



A Note from the Editors

The California Process-Based Restoration Network has been undertaking some self reflection in order to better understand how the Network can meet the needs of our members. Hopefully you received and completed a survey about Cal PBR Network. Jerry Talley, an organization development expert, has graciously compiled the results of the survey (see a summary of the findings below) and we are in the process of planning how to adapt what we've learned as we move forward. Some immediate changes include developing a Charter and Strategic Plan for our Steering Committee; adding a Tools and Techniques series that we'll kick off on July 13th (see below for details); continuing to host the Build Like A Beaver training in October; and working with Riverscapes Consortium to create a community space for members to interact, ask questions, and share ideas, events, or successful projects. [Post your thoughts on the Riverscapes Consortium Platform.](#)

We are upping our efforts because, more than ever, we believe in the importance of the mission of the Cal PBR Network to **promote process-based restoration approaches to increase the capacity of degraded river and stream ecosystems to retain water, support biodiversity, create fire resiliency, and adapt to climate change.** Since we were founded just a few years ago, a suite of research has shown what we see every day in the field - the value of PBR for biodiversity, water retention, plant productivity, wildfire resistance, and sediment capture. Each issue, we highlight one piece of this growing body of evidence of the importance of our work and hope you take a look at the latest Research Highlight below to see the value of low tech PBR on ranchlands in the western USA. And for the first time, we have a new section of poetry and art from the field. If you've ever been out on a successful build in a beautiful but damaged mountain stream or meadow, you can understand the urge to wax poetic. We hope everyone has a fun and productive field season. Happy beavering!

Karen Pope, Kate Lundquist, Kayla Trotter, Carrie Monohan



Photo: USFWS Partners Program

Aerial view of Doty Ravine before and after restoration (figure by Damion Ciotti)

Upcoming Events

- **Tools and Techniques Workshop - [Join us](#)** Monday, 13 July at 4:00-5:30PM for CalPBR's first workshop on Where to work: A watershed prioritization tool for meadow restoration developed by Megan Ireson, Scott River Watershed Council, and Adam Cummings, The Watershed Research and Training Center, for the Scott River Watershed.
- **Build Like a Beaver Save the Date** - We are planning to have the BLAB training October 7-10, 2026 at Yellow Creek on Maidu Summit Consortium lands. Registration is not open yet but stay tuned so you can get your spot at this popular training.
- **[BeaverCON 2026](#)** (Minneapolis, MN)—Sept. 28-30, 2026. Join CalPBR Network members for the beaver-believer gathering of the year. Professionals, researchers, practitioners, and the general public will gather at the University of Minnesota, Minneapolis Campus to learn and exchange ideas through a formal program of presentations, workshops, and other social and educational events.

Recent Accomplishments

- **Getting the Word Out** - Cal PBR Network was well-represented at the Salmonid Restoration Federation meeting held in Redding, April 28-May 1, 2026. Carrie Monohan, Mooretown Rancheria of Maidu Indians Natural Resources Director, moderated a session on Evaluating Process Based Restoration as a Method to Restore Ecosystem Resiliency that included several talks by Network members. Several Network members also presented at the Society for Ecological Restoration California conference held in Fortuna, 18-20 May 2026, including in a Fuels to Flows session and two Meadows sessions.
- **Restoration Site Tour** - Cal PBR Network hosted a 10th anniversary tour of Doty Ravine in May to showcase the habitat changes that have occurred at the site. Damion Ciotti, USFWS, and Elias Grant, Placer Land Trust, hosted the event and provided participants a great chronicle story of the evolution of restoration. Highlights included beaver moving into the restoration area shortly after the beaver dam analogues were installed and quickly converting the single thread stream channel into a network of channels and wetland ponds. The BDA structures are no longer visible as they were drowned out by the beaver wetland.

