

PACIFIC RIVERS

FREE FLOW

Season SPRING | May 2025

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LETTER FROM THE CHAIR


Mike Morrison - Board Chair

Welcome to the Spring 2025 edition of *Free Flow*, where we hope to inform and stimulate our readers and followers. Admittedly, it seems harder this time as we watch attacks on the natural world and our ability to help protect it.

This winter, our team took an extra step back in our annual planning process to consider how our goals and strategies should shift in light of the change in the federal administration. We were already seeing major changes in leadership, budgets, staffing and demands of key federal agencies. There was every reason to expect more.

After due consideration, we concluded the following:

1. Working in national coalitions, we will do our part to block – or at least to slow and diminish – rollbacks to our bedrock federal laws for environmental protection.
2. However, we will not let this consume nearly all of our time and resources, as many other organizations are much better positioned and funded to do that essential work.
3. *Our best role at this point will be to help hold – and indeed to advance – the water policy and implementation line at the state and watershed levels in the Northwest.*

To that end, we are stepping up our efforts on projects that fit those parameters. Our Outstanding Resource Waters initiative is alive and well. The petition for inclusion of Steamboat Creek above its confluence with Canton Creek is submitted and under review by the state. We are seeking to learn how we can use this tool to afford Clean Water Act protections to other streams in Oregon, Washington, and possibly northern California. It is our intention to be active in seeking out potential streams and also serve as a resource to other organizations interested in this avenue.

As you likely recall, Pacific Rivers and Idaho Rivers United (with a parallel action by the Nez Perce Tribe) sued Oregon DEQ for Clean Water violations in the lower Snake River. That case settled with the requirement that DEQ research and propose parameters for the concentration of methylmercury and the means to reduce it from its current very high levels to, eventually, levels where fish are safe for consumption by people and Hells Canyon's wildlife. The scientific team at Oregon DEQ is making progress and we are attending the meetings and monitoring the process. We are optimistic that a proposal that we can support will come out of the process, and we are working to ensure that it will.

On the North Umpqua, we continue to work toward a draft management plan for the Frank and Jeanne Moore Wild Steelhead Sanctuary. The initial phase (building on our many years of snorkel survey data) is near completion by the collection of historical water temperature data from many sources, stored in many different places. Dr. Charley Dewberry is at work on the report of the work so far. Along with partners The North Umpqua Foundation and Steamboaters we intend to determine what protection needs to be included in a draft plan that we will propose to the managing agencies. As of this writing at least, the Umpqua National Forest's official position is to seek partnerships to advance the management of the forest, and it is in this way we hope to assist an agency that was historically overburdened and is no doubt more beleaguered now.

Also, as a member of the North Umpqua Coalition, we are following the many legal challenges to Winchester dam, including those by ODFW for the killing of more than a half million Pacific lamprey in 2023, those by DEQ for alleged water quality violations while undergoing "repairs", and others.

Cover photo by Nick Basaraba.

In March of this year, in response to a suit we filed in January, we secured a court-ordered settlement regarding our petition to list Washington-coast spring-run Chinook salmon under the Endangered Species Act. The agreement requires a decision by the National Marine Fisheries Service no later than January 1, 2026. (The same court order requires action by November 1, 2025 on earlier petitions filed by the Center for Biological Diversity, Umpqua Watersheds and the Native Fish Society for listing of the spring Chinook of Southern Oregon and Northern California coastal rivers.) Science and law are crystal clear: These unique and endangered salmon urgently need and deserve protection. This agreement requires actions that are already overdue.



Rainbow Falls, Chehalis River. Photo by Nick Basaraba.

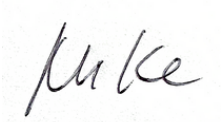
We continue to work in collaboration with and in support of other organizations whose work aligns with our mission. Since the publication of Fall 2024 *Free Flow*, we have contacted legislators about funding and action steps for the Columbia Basin Restoration Initiative (CBRI), Trust Land Transfers, the Antiquities Act, the Voluntary Grazing Permit Retirement Act and the work of federal employees supporting our public lands. We participated in ODFW's hatchery assessments, weighing in about Rock Creek hatchery specifically. And of course, we continue to monitor and provide testimony regarding bills brought forth in this legislative session for or against our interests of watershed health. We continue to encourage the expansion of beavers and their habitat, as evidenced by the article (with introduction by Liz Gilliam) included in this issue. We have recently provided testimony in support of Oregon Rep. Pam Marsh's bill to support beaver coexistence strategies for private landowners that would be affected by reintroduction of beavers.

In this issue, we are pleased to introduce Nick Basaraba to you, along with his essay about central Oregon's John Day River. Board member Nicky Scott has contributed an update to the dam removal project on Northern California's Eel River, and we have included information about the efforts taking place with regard to the proposed dam on Washington's Chehalis River.

Last—but certainly not least—we are pleased to highlight the innumerable contributions to Pacific Rivers that long-serving friend and financial guru Rebecca Daniels has showered upon the organization over so many years. We cannot thank her enough.

We believe we are doing good, important work. It is our intention to continue to do so, and our hope to expand what we can do. It is not cliché to write that we can only do it with your support—it is a cold, hard fact. And, as we expect to be confronted with numerous dangerous cold, hard facts in the future years, please accept our heartfelt "thanks" for your support over the years, and our appreciation in advance for any help you can provide going forward.

All the Best.



Mike Morrison

PACIFIC RIVERS

CONSERVATION PROGRAM UPDATE

SPRING 2025

Outstanding Resource Waters

***Strategic goal:* Protection of the water quality and aquatic ecosystems of the Northwest's most outstanding rivers through state classifications as Outstanding Resource Waters**

Under the Clean Water Act, states and designated tribes have the authority to establish water quality standards. "Outstanding Resource Waters" – their cleanest and most ecologically significant waters – are to be given the highest "non-degradation" standard. Many states across the country have designated Outstanding Resource Waters over the decades, but until recently the Northwest had none. Now six have been designated in Oregon and Washington, and there is momentum for more.

Last year, Pacific Rivers and our coalition partners petitioned Oregon for ORW designation of Steamboat Creek, the critically important North Umpqua tributary for salmonids. Soon after, conservation groups in southwest Oregon petitioned for designation of the Illinois River and its uniquely important tributary, Rough and Ready Creek. Pacific Rivers strongly supports those designations as well. Late last year, the Oregon Department of Environmental Quality included designation of all three in its draft three-year workplan.

We will seek and support additional ORW designations of qualified waters in the Northwest in the months and years to come.

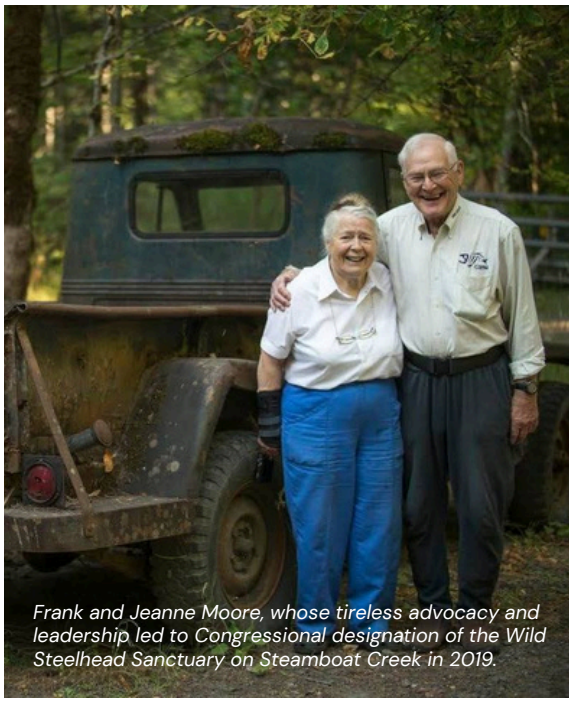
For much more information on ORWs, see the Fall 2024 issue of "Free Flow" on our website.



