



Issue 4 – May 18, 2023

In this issue: highlights and photos from SLO Beaver Fest!



Photo Credit: Brittany App

A Note from the Editors

This winter has provided an amazing opportunity to witness how PBR projects interact with and influence hydraulic forces. Now it's time for hydraulics to make way for biologic processes (see the Beale Project Spotlight below for an example of seasonal geomorphic and biological work). In this newsletter, we'll cover things we're excited about in the upcoming field season, but first we want to highlight what's been accomplished since the last newsletter and remind you about the upcoming Cal-PBR meeting next Monday, 22 May from 10-12 am. The link to the meeting is at the end of the Newsletter.

Congratulations to the San Luis Obispo Beaver Brigade for the outstanding success of the first annual SLO Beaver Festival! The event had a great turnout of over 1000 and brought together beaver believers and the SLO community at large.

After keynoting at the SLO Beaver Festival, Dr. Emily Fairfax hosted a half-day Cal-PBR Technical Tools workshop with Adam Cummings. Over 100 attendees learned about desktop tools to visualize problems and opportunities associated with potential project areas.

And finally, Cal-PBR was well-represented at the 40th Annual Salmonid Restoration Conference last month in Fortuna. The Cal-PBR session featured great talks from Kevin Swift (Swift Water Design), Dr. Carrie Monohan (The Sierra Fund), Mike Edwards (USFWS), Erich Yokel (Scott River Watershed Council), Craig Benson (Cal Poly Humboldt) and Kate Lundquist (Occidental Arts and Ecology Center). Dr. Monohan spoke about using PBR for hydraulic mine remediation. We also had a strong presence in the Healthy Fire, Healthy Fish Workshop, Flow Enhancement Workshop, and Practical Remote Sensing Tools Workshop. Let's keep getting the word out because California's diverse landscape needs a diverse network to bring about a resilient future.

With excitement for our future,

Karen, Kate, Matt, Garrett, Carrie, Jessica, and Ben

Announcements

California Department of Fish and Wildlife Beaver Restoration Program Update: The Program is fully staffed and the first public meeting is Thursday, May 25th, from 2 to 3 pm (meeting info will soon be published [here](#)). The meeting will cover a broad overview of CDFW's Beaver Restoration Program, including its purpose, objectives, tasks, and timelines. Additionally, the meeting will address the implementation of pilot and future beaver translocation projects, development of a beaver co-existence toolkit, and policy updates. The meeting will conclude with a public question and answer session.

SciPub at Gold Vibe Kombuchary – What is Process-Based Restoration? Join Sierra Streams Institute and the local community for this free event at the Gold Vibe Kombuchary in Grass Valley on Tuesday, May 30th from 6-7pm to learn about Process-Based Restoration and low-tech, low-cost, yet highly effective stream restoration techniques. More info [here](#).

Recovering “Lost Meadows” Published: Check out the new CDFW Journal article “Recovering the lost potential of meadows to help mitigate challenges facing California's forests and water supply” (found [here](#)) by Karen Pope and Adam Cummings. The article names Cal-PBR as an example of a group developing the restoration tools and trained workforce to meet California's pressing need for restoration.

Volunteer Opportunities: Check the CalPBR.org [calendar](#) for projects happening near you. Feel free to reach out to the project lead for opportunities to learn new techniques with great folks.

Field workshops: The Scott Creek Watershed Council will host Making Meadows Matter, a workshop on meadow restoration in the Klamath basin on September 26-29 in the Etna area. Register [here](#). And stay tuned for future announcements about another Yellow Creek training as well. If you have ideas for locations for additional trainings or want to help with planning, please reach out to us at calpbrnetwork@gmail.com.

Multiple State and Federal Grant Opportunities are open, including the Sierra Meadows Partnership Grant Program. SMP's grant solicitation and guidelines can be found [here](#).

Occidental Arts & Ecology Center Introduces New “Beaver Back Saver” Co-Existence Device: Designed by the US Fish and Wildlife Service staff at the Sutter National Wildlife Refuge, this simple, yet elegant design saves time and money by preventing beavers from blocking water control structures. Find more information [here](#).