Cal PBR Shorts

- **Occidental Arts & Ecology Center Launches the Found Gully Model** - OAE's Brock Dolman recently piloted this model in Sonoma County in collaboration with the University of Chicago's Data Science Institute. As part of OAE's [Fuels to Flows Campaign](#), this upland LTPBR model can help forest managers find incised gullies adjacent to overstocked fuels needing treatment to turn that slash into beneficial biomass towards repairing incision, reducing sediment delivery to salmonid streams, increasing fire resiliency and sequestering carbon. [Read the blog post and watch the video.](#)
- **Beaver in California Coexistence Webinar** - Occidental Arts & Ecology Center hosted its second annual webinar on the [California Beaver Help Desk](#) landowner assistance program. Watch the recording to hear more about financial and technical assistance, case studies, best practices from certified beaver coexistence professionals, and how human-beaver coexistence offers benefits to communities throughout California. [Watch the webinar!](#)
- **Lost Meadow Model Output Available [here](#)** - See and download lost meadow polygons for your project area, watershed, or all of California. Thank you Adam Cummings!
- **Funding Opportunity** - The CAL FIRE Forest Health Research Program has released three concurrent calls for research proposals and updated grant guidelines for Fiscal Year 2026-27. Brief concept proposals are due by July 30, 2026, 3pm pacific time. View the grant guidelines and apply [here](#).
- **RestoFest at Wakamatsu Farms** - Hosted by Symbiotic Restoration in partnership with Learning By Hand and American Rivers Conservancy, the first annual RestoFest was a success on all levels, bringing together 100+ people from across the ecological restoration, community education, and performing arts worlds. The festival accomplished restoration goals, building over 20 structures in the pond outflow channel with the help of nearly every attendee and featured a variety of performances including art and music.



Volunteers working at Wakamatsu Farms during RestoFest. (photo by Katya Castillo)

Research Spotlight

Trends in the Outcomes, Practice, and Law of Low-Tech Process-Based Restoration in Western Rangelands by Julianne Scamardo, Will Munger, Kelly Loria, Benjamin Nauman, Jenna Wang, Sara Leopold, Anne Heggly, Nancy Huntly, Michelle Baker, and Alison M. Meadaw. [Published in Rangeland Ecology & Management, 2025.](#)

This ambitious paper evaluated data from 65 LTPBR projects in the western U.S. that used natural beaver dams, beaver dam analogues (BDAs), or one-rock dams to quantify trends in commonly measured outcomes such as water storage and temperature, vegetation growth and greenness, sediment storage, and alterations to discharge. They also reviewed water law in 5 states and interviewed 13 experts to consider the social dimensions of LTPBR. Results across projects and perceptions from interviewees consistently found that LTPBR projects significantly increased water storage, sediment storage, and riparian vegetation greenness. Many projects also found decreased water temperature, especially as projects aged and plants grew to shade the water. Unsurprisingly, they found that beavers and beaver dams were effective while BDAs also did well but varied depending on location and design. Changes in state laws are occurring that recognize the instream use of water for ecological restoration as a beneficial use of water rights, thus potentially increasing opportunities to use large-scale LTPBR to adapt watersheds to climate change. Restoration practitioners expressed the need to collaborate and develop consistent metrics to improve and expand the use of LTPBR in the future.

