



Young citizen scientist volunteer grabs a water sample along the Merced River, CA.

Citizen science along the Merced *Wild & Scenic* River – the water quality monitoring program that refused to die!

by Kristina Rylands

Connecting communities to rivers through citizen science is a tried-and-true way for nonprofits to rally volunteers around river protection and restoration. It supports river managers and accelerates understanding of river health while inspiring meaningful community engagement and stewardship.

Since the early 2000s, the Upper Merced River Watershed Council, a small nonprofit located just outside of Yosemite National Park in central California, conducted quarterly community-based water quality monitoring. With a robust group of 24 volunteer teams, collaboration with federal agency and nonprofit partners, engagement with local schools, and staff to oversee training and quality assurance, the water quality monitoring program was the hallmark of the nonprofit's protection efforts. What resulted was a decade of reliable water

quality data to help land management agencies understand the health of the Merced Wild and Scenic River.

And then in 2012 a fire destroyed the office and everything in it. State funding dried up forcing the organization to lay off staff. All collaboration and projects screeched to a halt. For a year, efforts to recover the previous vitality of the Watershed Council were mired in insurance claims and simply struggling to assess what was lost. Without staff, without funding, and with only a handful of board volunteers remaining, the water quality monitoring program stalled.

When all looked hopeless, a local conservation organization Sierra Foothill Conservancy offered to share an AmeriCorps volunteer to help the Watershed Council reconstitute the water quality program. Fortunately, a few kits surfaced from various volunteer's garages, providing enough equipment to cobble

(continued p.20)



River Management Society

Main Office

Risa Shimoda, Executive Director
PO Box 5750, Takoma Park, MD 20913-5750
(301) 585-4677 / cell (301) 502-6548
executivedirector@river-management.org

River Training Center

River Studies and Leadership Certificate
Angie Fuhrmann, Coordinator
(480) 818-3649 / angie@river-management.org

National Rivers Project

James Major, Coordinator
(540) 717-3595 / james@river-management.org

Communications

Bekah Price, Coordinator
(423) 943-2000 / bekah@river-management.org

Professional Purchase

Rick Waldrup, Lead
(406) 925-1554 / riverguy@bresnan.net

RMS Store / Merchandise

Judy Culver
(928) 443-8070 / jculver@blm.gov

RMS Journal

Caroline Kurz, Editor / Design
(406) 549-0514 / caroline@river-management.org

National Officers

Judy Culver, President, Taos, NM
(928) 443-8070 / jculver@blm.gov

Shannon Bassista, Vice President, Boise, ID
(208) 373-3845 / sbassista@blm.gov

Helen Clough, Secretary, Juneau, AK
(907) 790-4189 / hcloughak@gmail.com

Rob White, Treasurer, Salida, CO
(719) 221-8494 / rob.whiteco@gmail.com

Emma Lord, Chapter Liaison, Loudon, NH
(518) 728-4029 / emma_lord@nps.gov

Ex-Officio Advisors

Bob Randall, Kaplan, Kirsch & Rockwell LLP
(303) 825-7000 / brandall@kaplankirsch.com

Nate Hunt, Kaplan Kirsch & Rockwell LLP
(303) 825-7000 / nhunt@kaplankirsch.com

Steve Chesterton, US Forest Service
(202) 205-1398 / stephen.chesterton@usda.gov

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Executive Director's Eddy

Restoring Rivers – Yesterday, Today and Tomorrow

River running once occurred intuitively as the snow melted or after a decent rainstorm. Since the 1980s, whitewater releases from hydropower dams have created recreation destinations and revitalized the economies of dozens of river communities as well as modestly restoring habitat through reaches that had been dewatered for decades. Private boaters and commercially outfitted guests can experience river skill-building, scenery, and excitement through scheduled river releases from early spring to November, rain or shine. While the season, number of days, flow volume, and time of day vary, one can usually plan a trip around the schedule of posted flows from Kennebec in Maine, Deerfield in Massachusetts, and Youghiogheny in Maryland to the Cheoah in North Carolina, Tallulah in Georgia and Catawba in Alabama, and South Fork American in California, and the Clackamas in Oregon.

It has been an honor and a privilege to support the *Hydropower Insights: Exploring Projects, Energy Markets, and Licensing Trends* series of webinars, designed to address the gaps in available resources for hydropower practitioners seeking an understanding of various aspects of hydropower projects and the licensing process. The toolkit development team includes Susan Rosebrough, Kevin Lewis, Angel Valenzuela, Krista Sherwood, and Abigail Johnson from the National Park Service; Angie Fuhrmann, Bekah Price, and myself from RMS; and Colleen McNally-Murphy from the Hydropower Reform Coalition.

The series has explored the basics of hydropower projects that frame operations,



Risa Shimoda, RMS Executive Director

hydropower's role in the energy market, its role in providing ancillary services to the grid, and trends and changes in the licensing process over the last thirty years since a game-changing phrase was added to the Federal Power Act by legislative counsel who happened to be an avid kayaker (see the *2024 Rivers Hill Week notes*). We are proud to have shined a light on reference to grassroots advocacy and agency collaboration that rewatered and restored public access to dozens of rivers across the country.

Notably, our webinar presenters include colleagues who have been friends and members of RMS from a few years to decades: Kevin Lewis (mentioned above), Tom Christopher, Theresa "Tree" Lorejo-Simsiman, Kevin Mendik, and Dave Steindorf. We are proud of these river professionals who possess nearly incomparable technical knowledge about a niche energy source that is a titan in its effect on rivers. The panelists and their expertise, along with river rangers, engineers, attorneys, and scientists, comprise the integrated, multi-disciplinary community that rivers and their wise management need to thrive.

(continued, p.12)

President's Corner

As the tree buds struggle to break out of their husks in the midst of spring snow storms I travel to work each day along the Northern Shoshone River, unfamiliar with how this river will throw off winter. It is an exciting time of year in my new environment to see when and where the fisherman will be plying the water, how the elk and deer migration patterns will materialize, which birds will show up, and when I will see my first bear track on the creek bed.

Are we in a migrating bird corridor like Taos, New Mexico, where hundreds of birds would swoop in and then out of the area almost as quickly. We could read books or ask those in the know, but exploring a new area through observations and experiences is much more rewarding even though it may be a dying art. It is just as rewarding as it was when I traveled down the cedar tainted waters of my youth.

March in Wyoming reminds me that each river breaks out of winter differently. The Chena's break-up is violent, fractured thick ice lenses slamming into each other, piling up, the sounds traveling great distances. The Rio Grande turns muddy as the snowmelt causes the river to rise, a signal for local boaters to strap on their lifejackets and run the rapids.

At least this year, the North Fork of the Shoshone is quietly shifting between icy shores, open water, and tiny little piles of ice stacking up on the inside bend of the river. It is not yet high enough to run but hardy fishermen are beginning to test the deeper pools of water or are casting lines around the Buffalo Bill Reservoir bridge, hoping to get a few days of fishing in before this section of river is closed to protect trout spawning grounds.

As I observe the signs of spring and hope for a long season of boatable water, I contemplate the new beginnings of River Management Society contractors who have recently been converted to River Management Society employees and the hard work that they have done for RMS over the years to support the symposiums, create and host river training offerings, train cadre, recruit schools to be part of the robust River Studies and Leadership Certificate program, or populate and launch the National Rivers Project website to name just a few.

Bravo.

Judy Culver, RMS President



Judy Culver, RMS President

Riparian Restoration on the *Wild and Scenic* Tuolumne

by Holly Heath

When hiking along the 39-mile Wild and Scenic stretch of the Tuolumne River between Hetch Hetchy and Don Pedro Reservoir, one encounters mountain sides thick with brush and skeletons of oaks regrowing shoots from tree roots that managed to survive the Rim Fire of 2013. Over a quarter million acres of land, much of it in the Stanislaus National Forest and Yosemite National Park, burned for two and a half months- at the time the second largest fire recorded in California's history. Ten years later restoration work is still underway in the watersheds affected by one of the first California "megafires". The Tuolumne River Trust (TRT) is an environmental organization dedicated to stewardship of the Tuolumne River watershed, and for the past decade TRT has been deeply committed to restoring burned areas and helping prevent future wildfires, managing extensive forest health projects throughout the Stanislaus National Forest.

The loss of riparian habitat that burned in the Rim Fire has led to a decline in both biodiversity and sediment retention on the riverbanks of the Tuolumne. As part of an ongoing restoration project, TRT has been working to revegetate the riparian zone

Rafting the Tuolumne in March 2014, post Rim fire.



Volunteer collects riparian cuttings.



along the river since 2021- to provide habitat for wildlife and improve recreational experiences along the Tuolumne River.

Access to the Wild and Scenic stretch of the Tuolumne riverside is limited to a few locations by road, and a few more by hiking trails that lead into the steep river canyon. TRT has utilized a novel way to reach longer stretches of the riparian habitats along the Wild and Scenic Tuolumne River: white water rafting.

Even access through rafting has had its unique set of challenges. 2023 was a wet winter for the Sierra Nevada; rain and snow fell from the sky in such quantities that roads washed out all along the river. The weather was great news for the snowpack, but not such great news for rafting companies - or those of us looking to restore riparian habitat. After months of waiting through what is usually the prime season for river rafting, we could at last access the river. Sierra Mac River Trips (a legendary local rafting company) had agreed to donate unsold seats on their single day rafting excursions for our restoration work throughout the boating season, and we coordinated with them to put our plan into action.

The Tuolumne River was earning its "Wild" status on the day I rafted downriver to plant willows with my coworker Cailey. The Tuolumne is already well known and loved in the rafting community for its Class 4-Class 5 whitewater and the high flows of 2023 only raised the stakes - and the stoke. Riding the rapids that day was reminiscent of cresting ocean swells in an approaching storm - they were tall, powerful, and thrilling. During our stops along the river, Cailey and I hurried to plant as many willows as we could as close to the river as possible so they

Planting willows on the riverbank.



might survive when the river's flow dropped dramatically later in the season - as we knew it would.

Water flow rates on the Wild and Scenic Tuolumne are regulated by the O'Shaughnessy Dam at Hetch Hetchy, which are further informed by the demand for hydroelectric energy. This leads to a river flow that varies widely throughout the course of a day, more so throughout seasons, and restoring the riparian zone has proven a challenge. Willows and other riparian species are best planted during their period of winter dormancy, a practice which minimizes shock and maximizes survival. Once planted, they need to remain in consistently moist soil to get established. When TRT goes out on an adventurous willow planting excursion, the areas in which willows are planted will vary widely based upon the level of the river: which unfortunately leads to low survival rates.