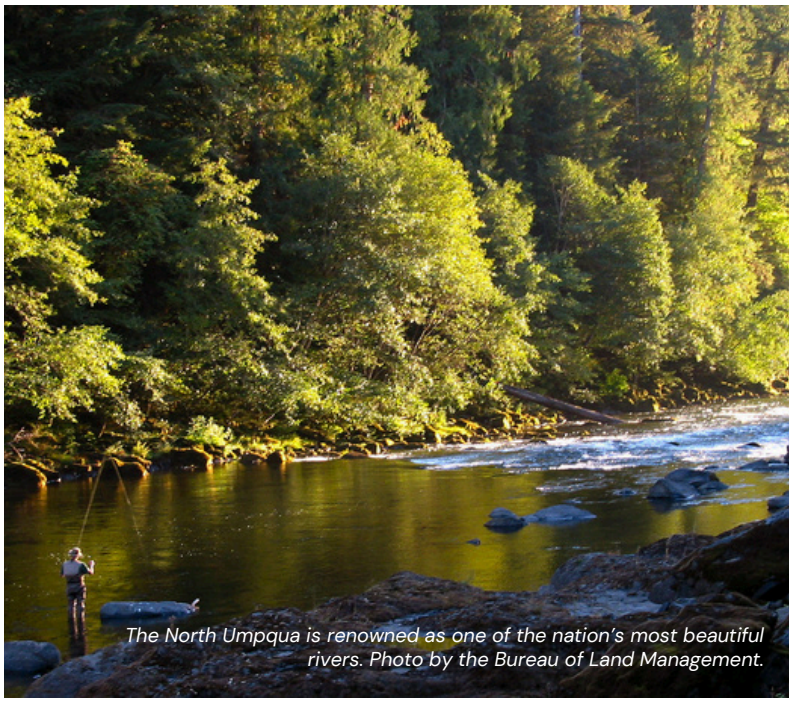
Illinois River by An Errant Knight.



Rough and Ready Creek by Zach Collier, Northwest Rafting Co.



Frank and Jeanne Moore, whose tireless advocacy and leadership led to Congressional designation of the Wild Steelhead Sanctuary on Steamboat Creek in 2019.



The North Umpqua is renowned as one of the nation's most beautiful rivers. Photo by the Bureau of Land Management.

North Umpqua River

***Strategic goal:* A well-protected and managed North Umpqua watershed that sustains robust populations of wild steelhead, salmon, lamprey and other native fish and wildlife, and serves as a model for the protection, restoration and management of other great rivers of the Northwest**

Pacific Rivers' work on behalf of the storied and beloved North Umpqua River takes more forms than ever today. In addition to the above-mentioned petition for ORW protection for Steamboat Creek, we are working to accelerate restoration projects on Steamboat's major tributary Canton Creek, and to secure a comprehensive watershed management plan for both.

We believe all three measures are necessary to provide the protection that the Frank and Jeanne Moore Wild Steelhead Sanctuary (designated by Congress in 2019) needs. Together, they would provide a new regional model for watershed protection and management of other waters whose high resource values have been recognized but not yet adequately protected.

We are also working in coalition to secure elimination of the North Umpqua summer steelhead hatchery program. This program has threatened extinction of the river's renowned wild summer steelhead run. The Oregon Department of Fish and Wildlife Commission has decided to terminate that program. However, Senate Bill 512 was recently introduced in the Oregon Senate to require the state to re-establish it. That, in turn, would require a very expensive rebuild of the Rock Creek hatchery, which burned down in the Archie Creek fire. Seeing no sense in requiring the state to re-establish a harmful program at great taxpayer expense, we stand in support of the Commission's decision and against the proposed bill.

Finally, as members of the North Umpqua Coalition, we are working to secure removal of Winchester Dam on the North Umpqua mainstem. In addition to being an impediment to fish and lamprey migration, its condition threatens public safety and downstream water supplies.

Hells Canyon Water Quality

***Strategic goal*: Snake River fish in and downstream of Hells Canyon that are safe to eat**

We continue to work to secure a pollution limit and cleanup plan for one of the Northwest's thorniest – and most dangerous – water quality problems. Mercury and excessive nutrients in the Snake River upstream of Hells Canyon are generating prodigious amounts of methylmercury – mercury's most dangerous form – in three deep reservoirs in the canyon. That methylmercury is then taken up at the bottom of the food chain and magnified up to one million fold as it works its way up to fish, birds, mammals and people. It is poisoning the Hells Canyon ecosystem and posing extreme health risks to people who eat fish from the Snake River at least sixty miles downstream. This is a public health issue, a fish and wildlife issue, and an environmental justice issue of the first order.

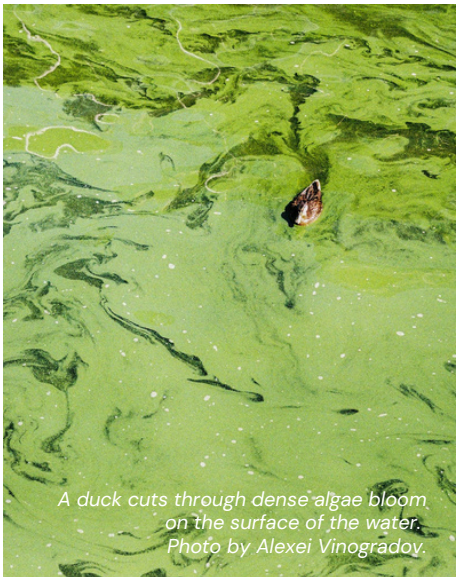
In 2019, Pacific Rivers went to court to address this long-standing problem. In 2021, Pacific Rivers, Idaho Rivers United, and the Nez Perce Tribe entered into a joint Settlement Agreement with Oregon. The Agreement calls for development of a methylmercury TMDL (Total Maximum Daily Load) and cleanup plan for the three Hells Canyon reservoirs and the Snake River downstream.

In Fall 2023, we published a *Free Flow* article with detailed background to that landmark agreement. We published a follow-up article last fall that summarized our takeaways from seven of the most important recent scientific papers relating to this issue. (Both articles are available on our website.)

In 2025, we will serve as advisors in the TMDL development process and prepare to engage in the public comment period on the draft TMDL that will occur in late 2025 or early 2026.



Snake River Celebration Park Algae by Thayne Tuason.



A duck cuts through dense algae bloom on the surface of the water. Photo by Alexei Vinogradov.

Spring Chinook

***Strategic goal:* Abundant, self-sustaining populations of wild spring Chinook salmon that preserve their cultural, spiritual, ecological and economic value for future generations**

Recent genetic research has confirmed that spring-run Chinook are distinct from fall-run salmon. They

evolved over millions of years to fill different ecological niches and utilize different habitats in time and space. Entering fresh water early in the year when river flows are high, they are able to reach and spawn in areas that fall-run fish cannot.

But spring Chinook are imperiled today. Dams, diversions, and habitat degradation have made their long journeys difficult or impossible. We have already lost them in some watersheds, and we are in danger of losing them in many more soon.

We are working along multiple lines to recover "springers" in the Northwest. We advocate prioritizing floodplain restoration, watershed protection, and dam removals in their river basins. We are also working to secure listing of spring Chinook as endangered species, as a way to garner funding urgently needed to accelerate restoration and recovery projects.