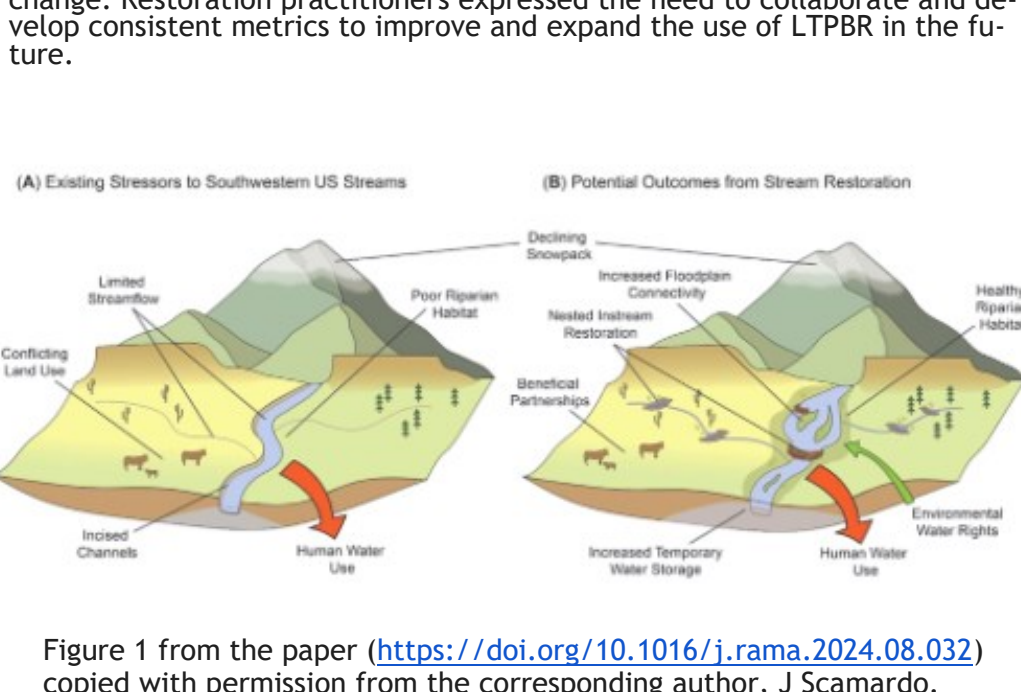


Figure 1 from the paper (<https://doi.org/10.1016/j.rama.2024.08.032>) copied with permission from the corresponding author, J Scamardo.

Conceptual diagram (not to scale) highlighting (A) anthropogenic and environmental stressors to headwater streams and downstream tributaries in the southwestern U.S., and (B) expected outcomes and benefits of in-stream, process-based restoration. Although restoration cannot remove or remediate all stressors, such as human water use and declining snowpacks, restoration is thought to slow and spread available water, which increases temporary water storage and reconnects streams and floodplains, allowing for riparian vegetation to thrive. Design by J. Scamardo.

Project Spotlight – Tásmam Koyóm

Jordan Vermillion and Janeva Sorenson –Upstream Ecology

Tásmam Koyóm is the Maidu name for a meadow valley in Northwestern Plumas County. Mountain Maidu people used and shared the abundant valley for edge of years, with several year-round villages located on the meadow forges. Tásmam Koyóm is around 2,325 acres and Yellowcreek, a tributary to the Feather River, runs through it. This area experienced a similar history as many of our Sierra meadows, indigenous people were removed from the land, breaking a long standing tradition of land tending; beavers were trapped off the landscape; creeks were mined, moved, and dredged; forests were accessed with miles of roads and even railroads for decades of unmanaged logging, riparian and sensitive areas experienced decades of intensive cattle grazing, and roads and culverts were installed around the perimeter of the meadow and one directly through the meadow.

All this time the Mountain Maidu of the area have advocated for the stewardship and return of their homelands. In 2003, Maidu Summit Consortium (MSC) was formed to work towards this vision. Plumas National Forest (PNF) owns the upper portion of the valley and the rest was privately owned by water and electric companies - and at one point was slated to become a reservoir accompanied by hydro-electric dams on Yellow Creek and ranch land. In 2019, MSC was deeded the land through a Pacific Gas & Electric bankruptcy settlement. After over 100 years of fighting, Tásmam Koyóm was back in the hands of the Mountain Maidu people, along with two other co-conservators: California Department of Fish & Wildlife (CDFW), and Feather River Land Trust.

In addition to being part of a monumental moment for land back, Tásmam Koyóm and the partnership with MSC has been a meaningful part of the story for beaver management and process-based restoration (PBR) in California.