Nonetheless, we persevere and have planted hundreds of cuttings at over 8 key habitat locations since 2021, spending dozens of days on the river in the effort. This year we are experimenting with planting canyon live oaks along the river to help build riparian habitat with a more drought tolerant species. We also plan to continue planting willow shrubs and trees, other shady tree species such as big-leaf maple and cottonwood, and are researching options and seeking input on planting methods that will help the water-loving plants survive on a variable riverbank.

Each year TRT's volunteers help to collect cuttings of riparian woody species for later planting by the river, from these cuttings we propagate "clones," leaving the parent plants healthy. It is a relaxed and fun day outdoors: TRT employees ID

plants and give instruction for collecting cuttings to volunteers. We store the cuttings until the rafting season begins and hike in what we can to river campsites like Clavey Left on the Hamby trail in Groveland. Anyone interested in volunteering with the Tuolumne River Trust on this or other projects can find out more information at TRT's website: www.tuolumne.org/events. Besides river restoration, TRT is coordinating volunteers in 2024 to assist with restoring overgrown river trails that burned in the Rim Fire, as well as river cleanups and meadow restoration. Together we are working towards a thriving and sustainable watershed for generations to come. ❖

Holly Heath serves as Restoration Coordinator for the Tuolumne River Trust.

Historical Sierra Snowpack Overwhelms Lower Owens River and Fills Owens Dry Lake

by Larry Freilich

Most are familiar with the story of the development of the Los Angeles Aqueduct, which, in 1913, diverted the entire flow of the lower section of the Owens River into the marvel of engineering that is the LA Aqueduct. Sierra Nevada snowmelt and Owens Valley groundwater are captured and transported solely by gravity, 300 miles south, where it is delivered to the City of Los Angeles. Water from the Owens Valley supercharged Los Angeles' growth and fueled the development of the LA metropolis. But as all water managers know, for every action, there is an equal and opposite reaction: the appropriation of the Owens River led to the drying-up of 52 miles of river. As well, Owens Lake, a terminal waterbody, evaporated and exposed its mineral-rich bottom to the wind. Dust from the dry lake was lofted halfway across the country by winds roaring down the east slope of the Sierra. The dry lake held the dubious distinction of being the nation's #1 point source of air pollution for decades.

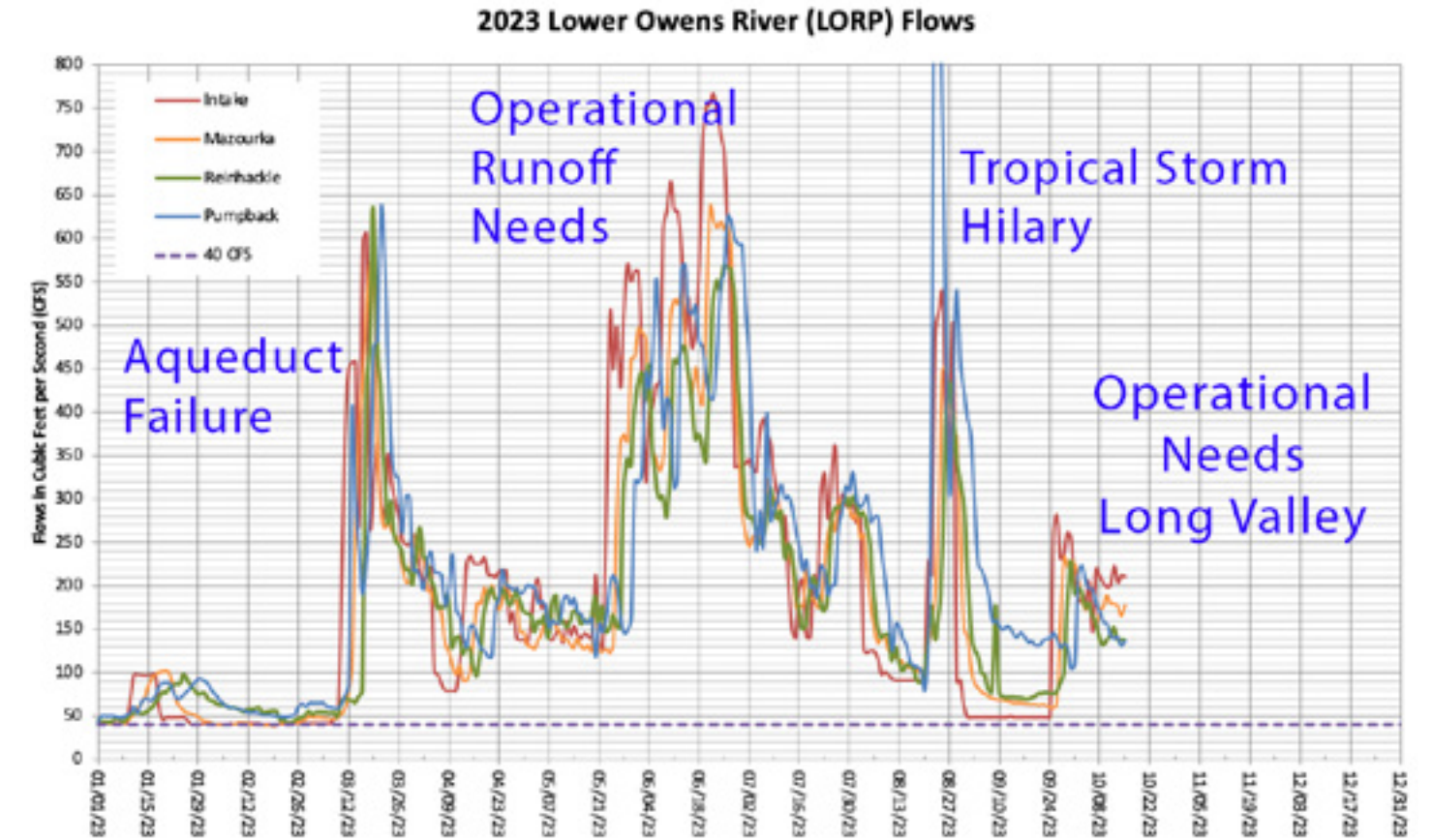
Fewer people, but still many, are aware that the river and its associated floodplain were revived 94 years later. In 2007, spurred on by a court order, the Los Angeles Department of Water and Power finally reestablished a controlled flow of 40 cfs year-round into the river, with a brief 200 cfs flow — a proxy for a seasonal habitat flow — released in late spring. Up to 50 cfs is recaptured before it arrives at Owens Lake and is sent

back into the aqueduct or conveyed to dust control cells on the lake. Just enough water remains to green up the river delta. For the most part, Owens Lake remains dry. For those interested in the progress of this endeavor, known as the Lower Owens River Project (LORP), with its river-riparian corridor, numerous ponds, and vast wetlands, a wealth of information can be found at <https://www.inyowater.org/projects/lorp/>.

There is an abundance of interesting, informative, and intriguing water lore here in Eastern California, in the Owens Valley, that even in summary would be impossible to capture in a 500-word article. I encourage our readers to seek out and explore some of the captivating history documented in various publications. However, the recent historical flooding within the LORP and Owens Lake is particularly noteworthy and is best shown in photos.

If I have piqued your interest, I invite you to follow up and learn more about the Lower Owens River Project on our website. And stay tuned for an invitation from the River Management Society's Pacific Chapter, inviting you to join us on a Chapter outing to explore the Owens River.

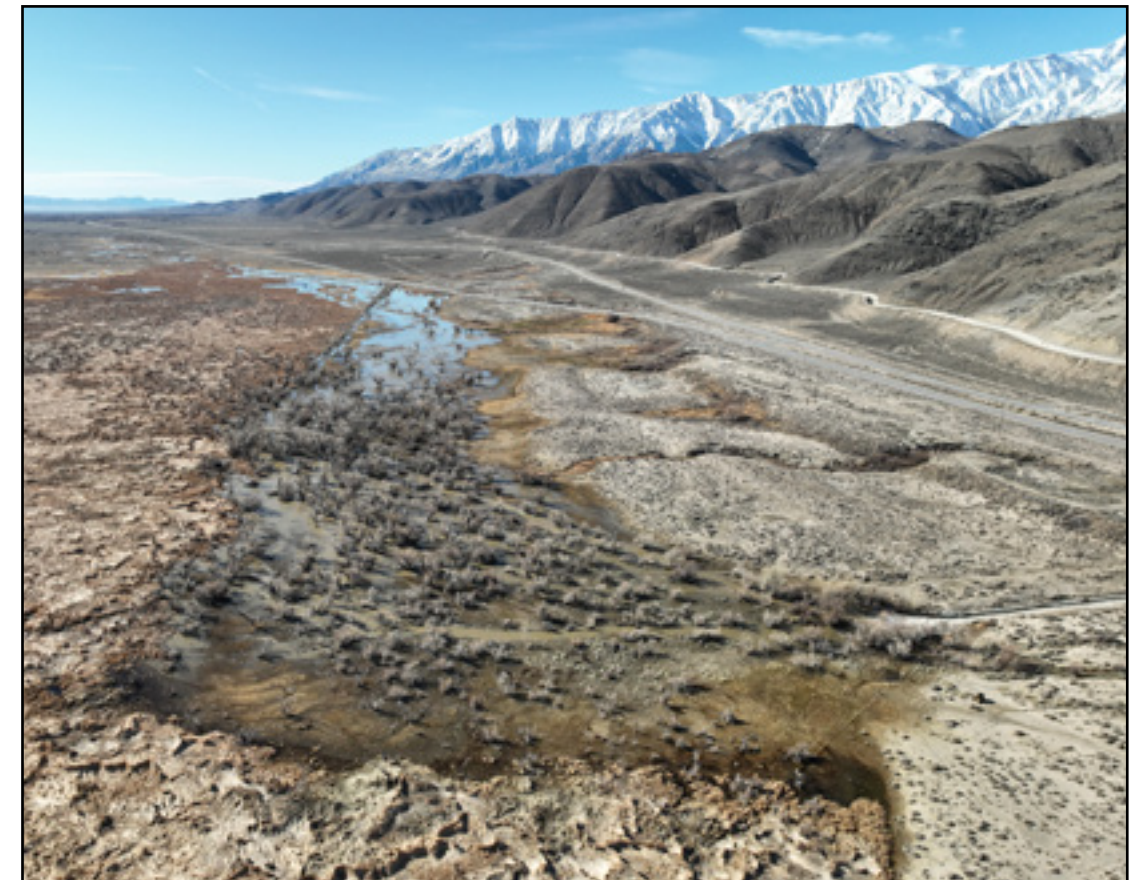
Larry Freilich serves as Mitigation Projects Manager for the Inyo County Water Department (ICWD).



