California Process-Based Restoration Network

January 2026

Let's get dam busy!

Issue 7 — January 16, 2026

A Note from the Editors:

Happy Winter 2026 everyone! There's been a lot of change and upheaval over the past year, and we've been a bit silent, but we're happy to report that the CalPBR Network is still here and gearing up to be stronger than ever. There are many great things afoot for the CalPBR Network, but our biggest change this year is partnering with the Occidental Arts & Ecology Center (OAEC) as our new fiscal sponsor. What does that mean? It gives CalPBR the administrative oversight of a well-organized non-profit 501(c)3 organization (OAEC), which allows CalPBR to apply for and receive grant funding. It also provides administrative oversight so CalPBR staff can focus on our mission of outreach and education rather than just administrative tasks. In 2025, we received our first CalPBR grant through the partnership and have hired a new part-time Project Director, Sheli Wingo, who has been an active participant with CalPBR from its inception. We are thrilled to have Sheli to continue and expand upon the mission of CalPBR.

In this issue, we'll be covering some of what the Network does best - coming together to share accomplishments, techniques, opportunities, research and monitoring results, and, of course, our annual Build Like a Beaver training. Our current priorities are reconnecting with all of you via this newsletter and more frequent and consistent CalPBR Membership meetings (starting with one planned for **March 4th, 2026, (1:00-3:00)**, updating our CalPBR website, and possibly launching a social media CalPBR page for your networking, and fundraising to support 2026 CalPBR activities.

If you or anyone that you know is interested in providing financial support for CalPBR activities, we welcome donations! We are in the process of setting up a donation link on the CalPBR website, but also welcome donations directly to us. Please contact Sheli Wingo, (530) 526-4902, sheli@calpbr.org to discuss. We look forward to talking with you!

Happy beavering,

Karen Pope, Ben Cook, Kate Lundquist, Sabra Purdy, Carrie Monohan, Sheli Wingo

Next CalPBR Network Meeting- Mark your calendars!

March 4th, 2026, 1:00-3:00 PM

CalPBR Shorts:

- The LTPBR mapping web site PBR Explorer is where CalPBR members have agreed to consolidate locations of low-tech process-based restoration projects. Please be sure to add your projects and see all the great work happening across the country.
- Check out the recent review paper titled "Beaver-related restoration on climate resilience in western North America" published in Restoration Ecology.
- The WATER Institute at OAEC recently launched the California Beaver Help Desk and related California Beaver Coexistence Training and Support Program to provide technical and financial assistance to those experiencing conflict with beaver. This new resource, created in partnership with the Beaver Institute, offers **free technical assistance** for land managers navigating human-beaver conflict, **cost-share applications of up to 50%** for project installation expenses, and **tuition waivers** for Californians ready to train as Certified Beaver Coexistence Professionals through the BeaverCorps program. Contact Grey Hayes (grey@oaec.org), OAEC Beaver Coexistence Program Manager, for more information.
- CDFW Beaver Restoration updates
- Round Valley is a recently restored meadow on Sierra Pacific Industries and Collins Pine timber lands that supports the last healthy population of Cascades frogs (*Rana cascade*) in the southern Cascade Range. The site provided the source frogs for a reintroduction to Lassen Volcanic National Park. Read about it in a recent High Country News article. Stay tuned for a research paper on the success of the meadow restoration for breeding frogs.

Build Like A Beaver 2025 (BLAB) Highlights:

Sabra Purdy, Trout Unlimited

The 4th Annual, 2025 Build Like a Beaver Workshop was a great success. The sold-out event brought 77 participants and instructors together for 4 days of learning, community-building, and hands-on experience. CalPBR partnered with American Rivers and the Humboldt-Toiyabe National Forest to host the training at their Faith Valley Meadow Restoration project site. This site, on the West Fork Carson River, provided an amazing classroom for participants to learn from and explore. The initial restoration implementation took place in 2022 and 2023, so students were able to see the progression of process-based restoration treatments over time while building 3 additional channel-spanning structures and enhancing 6 existing structures as well as implementing 20 m of gully stuffing and headcut mitigation. With active beavers on site, a fascinating history, and gorgeous fall colors, Faith Valley was an incredible place to host the event and learn about a highly dynamic site with a constantly changing channel and complex sediment dynamics.

We owe huge thanks to Mooretown Rancheria, the primary sponsors of the event. They provided funding and active support by sending out Tribal crews to help with fuels thinning and procurement to source materials for the structures. Thanks also to the Humboldt-Toiyabe National Forest, for providing the beautiful Hope Valley Campground for the event.

