



*Cabin on the East Fork. Photo: Linda F. Baker ©2022*

## The Unseen Upper Green – Groundwater

by Linda F. Baker

My first home in the Upper Green River Basin was a one-room log cabin with two wood-burning stoves, three kerosene lamps and a pitcher pump in the front yard. The well water was abundant, clear and cold, but when winter dove down to minus 40, the pump head froze. So we melted snow and chopped ice from the river — a simple exchange of groundwater for frozen surface flows.

When you can see the source of your water from your front porch, the ice and snow in the Wind River Range, the ground/surface water connection is as palpable as a hand on a pump handle.

Now we face a scarcity of surface waters as the headwaters and tributaries of the Colorado River shrink, and we siphon water from Flaming Gorge Reservoir for delivery downstream to Lake Powell and Lake Mead. Wyoming's glaciers, our frozen,

fresh water caches, are quickly disappearing. To provide for the water rights of future generations, and preserve river recreation and healthy fisheries, we cannot overlook the value of our groundwater, and the hidden river we may ultimately need.

As Western states review the Colorado River Compact amid a crippling drought supercharged by climate change, it seems we should know more about the secrets of our "blue gold": how much of it we have and how much we are losing.

Using a 2007 model, the Wyoming State Engineer's Office (WSEO) estimated a maximum volume of 31,900 acre-feet per year of groundwater produced for commercial, domestic, drilling, industrial, irrigation and other uses<sup>1</sup>. Another study estimated between 5,300 and 7,200 acre-feet per year of groundwater produced. Ultimately, WSEO estimated that 8,000 to 16,000 acre-feet per year of groundwater are withdrawn in the Upper Green River Basin.

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#### Editorial Policy

Articles are not edited for content and may not reflect the position, endorsement, or mission of RMS. The purpose of this policy is to encourage the free exchange of ideas concerning river management issues in an open forum of communication among the RMS membership. Unless indicated, points of view are solely those of the author.

## Executive Director's Eddy

### Something Old, New, Borrowed, and Blue

I thought this would be a cute frame for reflecting on the successes of 2021 and prospects for the new year. Curious to confirm the recipe, I was reminded that traditions themselves may not all stand the test of time:

“Something Olde, Something New, Something Borrowed, Something Blue, A Sixpence in your Shoe” names the four good-luck objects (plus a sixpence) a bride should include somewhere in her wedding outfit or carry with her on her wedding day. According to the ubiquitous and semi-authoritative Reader’s Digest, the rhyme came about in the Victorian era from Lancashire, a county in England. Most of the ingredients in the rhyme are meant to ward off the Evil Eye, which, according to Reader’s Digest, was “a curse passed through a malicious glare that could make a bride infertile.”

Hmm. Though it’s interesting to remember the rule of this rhyme, our view of partnership success has broadened just a bit. Outdated context acknowledged, I’ll apologize and proceed.

2021 was a watershed year! RMS hosted a previously unheard of number of attendees at an unprecedented number of events, with a crazy-high number of member-presenters and partners. There are too many fun statistics to cite, but they were captured in the [2021 Year in Review](#) on RMS’ Facebook page, prepared by Bekah Price, our Communications Coordinator.

What was old AND awesome was the participation by and celebration of longtime members and colleagues as topic experts and panelists. These include board member and multiple-time Symposium Chair Helen Clough, who rescued the 2020-2021 Symposium program planning effort with A+ leadership; Past President (1993-1999) and all-around volunteer, LuVerne Grussing, and longtime friend of RMS, Ed Krumpke, who provided historical connections and perspectives in their National Wilderness Skills Institute Wild and Scenic 101 class; and, thirty-



Risa Shimoda

year member (elected First Vice President in 1992...) Ed Fite who was a frequent panelist and contributor to the discussion sessions originally titled State River Managers Working Group, rebranded to be more inclusive as the River Management Roundtable. Thanks go to you all and others who have been so generous with your time, expertise and experience!

New leaders, new ideas, and new event formats poured into our lives all year long. Enthusiasm for breaks from the pandemic helped us learn that virtual connections can indeed engage ideas, purpose and passion, absent the still-longed-for fistbump and shared chat over coffee or a beer. We covered permits and user conflicts in the ‘On the River’ discussions, challenges of working in unfamiliar and unwelcoming workspaces, as well as other weightier topics in ‘Workplace Culture’ sessions, and were able to get to know brand new members at familiarity levels we would have never anticipated as possible in early 2020.

We borrowed, continuously, from the expertise of colleagues as we developed program ideas and benefitted from their participation, as most folks enjoy sharing what they do and love. We were the lucky beneficiaries of experience-sharing by John Kreske whose thorough familiarity with the permitting of outfitters on the Arkansas River is second to none on one

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## RMS President's Corner

As you all know, 2021 was another challenging year as agencies around the country struggled to hire staff. We saw increased user conflict related to increased public use — boaters, filled with joy and some hesitation, flocked to the water and RMS members and staff rose to the challenge.

The River Training Center (RTC) hosted multi-day WSR trainings throughout the country (with more to come) as newly designated Wild and Scenic River segments begin to develop their comprehensive river management plans. RTC also launched a very successful first-ever Wild and Scenic Webinar Series attended by 218 participants, held two River Ranger Rendezvous, and were part of the Wilderness Skills Institute. RTC is building on these successes in 2022.

Inclusivity has always been a challenge in land management agencies and on our nation’s waterways — reaching out to those who don’t know you exist, for example to rural or inner city communities, can be hard. And yet, there are reasons to celebrate. Offering outreach presentations, agency initiatives, and outdoor industry resources for the A-DASH Collaborative has helped highlight the continued challenge of preventing sexual harassment. We’ve also connected our members’ more traditional programs and services with the public through social media and virtual meetings as we move forward in this exciting new world.

Some of our top social media posts included those which highlight our work as an A-DASH Collaborative founder and leader, as well as our inaugural participation in Latino Conservation Week. While many RMS Listserv questions have dealt with multi-lingual signage, site development, and congestion, one key subject is how do we move forward with technological advances while maintaining a connection to those impacted by the technology deserts in rural or low income communities and states, particularly out West.

For river corridors dealing with the impact of tube hatches or first-time users

on Walmart floaties on public, private, and tribal lands, the great news is that the 2023 RMS symposium will be held in the San Antonio, Texas, area and will provide opportunities to meet with WORD of Comal County which developed a unique way to collect funds and manage these types of uses across management boundaries.

I am further excited that RMS leadership and river managers have the opportunity to listen and learn from the native voices that have begun to erupt on the scene, supported by Secretary of Interior, Debra Haaland. Having native voices join Wild and Scenic River training sessions and WSR Comprehensive Management planning efforts, discussing how to balance recreational uses with cultural concerns, expands river managers’ understanding of the needs of each tribe, pueblo and community.

If you want a voice in RMS chapters, symposium planning, or other tasks to continue moving RMS forward, there are many opportunities to volunteer — we are seeking Chapter Officers in the Pacific, Midwest and Southeast, volunteers to serve on symposium committees, and new members to sit on the RMS Awards committee. You will never do this alone as the RMS family will teach you the ropes or mentor you in these roles, many of which only take a few hours or a few days of your time. Be sure to stop by the updated RMS Store (online) and check out the much anticipated RMS baseball caps and Tim Palmer’s *Rivers of Oregon* book.

I want to take a moment and honor those RMS members who have been my mentors since I joined, including Bunny Sterin, Dennis Willis, Linda Jalbert, and Bob Ratcliffe to name just a few. And, a Happy Retirement to Sheri Hughes, the recreation.gov guru of river permits!

Thanks to each and every one of you. RMS is a great organization to be part of and it is an honor to serve. ♦

Judy Culver  
RMS President



Judy Culver

#### RMS Activities Last Quarter

~ Updated member benefits and granted Students and Organizational lead contacts the ability to vote and hold office

~ Adjustment: Moved Oklahoma from the Southwest Chapter to Midwest Chapter

~ Held planning meetings for the 2023 River Symposium (in Texas)

~ RMS River Training Center proposal for Nature Conservancy’s Durable River Protection Coalition Academy accepted

~ Launched new Wild and Scenic River Webinar series

~ Supported legislative development for Recreation and Access Funding



# Nominations for RMS Awards

So much has happened in the last year, and once again it is time to recognize people for their contributions to river management and the River Management Society. One of the most exciting and fun ways to recognize those who have made significant contributions to the art and science of river management, and those who best exemplify the spirit and purpose of the organization is to nominate them awards. Since 1998 we have given annual RMS awards for excellence in river management and conservation to deserving individuals.

Please consider nominating deserving individuals for the River Management Society Awards. The RMS recognizes outstanding individuals and achievements in four categories:

- Outstanding Contribution to River Management
- Frank Church Wild and Scenic Rivers
- River Manager of the Year
- Outstanding Contribution to the River Management Society

We invite you to give careful consideration to those who deserve to be recognized for their work and contributions to managing our rivers and developing our organization. If you submitted a nomination in the past and your nominee was not selected that year, you are encouraged to update and resubmit the nomination.

Each award and the criteria by which nominations are evaluated are described below.

## Outstanding Contribution to River Management Award (open to all)

This award recognizes a longer history of contributions to the greater field of river management (as opposed to more recent or project/location-specific accomplishments). Please consider longer-term and broader impacts in areas such as those listed below; nominees are expected to contribute in at least two of these areas.