The dashed purple line indicates the normal controlled flow into the Lower Owens River (40 cfs). The colored graph lines represent flows measured at four stations from the river intake 52 miles south to the pumpback station. Flood peak events include waters released due to aqueduct failure, uncontrollable runoff in the Owens Valley, the effects of tropical storm Hilary, and late-season high-country snowmelt. Flooding in 2023 exceeded designed flows from March through October and beyond!

Right: The Los Angeles Aqueduct, seen snaking along the base of the Poverty Hills below Mount Whitney, blew out in March 2023. Operational needs required dumping the full capacity of the aqueduct into the Owens River through the storied Alabama Gates. (ICWD, 3/13/2023)

Left: Owens River Delta Habitat Area, with the normally dry Owens Lake in the distance. Sediments held by the river for generations spill from the river and form braided sand deposits. Under normal circumstances, most of the water released 52 miles upstream is captured and pumped back into the aqueduct or used judiciously for dust control on Owens Dry Lake. However, in 2023, the delta, which usually receives an average flow of 6-9 cfs, was flushed by floodwater exceeding 1000 cfs. (ICWD, 11/30/2023)





Left, top: The primary river channel, formed under conditions of a 40 cfs flow, is overwhelmed by 900 cfs floodwaters. Water fills the floodplain of this low-gradient Great Basin river just east of the town of Lone Pine, CA, and cattle find themselves stranded on islands. In the distance, the highest peaks of the Sierra are visible, with Mount Whitney obscured by a pillar of cloud. (ICWD, 3/30/2023)

Left, bottom: The Owens River, normally a single channel (seen vaguely as a tule lined channel), leaves its banks, fills relic channels, and forms ponds, as the groundwater elevation rises to the surface. (ICWD, 10/15/2023)

Below: Approximately 40 square miles of Owens Dry Lake were filled for the first time in generations, providing visitors with a once-in-a-lifetime opportunity to explore the hyper-saline inland sea.

(Photo: Larry Freilich, 11/11/2023)

Note: These stunning photos are best viewed in full color, on the RMS website. ❖



Dams are breached on the Klamath River. Now what?

A warning blared over loudspeakers: “Fire in the hole, fire in the hole, fire in the hole!”

by Dave Meurer

The subsequent explosion at the base of Copco Dam punched through the remaining concrete plug in the newly constructed low flow outlet tunnel. A gusher of brown water and decades of accumulated sediment — mostly dead algae and fine material — roared through a pipe large enough to accommodate a school bus. With the last of the four hydroelectric dams on the Klamath River breached on January 23, the river is reconnected for the first time in a century. More than 2,000 acres of land are being laid bare as the reservoirs drain. The river is slicing through the mud, reestablishing its ancient course, and transporting millions of cubic yards of sediment out to the ocean.

So now what? When does the massive revegetation and landscape rehabilitation begin? “Actually, it began the day after the first reservoir – Iron Gate – was breached on January 11,” said Dave Coffman, Klamath Restoration Program Manager for

RES, the restoration contractor for the Klamath River Renewal Corporation (KRRRC). RES is the nation’s largest provider of ecological restoration services and has contracted with the Yurok Tribe to play a major role in the reseeding and replanting effort. “Tribal crews were immediately out in force, sowing millions of native seeds by hand and planting about 100,000 acorns one by one,” said Coffman. “Hundreds of thousands of plants, plugs, and bare root trees will also be planted by a team that is very personally engaged in the work. This river is vital to tribes who have relied on the Klamath for thousands of years. They want to be part of fixing what is broken.”

If dam removal is the surgery, restoration is the physical therapy. But one does not go to the local Lowes Garden Center to purchase billions of native seeds and hundreds of thousands of plants specifically adapted to the project area. RES had to grow

Copco Dam was the last to be breached when a blast at the base of the structure unleashed 4,000+ cfs.



Sammy Gensaw with the Yurok Tribe visits with Elliott Bouillion, the founder of RES, on the day of a detonation at Copco Dam.



Dave Coffman, Klamath Restoration Program Manager for RES, speaks with a reporter for the New York Times Magazine on the shores of Iron Gate Reservoir.

Insets below: With all of the Klamath hydroelectric dams now breached, and reservoirs rapidly draining, the revegetation effort is already in full swing. Billions of native seeds are being planted.



A member of the Yurok Tribe revegetation crew spreads seed on the banks of Iron Gate Reservoir.

what they needed. For years, tribal teams have hand picked native seeds from nearly 100 species in the local area. Many of those seeds were sent to specialized nurseries to be planted and harvested, year after year, until the exponential yield has now reached 17 billion seeds. “We are shooting for 19 billion seeds – about twice as much as we need – but the redundancy is a safety buffer in the event more is needed due to fire or flood in the project area,” said Coffman. “RES does not just provide a ‘service’ in planting the area. We guarantee the performance of the site. If something about the restoration is not working, it is our obligation to fix it. We don’t consider it done until performance metrics we provided to the client and regulatory agencies are met.” This means RES will steward the site for years to come.

On the same day that crews began planting the area, RES had other crews engaged in “assisted sediment evacuation” – think fire hoses mobilizing the mud. “The focus is on high priority tributaries where salmon are expected to return. We want to stabilize the soil as quickly as possible, planting the site quickly so native plants can reestablish before invasive species like Yellow Star Thistle begin to creep in,” said Coffman.

RES is also helicoptering in up to 1,000 mature pine trees, not to plant but to place root wads in the stream to slow the water and provide instant habitat. “We are jumpstarting natural processes,” Coffman said. “Anadromous fish are going to be coming back soon to places they have not been for 100 years. We need to get the tribes ready to welcome the salmon home.” ❖

Dave Meurer serves as Director of Community Affairs, West Region, for RES. Contact: (530) 941-3155 or dmeurer@res.us.

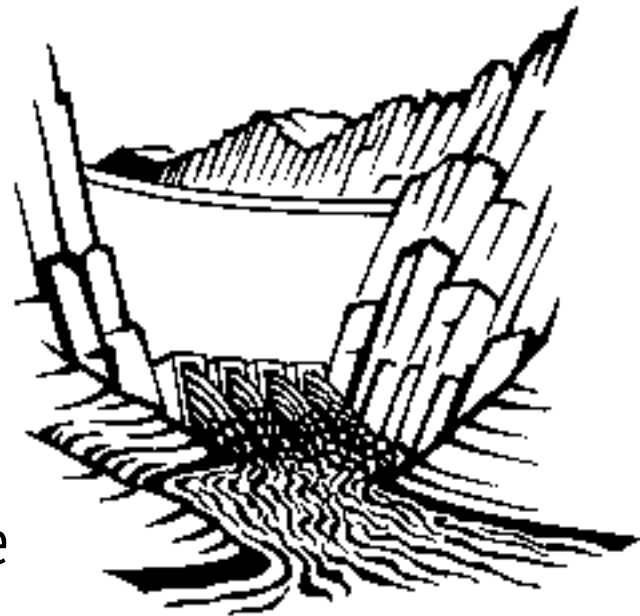
(Eddy, continued from p.2)

2025 in Ashland will provide a view like no other.

Looking to future programming, a team of rock stars has begun to plan a once-in-a-lifetime experience for those who attend the 2025 River Management Training Symposium in Ashland, Oregon. While past Symposiums have been memorable for their company and content, the upcoming week of training and peer learning will take place a few short months after the completion of the largest dam removal project in our nation’s history on the nearby Klamath River, amidst an equally historic restorative effort. The program call for presentations will be announced soon, and we hope to hear from you as a potential presenter and partner. ❖

Risa Shimoda

Risa Shimoda
Executive Director



Save the Date

Date: April 8-10, 2025
Location: Ashland, Oregon
Venue: [Ashland Hills Hotel & Suites](#)

Committee Chairs
Steering: Judy Culver
Program: Kai Allen, Kristina Rylands
Marketing: Emma Lord
Sponsorship: Helen Clough

Join us as we meet near the largest dam removal in US history and learn from the experiences of river professionals working on the relicensing, subsequent license surrender, and removal of hydropower dams on the Klamath River. In addition, Northern California and Southern Oregon are home to many iconic rivers whose legislated protection, traditional roles, and evolving partnerships will offer the basis for professional training and development.

Home to the world-famous Oregon Shakespeare Festival and ranked in the top 10 of “The 100 Best Small Art Towns in America,” Ashland is a cultural hot spot, with award-winning galleries, theaters, and restaurants. Mark the dates on your 2025 calendar and look for more details soon! ❖

Columbia College River Ecology and Management Program

by Tom Hofstra

In December 2021 I was scrolling down my Facebook feed and came across a post by Stanislaus National Forest River Ranger, Bob Stanley. Bob’s post made the point that whitewater rafting is a great way to teach natural history and ecology. At the time I was in the process of planning for a class entitled “Natural History and Ecology” that I was scheduled to instruct the following spring semester at Columbia College, a community college where I am an instructor of Forestry and Natural Resources (FNR), in Columbia, near Sonora, California. I was vaguely aware of Bob (although I wasn’t quite sure why I was seeing his posts) and knew that his territory covered the Tuolumne River. I don’t usually reach out to complete strangers on Facebook, but I thought this might be an opportunity to explore the Tuolumne River (which is just a few miles from where I live, but fairly difficult to access due to the extreme ruggedness and remoteness of the landscape through which it flows), as well as to offer an adventurous draw to prospective students.