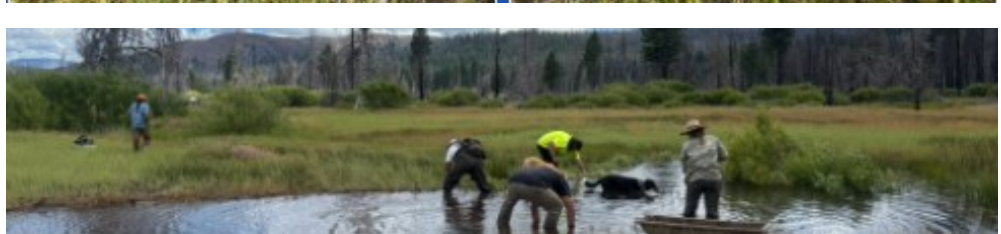
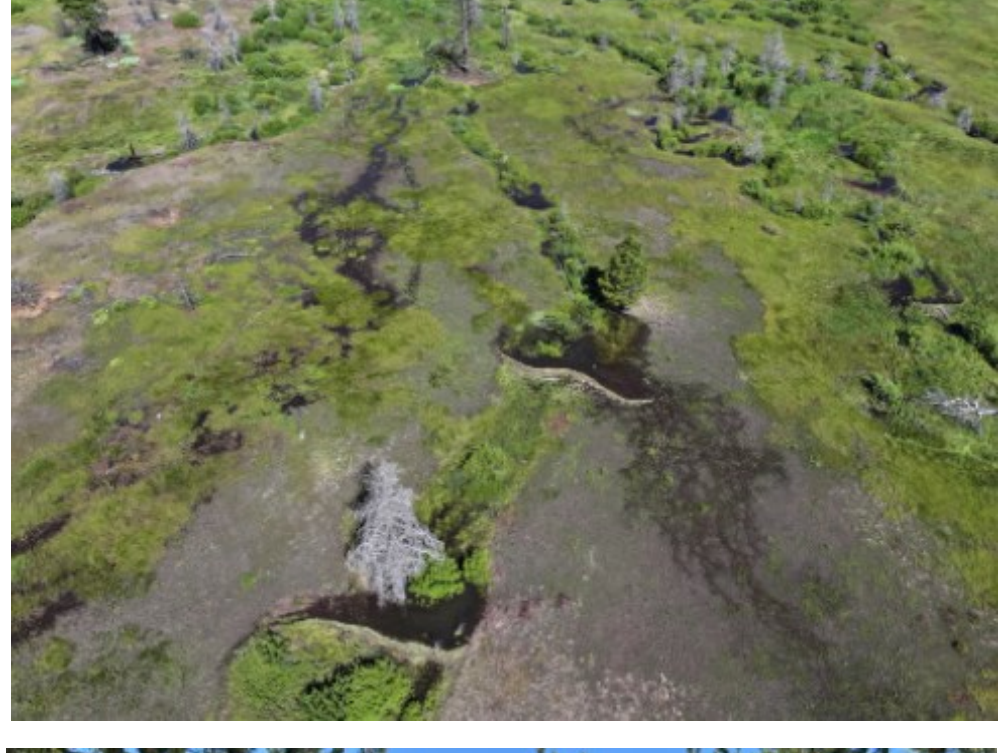
Tásmam Koyóm has been a hub of PBR and a working model of what collaborative land stewardship looks like. Since 2015 conversations about the importance of beaver and PBR began when Damion Ciotti with U.S. Fish and Wildlife Service (USFWS) introduced Occidental Arts & Ecology Center (OAEC) to the MSC Director at that time. OAEC eventually got funded by MSC to do a Beaver Recruitment Strategy and led the initiative of carbon dating historic beaver dams at Tásmam Koyóm, proving beavers were native to the Sierra Nevada. Through these efforts, many years of OAEC and MSC lobbying for beaver return, and the recommendation of Tásmam Koyóm having viable habitat for beaver, it was selected for CDFW first beaver relocation in nearly 75 years.

In 2019, MSC and Plumas National Forest (PNF) received funding to implement PBR at Tásmam Koyóm. As the two land holders of the valley bottom, they have pulled in a wide network of Tribal, private, NGO, state, and federal partners. Thinking like a watershed, these projects have worked simultaneously, with ongoing efforts to collaborate towards valley-wide restoration, beyond the common choke points of property boundaries.

Throughout these projects, Swift Water Design has designed and implemented work on MSC land, and Plumas Corporation and Symbiotic Restoration on PNF land. Recently, MSC received funds from the USFWS to develop a Tribal work crew, focused on meadow restoration. Over the past two months, Upstream Ecology has worked with 9 folks from the MSC crew to train them in PBR and build their capacity for long term stewardship of their homelands. Which includes understanding the hydrology of the entire meadow and not just within their property lines. Through conversation and collaboration of the many project partners, MSC crew were able to walk the water up and implement PBR on PNF land, a location up-valley that communicates greatly to the restoration MSC has implemented downstream.