- Advanced the field of river management through contributions in areas such as science, education, interpretation, research, and/or law enforcement;
- Developed innovative (or creatively adapted) river management techniques;
- Organized conferences/meetings that advanced river management as a science and as a profession;
- Developed or implemented new communication techniques to coordinate and connect managers;
- Provided opportunities for increased awareness by citizens and river visitors regarding their role in caring for rivers and watersheds; and/or
- Was an outstanding advocate for professional river management.



## Frank Church Wild and Scenic Rivers Award (open to all)

This award recognizes contributions focused on the management, enhancement, or protection of designated Wild and Scenic Rivers. As with the Outstanding Contribution to River Management, this award recognizes a history of contributions with a broad geographic scope (as opposed to more recent or project/location-specific accomplishments). Please consider longer-term and broader impacts in areas such as those listed below; nominees are expected to contribute in at least two of these areas.

- Advanced awareness of WSRs through contributions in areas such as education, research, technology, training, public contact, interpretation, law enforcement;
- Worked effectively and cooperatively to build partnerships with other agencies, scientists, user groups, private landowners, and/or general public to promote, protect, enhance, or manage WSRs;
- Demonstrated, developed, or creatively adapted innovative WSR management techniques;
- Organized conferences, training, etc., which involved and advanced WSRs;
- Exhibited leadership in promoting and protecting WSRs within the context of the established corridors and beyond designated lines on a map; and/or
- Worked to improve managing agency process, budget, and/or support for wild and scenic river programs.

## River Manager of the Year Award (for RMS Members only)

This award recognizes contributions that are field-oriented and location-specific, with a focus on recent accomplishments. If a nomination is submitted for someone with a longer tenure, only more recent accomplishments will be considered (up to past three years). An individual with a longer history or broader scope of accomplishments might be more appropriate for the Contribution to River Management Award. The committee will consider contributions “on the river” (field-oriented, technician level) and at the managerial or supervisory level (involving policy, planning, and program development). Please consider contributions in areas such as those listed below; nominees are expected to contribute in at least two of these areas.

- Provided leadership in promoting and protecting natural, cultural, or recreational resources;
- Worked effectively and cooperatively with other agencies, user groups, private landowners, and/or general public;
- Established or re-established key partnerships to protect and manage the river corridor;
- Created an effective, professional, and enjoyable working environment;
- Worked to protect one or more rivers within the context of their watershed and beyond designated lines on a map;
- Created and established new and innovative approaches to river management, advancing the field and creating new enthusiasm; and/or
- Shows strong dedication and commitment towards advancing and improving river management into the future.

## Outstanding Contribution to the River Management Society Award (for RMS Members only)

This award recognizes contributions to the success of the River Management Society itself, including contributions at the national or regional level that result in greater organizational effectiveness, efficiency, growth, positive change, or enthusiasm. The award focuses on impact on the organization as a whole, rather than a particular length of service. Please consider contributions in areas such as those listed below; nominees are expected to contribute in at least two of these areas.

- Exceptional contribution to national policy, planning, and program development that brings recognition to RMS as a leader among river and/or professional organizations;
- Demonstrated leadership within RMS that has created sustainable positive change;
- Donated considerable time, money, or effort that has resulted in advancement of RMS as a unique and robust institution;
- Brought new/positive, private/public awareness of RMS;
- Increased membership substantially;
- Developed or located new sources of funding; and/or
- Provided exemplary service through an elected office. ♦

Due March 30, 2022

Please help us honor some  
of our amazing colleagues  
by nominating them for an  
RMS award!

Nominations may be  
submitted online

or emailed to:

RMS Secretary

Helen Clough

[hcloughak@gmail.com](mailto:hcloughak@gmail.com)







Photo taken in Wyoming, a few miles downriver from the Montana reach included in the MHLA. Credit: Scott Bosse

# Legislation Would Double Wild & Scenic Protections in Montana

by Scott Bosse

For a state blessed with 177,000 miles of some of the most spectacular waterways on the planet, Montana has a relatively paltry number of rivers that are permanently protected in the National Wild and Scenic Rivers System. It has five, to be exact – the three forks of the upper Flathead River and a 150-mile reach of the upper Missouri River through the breaks, all of which were designated in 1976; and East Rosebud Creek, the state’s newest Wild and Scenic River that was designated in 2018.

But if river advocates get their way and Montana’s senior senator, Jon Tester, can maintain his impressive legislative batting average, the Big Sky state could double its number of protected

river miles by the time the current Congress ends a year from now.

The Montana Headwaters Legacy Act (MHLA), which Senator Tester reintroduced in June 2021, would add 20 rivers and approximately 385 river miles in the upper Missouri and Yellowstone river systems to the National Wild and Scenic Rivers System. Among the iconic waterways that would gain permanent protection from this landmark legislation are the public lands reaches of the Boulder, Gallatin, Madison, Smith, Stillwater and Yellowstone rivers.

The vast majority of these rivers flow across two sprawling

## WSR Bills in Play

State	Bill Name	Bill #	Bill Sponsor	River Miles
CA	PUBLIC Lands Act	S 1459	Sen. Alex Padilla (D-CA)	680
FL	Little Manatee Wild and Scenic River Act	HR 4358	Rep. Vern Buchanan (R-FL-16)	51
FL	Kissimmee River Wild and Scenic River Act	HR 4404	Rep. Darren Soto (D-FL-9)	72
ME	York River Wild and Scenic River Act of 2021	HR1469	Rep. Chelli Pingree (D-ME-1)	31
ME	York River Wild and Scenic River Act of 2021	S 491	Sen. Angus King (I-ME)	31
MT	Montana Headwaters Legacy Act	S 2254	Sen. Jon Tester (D-MT)	385
NM	M.H. Dutch Salmon Greater Gila Wild and Scenic Rivers Act	S 3129	Sen. Martin Heinrich (D-NM)	450
OR	River Democracy Act	S 192	Sen. Ron Wyden (D-OR)	4,700
OR	Smith River National Recreation Area Expansion Act	S 1538	Sen. Jeff Merkley (D-OR)	74
WA	Wild Olympics Wilderness and Wild & Scenic Rivers Act	HR 999	Rep. Derek Kilmer (D-WA-6)	464
WA	Wild Olympics Wilderness and Wild & Scenic Rivers Act	S 455	Sen. Patty Murray (D-WA)	464

national forests – the Custer Gallatin and Helena-Lewis and Clark — while a few reaches of the Madison River flow through lands managed by the U.S. Bureau of Land Management (BLM). All but three of the waterways in the MHLA were found to be eligible for Wild & Scenic designation during the most recent round of land management plan revisions.

Thanks to a decade-long public outreach campaign conducted by Montanans for Healthy Rivers, the coalition spearheading the effort to protect more of Montana’s rivers, the MHLA enjoys tremendous public support. A statewide public lands poll commissioned by the University of Montana in March 2020 found that 79 percent of Montanans support the MHLA and only 15 percent opposed it, making it the most popular public lands bill in the state.

Among the bill’s long list of supporters are more than 1,300 Montana businesses, four local chambers of commerce, five county commissions, the Fishing Outfitters Association of Montana (FOAM), Montana Outfitters and Guides Association (MOGA), Montana Fish & Wildlife Commission, and the Rocky Mountain Tribal Leaders Council, which represents tribes in

Montana, Idaho and Wyoming. There has been virtually no public opposition to the MHLA since it was introduced. Montana’s junior senator, Steve Daines, has yet to take a position on the bill, but he is under increasing pressure to do so.

The next step for the MHLA is to get a hearing before the National Parks Subcommittee of the Senate Energy and Natural Resources Committee, which supporters expect will take place in the first quarter of 2022. Once the bill is heard and passed out of committee, it will likely be attached to a much larger public lands package that includes nine Wild & Scenic River bills from seven states (see table above showing Wild & Scenic bills currently in play this Congress). Assuming that public lands package is signed into law by President Biden by the end of the 117th Congress, as many as 6,900 miles of new rivers will be added to the National Wild and Scenic Rivers System, making it the single largest river protection package in our country’s history.

For the most up-to-date information on the MHLA, visit the Montanans for Healthy Rivers website at [www.healthyriverstmt.org](http://www.healthyriverstmt.org) and follow them on Facebook and Instagram. ♦





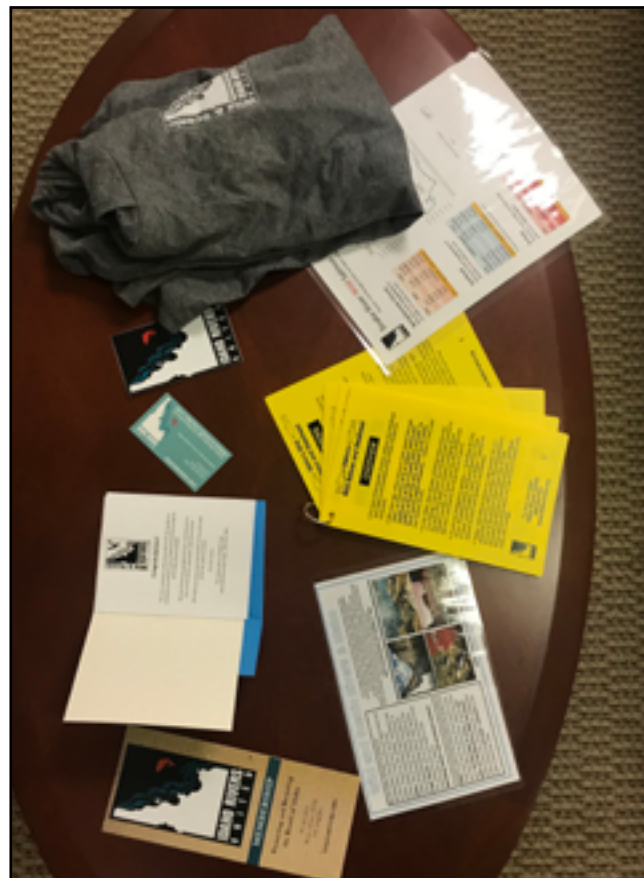


Reese Hodges delivering a talk on wild salmon recovery efforts and Wild and Scenic Rivers at the Boundary Creek put-in of the MF Salmon River.