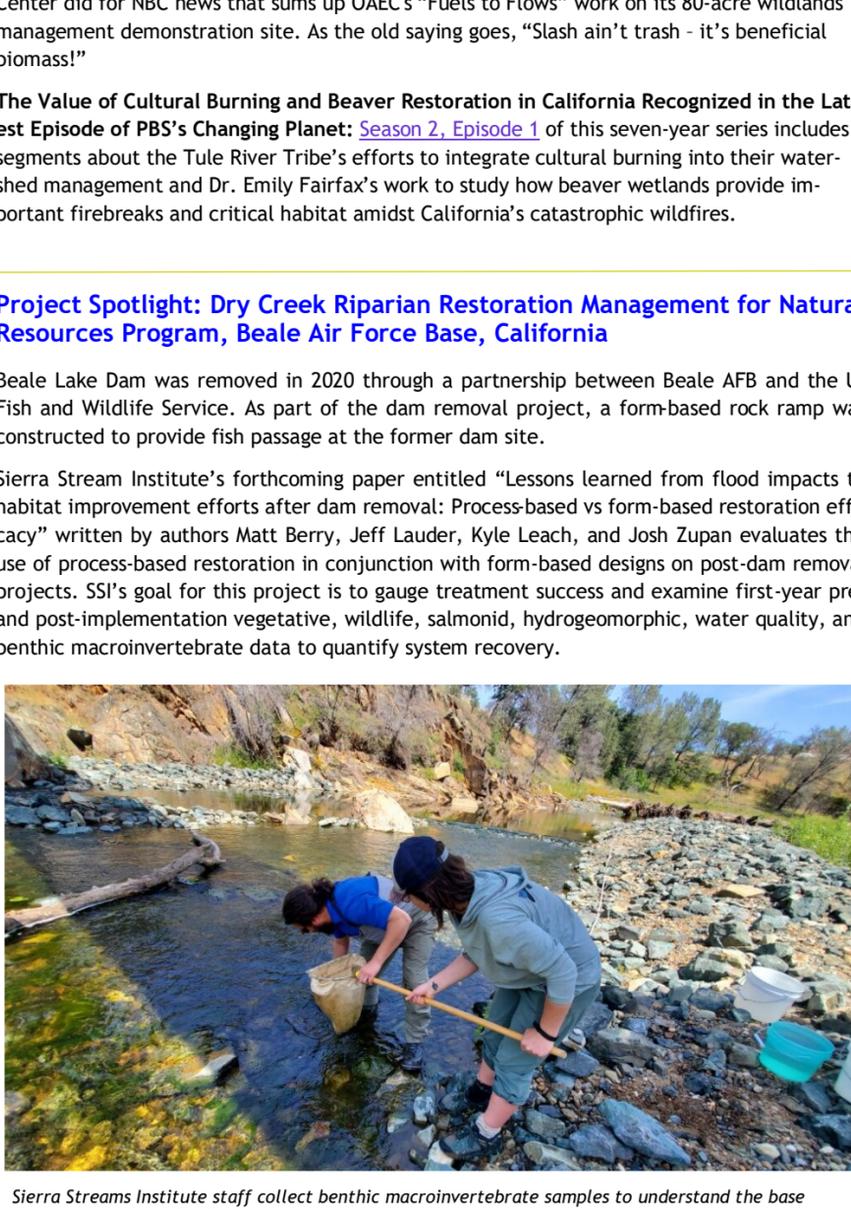
Upland Process-Based Restoration In The News: As we thin and limb our forests, we can put that material to good use to decrease erosion, build soil, increase water holding capacity, and create habitat for wildlife. Check out this [clip](#) that Brock Dolman of Occidental Arts & Ecology Center did for NBC news that sums up OAEC's “Fuels to Flows” work on its 80-acre wildlands management demonstration site. As the old saying goes, “Slash ain't trash - it's beneficial biomass!”