A question often asked in the restoration community, is what does long term stewardship look like? We believe we are closer to answering that through the work at Tásmam Koyóm. Develop relationships to provide funds, land access, and technical expertise, build tribal and local capacity, and put long term stewardship back in the hands of Tribes and the people.

Finally, Tásmam Koyóm has been host to two of CalPBR Network's annual Build Like a Beaver trainings and we are pleased to announce we will be returning to the mighty land of Tásmam Koyóm again for BLAB 2026. We are excited to share the magic of this place with all of you and honored to have MSC's leadership present throughout.



1. BDA's supporting floodplain reconnection. The historic floodplain has been dry for -75 years.

2. MSC crew building BDA

3. MSC working on PNF land

4. MSC crew working on a BDA that switches onto historic floodplain

Becoming Symbiotic

Ash Waters, Symbiotic Restoration

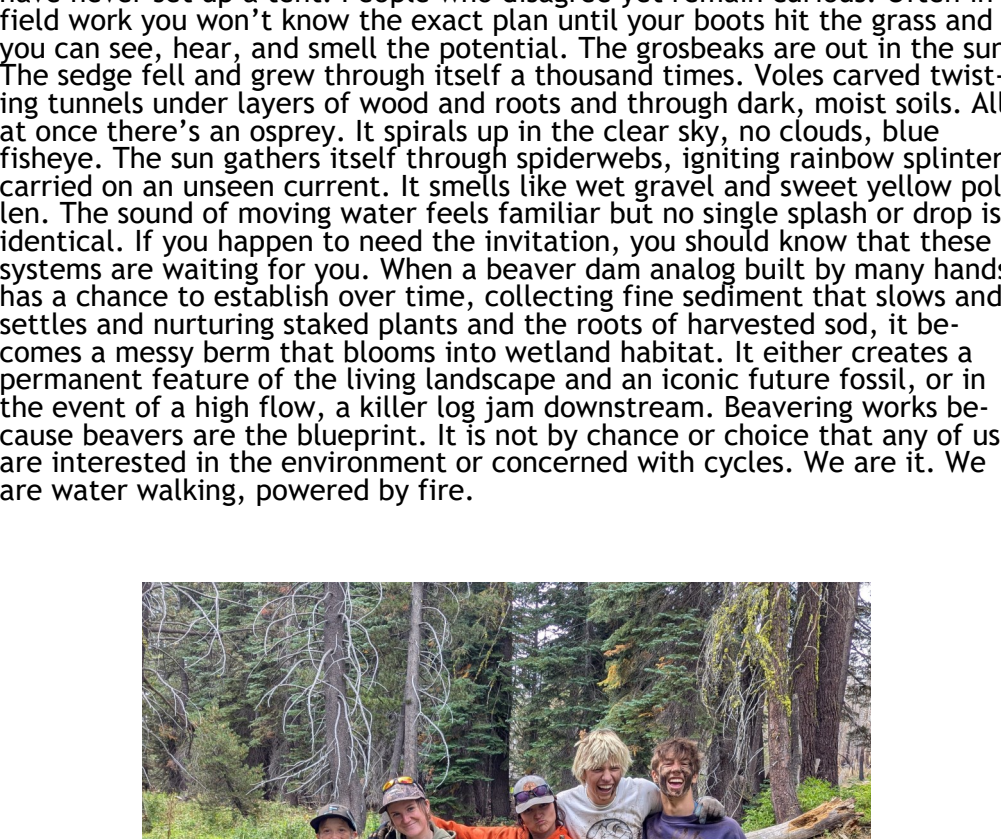
Collaboration is the heart of what we do. As a camping-based labor crew, we have to be able to hold one another to engage in the most strenuous tasks and with the accelerated tipping points of modern life. We love each other. We work together. It's symbiotic.