So, I sent Bob a message asking if he could arrange to take my class on a trip down the Tuolumne. He responded immediately and enthusiastically. Over the course of the next few months we hammered out the details and Bob enlisted the help of Marty and Tom McDonnell of Sierra Mac River Trips. Tom had been one of my students in the past, so it was great to reconnect with him, and Marty was a legend, with whom I was thrilled to become acquainted. In April 2023 the Natural History and Ecology class took a two-day trip from Meral’s Pool to the Wards Ferry Bridge, passing through the iconic Clavey Falls rapid and camping at Indian Creek. Not only was the trip an excellent lesson on the natural history and ecology of the Tuolumne River, it was



Stanislaus National Forest River Rangers Bob Stanley and David Michaels show Raft Guide I students the ropes at the FNR equipment yard on the Columbia College campus in May 2023. Photo: Ruby Mason

Rey from Sierra Mac River Trips (who provided guides, boats, and safety gear for the April 2022 Ecology and Natural History class Tuolumne River trip), gives the pre-launch briefing. Photo: Stan Dodson



life changing for many of the students involved, as well as for myself.

Bob invited me to join him almost immediately on his regular river patrol, and I accepted with enthusiasm. I was already hooked — not only on the challenge and adrenaline of navigating the river, but on the new perspective it gave me of the river. I felt like I had discovered a secret landscape, previously hidden to me, but right in my backyard. I ended up running the Tuolumne seven more times that summer, gradually working up to guiding an oar boat under Bob's close supervision. I will never forget my first time guiding a boat through Clavey Falls and the feeling of accomplishment when I made it safely through. Joining me in the boat that day was Ty McCarthy, another faculty member at the college, who would join me in building and instructing our new river program. Over the course of the summer, lounging in the shade of baking hot campsites, Bob convinced us to create a new program at the college that would train students to be river managers, stewards, and rangers like himself. It wasn't too hard of a sell.

We started writing curriculum for the new program late in the summer of 2022, before the fall semester started. Our curriculum creation process involves submitting proposals for courses and programs in the fall, followed by extensive review by a curriculum committee. We ended up writing and submitting five new courses (Introduction to River Navigation, Raft Guide I, II and III, and River Ecology and Management). These five new courses were combined with courses that already existed in the Forestry and Natural Resources program, including CPR and Basic First Aid, Introduction to Maps, Geographic Information and Global Positioning Systems, Ecological Restoration, Trail Construction and Maintenance, Watershed Management, California Water Infrastructure, California Naturalist Certification, Natural History and Ecology, and Water Resources Management. A Work Experience component was also included in what



Top left: Lunch stop on the East Fork of the Carson, Raft Guide III, June 2023. The flows and weather were perfect. For most of these students it was their fourth consecutive raft course that summer and they were functioning like a well-oiled machine.

Lower left: To boldly go... volunteers from the Natural History and Ecology class embark on a two-day, 18-mile trip down the Main Tuolumne from Meral's Pool to Wards Ferry Bridge in April 2022. Everyone knew they were a guinea pig — the experiment was a success! The new Columbia College River Ecology and Management program officially kicked off a year later. Photo: Stan Dodson

eventually became the River Ecology and Management Certificate program. Since our curriculum review schedule requires that courses first be published in the official course catalog, which is updated during the summer, we realized that we might not be able to offer the new courses until the summer of 2024. This was resolved through a special vote of the Curriculum Committee, allowing us to offer the new courses in the summer of 2023.

Equipment acquisition began as early as the summer of 2022 and continues to this day. Getting our hands on enough rafting gear to outfit a class of 20 seemed overwhelming at first, but was made possible through the generosity of various individuals and organizations, the financial backing of the college, and a very cooperative dean, Steve Amador. Professor Josh Viers, of UC Merced, who we met on the Tuolumne River in the summer of 2022, coordinated the donation of four 1970's vintage Avons that had seen many miles but were quite serviceable. He also donated enough PFDs to get us started. Bob Stanley provided us with another vintage but river-ready Aire, including a frame. The college provided \$20,000 which helped purchase paddles, helmets, more PFDs, wetsuits, paddle jackets, throw bags, air pumps, carabiners, webbing, cam straps, and repair materials.

The industry folks really came

through in assisting us with the equipment acquisition. We were on a fairly short timeline, and our district's purchasing process can be challenging. NRS set us up with a business account and was incredibly helpful and patient with us. Sawyer Oars and Paddles also set us up with a Pro Account and went out of their way to assist us in getting the right oars. Guy Henderson at Blue Dot Innovations built us some custom raft frames and gear bags.

Our course scheduling process requires that we schedule Summer classes in early December. December 2022 started out as a pretty normal water year so I scheduled all but one of the new rafting courses for May and June — I used the Dream Flows historic hydrographs to determine that the best flows usually occur during those months when the Sierra Nevada snow pack is melting. As it turned out, 2023 was one of the biggest water years on record. As May came around, the rivers were pumping. What started out as anxiety about not having enough water gradually turned into anxiety about too much water. Fortunately, things calmed down just as it was time to offer the courses and the flows were perfect.

Having just started rafting the summer before, I was nowhere near qualified to instruct these courses on my own. Fortunately, my two mentors, Bob Stanley and David Michaels, agreed to serve as lead instructors. These two both have decades of experience on rivers all around the globe, have been river rangers for the National Park Service and the US Forest Service, have lots of experience teaching rafting, and are very experienced on the local rivers that we planned on using for our courses. Ty McCarthy, another instructor in the FNR program at the college rounded out the instructional team. We were also very fortunate to have the help of Guy Henderson and Jody Forster, two highly experienced local river guides and wonderful people. Stan Dodson, a former student and graduate of the FNR program, was instrumental in participating in training and scouting trips,

arranging logistics, and providing moral support. Ruby Mason, the FNR program Instructional Support Technician and a life-long rafter, was another valuable asset to the team.

The plentiful water allowed us to experience a wide range of local rivers during the inaugural summer for the River Ecology and Management program. We started out with a couple of mellow floats on the lower Stanislaus (Knights Ferry to Orange Blossom) just to work out the kinks — this was a perfect stretch for the Natural History and Ecology and Introduction to River Navigation courses. This section has one class II rapid and the rest is pretty relaxed. For Raft Guide I, we started on New Melones Reservoir (infamous for drowning out the Camp Nine run on the upper Stanislaus). Its calm, warm waters were perfect for introducing safety skills, including swimmer recovery, self-rescue, throw bag use, and flip drills. We followed this up with multiple laps on the Mokelumne River (Electra to Middle Bar). As it turned out, Raft Guide I was so popular we had to add a second section and ran the class twice. Raft Guide II was based at Camp Lotus on the South Fork American, where we spent three days running the river from Chili Bar to Salmon Falls. Raft Guide III was an overnight on the East Fork Carson, where flows were some of the best in recent memory. River Ecology spent some time on the West Fork Walker (near Pickle Meadows), and an amazing three days on the lower Klamath with David Payne, recently retired Klamath River Ranger, to finish up the first summer of the program.

Creating this program has been one of the most challenging and rewarding experiences of my life — learning the ropes of whitewater rafting, writing the curriculum, acquiring the equipment, and organizing the logistics of multi-day river trips with as many as 25 people. We could not have accomplished all that we did in such a short time without all the efforts of the many great folks involved. The experience has been transformational for me and for all who took part. ❖

Contaminants of Emerging Concern in Yosemite's Waters

by Kelly Martin

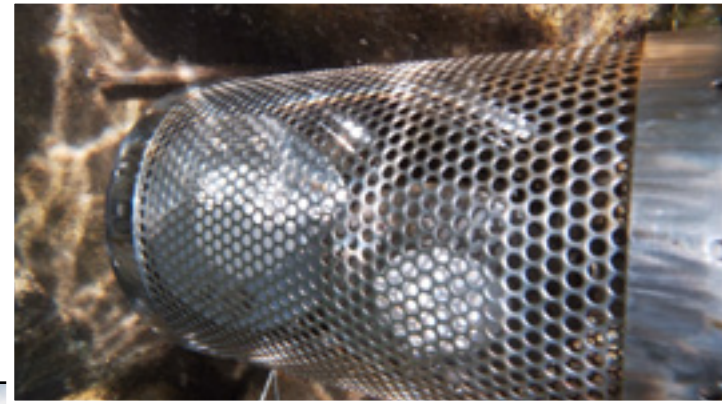
In 2022 and 2023, Natural Resource Managers at Yosemite National Park conducted a study to investigate contaminants of emerging concern (CECs) in the Merced and Tuolumne Rivers within the park. CECs not only include pesticides and herbicides, but also substances found in everyday items, such as soap, medicine, water bottles, and bug spray. CECs can enter a river ecosystem through a variety of sources including effluent from wastewater treatment plants and recreational activities including swimming. Many CECs are harmful to humans and aquatic animals, but their concentration in the environment is often unknown due to sampling difficulties. Using a relatively new technology that allows for continuous sampling, this study can determine what CECs are present in high-use areas within the Merced and Tuolumne River watersheds.

Figure 1. Scientific Technician pointing to location of POCIS filter deployment at a select site.



To monitor CECs in a river, passive water filters called polar organic chemical integrative samplers (POCIS) were deployed and analyzed for pharmaceuticals, pesticides, herbicides, and carbamate and urea pesticides by a contracted lab (See Figure 1). Two separate 30- to 60-day deployments were completed each year which covered a sampling period of July to September at ten sites (See Figure 2).

Polar organic chemical integrative sampler (POCIS).



Results from the 2022 deployments were returned and showed concentrations of acetaminophen, caffeine, ibuprofen, naproxen, and triclosan detected in surface waters of the Merced River (Figure 3). At the Glen Aulin site on the Tuolumne River, caffeine and triclosan were detected. Concentration results were returned from the lab and run through a calculation to determine a time-weighted average of each contaminant detected

during a deployment. The results of this study are still preliminary as project managers are awaiting results from 2023 deployments before a more robust analysis can be completed. Results are expected for the 2023 deployments by the spring of 2024.

Studying CECs in Yosemite National Park is crucial for safeguarding the park's pristine ecosystems and the health of its visitors and wildlife. By understanding the sources, distribution, and impacts of these contaminants, researchers can develop informed management strategies to mitigate their presence and protect sensitive habitats and species. Monitoring CECs not only helps us understand the current state of contaminants in Yosemite's pristine rivers, but also informs future conservation efforts to maintain the ecological balance of Yosemite National Park for generations to come. Through ongoing research and collaborative monitoring initiatives like this study, we can work to reduce the impacts of CECs to Yosemite rivers. ❖

Kelly Martin is a physical scientist with Yosemite National Park and manages the air and water quality program.