River guides proudly wearing their Wild and Scenic Stewardship sun shirts after receiving their kit for completing the course.



After completing the course and their action project, participants receive a package with education materials, the latest information on salmon returns, and a few other items.



# Idaho River Guides Make Waves

by Reese Hodges

Each river season, tens of thousands of people from near and far travel to Idaho to join as guests on commercial rafting trips throughout the state. The premier or “Crown Jewel” experience (debatable, but I’m biased) is the multi-day trip down 100 miles of the Wild and Scenic Middle Fork Salmon River. River guides, with the support of their outfitter, are responsible for providing safe, fun, inspiring, and hopefully educational experiences for these guests as they travel down one of the most remarkable river canyons in the world. On this 5-6 day trip down one of the original eight rivers in the Wild and Scenic Rivers Act, guests have the opportunity to learn about the Wild and Scenic Rivers Act, and experience the incredible values of the Middle Fork that deemed it worthy of inclusion and protection in our national system; such as the wild populations of endangered salmon, wildlife, and indigenous history and traditional use.

River guides have a unique platform and opportunity to inspire and educate guests during these multi-day trips, as the river breaks down day-to-day barriers and encourages great conversation in a stellar setting. Idaho Rivers United (IRU) has provided education and toolkits for river guides for over a decade, mostly focused on our endangered wild salmon and steelhead populations, the barriers to recovery, and opportunities to effect change to bring back the once thriving salmon runs that filled our rivers and communities. IRU’s goal is that these resources will empower guides to become active stewards of the river corridors where they work and play, and to inspire stewardship for their guests.

While historically IRU’s Guide Education programs were delivered in person, in 2020 we adapted (like the rest of the world) to the pandemic and shifted gears to develop a program to provide education and resources to river guides in a virtual setting. This new approach allowed us to also broaden the educational content, go deeper into a few topics, and potentially reach participants that we had missed on our annual early summer tours to outfitter warehouses around the state.

With support from the USFS and the River Network Wild and Scenic Stewardship Partnership Funding, IRU worked in partnership with the Salmon Challis National Forest to create and launch a new online learning program — called the Wild and Scenic Guide Stewardship program — at the start of 2021. With a small staff and limited capacity, we were lucky that Tess McEnroe (a seasoned Middle Fork Salmon and beyond river guide and environmental educator) reached out to us offering her stellar skillset. So, we brought Tess onboard for IRU’s first River Fellowship so that she could take the lead on curriculum development, outreach, and more. With support from IRU staff, Tess mapped out an outline for the course content, and she went to work to compile resources to create a curriculum that covers the Wild and Scenic Rivers Act, the Outstandingly

Remarkable Values of the Middle Fork Salmon, with an emphasis on Indigenous voices and cultural preservation, and of course the beloved wild salmon and steelhead of the Salmon River system. The program is focused on the Middle Fork Salmon, but registration is open to all guides and active river users that want to be part of the stewardship community.

The program timeline was set up to encourage maximum participation from Idaho guides, so outreach efforts began in the fall of 2020 for the first cohort of students for 2021. Once the online course was ready to launch, we hosted a virtual launch party in January 2021 and were pleasantly surprised by the attendance and participation with passionate river guides from Idaho and beyond. From that virtual gathering it was clear — river guides are eager to learn, develop professionally, and share their knowledge with guests.

Nearly 200 people registered for the Wild and Scenic Guide Stewardship certification course in 2021. To fully complete the certification program, participants have to complete both the online learning program and submit an “action project” that fits the stewardship theme of the course. These action projects range from artwork, letters to decision makers, visual aids for interpretive talks, etc. We were thrilled to get over 40 amazing action projects submitted by course participants, which are now hosted in a virtual library on IRU’s website, and are shared by these guides as they bring their guests downriver.

To hold up our end of the bargain, beyond providing the online course content, all participants that finished the course received a package at the start of the 2021 river season with their education toolkit — which includes waterproof and durable flip cards to assist in talks and to share with guests, a wild and scenic stewardship sun hoody, and a letter certificate of completion (along with a few other goodies).

From my personal experience as a Middle Fork guide and the many that I’ve met over the years, I know that Idaho river guides are a special bunch, full of passion for the rivers they run and a dedication to stewardship. So, I had high expectations for the success of the program, but wasn’t sure how the virtual component would pan out. We were thrilled by the participation, effort, and follow through during the river offseason and into the 2021 river season. Looking forward, we are excited to launch the 2022 program (fingers crossed both virtual and in person) and get another cohort of Wild and Scenic Guide Stewards ready to inspire their guests to take an active role in stewardship of our Wild and Scenic River system. ♦

*Reese Hodges is a guide on the Wild and Scenic Middle Fork Salmon River and a staff member at Idaho Rivers United.*



# Wild and Scenic River Values

## Workshop Garner Momentum for Northwest Oregon BLM

by Angie Fuhrmann

Participants gathered virtually last November 2-4, 2021, for a Wild and Scenic River Values workshop hosted by the River Training Center in partnership with Northwest Oregon Bureau of Land Management. Over the course of three days, 34 participants worked together to make significant progress toward defining the Outstanding Remarkable Values (ORVs) for the Nestucca River, Lobster Creek, Walker Creek, and Molalla River. Overall, participants rated the workshop a success, with over 80% of participants reporting that they plan to use information they learned within 6 months.

Participant and District Hydrologist for Northwest Oregon, Jonas Parker, noted, “The most challenging part of working through the Wild and Scenic Rivers Act, new stream designations, and ORV determinations, is finding the time to sit down, focus, and discuss with colleagues. I found that the workshop provided an excellent venue for stream and land managers alike to work through the process, discuss the legitimacy and merits of ORV determination, and begin the intricate steps of delineating a corridor reflective of those values. It was discussed

that the management of these lands and waters would likely be in place longer than our careers and RMS helped us transcend those temporal boundaries while pondering the gravity of our discussions.”

The workshop was instructed by Mollie Chaudet, retired US Forest Service, and Sarah Lange, Recreation Planner for Mt. Baker-Snoqualmie National Forest. During the virtual classroom sessions, participants increased their knowledge of the protection requirements of the Wild and Scenic Rivers Act, learned how to evaluate and determine Outstandingly Remarkable Values, examined the required and recommended contents of a Comprehensive River Management Plan (CRMP), and identified actions needed to begin preparation of a CRMP for each of the identified rivers.

One participant said, “The depth of experience of the instructors was helpful to direct the conversations.” Another added, “Having trained people on hand to guide specialists and managers through the CRMP process and answer questions as they arose was very valuable.”

When asked how this workshop might improve the management of these Wild and Scenic rivers, Lauren Pidot, Acting Social Sciences Section Chief and OR/WA National Conservation Lands Program Lead for the Oregon/Washington State Office of the Bureau of Land Management responded, “The workshop improved field specialists’ understanding of the requirements of the Wild and Scenic Rivers Act. It also helped the offices make progress on the development of defensible outstandingly remarkable values, a key aspect of both managing WSRs and developing a CRMP.”

While there is still work to be done toward completing the CRMPs, the workshop gave the district’s WSR program some momentum for the planning process. Cara Hand, Outdoor Recreation Planner for Northwest Oregon District Bureau of Land Management added, “I expect that the foundation laid by the workshop will contribute to well-described and defensible ORVs as we continue with the development of our river value assessments.” ♦



### Workshop Goal

- Make significant progress on identifying the:
  - Outstandingly Remarkable Values (ORVs)
  - Next steps for preparation of a Comprehensive Wild and Scenic River Management Plan (CRMP) for
    - Lobster Creek
    - Molalla River
    - Nestucca River
    - Walker Creek

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Mollie

Landon Rhodes

Tanner Hartman

Kayla Saager (...)

Grace Stone

Adriana Morales

dfitting

Tony Spitzack



# 2021 Jackie Diedrich Excellence in Leadership Award Winner –

by Lisa Machnik, PhD

The Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) is honored to recognize Jennifer Back as the recipient of the Jackie Diedrich Excellence in Leadership Award. This award recognizes an individual who has shown outstanding leadership to manage and protect wild and scenic rivers (WSR).

In her role with the National Park Service Water Resources Division as the WSR Science Lead, and in her five years with the IWSRCC, Jen worked tirelessly to advance cross-disciplinary understanding of wild and scenic rivers. From the evaluation of water quality assessments used broadly by nonprofit partners, agency staff, and local advocates to her engagement with the Environmental Protection Agency in advance of the 50th anniversary of the Clean Water Act, she encouraged a deeper understanding of the importance of water quality data for long term river protection. Relatedly, Jen provided leadership on the national interagency partnership with Adventure Scientists, helping guide scientific protocol for community science.