Recently, along with our partners Center for Biological Diversity and Native Fish Society, we sued the National Marine Fisheries Service to make a decision on our petitions for federal listing in light of the agency's failure to do so within the required time frame. Whatever the decisions of federal officials this year, we will continue our work along multiple lines to save springers.

For more on these irreplaceable icons of the Northwest, see the award-winning "The Lost Salmon" film and the detailed article on springers and our work to save them in the Fall 2023 and Spring 2024 issues of "Free Flow".

Dam Removal and Prevention

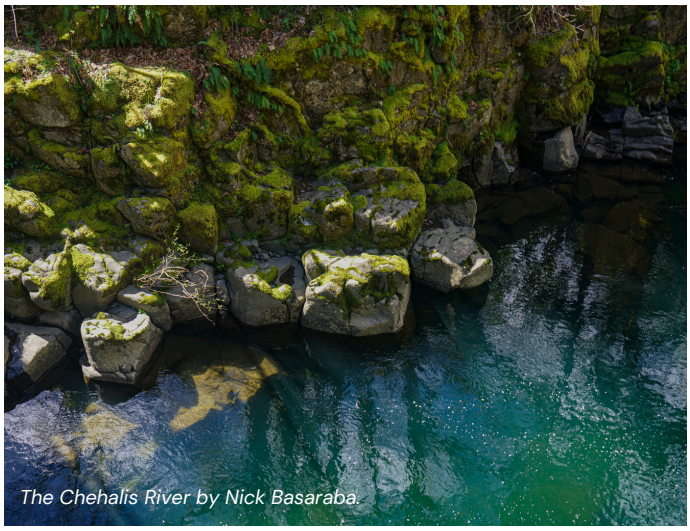
We continue to work in coalitions to prevent construction of new dams and to accelerate removal of the most harmful ones in our region. Our current priorities for removal are the four dams on the Lower Snake River in Washington, Winchester Dam on the North Umpqua River in Oregon, and the Eel River dams in Northern California. Our current priority for prevention is a proposed new dam on the Chehalis River.

For more information on these rivers and dams, visit our website to see:

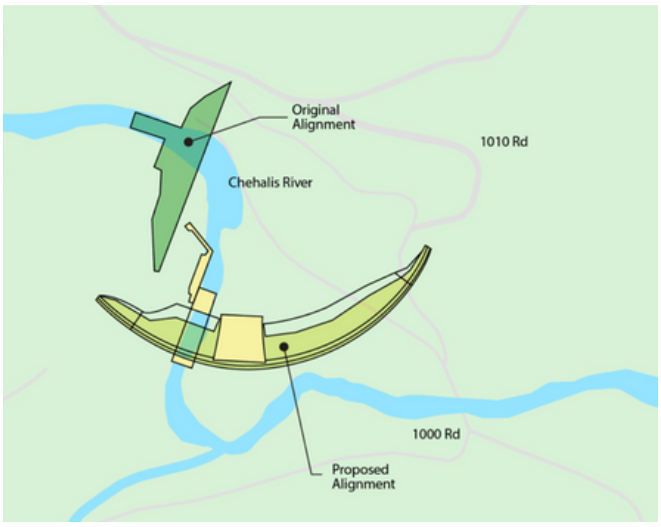
- *Chehalis: A Watershed Moment (Chehalis film)*
- *A River's Last Chance (Eel River film)*
- *Northwest Dam Removals: Past, Present and Future (series of articles in special Spring 2024 issue of "Free Flow")*



The now free-flowing Klamath River by Shane Anderson.



The Chehalis River by Nick Basaraba.



MEGA-DAM THREATENS THE
CHEHALIS RIVER

A proposal to dam the Chehalis River in Southwest Washington was made in 2020. You may have since viewed *Chehalis: A Watershed Moment* by Shane Anderson, produced by Pacific Rivers a few years ago.

Unfortunately, the proposal still exists today. It's a serious threat, and technical analyses conducted since have found that the benefits of the dam are a lot less than originally understood. At the time of this writing, there is a pending budget request by the Office of the Chehalis Basin for flood mitigation funding. The intentions for this funding include many significant elements towards non-dam alternatives and habitat restoration. Those include many worthwhile and cost-effective measures such as raising homes and habitat improvements. But by far the most expensive element of all the funding (the draft budget is a total of $70,029,000) is the Flood Retention Expandable (FRE) dam.

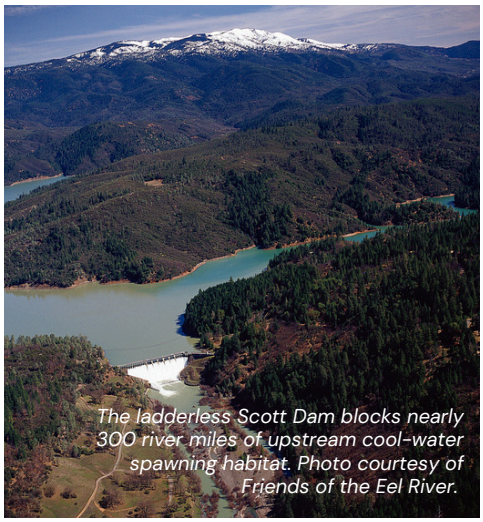
The FRE construction concept is 45% wider than the original dam proposal. It is being planned to provide an option for increasing the size of the dam again in the future. The enormous costs of installing a dam will have lackluster benefits: the project, if constructed, is estimated to lower the 100-year flood waters in the Twin Cities of Chehalis and Centralia by just 1.5 feet, and only protect 25% of buildings that are at-risk; at a cost of over $600 million. Surely there is a better way.

It is our understanding that the true costs to be borne on the environment, landowners, local tribes, and municipalities are not included in the anticipated costs of the FRE, and will have real, long-term consequences. Bigger is not better when it comes to environmental impacts of dams. Despite attempts for design improvements, this option would still have severely damaging environmental effects (habitat loss, flow and sediment interruptions, clear cutting, water temperature increases) that are not able to be fully mitigated - even based on the Flood Control District's own management planning models. This dam is being billed as novel and a first of its kind, but that can also be described as untested.

The Chehalis is one of the last remaining undeveloped rivers in SW Washington and is critical habitat for many species, including spring Chinook salmon. To consider this type of structure when salmon populations are at less than half of their historical numbers – with Chehalis spring Chinook currently being considered to be listed as Endangered – is irresponsible. Our work to oppose the dam, alongside Chehalis River Alliance partners, is not yet over.



The nearly 100-foot tall Cape Horn Dam. Photo by Kyle Schwartz.



The ladderless Scott Dam blocks nearly 300 river miles of upstream cool-water spawning habitat. Photo courtesy of Friends of the Eel River.

PAVING THE WAY FOR DAM REMOVAL ON

EEL RIVER



Nicky Scott - Board Member

There has been promising news for dam removal on the Eel River in California. Collectively known as the Potter Valley Project (PVP), the Cape Horn and Scott dams have had a significant impact on dramatically declining salmon and steelhead fish populations and worsening water quality on the Eel River in Northern California. The Cape Horn Dam has an inadequate fish ladder and the Scott Dam at 130 feet in height allows no fish passage. These dams cut off almost 300 miles of upstream spawning grounds for migrating salmonids. The dams are in such a poor state that they generate no electricity and cost PG&E and its customers the expense of ongoing yearly maintenance. And, more recently, PG&E has admitted that the Scott Dam may be structurally unsafe during an earthquake. Along with ongoing litigation concerning the effect of the dams on fish populations, water quality and degradation of tribal fishing rights, PG&E has made the sensible decision to not renew its operating lease to FERC and to assist with the removal of the dams.