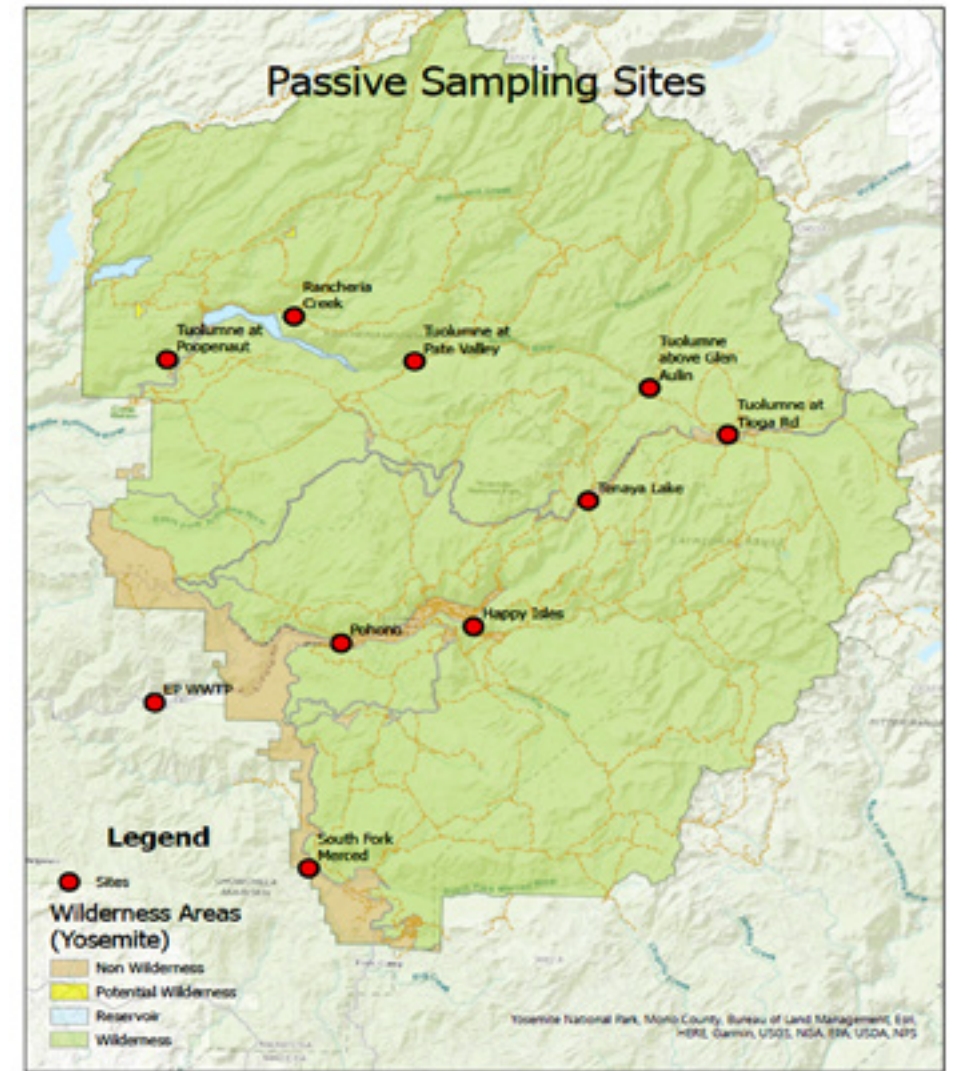
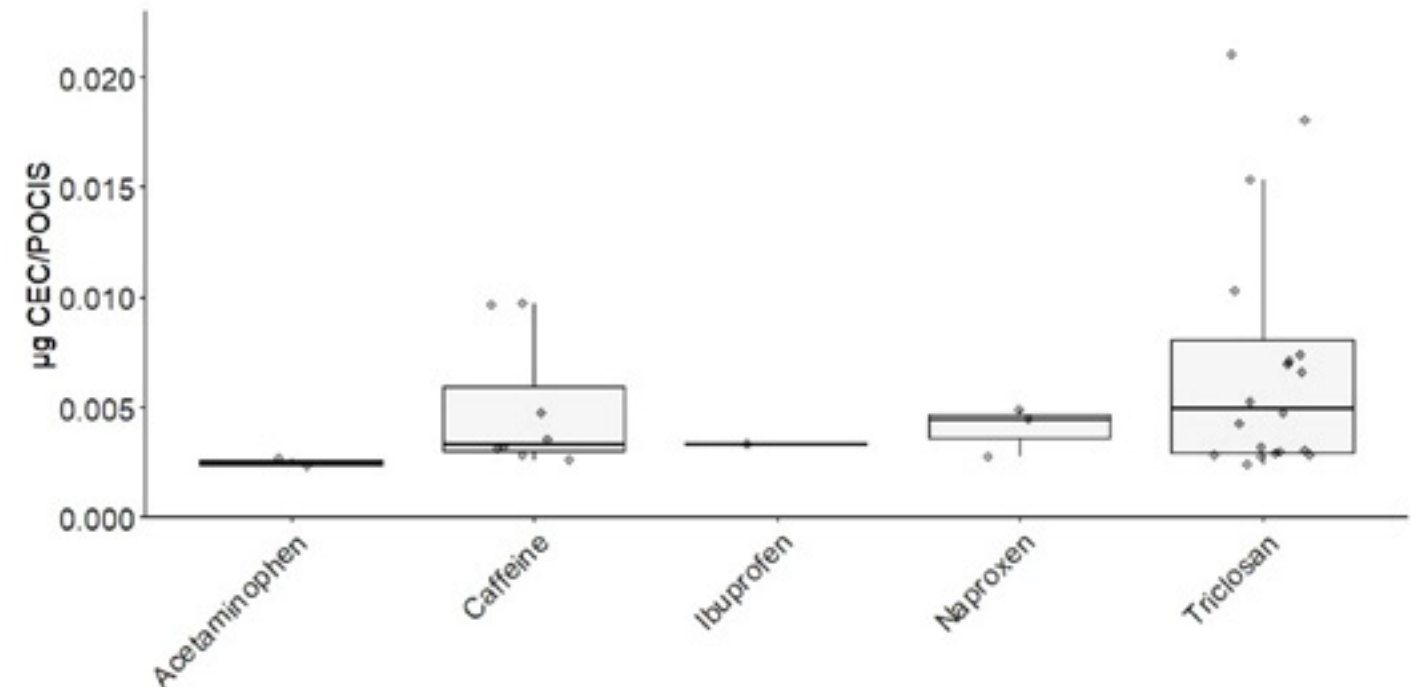


Figure 2. Site locations on the Tuolumne and Merced Rivers for monitoring CECs with passive water filters in the summer of 2022 and 2023.

Figure 3. Results from two separate 30- to 60-day deployments in 2022 showing detections of Contaminants of Emerging Concern (CECs) at sites on the Merced and Tuolumne Rivers.



Oregon River Trip Planning Just Got Easier

Updated National Rivers Project Improves First-stop Experience

Oregon river information is now more accessible than ever on the [National Rivers Project's](#) (NRP) recreational river map. In collaboration with the Bureau of Land Management, the River Management Society recently added or updated over 1,000 miles of Oregon rivers to the NRP website. This includes nearly 700 miles of Wild and Scenic Rivers, iconic whitewater reaches, and beginner-friendly sections.

“Whether you want to paddle through Oregon’s high deserts and canyons or explore the rainforests and coastal waterways, the National Rivers Project is a really convenient first stop in the planning process,” says David Ballenger, BLM Oregon/Washington Recreation Lead.

The NRP website offers intuitive search features for both beginners and experienced paddlers. Users can sort sections by difficulty and recreational amenities such as fishing, camping, and boat ramps. Each listing provides river access and permit details, with links to more information.

“Recreating on Oregon rivers gives people a stronger sense of stewardship,” says Lauren Pidot, BLM Oregon/Washington National Conservation Lands Program Lead. “Visitors are interested in protecting these public resources. We’re excited to help people more easily find these opportunities.”

Some of the recently added sections are very accessible with developed launches, while others are more wild and remote. BLM rangers remind boaters to check local weather conditions, water levels, and permit requirements before departing on a river trip.

“All of our river and access information is sourced and reviewed by managing agencies, so boaters can feel confident when they begin their trip planning on our website,” says James Major, NRP Coordinator. “We want to give special thanks to BLM Oregon for their invaluable assistance on this project.” ❖

The National Rivers Project website now includes all boatable rivers managed by the Bureau of Land Management which are highlighted blue. Previous rivers are shown in red.



The River Management Society, a 501c3 nonprofit organization, supports professionals who study, protect, and manage North America’s rivers. With the National Rivers Project, RMS empowers tens of thousands of recreationists annually to discover new river sections nationwide. For more information, contact Bekah Price at bekeh@river-management.org or 423-943-2000.

The BLM manages more than 245 million acres of public land located primarily in 12 western states, including Alaska, on behalf of the American people. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. Its mission is to sustain the health, diversity, and productivity of America’s public lands for the use and enjoyment of present and future generations.



The Rogue River is among several recent additions to the National Rivers Project website. Photo courtesy of BLM Oregon/Washington.

Be Sure to Watch the YouTube [Video](#) on the Wekiva – Southeast’s first Partnership Wild and Scenic River!



Video Chronicles Florida Community’s Success Protecting Wekiva River

The National Park Service (NPS) and River Management Society (RMS) have produced a [video](#) — *Designating the Wekiva Wild & Scenic River System: Florida’s First Partnership Wild and Scenic River* — which celebrates the [Wekiva River System](#), the first Partnership Wild and Scenic River (PWSR) in the Southeastern US.

“More than 2 million people live within 20 miles of the Wekiva River System, yet it is lush with wildlife, recreational opportunities, historic and cultural sites, and an abundance of natural springs,” says Ashley Konon, River Ambassador with Wekiva Wild and Scenic River System. “We are grateful for the community members who in the late 1990s responded to the pressures of development by pursuing federal protection. Over the years, this collaborative effort has only expanded, testament to the community’s commitment to preserving the Wekiva River System.”

The PWSR model enables rivers flowing through privately owned lands to receive federal Wild and Scenic designation. It provides a framework for long-term collaboration among landowners and community partners and the development of a locally led management plan backed by federal technical assistance and funding.