Wet meadows are often missing two curators of connectivity they have enjoyed for thousands of years: human tenders with generational knowledge of elemental cycles and spirit, and the beavers who have the power to bring slow, sloppy complexity back to river systems now resting between sheer banks. There are traces of wetland understory extending into now-crowded forests bordering meadow zones. These forests had their small fires suppressed until they flew into fevers, lightning strikes and mega-fires dying down into standing dead and salvage yards. What remains in unburnt islands creeps crowded and encroaching toward once-beavered streams, thirsty and erosive without anabranching arms. Natural springs gurgling out of crystal and loam lie bumpered by forest roads and fences, compressed into culverts, slowly filled with strange dilutions by theoretically advanced mammals. Even degraded, these systems are still giving. They are full of life. They point their arrows outward, waiting for our return flow.

The larger the number of connections you can nurture, the stronger a system will be. To live up to our name and mission in restoration, through cycles of return and readjustment, we welcome all who are interested in what can happen when you reignite a friendship with the Willow; with thick mud, bendy branches, and clearer water running into and over the Earth. We want to collaborate with people from all walks of life. We want to offer a doorway into relationships with land stewardship that lie latent. The continuity of these relations is up to all of us. Meadows are latents of complexity, providers, survivors as private pasture, parks, and protected zones. They are long-held by indigenous stories of the rock, fish, and animal people. They are the filters, the holders, the overflowers. Through and connected. Righteously squeezed in the government tourniquet. Through mimicry of the beaver, we are working in tandem with all beings in search of water. Trees unable to burn in cycles returned as carbon to waterways, fish with streams too shallow to traverse given newly active side channels, mammals hunkered down in shady refugia as burn scars reburn, soil with generations of seeds replenished with groundwater, depressions becoming dragonfly pools and cutbank overhangs for winter bumble bees, the sensitive in between, the microbiomes and basking zones. Observation of any system yields an energy exchange so intricate it feels difficult to take a single step yet here we are. Disassembly inviting reassembly.

During our field season in the Sierras, we work with ever shifting groups of people, elevations, and temperatures. Symbiotic works with many school groups each year ranging from kindergarten to college-aged students. A group of Bay Area middle schoolers and their parents in tech showed up to the headwaters of the undammed Cosumne River and it was as much a balm for the adults, one person stating that they couldn't remember the last time they had heard the wind through the trees. Elementary schoolers in Lassen built dams with us in their local catastrophic burn scar struck by three fires in the last five years and where damage still hold on, splashing and playing and saying it was their favorite day of the year. In Plumas County we built structures in a historic beaver reach on private logging land and returned the next year to find our dams over four feet taller with a new lodge in between. Beavers find Tahoe built low and extended our structures sideways, further harnessing the power of the Carson River in rehydrating miles of meadow. Anybody is invited any week to volunteer.

The time is now. To imagine a world where everything is connected is no longer a radical statement. Connect to the people who came from the land. Children. Students. Retirees. Organizational bodies. Curious individuals who have never set up a tent. People who disagree yet remain curious. Often in field work you won't know the exact plan until your boots hit the grass and you can see, hear, and smell the potential. The grosbeaks are out in the sun. The sedge fell and grew through it a thousand times. Voles carved twisting tunnels under layers of wood and roots and through dark, moist soils. All at once there's an osprey. It spirals up in the clear sky, no clouds, blue fish-eye. The sun gathers itself through spiderwebs, igniting rainbow splinters carried on an unseen current. It smells like wet gravel and sweet yellow pollen. The sound of moving water feels familiar but no single splash or drop is identical. If you happen to need the invitation, you should know that these systems are waiting for you. When a beaver dam analog built by many hands has a chance to establish over time, collecting fine sediment that slows and settles a messy berm that blooms into wetland habitat. It either creates a permanent feature of the living landscape and an iconic future fossil, or in the event of a high flow, a killer log jam downstream. Beaver work because beavers are the flow, the print. It is not by chance or choice that any of us are interested in the environment or concerned with cycles. We are it. We are water walking, powered by fire.



1. El Dorado high schoolers volunteer at Leek Springs

2. Bay area high schoolers volunteer group Eco-Engineering In Action at Leek Springs