Last Spring's edition of *Free Flow* (pg. 18-20) highlighted this possible opportunity, and we're here to report on the progress.

PG&E's recent license surrender plan, approved January 31, 2025, calls for the decommissioning and removal of both dams starting as early as 2028. The subsequent February 13, 2025 Memorandum of Understanding (MOU) between the Round Valley Indian tribes (RVIT), CDFW, Sonoma County Water Agency, Trout Unlimited, and Humboldt County Inland Water and Power Commission has supported the planning for dam removal, restoring seasonal flows in the Eel River, and allowing access to upstream spawning habitat.

With a coordinated plan now in place for dam removal and the drawdown of the reservoirs as well as footprint restoration starting as early as 2028 we should hope to see improvement in water quality and fish populations. This action has been needed for years, both to protect the Eel River and to restore cultural and historic fishing rights mandated by law to the involved tribal entities. With these dams removed, the Eel will become the longest free-flowing river in California.

To learn more about the mighty Eel River (and the pressures of salmon, timber, weed and wine), please watch the Pacific Rivers documentary 'A River's Last Chance'.



Tanner Irwin sets off in his boat for a day of steelhead fishing in Cottonwood Canyon State Park. There are many ways to enjoy the state park, but some of us prefer to see it seated in a raft to soak in the impressive scenery in hopes of connecting with one of the John Day's incredible steelhead. Photo by Nick Basaraba.

THE CANYONS CALL US HOME:

MY JOURNEY TO NORTHWEST RIVER ADVOCACY



Nick Basaraba - Freelance Writer and River Advocate

I grew up on the northern Front Range of Colorado, where the great plains meet the foothills of the Rocky Mountains. The Cache la Poudre River dissects my hometown of Fort Collins on its way east toward the Platte River. It begins as thousands of trickles that merge high in the mountains west of Fort Collins, fed by winter snowpack and seeping groundwater. As it gathers nameless creeks, the Poudre, as we call it locally, begins to gain momentum as gravity pulls it eastward. It then drops in elevation quickly, gaining speed and turbulence. It plunges into a steep canyon, cutting through the mountains where lodgepole and ponderosa pines cling precariously to the knuckles of granite.

This river is unique compared to others in Colorado. More famous rivers like the South Platte, Frying Pan, and the Colorado River are all impounded for water storage. In the trout fishing world, these rivers are called tailwaters–a river fed from the bottom of a reservoir that stabilizes water conditions. The Poudre is a freestone, meaning there are no dams. It swells impressively during late spring and early summer as warm weather in the high country releases the annual flush of frigid water before quickly transforming into a gentle trickle as the snowpack diminishes throughout the hottest parts of the year.

Because the Poudre was never dammed and remained free-flowing, it has retained its natural beauty in ways other rivers haven't. As a young kid learning how to fly fish, I quickly fell in love with the wild brown trout who recklessly throw themselves at comically large foam-bodied dry flies that replicate the many stonefly species that thrive in the numbing-cold and highly oxygenated water.

The trout are small, delicate creatures with ornate black and red spots. Their deeply olive backs blend smoothly into cream, yellow bodies that flash golden underwater as they emerge from their hiding places to consume a meal drifting past them. They have an eager wildness to them that is increasingly difficult to find in today's world – it's a wildness that deserves to be protected forever. So much so that in 1986,

the Cache la Poudre River was included in the growing, nationwide effort to assign federal protection to irreplaceable watersheds across the country under the Wild and Scenic Rivers Act. Today, it remains the only river designated as Wild and Scenic in the entire state of Colorado, totaling 76 miles.



A typical Poudre River wild brown trout, probably taken on a ridiculous-looking and oversized dry fly. These stunning brown trout have taken the place of a unique subspecies of cutthroat trout, the greenback cutthroat, which was found only in the Poudre River and South Platte River drainage but was fished to extinction in the nineteenth century. A genetically-pure population of greenback cutthroat was recently discovered and conservation groups are working tirelessly to reintroduce the subspecies into their historic range. Photo by Nick Basaraba.

I began to center my life around this vibrant free-flowing river winding through the arid foothills of northern Colorado. In my early twenties, I took a second job working weekends in the local fly shop, eventually becoming a full-time employee. I quickly found myself surrounded by a passionate fishing and river community that was as infatuated with this river as I was, inserting myself into a culture that cared deeply about the river as a natural resource but also as an entity that deserved unwavering respect and protection. In the summer, I took calls daily from anglers from across the state who were curious about the river and if it was worth driving from hours away to visit. Yes, the fish were smaller, but here we had a river system relatively intact after decades of complicated statewide resource management designed on first come, first serve for water rights. Where many watersheds that fed the drinking water supply for the spreading sprawl of Colorado's Front Range had been dammed to fulfill downriver water rights, our vibrant freestone river still trickled from its headwaters and into our backyard as nature intended. Working in the fly shop or during my seasons guiding anglers from around the country, a major talking point was that the Poudre was the only river in Colorado designated as Wild and Scenic.

When multiple catastrophic fires burned down the canyon, our community became rattled. When heavy rains sloughed half of a mountain slope into the upper river, causing a catastrophic flood of debris and ash, our community felt helpless. When developers began proposing new dams and reservoirs designed for water storage to feed the unquenchable water demands of a rapidly increasing Front Range population, we became angry. Numerous grassroots organizations sprang up from all corners of Fort Collins community, ready to take action



Changing aspens line the banks of the upper Cache La Poudre River as fall weather descends onto northern Colorado. The wilderness quality of the Poudre has resulted in a cult-like following from all types of outdoor recreationalists on Colorado's Front Range. Photo by Nick Basaraba.

in defending the river that had given us so much joy and reprieve from our everyday lives. Our little fly shop became a hub of activity. Customers we saw weekly and those we rarely saw came into the shop or called regularly with questions and concerns. They all wanted to know one thing: *What can I do?* Our voices were loud and our actions were quick. Anyone who was a disciple of a clean, free-flowing Poudre River mobilized and showed up to advocate for the future of our river on an impressive scale.

The Wild and Scenic designation of the Poudre River gave us a substantial foothold from which we could leverage our hopes to create the future we all envisioned, thanks to the vision passed down by previous generations who had the foresight to take action decades prior.

It wasn't until years later, when I moved to the Pacific Northwest, that I fully understood the power of community-led action to protect our remaining wildernesses and watersheds. Anytime I step into a different river across the state of Oregon, I am reminded of the far-reaching capabilities of passionate people. This unwavering desire to conserve and protect our natural resources grows deeper than the roots of an old growth Douglas fir. Name a conservation organization in Oregon and you would probably notice that it began with a group of concerned citizens.

One place in particular where we can experience the efficacy of community-led conservation is the John Day River. It's a river of incalculable beauty; depending on who you ask, it is one of Oregon's most unique and scenic watersheds.

THE JOHN DAY RIVER:
Oregon's Desert Wilderness Stronghold



Early summer grasses turn the surrounding John Day River canyon walls green with the season's new growth. Each year, thousands of boaters apply for permits to access the remote stretches of the river during multi-day floats through the John Day canyon. Photo by Nick Basaraba.