The workshop provided a great opportunity to bring a diverse assortment of people together to share knowledge and create momentum and understanding of process-based restoration methodology and approaches. Instruction and guidance was provided by crews from Swift Water Designs, Symbiotic Restoration, Anabranch Solutions, Upstream Ecology, Occidental Arts and Ecology Center and Trout Unlimited. There were numerous organizations present to learn and enhance their PBR knowledge including several Tribal Organizations (Pomo, Mooretown, Hybrid Indigenous Stewardship), non-profit and environmental consulting organizations from around the state.

Days in the field were spent exploring beaver wetlands, sediment dynamics, opportunities and constraints, design methods, and structure types. Evenings gave way to shared food, music, lightning talks, and networking opportunities. It is clear that there is a great hunger for the knowledge and application of PBR methodologies. The approach and thought processes that drive PBR call for a long-term, iterative

Captioned top to bottom:

BLAB 2025 group photo.—Brock Dolman.

Garrett Costello, Symbiotic Restoration, teaches next to a structure. —Matt Berry

Group build in stream. —Matt Berry.

Group learning in stream. —Matt Berry.

Project Spotlight

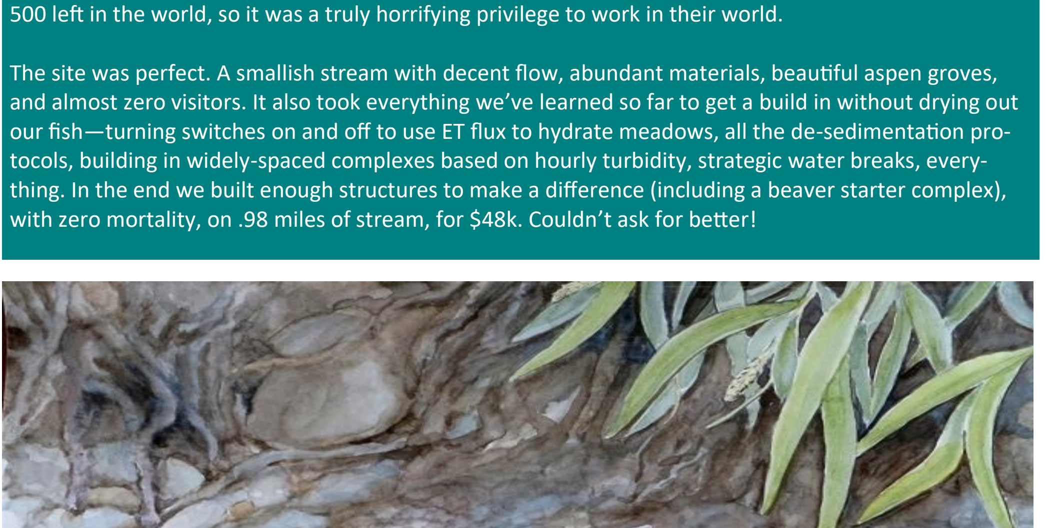
By-Day Creek: Short timeline Sensitive Fish Species PBR build

Kevin Swift, Swift Water Design

Late April last year I got an email from CalTrout saying, "We have an endangered trout build with a small budget, the money explodes June 31st, and we can't implement before June 6. Can you do anything?" I love these sorts of projects, so we had a couple zoom meetings, brought a small team to the site June 6, did a quick tour, and started building on day one. No planning grants or budget-bloating office fodder. Just obsessive attention to water levels, turbidity and temperature, soil infiltration and runoff rates, and real-time observation of fish behavior.

The By-Day Creek has a special population of the Lahontan Cutthroat Trout (*Oncorhynchus clarkii henshawi*), which is a federally-listed threatened (FT) species under the Endangered Species Act (ESA) and is also designated as Nevada's state fish. They are "a weird fish, with unique genetics", to quote our fisheries champion Nick Buckmaster of California Department of Fish & Wildlife. Having not been fished since 1977, we could walk right up and say Hi and they'd just smile and wave a fin. There are only about 500 left in the world, so it was a truly horrifying privilege to work in their world.

The site was perfect. A smallish stream with decent flow, abundant materials, beautiful aspen groves, and almost zero visitors. It also took everything we've learned so far to get a build in without drying out our fish—turning switches on and off to use ET flux to hydrate meadows, all the de-sedimentation protocols, building in widely-spaced complexes based on hourly turbidity, strategic water breaks, everything. In the end we built enough structures to make a difference (including a beaver starter complex), with zero mortality, on .98 miles of stream, for $48k. Couldn't ask for better!