Leadership is one of the critical elements of this award, and Jen’s commitment to mentoring three Conservation Fellows has led to a vital understanding of WSR water quality (see ‘Evaluation of State Water Quality Assessments and the National Wild and Scenic Rivers System’) that has primed emerging partnerships at the state and national level. Jen also saw a huge opportunity to tackle key WSR issues through training, including a highly regarded bank stabilization workshop and multiple interagency trainings in a virtual environment with RMS as agencies and partners transitioned into new ways of working together.

Jen leaves a legacy for future river managers from her work in providing policy guidance as an example to follow in her efforts to support interagency collaboration, positive relationships with partners, and opportunities for future leaders. Congratulations Jennifer! ♦

Jennifer Back

Julie Laufman, left, and Jennifer Back on the Main Salmon, ID. Photo: Bill Hansen



John Soltys and his son collect water quality data from the headwaters of the Pratt Wild and Scenic River in WA. Credit: Dalton Johnson (daltonjohnsonmedia.com)

## ...for *Wild and Scenic* Rivers

by Maris Fessenden

How do you measure the health of a river? You take its temperature. You also measure pH, salinity, and a handful of other metrics over time to capture differences in seasonal flows and conditions. Taking those measurements can take time, even with specialized probes, so avid outdoorsman John Soltys came up with a solution. He rigged the probe up to a light-weight tripod and allowed it to dangle at just the right depth in the river to gather measurements.

Soltys spends his free time mountaineering, backpacking, hiking, snowshoeing, fly fishing, and more, often with one or more of his four kids, wife, and dog. In 2013, the family started giving back to the environments they love by volunteering with Adventure Scientists, a Bozeman, MT-based nonprofit that recruits, trains, and manages volunteers with outdoor skills.

His clever tripod solution helped him gather 12 river health surveys and 4 water samples from the Snoqualmie and Pratt Wild and Scenic rivers over the last year and a half. The data Soltys and other volunteers are collecting will help protect some of America’s most treasured rivers – those in the National Wild and Scenic Rivers System. Eighty-two percent of these rivers either fail water quality standards set by the Clean Water Act or have little to no data on their status. The Adventure Scientists project aims to close those data gaps.

“It’s a great way to spend time with the family in addition to helping the environment,” Soltys says. He recalls the first Adventure Scientists project he did got his two girls, nine and seven years old at the time, to sit still for an hour and watch for pika high in the mountains. Now, one of them is a freshman in college, studying environmental science.

From July 2020 through September 2023, volunteers are hiking, biking, trail running, and paddling rivers across the country, collecting data to create the most comprehensive view of the health of the Wild and Scenic Rivers system ever attempted.

Already, volunteer teams have visited 133 priority Wild and Scenic rivers and tributaries, including 70 in the five states that make up the RMS Northwest chapter. By the project’s end, volunteers for Adventure Scientists will have filled critical data gaps for the National Park Service, USDA Forest Service, Bureau of Land Management, and state agencies tasked with preserving these exceptional rivers.

The next field season launches on April 1, 2022. Data from 14 rivers in Alaska are a priority and volunteers are needed to sample in that state. Learn how you can help [Adventure Scientists](#) protect rivers, and follow the Soltys’ family adventures at [Moosefish.com](#). ♦

Maris Fessenden works as the Communications Manager of Adventure Scientists.



# Hope on the Horizon – Klamath Dams to Come Down Next Year

by S. Craig Tucker, PhD and Joe Curtis

For nearly two decades, Klamath River advocates have campaigned for the removal of the lower four Klamath River dams. Tribes, commercial and sport fishermen, conservation groups and others have pressed their case for dam removal in court rooms, shareholder meetings, before federal and state agencies, the halls of congress, and the public arena. The demand is nothing short of a moon shot for salmon: it will be the largest river restoration effort in history.

Although Klamath salmon runs have been in decline since the gold rush, a unique ecological disaster occurred in 2002 that spurred dam removal efforts. Drought, dams, and poor water management decisions by federal regulators led to massive fish kill in the lower Klamath River. As many as 70,000 adult salmon died before spawning, littering the banks of the Yurok reservation with diseased fish carcasses. Soon after this event, the Tribes kicked off what become a two-decade long campaign to Bring the Salmon Home by traveling to Scotland to crash the shareholders’ meeting of the dam owner which at that time was Scottish Power.

Since then, the dams have changed hands and are now owned by Warren Buffett’s Berkshire Energy. Dozens of protests and lawsuits, along with years of advocacy and technical studies, eventually led to the Klamath Hydroelectric Settlement Agreement or KHSA. The Agreement was agreed to by Berkshire’s subsidiary PacifiCorp, the states of California and Oregon, the Karuk and Yurok Tribes, and a host of conservation groups. It calls for the creation of a non-profit corporation to take over the dams and manage their decommissioning — thus, the Klamath River Renewal Corporation (KRRC) was formed. The KRRC and PacifiCorp jointly filed an application with the Federal Energy Regulatory Commission (FERC) to transfer the dams to KRRC

for the purposes of removal, which FERC approved last year. (FERC oversees the licensing of non-federal power projects or the decommissioning of such projects.)

Before FERC can render a final approval on the dam removal plan, the agency must produce and release for public comment an Environmental Impact Statement (EIS) to disclose all the project impacts. FERC is scheduled to release a draft EIS before the end of February of 2022. FERC should complete the full environmental review and approve the project in time for dam removal in 2023. The project is financed jointly by PacifiCorp and California.

Klamath Basin communities have been ready for these deadbeat dams to come down for years. The dams provide no irrigation diversions, no drinking water diversions, generate little electricity, and offer virtually no flood control benefits. But they do have devastating impacts on river and fish health. The dams are a key factor in the epidemic levels of *Ceratonova shasta* (*C. shasta*) infections in juvenile salmon in recent years. *C. shasta* is a disease-causing parasite that spends one part of its life cycle in

Yurok Tribe fishery technician, Jamie Holt, counting dead juvenile fish during 2021 fish kill in the Klamath River. Photo: Stormy Staats



polychaete worms that thrive in the river channel below Iron Gate dam and another part in salmon. Below the Klamath dams, the unnaturally static hydrograph, warm water temperatures, and high nutrient loads provide an ideal habitat for the polychaete worm to thrive. When salmon migrate through the reach, the disease can be transmitted from the polychaete to the fish and back again. In recent years *C. shasta* infection rates in juvenile salmon have topped 90%, resulting in an almost total loss in several generations of salmon. Recent years have seen some of the lowest salmon returns in history, leading to a full-blown crisis for tribal and non-tribal fishing communities in the region. Dam removal will restore a natural flow regime to the diseased reach of river and dramatically decrease polychaete populations and infection rates.

The reservoirs created by the dams are also a toxic mess. The Klamath’s headwaters pick up heavy nutrient loads partly from the volcanic soils of the Upper basin and partly from intense agricultural activity. When trapped behind the dams, the nutrient-rich water warms and massive blooms of toxic algae erupt. Iron Gate and Copco Reservoirs are posted with warnings against

human and pet contact with the water due to high levels of the algal liver toxin microcystin. Sometimes, the blooms are so bad that contact with the river below the dams is dangerous.

With the four lower hydroelectric dams gone, salmon runs will have access to historic spawning areas including dozens of cold-water springs and hundreds of river miles for the first time in over a century. An undammed river will result in lower river temperatures and a natural flow pattern for most of the river’s length. In addition, dam removal addresses fish disease issues, restores sediment mobilization and transport, alleviates toxic algae blooms, and leads to an overall healthier, cleaner Klamath River.

If the schedule for drawdown and deconstruction proceeds as planned, removal will begin in January of 2023 with completion of the project by the end of that year. The plan for removal is timed to limit negative short-term impacts on the river and aquatic ecosystems while deconstructing all four dams simultaneously. Starting with drawdown procedures that will remove as much water as possible from behind each dam, deconstruction details will take several forms depending on the

Copco No. 1 Dam on the Klamath River is one of the dams slated for removal in the beginning of 2023. Courtesy: KRRC





engineering details of each dam.

There will be relatively little explosive power utilized in the deconstruction project. Other than Iron Gate Dam, which will require the strategic creation of a small hole via a carefully engineered explosion, the dams will be removed in much the same way that they were originally built, only backwards. The KRRC is tasked with carefully dismantling the dam superstructures and managing the removal and/or storage of the waste materials created. This will include filling in a sink hole at one of the dam sites as well as various environmental remediation projects that will contribute to the overall health and revitalization of ecosystems long impacted by the dams and their maintenance.

While dam removal proponents can finally enjoy some political momentum, critics of dam removal are still working to undermine the effort. In Siskiyou County, California, a vocal minority relies on disinformation campaigns to further efforts to derail the dam removal process. Claims that salmon never migrated to the Upper Klamath Basin, that salmon are not native to the Klamath Basin, and that the dams are important for storing water to supplement river flows during droughts are being circulated by a small but vociferous group of dam supporters in social media pages and local press outlets.