The John Day begins as three separate forks that originate in the Blue Mountains of eastern Oregon. With 284 undammed miles from the headwaters of the North Fork to the last 9 miles of the mainstem (which are flooded by a downstream dam on the Columbia) the John Day is the longest free-flowing river in the Northwest. The river has cut its way deep into the eastern Oregon basalt that towers along its length, radiating a mixed palate of deep ochre and stark, coal black, vertical walls fringed with prairie grasses. In spring, fragile wildflowers bloom

through the soft layer of rejuvenated shoots of wild grass that cover all non-vertical nooks and crannies of the canyon, rippling in the wind with a thousand shades of green. Between the basalt, the river swells to impressive sizes with snowmelt and runoff, its earth-colored water winding its way slowly toward the Columbia. It drops to shockingly low levels in late summer and fall when approaching storms bruise the sky, giving off fragrant smells of loamy soil and sagebrush during the early winter rains that welcome returning summer steelhead back home. The canyon is home to Oregon's largest herd of rare California bighorn sheep, scattered herds of elk, and countless mule deer that can live their lives unseen by humans as they traipse through steep side canyons and hide amongst the basalt outcroppings. The plateau above the river is a tapestry of wheat and fallow fields mixed with expansive grazing lands that allow for incredible vistas of Oregon and Washington's famous Cascade volcanoes. Some viewpoints near the river provide their own spectacular views of the John Day and the immense canyon it has carved. Access to the river is limited, but thousands enjoy long floats down it each year via drift boat, raft, canoe or kayak.



Matilde McCann and her mother Pia Alliende enjoy a scenic stretch of the John Day River canyon. For the most part, this rugged canyon is impossible to reach by car or on foot and is best enjoyed from the front or rower's seat of a raft. Photo by Nick Basaraba.

The John Day's wild steelhead runs are the healthiest in the entire Columbia Basin, where they are listed as a Threatened species. They are, however, much diminished from their historic abundance, despite the fact that the John Day is completely void of dams and hatcheries. Irrigation withdrawals that continue deep into the summer reduce river flows to near zero, which makes upstream migration difficult and creates significant water temperature fluctuations. Cattle grazing degrades habitat along the river, especially adjacent to its small tributaries which are vital to spawning fish and smolts, causing erosion and decreasing native riparian vegetation. Out-migrating smolts face a litany



A large hen summer steelhead shows signs of repeat spawning with healed wear at the base of her tail from digging a previous season's redd. Steelhead that spawn multiple times pass along vital genetics, equipping the next generation with a life history that may increase their chances of surviving challenging conditions during their upstream migration into the John Day River. Photo by Nick Basaraba.

of perils as they travel down the Columbia before reaching the ocean to mature. The multiple dams on the Columbia create slackwater reservoirs that are challenging for fish to navigate and dramatically increase water temperatures during peak migration times – all things the downriver smolts and returning adult fish must face. As a result of the cascading effects of habitat modification, and the illegal introduction of non-native species, the John Day is now home to a thriving population of warmwater species such as smallmouth bass that thrive in the river's altered and warm conditions. Bass compete with salmon and steelhead for habitat, and feed heavily on their smolts.

The John Day Dam on the Columbia River was constructed not far below where the John Day River enters Columbia. The reservoir behind the dam floods the lowest ten miles of the John Day, resulting in little detectable current for returning fish migrating up the Columbia River to the John Day. This causes many of the John Day's wild adult steelhead to overshoot the river entirely, sometimes traveling as far as McNary Dam on the lower Snake River, before at least some eventually turn back around and return to the John Day.

And yet, despite these and other challenges, summer steelhead, spring Chinook, and a few remaining fall Chinook manage to return to the John Day River and successfully reproduce future generations of fish. Many communities and landowners along the John Day have been working with watershed councils, state agencies, Tribes, and other conservation organizations to ensure a sustainable future for the fish and the communities that line the river through the implementation of large and small-scale projects focusing on improving watershed health.



Tanner Irwin brings a bright and acrobatic John Day steelhead to hand. The John Day River offers a unique remote steelhead fishing experience to those willing to put in some miles hiking into the river's picturesque and isolated runs. Photo by Nick Basaraba.



Tanner Irwin puts the pressure on a hard-earned John Day steelhead. Landing these powerful fish quickly and handling them gently is an absolute must, ensuring their safety on their long journey upriver to spawn the next generation. Photo by Nick Basaraba.



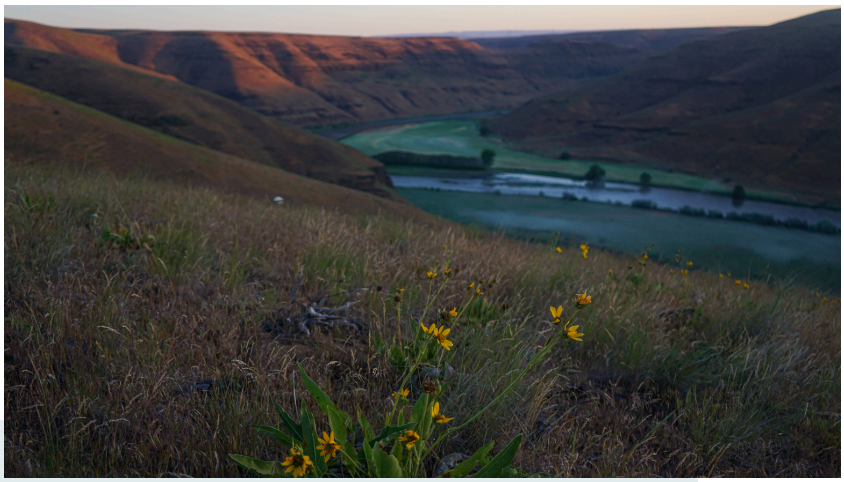
Mature California bighorn rams face off during a long battle over a group of ewes during the bighorn rut along the John Day. The sound of fighting rams butting heads can be compared to a rifle shot, echoing for miles down the canyon. Photo by Nick Basaraba.

On the North Fork John Day River, the longest upper fork of the river, The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) have implemented extensive restoration projects with numerous partners, using mitigation funds from Bonneville Power Administration and other funding sources. Tribes implement traditional ecological and cultural knowledge "***to protect, restore, and enhance the First Foods – water, salmon, deer, cous, and huckleberry – for the perpetual cultural, economic, and sovereign benefit of the CTUIR.***" This funding has widespread benefits to the North Fork watershed: purchase of properties, culvert replacement, restoration of native plants to improve riparian zone habitats, road maintenance, and restoration of streambeds and channels affected by past mining.

In 2020, Wild Steelheaders United, along with Trout Unlimited, partnered with the Oregon Department of Fish and Wildlife on the John Day Steelhead Project. Two hundred adult steelhead were fitted with tags in order to map the progress of migrating steelhead to better understand why so many fish overshoot the John Day and stray into other rivers during migration. This also gave researchers a better understanding of how steelhead use vital thermal refuges throughout the Lower Columbia River to avoid dangerously high water temperatures that occur during their



After a long hike, I found a small cave not far from the John Day River that was covered in numerous Native American pictographs. To this day, descendants of those who painted these rocks work hard to conserve the natural beauty of the John Day and its irreplaceable resources. Photo by Nick Basaraba.



Wildflowers welcome the sun as it crests the John Day canyon near Cottonwood Canyon State Park. The dramatic scenery from the top of the canyon is a perfect place for watching the sunrise with a cup of hot coffee. Photo by Nick Basaraba.



Tanner Irwin prepares a stunning John Day River steelhead for release. The river was closed to steelhead fishing in 2021 and 2022 due to concerningly low numbers of returning wild steelhead in the Columbia basin. Every opportunity to encounter one of these fish is a cherished experience for any angler. Photo by Nick Basaraba.

peak migration times. I spoke to an ODFW biologist who said they observed one steelhead swim multiple laps in the Columbia for over 700 miles before it eventually entered the John Day River. During an upriver survey for smallmouth bass, one steelhead was found near the mouth of Thirtymile Creek on the John Day, 84 miles from the Columbia River confluence, in August, when the water temperature was 80 degrees!