“This is the first Partnership Wild and Scenic River designated outside the Northeastern US, but this model can be used anywhere in the United States,” says Shana Stewart Deeds, the coordinating producer of this video, and the study coordinator for the Upper Missisquoi and Trout Rivers in Vermont. “This designation helps mobilize volunteers and open doors for grant funding and future projects to support local watershed initiatives.”

This video, available on the NPS Wild and Scenic Rivers YouTube [playlist](#), was produced through a cooperative agreement between NPS and RMS, who give special thanks to the Wekiva River System Advisory Management Committee, [Friends of the Wekiva River](#), Coordinating Producer Shana Stewart Deeds, Director and Editor Katie Geis, and Director of Photography Ian Sasso. Learn more about the partnership model at <http://www.nps.gov/pwsr> or www.river-management.org/pwsrtoolkit. ❖

With questions, contact bekeh@river-management.org.

(continued from p.1)

together a smaller scale program that enabled monitoring to resume along four representative segments of the river. And thanks to a small group of former water quality volunteer team members, the Upper Merced River Watershed Council was once again contributing quarterly water quality data.

In addition, the data set was further bolstered through the efforts of Yosemite National Park’s nonprofit education partner, NatureBridge, which provides hand-on science learning to over 15,000 school children annually. As a key component of its curriculum, NatureBridge’s citizen science water quality monitoring efforts provided a regular stream of Merced River data collected by students in Yosemite Valley throughout the school year.

And then the pandemic hit.

With monitoring suspended since 2021, hope again seemed lost. Yet efforts are underway today to reconnect with federal agency and community partners—including NatureBridge—to revive the program. Through a WaterSMART grant from the Bureau of Reclamation and a RiverNetwork USFS Stewardship grant, the Upper Merced River Watershed Council is making water quality monitoring a primary objective of the organization in its newly created Watershed Work Plan. Thanks in part to feedback heard during the planning process, water quality monitoring emerged as a unanimous area of concern among community members. Supporters of the Watershed Council remembered the strength of the citizen science program in its heyday and welcomed the idea of rallying around it as a pillar of community stewardship.

With a new look at exploring why water quality monitoring is important today, new issues have emerged. Understanding baseline conditions for water quality is not just an important aspect of managing a wild and scenic river, but it has broad ecological implications. Discussions are underway among federal agencies and other partners along the Merced River to consider the possibility of reintroducing steelhead populations — once plentiful in the Sierra Nevada — into the upper watershed. A coordinated approach to understanding water quality throughout the length of the Merced Wild and Scenic River is needed in order to set the stage for determining the conditions needed for these fish to thrive.



Water quality monitoring volunteer conducts dissolved oxygen test.



NatureBridge students in Yosemite investigate benthic macroinvertebrates as part of citizen science water quality monitoring along the Merced River. Photos: Kristina Rylands

As the organization reemerges and reestablishes its footing as a river-serving nonprofit, the work of revitalizing the citizen science water quality monitoring program is beginning to take shape. While putting the brakes on a vital program—yet again—was far from ideal, the opportunity to revisit protocols and consider new ways to engage volunteers has been rewarding. The effort currently underway is allowing the organization to

- Revisit monitoring protocols and the Quality Assurance Project Plan
- Collaborate with partners (National Park Service, US Forest Service, Bureau of Land Management, NatureBridge in Yosemite) to be better coordinated in our methods to create a consistent data set for the river
- Consult with like-minded watershed organizations about their water quality monitoring efforts: What works? What doesn't?
- Explore additional monitoring protocols for post fire effects, Harmful Algal Blooms (HABs), and macroinvertebrates
- Expand the educational awareness campaign—including outreach to local schools—to help the public understand why monitoring water quality is important for the community
- Invite local tribes, including the Southern Sierra Miwuk Nation, to incorporate water quality monitoring as part of their stewardship network efforts
- Purchase new equipment
- Create a water quality monitoring dashboard for the Merced Wild and Scenic River to share results, including HOW data will be used

The goal is to recruit and train citizen science water quality teams this spring so that monitoring can get underway this summer. While the program has experienced waves of ups and downs, reinventing this collaborative effort has resulted in renewed dedication to not only its success, but its long-term sustainability. To learn more or to follow progress, visit www.merced-river.org.

Kristina Rylands is the Board Vice Chair and Project Director of the Upper Merced River Watershed Council.

Get to know our River Studies and Leadership Certificate alumni – the next generation of river professionals

Sarah Smith, Northern Arizona University Alumna
U.S. Forest Service Social Science Analyst

The river has always been one of my greatest teachers. At two years old, I learned how quickly the river could gulp up my favorite hat, blown off by a canyon breeze. At eight, I learned how swiftly I could get sucked under a capsized raft. At seventeen, I learned how the river can heal a broken heart. At twenty four, I learned how to teach others to love the river. And at nearly thirty, I learned how to be a river protector.

When I began graduate school at Northern Arizona University and joined the River Studies and Leadership Certificate (RSLC) program, I continued learning from the river in different ways. I explored river protection policies and applications of the Wild and Scenic Rivers Act on New Mexico’s rivers. I gained skills in mapping and dove deep into the nuances of community relationships with rivers. I investigated climate change implications on water resources and connected with scholars all over the country. The RSLC program provided me with opportunities for both classroom learning and practical applications of this knowledge. Upon completion of my degree and the RSLC program, I returned to New Mexico to work in Wild and Scenic River management on the Santa Fe National Forest, where I now manage a district recreation program.

In this role, I still constantly learn from the river. After New Mexico’s largest wildfire in history tore through the district in 2022 — torching vitally important headwater streams and causing subsequent destructive flooding — I am learning how to recover a ravaged watershed. Throughout the process, the river teaches me new lessons, including just how powerful and resilient she can be. I’m better prepared to navigate the waters of my career thanks in part to the support and networking opportunities that RMS has provided me over the years.

I will always lean on the river as a great teacher: whether I’m a young explorer, angry teenage paddler, graduate school scholar, or now, a dedicated river manager. ❖



Where are they now?

by Bekah Price

RMS launched the River Studies and Leadership Certificate program in 2015 in partnership with various universities to help students build a foundation of knowledge, skills and experience in river-based science, policy, conservation, education and recreation. Since then, 53 students have graduated with the certificate, and most have gone on to pursue careers in river management and stewardship.

In this RMS Journal column, we showcase their success so that our members can get to know them and learn more about today’s pathway from student to river professional.



Letter to the Editor

Randy Thoreson had that big friendly smile and the kind of outgoing personality that left you thinking you'd probably been lifelong friends ten minutes after you met him. I've seen him walk into a random truck stop on the interstate and in minutes was old friends with the clerk behind the checkout counter.

He lived in Belgrade, Montana, for a number of years and there developed a passion for fly fishing. After returning to his native Minnesota he went to work for the National Park Service's RTCA program and spent many hours in a kayak on his beloved St. Croix River. He loved being a member of RMS and served as Midwest Chapter President for a couple of years. He couldn't pass up a bargain for a used kayak, so wound up with a stack of them in his yard. For a guy who lived alone with his dog, who needs a half-dozen kayaks? I asked him that once, but he just smiled and shrugged.

He retired from NPS in 2018 and spent even more time on the river, starting a program to get senior men's groups from various churches out on the water. Always happy, always smiling, always making new lifelong friends.

Until one night in October 2022, when he took his own life. A bit like Robin Williams, Randy had smiled at the world past a mind troubled by demons.

But this story isn't about Randy Thoreson. It's about you. The river community has more than its share of stoic river rats who can face down fierce challenges in their work life but are plagued by troubled thoughts and think they're too tough to seek help. The second word in mental illness is ILLNESS, folks. You'd seek help if you had pneumonia, or broke your leg. Seeking help isn't a sign of weakness, it's a sign you want to get better.

Employee assistance programs are there for you. And they're free. Take advantage. Save yourself. The river can't afford to lose you. ❖

Steve Johnson
Stillwater, Minnesota

Remembering Randy Thoreson



Located in northern California, the mission of the South Yuba River Citizens League (SYRCL) is to unite the community to protect and restore the Yuba River network. To learn more, visit www.yubariver.org.

A river nonprofit helps organizations inspire activism

Submitted by SYRCL

The intersection between art and action has always been a place of power, one naturally flowing into the other, always building toward societal change. Since 2003, the South Yuba River Citizens League (SYRCL), a California nonprofit dedicated to preserving and protecting the Yuba River watershed, has been producing the Wild & Scenic Film Festival. The festival serves dual functions. First, the Wild & Scenic flagship Film Festival operates as one of SYRCL's largest fundraising events. Next, with its *On Tour* program, the festival becomes a source of community building and revenue for other activist organizations all over the country.

Considered one of the nation's premier environmental and adventure film festivals, SYRCL's Wild & Scenic Film Festival combines stellar filmmaking, beautiful cinematography, and first-rate storytelling to inform, inspire, and ignite solutions and possibilities to restore the earth and human communities while creating a positive future for the next generations. All proceeds from the festival, held annually in February in Nevada City and Grass Valley, CA, go towards helping SYRCL focus on its large- and small-scale restoration projects, river policy advocacy, education, and stewardship.

Additionally, every year since 2008, SYRCL staff offer the *On Tour* programming to like-minded organizations throughout the world. *On Tour* is a turn-key festival offered at flat-rate pricing. SYRCL staff have already done the hard work of selecting the films, paying royalties, and creating marketing collateral, so that host organizations can basically just plug and play.

On Tour events are hosted by a diverse array of environmental nonprofits, schools, museums, and businesses, each creating unique film festivals in their

own communities and using the festival to raise funds, reach new contacts, and raise awareness of local issues. In 2023, the average attendance for an *On Tour* event was 185 people, bringing in, on average, over \$10,000 per event for the host organizations. From the Willamette Riverkeeper organization in Portland, Oregon, to the Blue Hill Heritage Trust in Blue Hill, Maine, SYRCL's Wild & Scenic Film Festival *On Tour* events can be found all over North America and even the world. With over 160 films in the library at any given time, *On Tour* is a perfect solution for organizations looking to raise funds to support their missions and connect with their community over environmental activism, a love of nature, and the thrill of adventure.