Dam removal opponents continue to recycle debunked myths and contrive new conspiracy theories to motivate a certain kind of base to action. However, FERC is a decision-making body that functions like a court and facts still matter in this arena. We know salmon made their way to the Upper Basin - we have photographic evidence (from newspapers and books) that shows prolific salmon runs upriver from the J.C. Boyle Dam in Oregon, and firsthand accounts recorded in journals and correspondence that further indicate the prevalence of salmon throughout the Klamath River watershed.

There are several ways to contribute to removal efforts such as making financial contributions to one of the many non-profit organizations that are involved in the effort, submitting comments to FERC in support of dam removal, and being prepared to challenge anti-removal myths and attitudes. Having conversations about dam removal with family, coworkers, neighbors, and family members is another important way to participate in the removal process: helping inform the public even on a small, personal basis can have important effects on the long-term success of these kinds of processes.

Submitting comments to FERC based on the information presented above is a particularly potent way for people to help the dam removal process. Writing a brief letter that illustrates your personal understanding of the situation and demonstrates your interest in dam removal can be a powerful component in the fight against disinformation. We are awaiting the imminent release of a draft Environmental Impact Statement (EIS) from FERC. Once available for public review, submitting comments in response

to the EIS is an important way for people to make their voices heard.

Dam removal is reliant on as many invested individuals and groups contributing to the effort as possible. Thus far, river stewards have been a powerful voice in the chorus of dam-removal demands – may this tradition of informed stewardship proceed into a future that sees the Klamath River undammed at last. River folk of all backgrounds and interests will be able to better appreciate and utilize an undammed Klamath. Tips on how to file your comment with FERC can be found at <https://reconnectklamath.org/take-action/>. In addition to submitting comments to FERC, those interested in supporting dam removal in the Klamath Basin can donate to non-profit organizations invested in the process — of note are Trout Unlimited, American Rivers, and Save Our Wild Salmon. ♦

These photographs are from Charles Holder’s text, *Gamefishes of the World*, published in 1913. These pictures were taken at what was known as the ‘Salmon Pool’ on the Williamson River, a stream that feeds Upper Klamath Lake.

**Craig Tucker** is principal at Suits and Signs Consulting, a firm that works with tribes, local governments, and NGOs to protect natural resources and promote responsible economic development. Craig has helped foster coalitions of Tribal governments, commercial fishermen, agricultural organizations, energy companies, and conservation organizations to advance a wide range of objectives from fisheries restoration and community fire protection to business development and health care. Learn more about Suits and Signs Consulting at: <https://suitsandsigns.com>

**Joe Curtis** is a Graduate Student in Humboldt State University’s Environment and Community Program and holds a BA in History from the same institution. He works as a researcher and writer. His research focuses on the relationship between state agencies, Tribes, and land management outcomes. After living in Humboldt and Siskiyou Counties for the last 15 years, he is driven to engage regional environmental and social issues that impact the region’s communities.

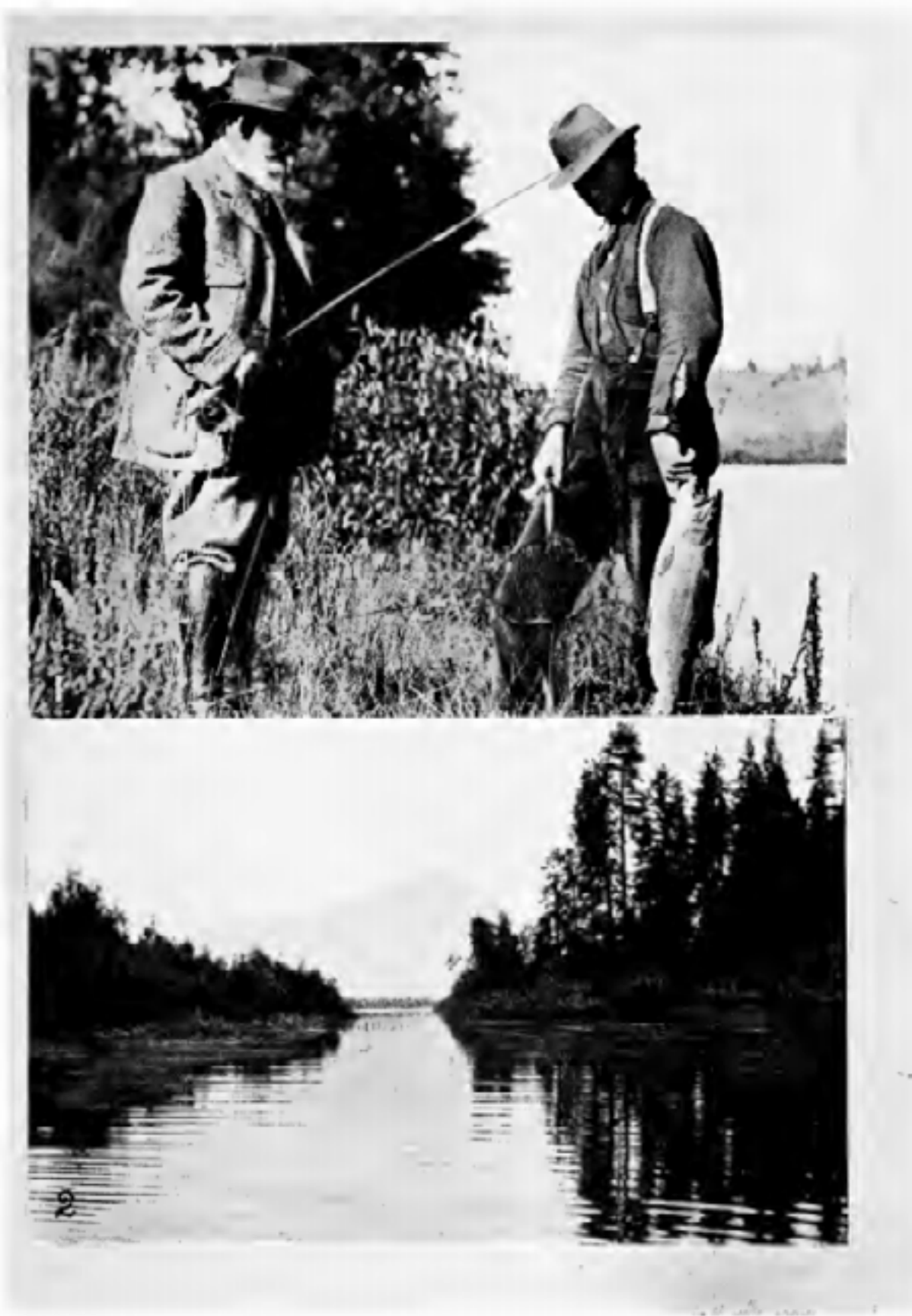


Fig. 37.  
1. The Author's Salmon, on Trout Tackle. 2. The Salmon Pool, Williamson River, Oregon, U.S.A., Altitude 4,500 Feet. The Mountain, 9,000 Feet. p. 264.



# 4 Easy Ways to Build a More Accessible Outdoors

by Adam Edwards

[Originally published for [Melanin Base Camp](#) on 11/20/2021.]

We often talk about how the cost of entry into many outdoor sports is prohibitive. Whether that cost is financial or emotional, it can cause many individuals to write off an activity as *not for them* without ever having the chance to experience it. I've been thinking a lot about the cost of entry lately and how I can help provide reasonable access for Black, Indigenous and People of Color (BIPOC) to try outdoor activities.

This past summer I was able to assist in coordinating two BIPOC-focused paddling events in Oregon and Washington alongside Carla Danley and Jim Good—two local paddlers who are committed to providing opportunities for BIPOC to become part of the paddling community. We spent several months working with [Diversify Whitewater](#), Portland Metro and Issaquah Washington's Parks and Rec department to plan our events.

Holding an event during the current shift from heavy pandemic regulations to the current state we are in now was definitely challenging. Navigating evolving state and local mandates as well as personal comfort levels without compromising safety for at-risk groups took effort and flexibility. With the help of our community members and with support from organizations like [Diversify Whitewater](#), [i-Urban Teen](#), and [American Whitewater](#), we were able to successfully host two events.

The paddling community in the Northwest has a lot of individuals who are willing to donate their time, knowledge and gear to facilitate events for the general public. We were also able to get substantial support from local and national outdoor industry members like [Next Adventure Paddle Sports Center](#), [Issaquah Paddle Sports](#), [Immersion Research](#), [Dagger Kayaks](#), [liquidlogic](#), [Trail Butter](#) and more.

Witnessing the outpouring of support from a community of which I have been a member for more than a decade was

amazing. Participating in gear heavy or highly technical sports is daunting for most beginners and events like these are one of the few ways folks can focus on having a positive first-time experience versus spending a lot of money. The feedback I received was really encouraging. A lot of our first-timers talked about how great it was to have a chance to try different paddle sports in a safe and comfortable location and for FREE!

The instructional goal for both events was to create the best day possible for our participants. That meant simple instructions, positive feedback and support and full accommodation of participants' needs. Beyond that our drive was to make sure people had a great experience, stayed safe and learned something new. It was heartwarming to see so many People of

Color enjoying quality time on the water while learning different paddle sports to include canoeing, rafting, whitewater kayaking and stand up paddle-boarding.

The experience made me reflect on why it is so important to have honest discussions about barriers that limit access to our communities, to include the financial cost of entry. Barriers can also include time and cultural differences inherent in navigating a new community while learning something new—especially if the community is not taking intentional steps to accommodate people from different backgrounds. All food for thought.