In 2020, Western Rivers Conservancy acquired McDonald's Ferry ranch, a 4,054-acre ranch located seven miles north of Cottonwood Canyon State Park. Since then, they have begun restoration work to allow steelhead to utilize the once important spawning tributary, Grass Valley Canyon Creek, in the very lower portion of the John Day River. WRC has also purchased two ranches further upriver at Thirtymile Creek, keeping boating access open for extended raft trips while simultaneously conserving the creek for spawning steelhead. Thirtymile Creek has also been included in the River Democracy Act proposed by Oregon Senators Ron Wyden and Jeff Merkley.



Hay Creek enters the John Day on the Cottonwood Canyon State Park property on a moody fall day. Small creeks like Hay Creek may be unassuming, but mark the final destination of returning summer steelhead throughout the John Day basin. Photo by Nick Basaraba.

These conservation efforts are just a few that are currently underway in the John Day River basin. Many more like them are being led by hard-working and passionate people throughout the state who demonstrate that we don't need to rely solely on federal or even state-level legislation to have an immediate and serious positive effect on the places that we love. Big changes often begin – and sometimes end – at the local level. People set aside differences to become fierce defenders of their natural resources–they become river stewards rather than simply users. When something threatens the sanctity of a river, whether it's diminishing fish numbers, mismanagement of resources, threats to clean drinking water, development, or natural disasters, we as community members can respond quickly to defend and restore it. The motivation comes from beyond the need to protect the river, its wildlife, and the surrounding forests; it's about protecting the soul.

A trickle of support from small, community-led grassroots organizations begins like a handful of small headwater creeks. Each individual creek might not have enough force to move policies forward on their own. But when combined, these small creeks converge and combine their strength, forming a river of voices and support powerful enough to shape the landscape.

Nick Basaraba is a freelance writer living in Portland, Oregon, where he is finishing his Journalism and Media Communications degree. He was introduced to Pacific Rivers by board member Kate Crump. In the fall of 2024 he completed an internship with Pacific Rivers exploring and highlighting crucial watersheds for protection under the proposed River Democracy Act. When not writing or studying, he can be found tying classic steelhead flies and planning his next trip to the river. More information about Nick can be found at his website, www.nickbasaraba.com.



A rainbow shines over the John Day during an intensifying evening fall rainstorm moving up the Columbia. Fall weather brings the relief of cooler temperatures that quickly cool the river, drawing the John Day's steelhead into the river in much larger numbers. Photo by Nick Basaraba.

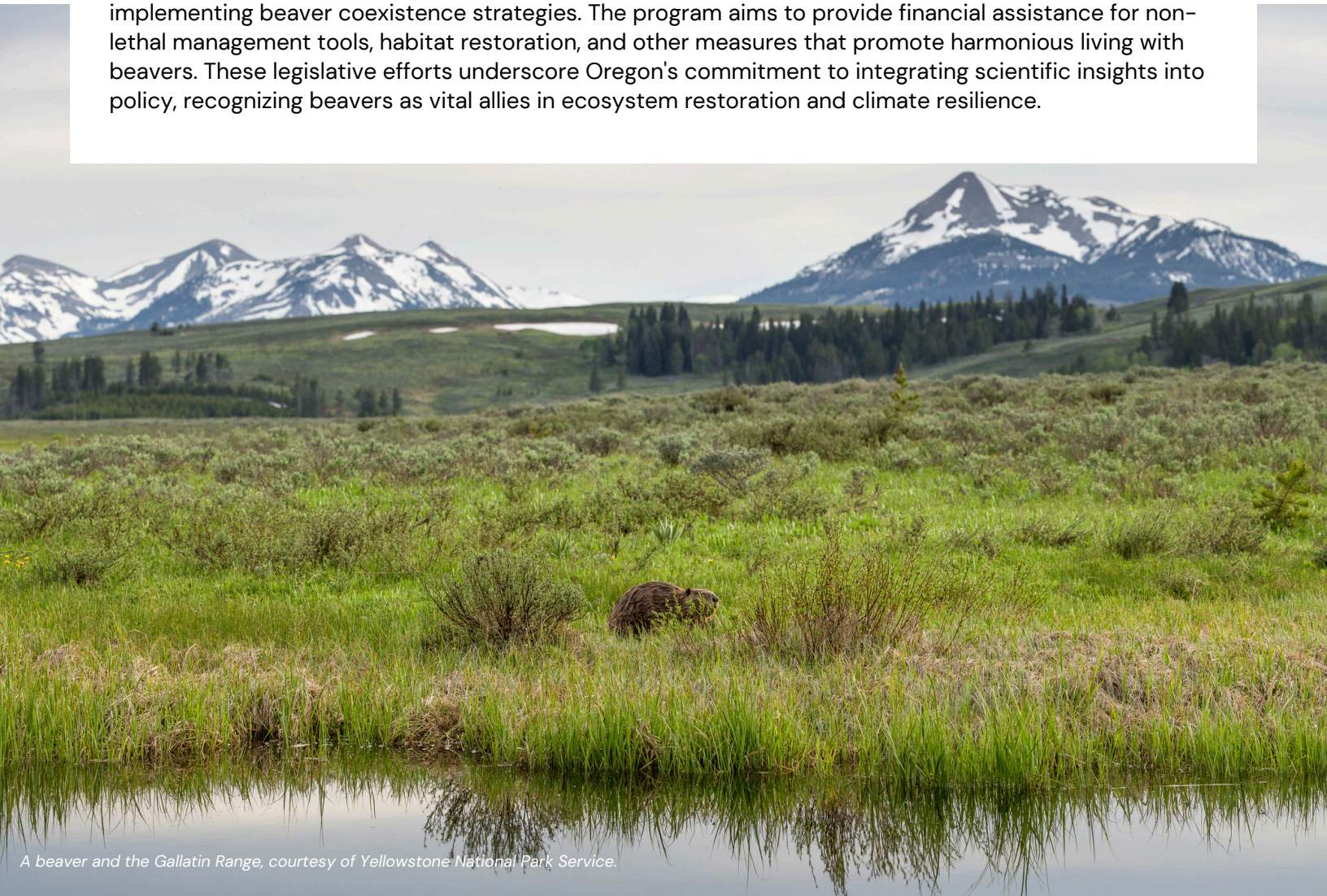
BEAVERS BOUNCING BACK



In a recent Los Angeles Times op-ed, Dr. Emily Fairfax's research highlights the crucial role of beavers in enhancing ecosystem resilience, particularly in mitigating wildfire impacts. Her studies demonstrate that beaver-engineered wetlands serve as natural firebreaks, preserving verdant corridors even amidst widespread mega-wildfires, a topic that becomes more and more relevant for all of us. We've provided the article in full in this newsletter (pg. 20-22).

Before we dive into the article though, we would like to celebrate successes that Beaver Believers have gained in recent years, as affirmative action for beavers has taken hold, and their hard work and dedication is more appreciated. To start, Oregon has undertaken legislative initiatives to promote beaver conservation and management. In 2023, the Oregon Legislature enacted HB 3464, which reclassified beavers from 'predatory animals' to 'furbearers.' This shift transferred management authority on private lands from the Department of Agriculture to the Oregon Department of Fish and Wildlife (ODFW), facilitating non-lethal management strategies and requiring reporting of all beaver removals.

Continuing this momentum, Representative Pam Marsh introduced HB 3143, the "Landowners Living with Beaver Grant Program Fund," in the 2025 session of the Oregon State Legislature. This bill proposes the establishment of a grant program within ODFW, allocating $1.5 million to support private landowners in implementing beaver coexistence strategies. The program aims to provide financial assistance for non-lethal management tools, habitat restoration, and other measures that promote harmonious living with beavers. These legislative efforts underscore Oregon's commitment to integrating scientific insights into policy, recognizing beavers as vital allies in ecosystem restoration and climate resilience.