Aaron Zettler-Mann, Executive Director of the South Yuba River Citizens League, echos this sense of connection that a Wild & Scenic Film Festival event engenders, "SYRCL's Wild & Scenic Film Festival is more than just a source of

financial resources for our organization — the relationships we build with partners at the Fest is central to our success as restoration practitioners and advocates. We know this is true for our *On Tour* hosts as well."

Host organizations also know that young people are an important connection and audience. With this in mind, *On Tour* offers a targeted school program. SYRCL's Wild & Scenic Film Festival Education Team curates age-appropriate, engaging, and inspiring content for K-2, 3rd-5th, 6th-8th, and 9th-12th grade film screenings. Along with the films, the team also provides film-specific, standards-based curriculum for participating educators from local elementary, middle, and high schools for further classroom enrichment.

To find out more about the Wild & Scenic Film Festival and the possibility of hosting an *On Tour* event, visit: <https://wildandscenicfilmfestival.org/on-tour/>. ❖

A SYRCL volunteer helps keep the South Yuba River clean. Photo: Jason Scallin



RMS Chapter News

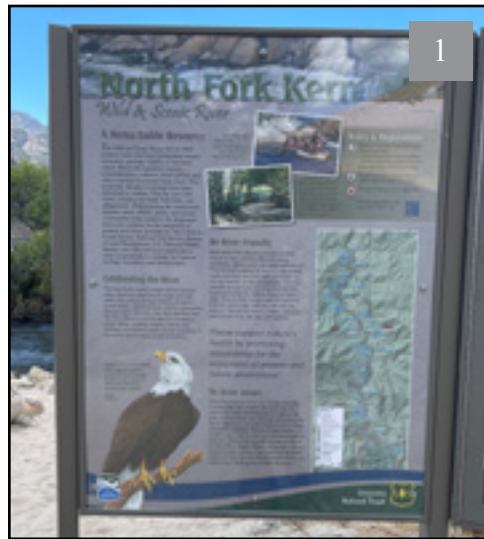


Photo 1: North Fork of the Kern Wild and Scenic River signage.

Photo 2: Pacific Chapter officers (L to R) Kristina Rylands, Leigh Karp, and Larry Freilich.

Photo 3: Blowing up boats, provided by UC Riverside.

Photo 4: USFS Kern River Recreation Management Specialist Eric Lundgren learns paddling techniques, assisted by Leigh.

Photo 5: Happy Pacific Chapter paddlers!

Photo 6: New friends (Leigh on left, and Jennifer Hopper) network and enjoy post-paddle downtime with Honey the dog.

Photo 7: Liz Duxbury serves as safety paddler on the Powerhouse Run. (All photos: Kristina Rylands)

Pacific by Kristina Rylands

Coming off of a successful 2023, the Pacific Chapter is looking forward to a great 2024!

One of our key successes was growing our chapter membership by 38%. Key to that growth was creating opportunities to bring people together — both existing members and folks new to RMS. We realized that the more events we can sponsor in our chapter, the greater opportunity we have to come together to support each other as river professionals *and* spread the word about our great organization.

A key event was our *first* river trip in many, many years (if ever!) on August 11-13, 2023. After a few attempts that were thwarted by the record-setting winter Sierra snowpack, we managed to pull together a late summer gathering. Thanks to our host, Pacific Chapter Vice President Leigh Karp, we spent a weekend along the Kern Wild and Scenic River, the southernmost river in the Sierra Nevada with headwaters flowing from Mt. Whitney, the highest peak in the Lower 48. Camping in the yard of her cabin, we had a cozy basecamp from which to explore the river as it flowed into the community of Kernville. Since it was publicized as BYO food and beverages (folks were all expert potluckers!), we were able to keep it as a free event.

With rafts procured from our friends at UC Riverside’s Outdoors Excursion Program, paddlers and kayakers enjoyed the Class II-III Powerhouse Run followed by a fun dinner at the Kern River Brewing Company, owned by former Olympic kayakers Eric and Rebecca Giddens. On Sunday, Leigh led an intro to whitewater kayaking beach-side seminar while the Kern River Conservancy’s Gary Ananian shared stories of some of the challenges and successes of stewardship along the river.

The success of this trip inspired our chapter to begin planning for 2024. We’re looking forward to the following trips:

EAST FORK OF THE CARSON RIVER - MAY 10-12

Put-in near the town of Markleeville for a 2-day, 19-mile float on Class II+ with camping midway at a hot springs along the gorgeous eastern Sierra Nevada.

KERN WILD & SCENIC RIVER - AUGUST 9-11

Back to the Kern River with camping at Leigh’s cabin in Wofford Heights in the southern Sierra Nevada.

OWENS RIVER FLOAT - SEPTEMBER (date TBD)

Join us to experience the joy of kayaking, canoeing, and SUPing through the Eastern Sierra’s scenic and winding watercourse through the Owens Valley.

These events will be open to *all* RMS members and any guests you think should be introduced to RMS, so stay tuned for more information in the weeks to come. ❖



Northeast by Risa Shimoda

RMS is one of 60+ members of The Wild and Scenic Rivers Coalition, and donates a modest amount toward its work each year. We are one of the few members who, while we support its mission and are actively involved on the leadership, DEI, and Indigenous Subcommittees, refrain from advocating actively for legislated protections. While our members include federal and state agency staff and we therefore don't actively participate in government affairs initiatives, we do participate in information sharing and serve this community with information sharing and training programs.

Rivers Hill Week debuted as a week of in-person meetings with agency leaders and congressional staff. It took place days before COVID-19 closed the country, and like many get-togethers has evolved into a hybrid experience. This year a virtual Rivers Hill Week took place in February and an in-person series of meetings unfolded in March 2024, thanks to the leadership of RMS member Lisa Ronald, the WSR Coalition Coordinator, who also serves American Rivers on its initiatives in Montana: here is Lisa's recently-posted installment of [TheRiverisMyOffice](#). American Whitewater is the fiscal agent for the Coalition, collecting and accounting for its financial support.

A pleasant surprise was the serious presence of RMS members among the Rivers Hill Week participants. This image mid-week of a few represents but half of those who participated in one or many meetings.

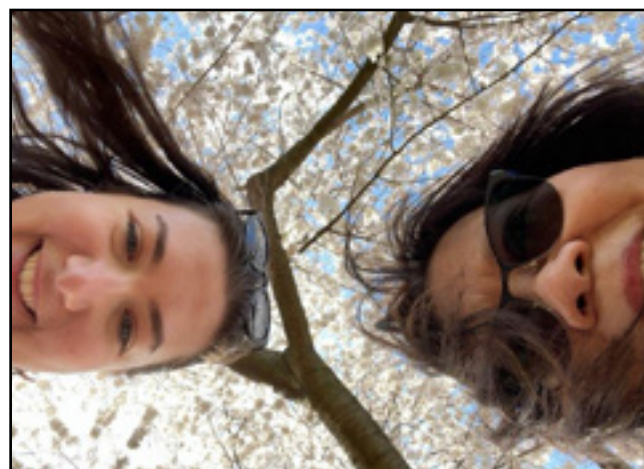
A detailed agenda for the 2024 virtual and in-person Rivers Hill Week programs are listed on the Wild and Scenic Rivers Coalition [website](#) and we will share more about this year's outcomes in future issues.

2024 Rivers Hill Week



2024 Rivers Hill Week RMS members, L to R: Scott Harding (AW), Kestrel Kuntz (AW), Rachel Ellis (American Rivers), Tom O'Keefe (AW), Kevin Colburn (AW), Risa (RMS), Lisa Ronald (WSR Coalition/American Rivers), Mike Feibig, Nic Nelson (Idaho Rivers United), Nick Kunath (Idaho Rivers United). Photo: Risa Shimoda

Rivers Hill Week participants not pictured: Fred Akers (Great Egg Harbor Watershed Association), Scott Bosse (American Rivers), Jann Dorman (Friends of the River), Charles Drimal (Greater Yellowstone Coalition), Britta Nelson (Bureau of Land Management), John Canella (National Park Service), Susannah Erwin (NPS), Corita Waters (SNP), Lucy Nentwick (NPS), Hannah Volk (NPS), Steve Chesterton (USDA Forest Service), and Katie Armstrong (USDA Forest Service).



Risa and Pope Barrow, past American Whitewater Director. Pope was a panel participant in the recent *Hydropower, Trends in Relicensing: Evolutions, Trend, and Lessons Learned* ([recording](#)).

In 2009, Pope retired from his job as the Sixth House Legislative Counsel since that office was first created in 1918. He made his mark in the drafting of the Clean Air Act, the Safe Drinking Water Act, the Solid Waste Disposal Act, the Superfund law, the Public Utility Regulatory Policies Act, various amendments to the Federal Power Act, each and every omnibus energy bill in the 1980s-2000s, including the Energy Policy Act of 1992, the Energy Policy Act of 2005, and the Energy Independence and Security Act of 2007. He was also the principal draftsman of the National Parks and Recreation Act of 1978 and the Alaskan Lands Act.

In celebration of his retirement, then Congressman Ed Markey of Massachusetts complimented Pope and his team “working very hard to make sure that the bills, resolutions and amendments that we offer are as clearly written, as understandable, and as reflective of legislative intent as is humanly possible ... We simply could not do our job around here without their assistance. When I think of a markup in the Energy and Commerce Committee, or in the Natural Resources Committee, I think of Pope Barrow sitting down at the Counsel's table, ready to assist the Members as we work our way through whatever legislation is before us. Pope, we will miss you.” ❖

Photo to the left: Hannah Volk (left) and Risa Shimoda under peak-blooming cherry blossoms. Photo: Hannah Volk



RMS member Jann Dormann, Executive Director of long-time river stewardship leader Friends of the River. Photo: Risa Shimoda



Risa points to the Wild and Scenic Rivers Act on this Main Interior building plaque honoring Stewart Udall.

RMS Chapter News

Dearborn River, MT — May 19, 2024

Cannon Colegrove will lead this one day, relatively easy stretch with some Class II rapids. Rafts, IK's, packrafts, and kayaks are the preferred watercraft. Enjoy incredible scenery in steep canyons, good fishing, and a fun float. Contact Cannon (cannon.colegrove@mt.gov) to RSVP or if you have any questions.

Middle Fork of the Flathead River, MT — July 17, 2024

Echo Miller-Barnes, Lead River Ranger on the Flathead NF, will lead a day trip on this section of the Flathead. Contact Echo (echo.miller-barnes@usda.gov) to RSVP or if you have any questions.