Events like the skills and paddling days organized by [Diversify Whitewater](#), or the events we were able to hold at Oxbow Park and Tibbets Beach, are great ways to lower the cost. However, these are just stepping stones. Planning events for a hundred people, navigating city permits, insurance, sponsors, gear acquisition and COVID is a big ask. As I've reflected on the opportunities we were able to provide and some of the feedback we received I've realized there are other ways to lower the cost of entry that will help diversify our community. More on that later, but first let's talk about **Cost of Entry**.

1. *Outdoor recreation isn't cheap.* And isn't going to get any

cheaper. Forking out several hundred to several thousand dollars is daunting...especially if you're not sure if you will stick with the activity. Initial costs and instruction for most adventure sports range from \$1500-3000. Even more affordable activities, such as trail running, hiking and skateboarding have their own hidden costs—both cultural and financial, that can keep people from trying them.

2. *Cost of entry is not limited to money.* There are layers of privilege that are part and parcel of adventure sport communities. If you were not privileged to grow up with financial or geographic access, they can be difficult to break into. This is especially true of sports that take legacy access for granted which means, if you are determined to learn as an adult, you may find yourself in a class alongside five and six year olds who have privilege and access you never dreamed of at their age. Oftentimes, legacy sports also expect you to know unspoken rules about the community that you have no way of knowing, since you didn't grow up participating in that activity. Or mentorship is the only way to advance, and finding a mentor, when no one else looks like you is daunting.

3. *Cost of entry is emotional.* For some, the challenge of the unknown is thrilling. For others it's the extra layer on an anxiety sandwich. Trying new things is daunting, combine that with having to spend a lot of money, meet new people (during a pandemic), learn a new language and build connections with the 'right people' in order to advance. It's a lot to ask, especially of



BIPOC who often are entering spaces that are not designed with their comfort in mind. This understandably leaves many people saying, "Aight, I'm gonna head out."

4. *Many outdoor communities are not openly welcoming.* Some are hostile to different gender identities, BIPOC or LGBTQIA participants. Whether it be the community members or an overall social norm this barrier to entry cannot be ignored and is often harder to overcome than just finance. Now that we have a small idea of what it may feel like to be an outsider or newcomer in an outdoor community, let's talk about next steps.

## A Few Ways To Lower Cost Of Entry

1. *Focus on the intangibles.*
  - Free and reduced cost events are great, but empathy and kindness also matter. Be available. Be present. Be kind. Operate from a position of conscious and curious sharing.
  - Share your knowledge, share your time. Don't take important issues like access, time and knowledge for granted. The community will only grow if skilled and experienced members make themselves available as mentors.
2. *If you have extra gear that is in safe and working order, donate it instead of selling it.*
3. *If you are qualified to instruct, either privately or through a company, try to provide free or low cost options to interested folks who might not otherwise have the opportunity.*
  - Consider setting up a gear share, wherein experienced members with extra gear and an inclination to share time, knowledge or skills make themselves available for group outings. Really it's as easy as sharing some of your time and it's a great way to build genuine connections.
4. *Research organizations that provide leadership or skills courses to BIPOC and LGBTQIA individuals and donate your time, money or both.*

Realistically many things are going to keep increasing in cost.

That means that prices of gear will continue to go up even as wages remain stagnant for many people living in the U.S. Unaddressed structural racism also keeps social, cultural and emotional costs high for BIPOC and other historically marginalized groups. So doing what you can to help each other, to really foster the growth and pursue the change we'd like to see in our communities is going to be so important.

I, for one, will continue to look for ways to provide free paddling days, community connections and mentorship with the goal of making paddling sports accessible to new people. Hope to see you out there! ♦





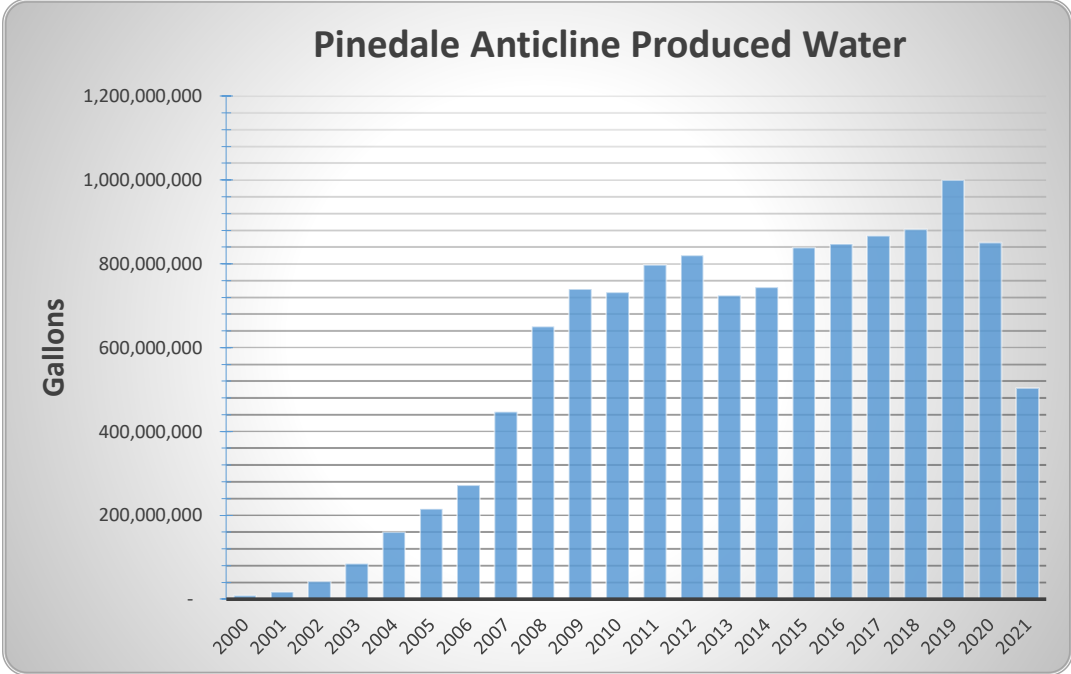
(Upper Green, continued from p.1)

In 2010 the Wyoming State Geological Survey estimated a groundwater withdrawal rate of 7,000-15,000 acre-feet per year, including annual recharge, discharge, and use.<sup>2</sup>

But there is another estimate of groundwater withdrawal that is not considered by either the Wyoming State Engineer's Office or the Wyoming State Geological Survey.

Over the past twenty years, this quiet corner of western Wyoming has drawn natural gas drillers from around the U.S. and the world. The Pinedale Anticline and Jonah natural gas fields are two of the state's largest with a combined 7,499 permitted gas wells.

Groundwater withdrawal rates have increased exponentially with the number of gas wells drilled in these two gas fields. The Wyoming Oil and Gas Conservation Commission records barrels of "produced" groundwater withdrawn in each gas field. In the Pinedale Anticline gas field, 292,623,878 barrels (37,700 acre-feet) have been "produced" since the year 2000. In the Jonah gas field, 73,630,122 barrels (9,486 acre-feet) of water have been produced since 1998.<sup>3</sup> This produced water, deemed worthless, is a by-product of natural gas production, and is "reinjecting" thousands of feet underground.



The Oil and Gas Commissions in Colorado and Utah also record the amount of "produced" groundwater, showing even greater amounts withdrawn each year. But there is no agency or organization that recognizes a complete tally of groundwater withdrawn from aquifers within the entire Colorado River Basin. While our state agencies can only guess at how much groundwater we have, how much we are using, and how much is left, our rivers depend on the recharge capabilities of our groundwater now more than ever.

<sup>1</sup> <https://waterplan.state.wy.us/plan/green/2010/gw-finalrept/gw-ch03.html>. p. 3-12.  
<sup>2</sup> <https://sales.wsgs.wyo.gov/available-groundwater-determination-wwdc-green-river-basin-water-plan-ii-groundwater-study-level-i-2007-2009-2010/>. p. 10  
<sup>3</sup> Source: <http://pipeline.wyo.gov>  
<sup>4</sup> 1 barrel = 42 U.S. gallons  
<sup>5</sup> <https://www.nytimes.com/2021/07/20/us/utah-water-drought-climate-change.html>

The river we can see is a water commonwealth: physically, chemically, and biologically connected through migration of fish, amphibians, plants, and microorganisms. The river we cannot see beneath us is a network of trickles and streams, lakes and pools.