Lahontan Cutthroat Trout

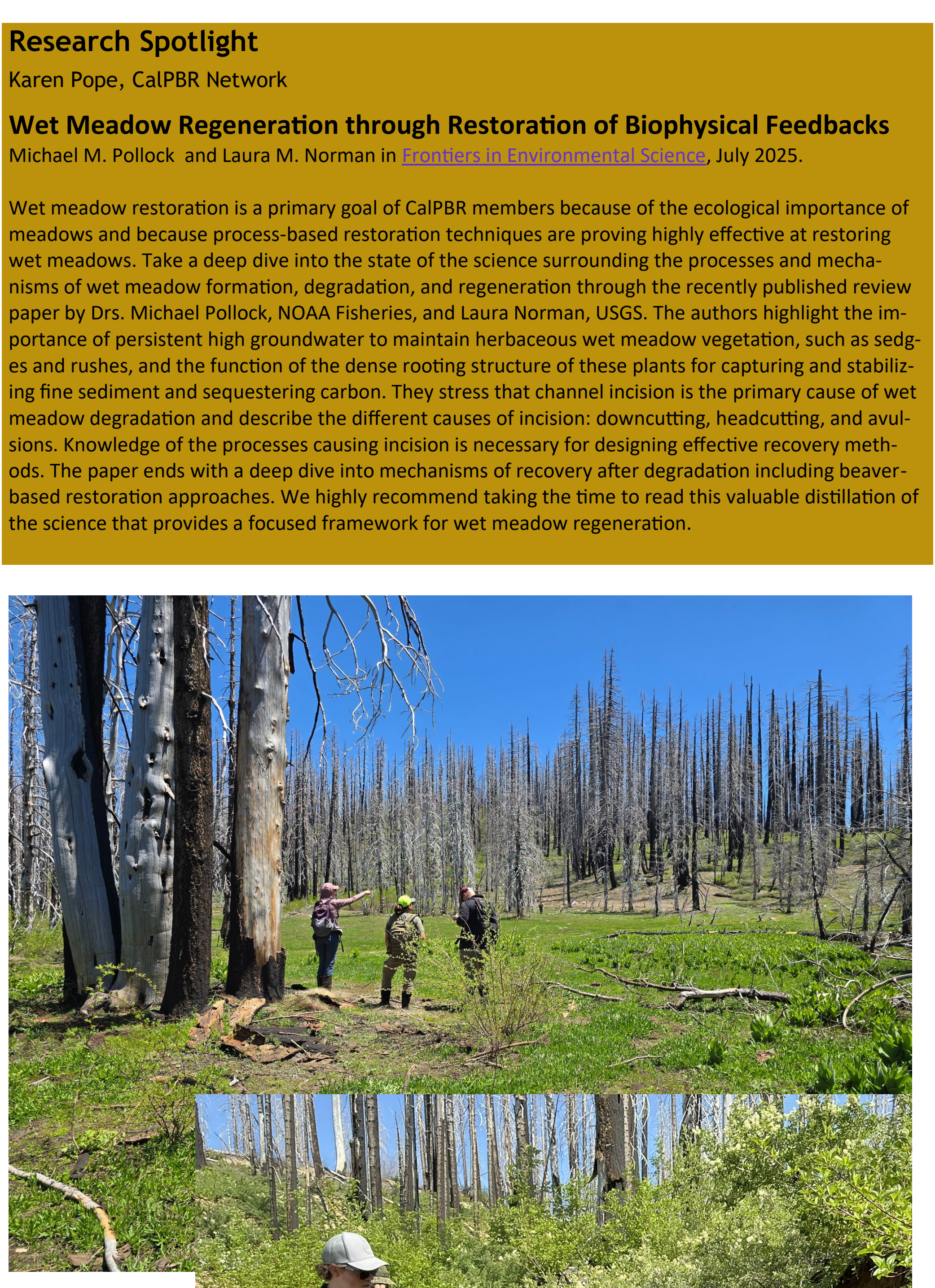
Research Spotlight

Karen Pope, CalPBR Network

Wet Meadow Regeneration through Restoration of Biophysical Feedbacks

Michael M. Pollock and Laura M. Norman in Frontiers in Environmental Science, July 2025.

Wet meadow restoration is a primary goal of CalPBR members because of the ecological importance of meadows and because process-based restoration techniques are proving highly effective at restoring wet meadows. Take a deep dive into the state of the science surrounding the processes and mechanisms of wet meadow formation, degradation, and regeneration through the recently published review paper by Drs. Michael Pollock, NOAA Fisheries, and Laura Norman, USGS. The authors highlight the importance of persistent high groundwater to maintain herbaceous wet meadow vegetation, such as sedges and rushes, and the function of the dense rooting structure of these plants for capturing and stabilizing fine sediment and sequestering carbon. They stress that channel incision is the primary cause of wet meadow degradation and describe the different causes of incision: downcutting, headcutting, and avulsions. Knowledge of the processes causing incision is necessary for designing effective recovery methods. The paper ends with a deep dive into mechanisms of recovery after degradation including beaver-based restoration approaches. We highly recommend taking the time to read this valuable distillation of the science that provides a focused framework for wet meadow regeneration.