Upper Green River around Pinedale, WY — Mid-August to mid-September (stay tuned for exact dates)

Join our 3-day float from Green River Lake, USFS to Warren Bridge. Packrafts are best, as the much of the water might be too low for rafts and canoes. The majority of the river is Class 2-2+ and one 1/4-mile stretch of Class 3+ a few miles below the lake. Contact Lelia Mellen (lelia_mellen@nps.gov)

Dearborn River, MT Fishing Access



Northwest

Mark your calendars for these 2024 trip options and reach out to us if interested!

Snake River, Bliss Reach, ID Photo: southernidaho.org



Upper Green River, WY Photo: The Nature Conservancy



Middle Fork Flathead River, MT Photo: Forrest McCarthy

Main Payette, ID Photo: raftidaho.org

Main Payette, Boise, ID — or Snake River, Hagerman/Bliss reach

October 5 or 6, 2024

This day trip will be in conjunction with the National RMS Board Meeting. Water levels will determine which river. Details TBD.

Welcome New RMS Members

Associate

Mia Hildebrandt, New York, NY

Lucy Nentwick, GIS Fellow for Nationwide Rivers Inventory
National Park Service, Wild and Scenic Rivers
Washington, DC

Collin Overby, Marietta, SC

Will Prioleau
Developing a paddling camp in SC with educational programs
Columbia, SC

Galen Sparks, Wild and Scenic Rivers Specialist
Nez Perce-Clearwater National Forests, Nezperce, ID

Individual

Monti Aguirre, Latin American Program Manager
International Rivers, Oakland, CA

Jessica Bryzek, AmeriCorps VISTA
WV Department of Environmental Protection
Fairmont, WV

Shannon Connolly, Forest Recreation Program Manager
US Forest Service, Columbia Falls, MT

Leila Desotelle, Scientist, Cockeysville, MD

Jackie Dias, Community Planner
National Park Service, Springfield, MA

Michael Dixon, Executive Director
Trinity River Restoration Program, Weaverville, CA

Robert Goo, Environmental Protection Specialist
Environmental Protection Agency, Washington, DC

Katie Gregory, River Ranger
US Forest Service, White Bird, ID

Grace Hilber, Program Analyst
National Park Service, Hood River, OR

Alan Hunt, Community Planner
National Park Service, Hampton, NJ

Kenneth Keeley, Landscape Architect
US Forest Service, Dane County, WI

Bianca Klein, Environmental Protection Specialist
National Park Service, Gardiner, MT

Ashley Konon, River Ambassador
Wekiva Wild and Scenic River System, Cape Canaveral, FL

Bill Marshall, Program Manager, State Scenic Rivers
SC Department of Natural Resources, Columbia, SC

Brian Murphy, Principal Ecological Engineer
River Works, Denver, CO

Colleen Pennington, Glenwood Canyon Manager
US Forest Service, Eagle, CO

Kennedy Perry, Student
River Studies and Leadership Certificate Awardee
Ft. Lewis College, Durango, CO

Kaylee Pineda, Biologist
National Park Service, Gap Mills, WV

Sharla Stevenson, Hydrologist
National Park Service, Fort Collins, CO

Organization

Foodshed Alliance, Sparta, NJ
Christine Dunbar, Paulins Kill Watershed Coordinator

Open Space Institute, Georgetown, SC
Erin Pate, Development and Community Outreach

Rangeley Lakes Heritage Trust, Rangeley, ME
Jason Latham, Natural Resource Specialist

West Virginia University
Nicolas Zegre, Associate Professor of Forest Hydrology

Tennessee Scenic Rivers Association (TSRA), Nashville, TN
Stephanie Sullivan, Operations Manager
Vinson Dill, President

USFS Ecosystem Management Coordination
National Wilderness and Wild & Scenic Rivers Team
Washington, DC

Christopher Colvin
Dan Abbe

Eric Patagonia
Katharine Bennett

Kyle Byers
Mairead Whitford Jones

Susan Parker

Student

Sam Beichler
University of North Carolina - Asheville, NC

Chapter Officers

ALASKA (vacant)

PACIFIC

Kristina Rylands, President
Upper Merced River Watershed Council
Mariposa, CA 95338
(209) 761-6674 / kristinarylands@gmail.com

Leigh Karp, Vice President
BLM California Desert District
1201 Bird Center Drive
Palm Springs, CA 92262
(951) 697-5291 / lkarp@blm.gov

Larry Freilich, Secretary
Inyo County Water District
PO Box 337
Independence, CA 93526
(760) 920-1169 / lmfreilich@gmail.com

Bob Stanley, Events Coordinator
Tuolumne Wild and Scenic River
24545 State Highway 120
Groveland, CA 95321
(209) 962-7825 / beobob@yahoo.com

NORTHWEST

Cannon Colegrove, President
Montana Fish, Wildlife and Parks
4600 Giant Springs Rd, Great Falls MT 59405
(406) 454-5854 / cannon.colegrove@mt.gov

Chris Elder, Vice President
Whatcom County, WA
PO Box 43, Acme WA 98220
(360) 840-3064 / celder@co.whatcom.wa.us

Echo Miller Barnes, Secretary
Hungry Horse Ranger Station
10 Hungry Horse Dr, Hungry Horse MT 59919
(971) 940-3583 / emillerbarnes@gmail.com

Lelia Mellen, Events Coordinator
National Park Service
2310 Flourhouse Way, Bozeman MT 59715
(406) 224-3509 / lelia_mellen@nps.gov

MIDWEST

Ed Fite, President
Grand River Dam Authority
15307 North Swannanoa Rd, Tahlequah, OK 74464
(918) 456-3251 / ed.fite@yahoo.com

Ed Sherman, Vice President
USDA Forest Service
#66 Confederate Ridge Road, Doniphan, MO 63935
(573) 996-2153 / edward.sherman@usda.gov

Bobbie Jo Roshone, Secretary
Niobrara National Scenic River
214 W. HWY 20, Valentine, NE 69201
(402) 376-1901 / bobbiejo.pennington@gmail.com

SOUTHWEST

Matt Blocker, President
Bureau of Land Management
440 West 200 South, Suite 500
Salt Lake City, UT 84106
(801) 539-4021 / mblocker@blm.gov

Stew Pappenfort, Vice President
Colorado Parks and Wildlife, Retired
308 Palmer St, Salida, CO 81201
(719) 221-4905 / sgpappy@gmail.com

Secretary (vacant)

Events Coordinator (vacant)

NORTHEAST

Emma Lord, President
National Park Service
54 Portsmouth St, Concord, NH 03301
(603) 224-0091 / emma_lord@nps.gov

John Field, Vice President
Field Geology Services
P.O. Box 985, Farmington, ME 04938
(207) 645-9773 / fieldgeology@gmail.com

John Little, Trip Coordinator
Missisquoi River Basin Association
737 Rushford Valley Rd
Montgomery Ctr, VT 05471
(802) 326-4164 / jalittle58@gmail.com

SOUTHEAST

James Vonesh, President
Virginia Commonwealth University
1000 W. Cary St, Richmond VA 23284-2012
(804) 426-8553 / jrvonesh@vcu.edu

Vice President (vacant)

Elise Chapman, Secretary
University of Tennessee at Chattanooga
615 McCallie Ave, Holt Hall, Room 328
Chattanooga, TN 37403
(423) 227-6131 / elise-chapman@utc.edu

Jack Henderson, Events Coordinator
French Broad Paddle Trail
P.O. Box 1242, Pisgah Forest, NC 28768
(703) 638-3616 / hendersonjc3@gmail.com

Canadian River Management Society

Contact: Max Finkelstein
tel (613) 729-4004 / dowfink@gmail.com

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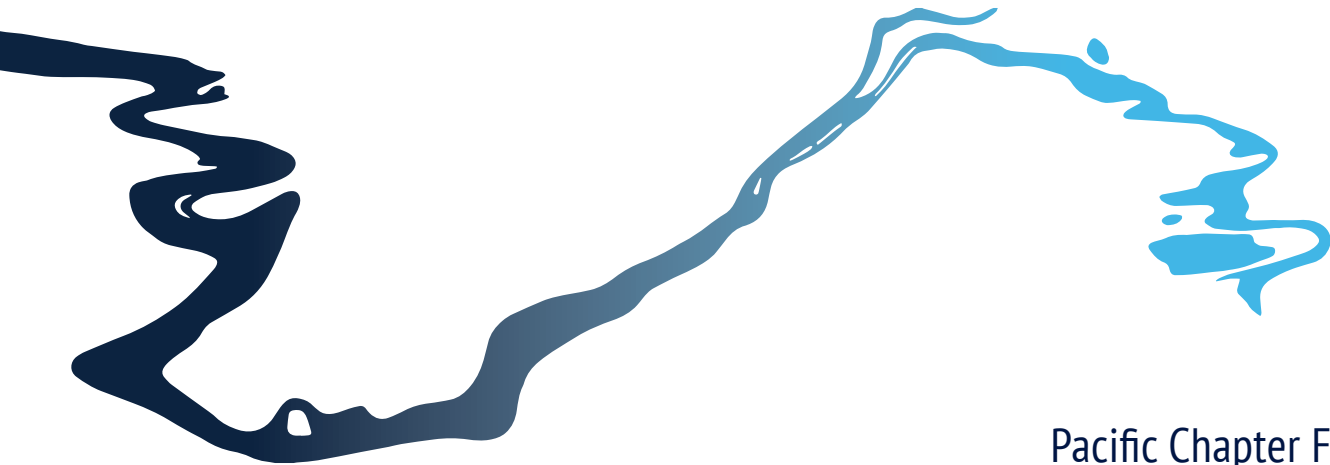


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Pacific Chapter Focus

Citizen Science Along the Merced	1
Riparian Restoration on the Tuolumne	4
Snowpack Overwhelms the Lower Owens	6
Dams are Breached on the Klamath	10
Columbia College River Ecology Program	13
Contaminants of Emerging Concern in Yosemite	16
Oregon River Trip Planning Just Got Easier	18
Protecting Florida's Wekiva River	19
RSLC Alumni - Where are they now?	21
Remembering Randy Thoreson	22
SYRCL's Wild and Scenic Film Festival	23
Pacific Chapter 2024 Trips	25
2024 Rivers Hill Week	26
Northwest Chapter 2024 Trips	28