A beaver and the Gallatin Range, courtesy of Yellowstone National Park Service.



Photo by Minette Layne.



A beaver lodge reflects in a beaver pond. Courtesy of Grand Teton National Park Service.

This is just one of several significant steps taken by western U.S. states in recent years to promote beaver coexistence and restoration through legislative and policy advancements. The following is a summary:

Oregon

- HB 3464 (2023): Reclassified beavers from "predatory animals" to "furbearers," shifting management authority on private lands from the Department of Agriculture to the Oregon Department of Fish and Wildlife (ODFW). This allowed for non-lethal management and required reporting of beaver removals.
- HB 3143 (2025 Proposed): Introduced by Representative Pam Marsh, this bill seeks to establish the "Landowners Living with Beaver Grant Program Fund" within ODFW. The program would provide financial support to private landowners implementing beaver coexistence strategies.
- SB 354 (2025 Proposed): Would authorize the relocation of beavers from western Oregon to central and eastern regions where populations have declined, aiming to restore ecological balance.

Idaho

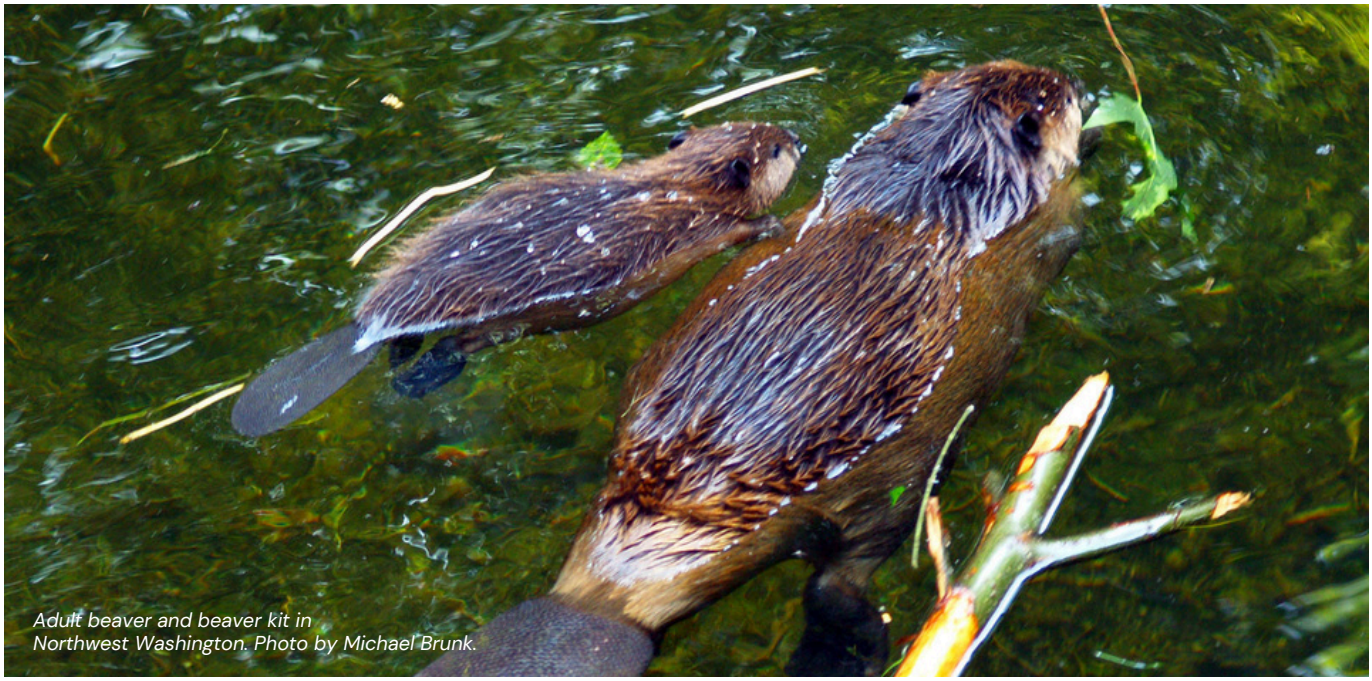
- Beaver Translocation Program: Ongoing efforts by the Idaho Department of Fish and Game (IDFG) to relocate beavers from high-conflict areas to locations where they can restore degraded habitats and improve watershed health.

California

- Beaver Restoration Program (2022): Established by the California Department of Fish and Wildlife (CDFW) to support ecosystem restoration through beaver-assisted projects.
- AB 2196 (2024): Codified the Beaver Restoration Program into law, ensuring long-term funding and support for beaver conservation efforts.
- $2 Million in Grant Funding (2023): CDFW announced funding for non-lethal beaver damage management to help landowners and agencies implement coexistence strategies.
- Beaver Depredation Policy Update (2023): Prioritized non-lethal management approaches and, for the first time in nearly 75 years, authorized the translocation of a beaver family to restore populations in Plumas County.

Washington

- SB 5846 (2024): Mandates the Washington Department of Fish and Wildlife (WDFW) to develop a comprehensive statewide beaver ecosystem management plan, prioritizing non-lethal conflict resolution and relocation.
- Beaver Relocation Program (2024): Transitioned from a pilot project to a permanent program, allowing the relocation of nuisance beavers to areas where their presence can enhance water retention and ecosystem health.
- DAMS for Beavers Act (2024, Federal): Proposed by Representative Suzan DelBene, this bill would allocate $3 million annually to fund non-lethal beaver mitigation alternatives, such as flow devices and habitat restoration.



Adult beaver and beaver kit in Northwest Washington. Photo by Michael Brunk.

WANT TO FIGHT CLIMATE CHANGE AND DROUGHT AT THE SAME TIME?

BRING BACK BEAVERS

By Chris Jordan and Emily Fairfax / Los Angeles Times

Millions of highly skilled environmental engineers stand ready to make our continent more resilient to climate change. They restore wetlands that absorb carbon, store water, filter pollution and clean and cool waters for salmon and trout. They are recognized around the world for helping to reduce wildfire risk. Scientists have valued their environmental services at close to $179,000 per square mile annually. And they work for free.

Our ally in mitigating and adapting to climate change across the West could be a paddle-tailed rodent: the North American beaver.

There's a strong consensus among scientists and environmental managers on the benefits of working with beavers to protect our natural environments. Beavers can help us continue to live on, work with and enjoy our Western landscape. As ecosystem engineers, they build dams and dig canals to escape predators. Their manipulation of plants for food and building materials produces wide-ranging environmental gains.

Yet despite beavers' ecosystem benefits, we have long pushed them out of their homes. When the European-American fur trade killed hundreds of millions of beavers, it destroyed the engine that built and maintained North American wetlands. California alone has lost an estimated 90% of its wetland area. Humans continue to tear down beavers' dams and lodges when they get in our way.

Rather than chase beavers off, it is time to invite them back.

Watershed scientists and state and federal land managers can identify the thousands of streams most suited to beavers. Simple steps can help bring them to watersheds in need — whether that means helping restore river environments to attract dispersing juvenile beavers from existing nearby populations, or reintroducing beavers to locations where they had thrived before the fur trade and habitat degradation destroyed them as well as their homes.

Beavers can then set in motion protective natural processes. Their dams and canals slow the flow of streams and rivers, spreading water across the floodplain. Once slowed, the water loses its ability to carry sand, silt and gravel, so these materials accumulate. The wet ground and regular sediment deposits make fertile conditions for vegetation that has evolved with beavers and is more productive when regularly chewed. All of this builds and maintains wetlands.