It is difficult for the average water user to understand the collective knowledge of every state water agency in the Colorado River Basin, and to contribute to thoughtful, informed river management. For example, the states' oil and gas commissions measure water by the barrel, while the engineers measure water in acre-feet. Still other agencies measure water in gallons per minute. Now in our twenty-second year of drought, water managers are encouraging irrigators to reduce water use, while planning to build more dams for irrigation. But Las Vegas has taken water conservation seriously, and one small town in Utah has a moratorium on new building because there is not enough water.<sup>5</sup>

A River Management Roundtable discussion might begin to assemble what we know and what questions remain. Does the Wasatch aquifer connect to those in other states? How much groundwater are downstream aquifers estimated to collectively hold, and how much is withdrawn? To collectively organize a future of water wisdom, an inter-basin "Colorado River Collaborative" that focuses on the river water, including its groundwater, rather than its political divisions, may face this water emergency with better potential solutions. A top-to-bottom comprehensive plan for the entire Colorado River Basin might include more public outreach focused on water conservation, and broader accountability on actual water use from all sources in all industries. Every water user should have a clear view and strong handle on where our water comes from and where it's going: all the riverine connections that give us life. From the Wind River Range to the Grand Canyon and beyond, every water source is significant and every drop is priceless. ♦

*Linda F. Baker is the Executive Director of the Upper Green River Alliance in Pinedale, Wyoming. She can be reached at: [linda@uppergreen.org](mailto:linda@uppergreen.org) / (307) 367-3670 (o); (307) 360-7000 (c).*



## 2022 Wild and Scenic Rivers Webinar Series

From January through June, the River Management Society's (RMS) River Training Center will host a six-part webinar series for river managers and advocates exploring the application of the Wild and Scenic Rivers (WSR) Act. Instructors bring with them years of experience managing WSRs and Partnership WSRs within various states and agencies.

Participants will learn how federal WSR designation protects specific river values, and discuss river managers' responsibilities as caretakers and stewards of the rivers, once their designation takes place.

The content is relevant for both new and seasoned river rangers, and when the series was first offered in 2021, attendees called it "a huge help," saying they wished it had been offered when they first began working as river managers.

Attendees must register for each webinar individually:

- 1/19 – Management of Wild and Scenic Rivers
- 2/16 – Partnership Wild and Scenic Rivers
- 3/16 – Introduction to Section 7 of the WSR Act
- 4/20 – Section 7 and a Broader NEPA Analysis
- 5/18 – Outstandingly Remarkable Values
- 6/15 – Steps to Address User Capacities

The series is offered at no cost to RMS members as a benefit of membership, and \$15 per webinar for non-members. Membership in RMS is available for \$60 annually for Individual members, so joining offers a great value for new members, in addition to the other benefits they receive throughout the year.

For more information, please check out the [River Training Center](#) on the RMS website, or email: [training@river-management.org](mailto:training@river-management.org).



# What have the National Park Service River Rangers been up to?



Swiftwater rescue instructors working on the curriculum for the new Swiftwater Incident Management (SWIM) class — Camp Brookside, New River Gorge National Park.

by Kathy Zerkle

Although the National Park Service Swiftwater Incident Management class (SWIM) has been years in the making, Covid gave folks time to fine-tune it. The first week in August of 2021, swiftwater rescue specialists from within the National Park Service gathered at Camp Brookside, a refurbished summer camp built in the 1940's along the New River, West Virginia. Camp Brookside can be found in the National Park Service's newest national park, New River Gorge National Park and Preserve (NRGNP&P). Rangers from Glacier National Park, Mammoth Caves, Canyonlands, and the Smokies, to name a few, spent the week hammering out the curriculum and study

guides for a swiftwater rescue class for NPS rangers. NRGNP&P Whitewater Rescue Ranger Matt McQueen said, "I am excited to be a part of this groundbreaking program. It's really the first of its kind on a national scale, wholly created by and for swiftwater professionals employed in a federal capacity."

Time was spent discussing different rescue techniques and how to effectively teach them. Trainers acquainted themselves with the latest rescue equipment that had been purchased for use in class for SWIM students. Different locations on a variety of rivers were scouted as potential sites for students to learn rescue skills. Not to worry, the week

was not *all work and no play* for folks. The course developers, many of whom had never paddled in the east, were able to experience the thrill of the rapids on the Lower New River during their stay in West Virginia. Rangers paddled a myriad of whitewater crafts — kayaks, IK's, catarafts and paddle rafts were piloted down the river by the rangers, who showed their whitewater prowess. Evenings were spent surfing at Brooks Falls which is located on the New River adjacent to Camp Brookside.

The New River Gorge National Park and Preserve offers the perfect setting for swiftwater classes. The New River is wide, high volume with warm waters,

# ... SWIMing!

while the Gauley River is narrow and rocky with its cold water coming from the bottom of Summersville Dam. Located in southern West Virginia, the park has a variety of rivers and streams for the in-water portion of the class that provide students with a range of whitewater settings.

The initial weeklong class is open to NPS staff that work in or around national park units that contain moving water features. The plan is to open the class to other agencies in the future. The class will be a comprehensive basic swiftwater rescue course. Some of the topics covered

will be self-rescue, rescue of others, rope techniques, fundamental boat handling skills, as well as night operations, pre-planning, and scene management. Much of the class time will focus on skills used while in the water. Students should come prepared to swim in the waters of West Virginia.

The class will be held in June 2022, at New River Gorge National Park and Preserve. Participants interested in the class should feel comfortable swimming in moving water and be able to provide their own PFD, helmet, and appropriate river clothing. ♦

June 2022  
Course  
Offering!

For information:  
Bill Parker  
[bill\\_parker@nps.gov](mailto:bill_parker@nps.gov)

*Instructors scouting Lower Keeney rapid on the New River in West Virginia.*





# Congratulations! to Dave Payne

Excerpt from November 17, 2021  
Klamath National Forest News & Events

The USDA Forest Service has awarded this year's national Outstanding River Manager Award to Dave Payne, a Klamath National Forest recreation technician, in recognition of his four decades of service in support of the Klamath Wild and Scenic River system. Payne said his surprise and reflection of being nominated for the award is summed up by a Chinese philosopher — “The mark of a successful man is one that has spent an entire day on the bank of a river without feeling guilty about it.”

Payne began his career as River Manager on the Klamath in 1980 and is currently a Recreation Technician on the Happy Camp/Oak Knoll Ranger District. Throughout each season, he works with outfitters and guides on the river and provides a friendly, positive Forest Service presence. Additionally, Payne tirelessly pulls tens of thousands of invasive weeds each year and constantly removes litter and trash from dump sites along the river corridor. His wildlife background and expertise in Klamath avifauna aids the Forest Service staff with Bald Eagle surveys and identifies important observations along the Klamath River and its tributaries. During his career, Payne has shared his knowledge as he oriented new employees to the district and mentored numerous interns and volunteers through partnerships with multiple organizations.

“I have continuously been impressed by the number of volunteers Dave signs up, and particularly return volunteers,” states Sarah Borman, Recreation Officer. “A lot of his former interns come back for a few days pulling weeds and garbage with him. They’ll bring friends and family — sometimes it is an annual event.”

The Outstanding River Manager is a Forest Service-wide award that recognizes an employee who exhibits leadership in protecting and enhancing river values, establishes long-term partnerships, and contributes to the growth of a Wild and Scenic River stewardship group or other significant partnership building effort. ♦

## Acceptance Speech

I am honored and at the same time deeply humbled by this recognition. I had no idea that I was even nominated for this award! I view the river corridor as a long linear golf course. My management philosophy reflects this view.

- River Accesses are the tees which allow the public to enter the course.
- Camping beaches are manicured just like putting greens.
- The rapids are like sand traps. People generally have more issues there.
- We landscape by planting native species (local acorns, maple seeds, and ash seeds) where needed.
- The Klamath River is a Public Golf Course. Everyone is welcome here as we have a highway that runs parallel to the river that allows unlimited access.
- Other rivers with controlled limited access are the Private Country Clubs of the river world.
- The River Ranger Teams are the course officials. We use rafts, inflatable kayaks, hardshell kayaks, and rescue boards to get to our worksites just as golf carts are used on golf courses.
- Noxious weeds are a major issue in the river corridor. We recruit volunteers to float with us to physically pull weeds. This year we pulled over 56,000 noxious weeds of various species. Scotch Broom, French Broom, Spanish Broom, Marlahan Mustard, Puncture Vine, Yellow Star Thistle, and Mullein are the species we primarily focus on in the immediate river corridor.
- Our season is like one long golf tournament with a commercial rafting leader board published at the end of the season.
- The trophy taken home is the outstanding experience that the river itself gives to each participant that challenges the course.
- Par for our course: The smiling faces of river visitors; the possible observation of many species of birds and wildlife; baking in the sun on hot, summer days; or landing a mighty steelhead amid the fall colors.

I came from the east coast with an otter's spirit in me and found suitable habitat (the Klamath River) in which to thrive. My 50th high school reunion was a month ago (rescheduled because of covid). Our high school class motto, “Professionally Done by ‘71” has guided me through my journey in life and with my work here along the Klamath River. Let me close by inviting folks to come enjoy the river with us; helping manage our public resource by “Caring for the land and Serving people.” Thank you again for this prestigious award. Does it come with a raft? a tee shirt? a hat? a visor? or a coveted Middle Fork Salmon permit! Thank you. ♦ — Dave Payne



*Dave Payne takes off for a little river surfing.*



*Retrieving and hauling out a dory that has seen better days.*



## It was 2010...

... when I set off to Happy Camp, California, to work a River Recreation internship through the Student Conservation Association with the Forest Service. Little did I know how much the summer would shape my career path. I traveled west from my home town in Maryland, where I had just learned how to whitewater kayak the summer prior on the Shenandoah and Potomac rivers. I had no experience with the Forest Service and no idea that “river rangers” existed.

I arrived in Happy Camp and met my mentor for the summer, Dave Payne. Dave taught me so much about being a passionate and thoughtful person towards the river, wildlife, landscape, and visitors. He also introduced me to RMS by taking me to a River Ranger Rendezvous, and I have been a member ever since.