PBR Developments- Mooretown Meadow Prioritization

In 2020, the North Complex Fire devastated more than 300,000 acres of traditional Maidu territory. Although the fire caused extensive damage, including the death of more than 90% of the trees, it also provided an opportunity for Mooretown Rancheria to reconnect with and help to heal lands their ancestors called home from time immemorial. An important part of this reconnection is Mooretown's recent work to visit and assess meadows throughout the North Complex Fire footprint. Meadows are not just biodiversity hotspots that provide hydrologic and carbon sequestration benefits, they are also highly significant cultural landscapes. These are places where the original people of the land lived and built community with each other and other species of the land, water, and air. Many plants that thrive in healthy meadows were used in cultural practices such as basket-making (willow, redbud) and were traditional foods (tubers like camas, onions, bistort).

With support from the Sierra Meadows Partnership and Point Blue, Mooretown Natural Resources Department team members identified and assessed priority meadows for restoration. An exciting new element of this work is the Cultural Significance component that Mooretown's Traditional Ecological Knowledge Specialist and Tribal Historic Preservation Officer developed, which has been incorporated into the Meadows Condition Scorecard initially created by American Rivers. The Cultural Significant assessment tool includes two main focuses: Ethnobotanically Significant Species and Signs of Occupation. These cultural foci can now be included in assessments not just on Maidu ancestral lands but on meadow sites across the Sierra Nevada and beyond. Contact Keri Rine at krinne@mooretown.org for more information.

Mooretown is now in the process of developing restoration objectives and permitting strategies for 10 sites, on which we hope to implement process-based restoration actions in the near term.

Partner Accomplishments 2025

Scott River Watershed Council worked in three meadow systems and applied PBR techniques to initiate restoration of 30 acres of wet meadows and fens.

Trout Unlimited projects supported restoration in 16 meadows across the Sierra Nevada. They built 508 new structures, >90% of which were built in designated wilderness using only hand tools.

Mid Klamath Watershed Council and the Karuk Tribe - MKWC worked at three stream reaches where they built a range of structure types (PAWS, BDAs, brush structures) to add complexity, slow water, and arrest active headcuts. In this work they enhanced 0.4 miles of stream.

Upstream Ecology - In their company's first season, the Upstream gals initiated restoration of over 2 miles of stream across multiple meadow, stream, and upstream drainages with 448 structures built. They reactivated approximately ½ mile of new flow paths.

Symbiotic Restoration - It was an incredible year thanks to a truly special community of thoughtful people working at all levels to tend to our wet mountain meadows. The Symbiotic team worked on 22 projects, constructing or reworking 515 structures over about 16 stream miles.

Swift Water Design - Swift Water Design built or evolved 1348 structures on 23.2 stream miles in 27 different sites. Most sites saw 50-100% new channel length, and are estimated to have yielded 10+ acres of groundwater and surface water effects per mile restored. Swift Water Design trained around 80 people including members from 3 tribes, the USFS and 5 French folks. An average of 13 person crews worked over 1,000 hours.

Anabranch Solutions - In California, Anabranch worked closely with Trout Unlimited to design and implement a large meadow restoration project in the Golden Trout Wilderness. They also worked on meadow restoration plans for Forni Meadow in the Eldorado NF and Dismal Swamp in the Modoc.

Nature's Engineers- In 2025 Nature's Engineers implemented 88 in-stream structures over 4 projects covering 3 counties: San Luis Obispo County, Santa Barbara County, and Santa Clara County. Approximately 1.66 stream miles.

Upcoming Conferences

California Society for Ecological Restoration (SERCAL) Annual Meeting
https://sercal.org/sercal-2026
May 28th—20th, 2026 -- Fortuna, CA
Registration Open

River Restoration NorthWest Conference
https://www.rrnw.org/symposium-welcome-page/
February 2nd - 6th, 2026

Salmonid Restoration Federation (SRF) Conference
https://www.calsalmon.org/conferences/43rd-annual-salmonid-restoration-conference
February 2nd - 6th, 2026—Redding, CA

San Luis Obispo Beaver Brigade - SLO Beaver Fest 2026
https://www.slobeaverbrigade.com/beaver-festival-2026/
April 11, 2026 ~ please keep an eye on their webpage for more details

Sierra Meadows Partnership
https://www.sierrameadows.org/annual-meeting-2026
May 26-28th — Tahoe City, CA
Registration Open

The Beaver Institute—BeaverCon 2026
https://www.beaverinstitute.org/professional-info/beavercon/
September 28 - 30th, 2026 - Minneapolis, MN

*** We're refreshing our https://www.calpbr.org/ website! If you have any Resources and/or News & Events that you feel are relevant to CalPBR membership, Please contact us with your suggestions: sheli@calpbr.org

Sheli Wingo

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