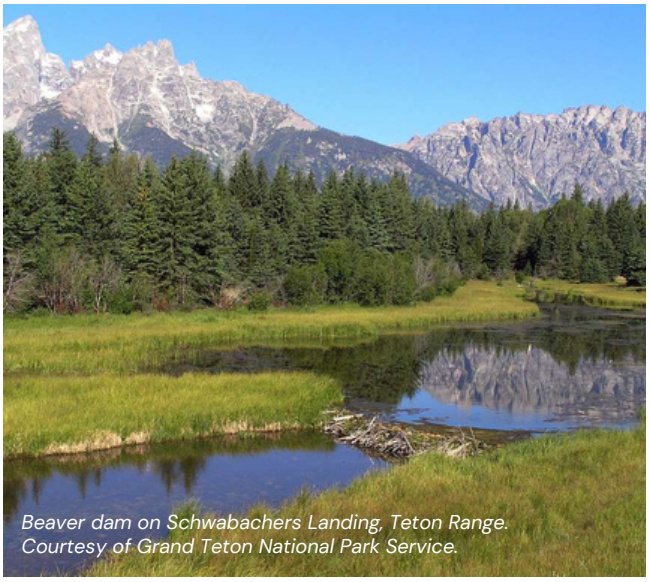
This nature-based restoration can in turn help stave off the worst effects of climate change that are warming streams, deepening droughts and fueling wildfires. These threats harm native fish and wildlife in our communities while draining billions of dollars from our economies.

Riverine wetlands rebuilt by beavers can counteract rising temperatures, nourishing vegetation that stores carbon and benefiting sensitive species including steelhead trout. Spreading water across the floodplain creates a network of firebreaks — gaps in combustible vegetation that can stop or slow wildfires. And beaver wetlands help combat drought because their dams raise water levels so the ground stores water like a sponge, percolating out in drier seasons, which keeps streams flowing instead of going dry.

As part of a team of state, federal and university researchers, we tested the capacity of beavers along an eastern Oregon creek so eroded from years of poor management that the water ran many feet below the surrounding terrain. The erosion led to dried-out floodplains, dead stream-side vegetation and a self-sustaining cycle of drying and degradation in the channel.



Meadowbrook Pond, Seattle, WA. Photo by Joe Mabel.



Beaver dam on Schwabachers Landing, Teton Range. Courtesy of Grand Teton National Park Service.



Whatcom Creek Estuary, Bellingham, WA. Photo by Andrew Reding.

Fixing the creek would require slowing that water down, piling it up to reconnect the channel to its floodplain. This would be a big ask for beavers on their own, so we helped. We hand-built structures to mimic beaver dams to begin slowing and spreading the flow.

This work attracted the first beavers from other environments. In just a few years, more beavers found the spot and assumed the maintenance. Building on our initial efforts, they transformed logs, mud and sticks into structures that spanned the valley and spread the water across many small branching channels, canals and ponds. Willows and other stream-side vegetation emerged. Water soaked the ground in storage that gradually filtered back out, offsetting dry spells.

Stream-side communities might worry that letting a wild dam builder loose might spur flooding that could damage property. But beavers are creatures of habit, meaning we can predict which locations have the lowest potential for human conflicts and greatest potential for environmental benefits. We can entice beavers to remote areas such as millions of acres of national forest and other federal and state lands. And we have tools to prevent beavers' work from damaging property, such as devices that keep beaver ponds at safe levels, fencing or paint to protect trees and screening to ensure drainage systems are not plugged.

The work is also relatively cheap. The main costs of beaver-based stream restoration involve helping them get a foothold by starting restoration work ourselves and, where necessary, transporting beavers to the right natural site. This approach typically costs thousands of dollars per mile, not the millions per mile we often spend on infrastructure solutions.

This solution also requires not destroying our population of environmental heroes. Last year alone, approximately 25,000 beavers were killed by wildlife control officers in response to people's complaints and requests to protect their property. Imagine the value to communities of promoting nonlethal options instead, such as adapting the environment for coexistence with beavers or, when that's not an option, moving them to less conflict-prone locations.

The job is enormous, but so is the capacity of beavers to help. Modest funding for beaver restoration was added to California's budget this year. Groups that protect wildlife, fisheries and wetlands should join forces across the West to make beavers integral to a coordinated climate change response.



Photo courtesy of Yellowstone National Park Service.

Chris Jordan is mathematical biology and systems monitoring program manager at NOAA Fisheries' Northwest Fisheries Science Center. Emily Fairfax is an assistant professor of environmental science and resource management at Cal State Channel Islands. Pacific Rivers was given permission to publish by the authors.

A HEARTFELT THANK YOU TO

REBECCA DANIELS



Rebecca Daniels is an integral part of Pacific Rivers today and has been for many years, contributing significantly to the organization's financial management and overall mission. During her more than two decades with Pacific Rivers, she has worn multiple hats, showcasing her versatility and dedication. She has been pivotal in ensuring the organization's financial health, allowing Pacific Rivers to continue its vital work in watershed protection and conservation.

Beyond her professional commitments, Rebecca's personal interests reflect a deep connection to nature and the arts. Her hobbies include hiking, running, music, baking cakes, gardening and just spending time by rivers. She has considered Oregon her true home since arriving in 1987. She raised her four beloved children in Eugene, Oregon and lives there still today. Rebecca studied classical piano in college and continues to play piano, especially finding joy and solace in Bach. Her love for the outdoors is evident through her hobbies, and the experiences she shared with her now-adult kids. Rebecca has always been passionate about introducing her two daughters and two sons to the wonders of the natural world, fostering a sense of environmental stewardship in the next generation.

In addition to her role at Pacific Rivers, Rebecca has extended her expertise to other organizations. She served as the Executive Director at Network Charter School in Eugene, where she guided the school's mission and operations for 14 years. Her leadership was marked by a commitment to fostering a nurturing educational environment – including a successful capital campaign to purchase the school's current building. Rebecca has been associated with other local organizations, serving on the Board of Directors of Nearby Nature for five years. She also volunteered for many years for No One Dies Alone, providing companionship to individuals during their final hours, further showcasing her dedication to community well-being. We share Rebecca with Salmon-Safe, where she also serves as Finance Manager, using her myriad skill sets and wise insights.

Rebecca says she's passionate about her work with Pacific Rivers because she appreciates a watershed-wide approach, understanding that we're all connected and whatever you do to help has a downstream effect. Steamboat Creek has a special place in her heart. She and her family camped there many dozens of times over the years; they consider it their family's spiritual home. Pacific Rivers' extensive work for Steamboat Creek's health is especially gratifying and meaningful to her.

Rebecca's multifaceted career and personal passions have made her a cherished member of the Pacific Rivers family. Her unwavering commitment to conservation, education, and the arts, and her in-depth knowledge on so many fronts, continues to inspire those of us around her. One of Rebecca's favorite quotes is from Bertolt Brecht, who said, "*Everyone needs help from everyone*." Rebecca believes this should guide our actions with regard to other people AND to the natural world.

THANK YOU FOR YOUR SUPPORT!

We want to thank our many supporters for giving us the information, inspiration, motivation, and yes, funding, to tackle the most important river and watershed issues of our day. We could not do it without you.

OUR MISSION

The mission of Pacific Rivers is to protect and restore the watershed ecosystems of the West to ensure river health, biodiversity and clean water for present and future generations.

OUR VISION

A future where healthy communities have access to clean, cool drinking water free from chemicals, and people can play in rivers and streams. A future where watersheds that store carbon are resilient to warming temperatures and other effects of climate change and are home to abundant populations of fish and aquatic wildlife.

PACIFIC RIVERS

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