The Value of Cultural Burning and Beaver Restoration in California Recognized in the Latest Episode of PBS's Changing Planet: [Season 2, Episode 1](#) of this seven-year series includes segments about the Tule River Tribe's efforts to integrate cultural burning into their watershed management and Dr. Emily Fairfax's work to study how beaver wetlands provide important firebreaks and critical habitat amidst California's catastrophic wildfires.

Project Spotlight: Dry Creek Riparian Restoration Management for Natural Resources Program, Beale Air Force Base, California

Beale Lake Dam was removed in 2020 through a partnership between Beale AFB and the US Fish and Wildlife Service. As part of the dam removal project, a form-based rock ramp was constructed to provide fish passage at the former dam site.

Sierra Stream Institute's forthcoming paper entitled “Lessons learned from flood impacts to habitat improvement efforts after dam removal: Process-based vs form-based restoration efficacy” written by authors Matt Berry, Jeff Lauder, Kyle Leach, and Josh Zupan evaluates the use of process-based restoration in conjunction with form-based designs on post-dam removal projects. SSI's goal for this project is to gauge treatment success and examine first-year pre- and post-implementation vegetative, wildlife, salmonid, hydrogeomorphic, water quality, and benthic macroinvertebrate data to quantify system recovery.



Sierra Streams Institute staff collect benthic macroinvertebrate samples to understand the base level health of the Dry Creek ecosystem.

The authors compare control versus treated areas above and below natural beaver dams, and discuss lessons learned from historic flood impacts on artificial floodplain and channel construction. More information at Sierra Streams Institute [here](#).

SLO Beaver Fest!

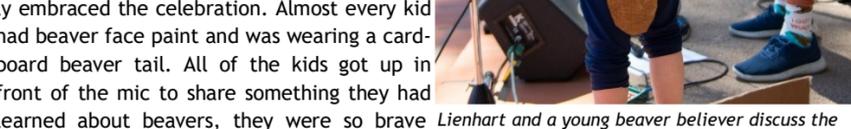
The SLO Beaver Brigade put on the first San Luis Obispo Beaver Festival on April 1st in Mission Plaza. This wildly successful event attracted over 1,000 beaver believers and members of the general public.

SLO Beaver Brigade's Audrey Taub kicked off the event and then The Loving Mosh and Cuyama Mama performed set after set of great live music in between speakers Dr. Emily Fairfax, Chumash Tribal Elder and Advocate Michael Khus, and Garrett Costello of Symbiotic Restoration. When the time was right, SLO Beaver Brigade's Cooper Lienhart took the stage, and backed by The Loving Mosh, belted out a heavy rendition of “Go Little Beaver Go”.

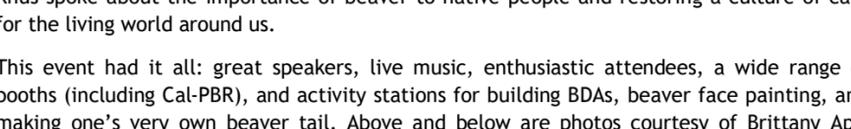
Lienhart reflects: “A highlight for me was seeing how quickly the kids and families understood beavers' importance and how they totally embraced the celebration. Almost every kid had beaver face paint and was wearing a cardboard beaver tail. All of the kids got up in front of the mic to share something they had learned about beavers, they were so brave and passionate!”

Khus spoke about the importance of beaver to native people and restoring a culture of care for the living world around us.

This event had it all: great speakers, live music, enthusiastic attendees, a wide range of booths (including Cal-PBR), and activity stations for building BDAs, beaver face painting, and making one's very own beaver tail. Above and below are photos courtesy of Brittany App (App's Photography) that capture the vibe of the event.



Lienhart and a young beaver believer discuss the benefits of beaver reintroduction.



L-R: Jenn Fields of the Morro Bay National Estuary Program, and Watershed Stewards Program Members Natalie Nemeth and Julian Palmisano demonstrate camaraderie between salmon and beaver.



L-R: California Conservation Corpsmembers Gabriela Aguilar and Staff Recruiter Ana Mejia.

Next Cal Process-Based Restoration Network Meeting:

Monday, May 22nd, 2023 from 10:00am - 12:00pm

Join Zoom Meeting [here](#).