I am so thankful and fortunate to have been mentored by Dave, which was the beginning of an awesome river management career for the past 11 years. I know I am not the only one that has worked alongside Dave and used newly gained experience to begin a river-related career — those of us that know Dave would not be surprised to learn that he was recognized nationally by the Forest Service, receiving the Outstanding River Manager Award.

Thanks Dave, for all the inspiration you've provided to interns such as me! I can't imagine where I'd be without your mentorship. I not only learned to value river stewardship, but also learned the importance of passing that knowledge on to others. It was truly one of the “best summers, ever.” ♦ — Lisa Byers



# Congratulations



## NATIONAL WILDERNESS SKILLS INSTITUTE CORE TEAM

HOSTING VIRTUAL TRAINING EVENT FOR OVER 900 FOREST SERVICE EMPLOYEES AND PARTNERS

**FOREST SERVICE GOAL:** Apply knowledge globally

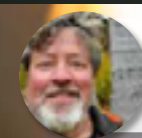
**UNITS:** Washington Office, National Forest System; Northern Region; Southern Region; Pacific Northwest Region

**TEAM MEMBERS:** Dusty Vaughn, Bill Hodge, Jimmy Gaudry, Risa Shimoda, Jacob Wall, John Campbell, Dan Abbe, Carol Hennessey, Nancy Taylor, Angie Fuhrmann, Eric Giebelstein, Ian Davidson

**PARTNERS:** Bob Marshall Wilderness Foundation, River Management Society, Society for Wilderness Stewardship, Southern Appalachian Wilderness Stewards, Selway Bitterroot Frank Church Foundation

Before each field season, interagency wilderness, river, and trail managers, field technicians, partners, and volunteers typically come together for training in different locations. With limitations on in-person gatherings due to the COVID-19 pandemic, a core team of Forest Service employees and partners organized the National Wilderness Skills Institute—the first-ever national field-based virtual training for wilderness and wild and scenic river stewards. On May 24-28, 2021, the team hosted a week of online training and virtual activities for field employees and partners at all levels of experience. Seventy interactive sessions were offered over the course of the week. Participants included over 900 Forest Service employees, volunteers, and interagency and nongovernmental partners from across the United States, joined by international participants from Austria, Canada, Ecuador, and Jordan.

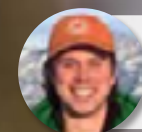
## NATIONAL WILDERNESS SKILLS INSTITUTE



**Bill Hodge**  
Executive Director  
Bob Marshall Wilderness Foundation



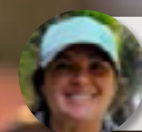
**Jimmy Gaudry**  
Northern Region Wilderness and Wild & Scenic  
Rivers Program Manager, USDA Forest Service



**Jacob Wall**  
Program Director  
Society for Wilderness Stewardship



**John Campbell**  
Southern Region Wilderness and Wild & Scenic  
Rivers Program Manager, USDA Forest Service



**Angie Fuhrmann**  
River Training Center Coordinator  
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**J. Dan Abbe**  
Wilderness Specialist, USDA Forest Service Representative,  
Arthur Carhart National Wilderness Training Center



**Risa Shimoda**  
Executive Director  
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**Carol A. Hennessey**  
Recreation, Trails, Wilderness, Outfitter & Guide & Rivers Program  
Manager, Nez Perce-Clearwater National Forests, USDA Forest Service



**Eric Giebelstein**  
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Southern Appalachian Wilderness Stewards



**Nancy Taylor**  
Pacific Northwest Wilderness, Wild & Scenic Rivers, Congressionally  
Designated Areas Program Manager, USDA Forest Service



**Ian Davidson**  
Program Manager  
Selway Bitterroot Frank Church Foundation



**Dusty Vaughn**  
Wilderness and Wild & Scenic Rivers  
Specialist, USDA Forest Service

USDA Forest Service  
2021 Chief's Awards – January 13, 2022  
Award Category – Apply Knowledge Globally

See the Core Team's acceptance video here:  
<https://www.youtube.com/watch?v=6r3hJKn6w4c>





## RMS Receives DEI in Outdoors Leadership Certificate

by Risa Shimoda, based on comments from Angie Fuhrmann, Bekah Price, and Dr. James Vonesh

During the fall of 2021 the RMS staff and partnership colleagues completed the Diversity, Equity, and Inclusion in Outdoors Leadership Certificate Program, offered by the Workforce Development and Community Education program at Greenfield Community College. The learning objective for this inaugural program was to “allow for a space of discovery and action as we look at challenges to creating diversity, equity, and inclusion in outdoor education, recreation, industry and in group facilitation.” The [Certificate](#) sessions offered information and tools intended to enhance our ability to facilitate our own discussions and actions, and “move the needle of social justice forward.”

### Our Fellow DEI Certificate Registrants

Certificate students included outdoor industry professionals from across the country. Angie Fuhrmann, James Major, Bekah Price, and Risa Shimoda attended the virtual class one evening per week over a six-week period. Attendees included RMS River Studies and Leadership Certificate (RSLC) Advisors Andy Rost, PhD, and James Vonesh, PhD, as well as:

- Action Consulting and Therapy
- Anchors Aweigh Counseling
- City of Berkeley, CA - Camps Programs
- Brantwood Camp - Greenfield, NH
- Catamount Trail Association (VT)
- Delta State University Outdoor Programs
- Holyoke Rows, Community Boathouse
- Manice Education Center
- River Management Society
- Sierra Nevada University
- Vail Mountain School
- Virginia Commonwealth University & River Field Studies Network
- Zoar Outdoor, Berkshire East Mountain Resort & Catamount Mountain Resort

### What did we learn and share?

Class and homework subjects included: creating a learning culture by understanding a common language and terminology, and identifying and sharing organizations with which to identify, align with and support. We were also asked to increase our understanding of land acknowledgements and developed our own land acknowledgement — this involved learning chapters of



Diversify Whitewater and Team River Runner are examples of organizations founded to support and celebrate underserved communities who may produce tomorrow’s enthusiasts and leaders.

US History that were probably new to most of us, and in-depth research about the history of the geographical area from which we hail. Here (<https://www.youtube.com/watch?v=ziyJ4X0z3e0>) is the land acknowledgment Angie produced for the Applegate Valley in Oregon, and here (<https://youtu.be/aMqf0e996JY>) is a video by Dr. Vonesh, whose Richmond, Virginia, home lies at the James River.

Homework included listening to interviews (conducted by our instructor, Rachel Hailey) of individuals who are creating space for non-traditional outdoor pursuits:

- Andrew Alexander King, founder of the [Between Worlds Project](#)
- Perry Cohen, founder of [Venture Out Project](#)

### How valuable was our experience?

James Vonesh found value by simply committing to attending the class: “I really appreciated being ‘forced’ to spend a little more time thinking about these issues. Sometimes when we are so busy having it ‘assigned’ helps justify bumping it higher in the list of all the things to do, many of which will not get done!”

One assignment asked us to identify and become familiar with one or two organizations founded by or initiating DEI programs. I think I can speak for us all as having appreciated

this assignment — learning about organization(s) (*two of which are depicted in the photographs above*) and then delivering presentations to each other.

Another specific exercise that tested our understanding of words or phrases that are quite new to social language was challenging. Bekah commented that we “expanded our vocabularies and learned the differences in terms that may seem similar like *institutional racism* versus *structural racism*, which actually differ in meaning significantly.”

Focusing on the value and significance of land acknowledgements was particularly valuable (especially as we also learned the importance of ‘doing them right’ vs. offering politically correct token acknowledgments). Dr. Vonesh offered, “I learned a lot from doing my 10-minute land acknowledgement. I had prepared land acknowledgements before, but they were always very short. Taking more time forced me to dive deeper in a good way, and I feel more able to reach out locally in this regard.”

The following are thoughts from our team as we reflected on having, admittedly, taken a leap of faith by signing up for this inaugural virtual course.

Bekah shared that, “The course was helpful in illuminating the many organizations working to make the outdoors more





## Rios to Rivers is another one of the organizations that attendees researched and then presented to fellow workshop participants.

inclusive. I hope that knowing what’s out there will open up opportunities for potential partnerships in a landscape where lots of folks feel they don’t know where to start, or are so afraid of saying or doing the wrong thing that they avoid these topics altogether.”

Angie commented on the quality of our classroom company. “I thought that the instructor was knowledgeable on the topics, was impressed by the breadth of professionals in the course, and enjoyed the active engagement from everyone. I felt like I was learning from and alongside my classmates.”

James Major found a lot of value in listening to the webinar “More Than a Land Acknowledgement” with Heather Bruegl, along with the Q&A portion following the presentation. He was a little disappointed that there was not more class time devoted to further discussions with the class instructor along with other participants regarding this topic, but chalks this up to a timing issue related to this being the initial offering of the course.

Dr. Vonesh offered an insightful perspective from his vantage point as a university professor: “Overall, I would say the majority of my learning from this experience came from self-study, rather than course materials; the class was essentially taught by the participants. The instructor generated assignments in which we created content and then we presented it to each other, versus more of the “sage on the stage” approach where an expert

presents materials.”

Beyond the topics and assignments, the production and delivery of the course was not great. One of us offered, “Relative to my expectations (fair or unfair) I’d score this course as a 5 out of 10. Not a waste of time, and some good learning happened, but I feel it could have been much better. Indeed, what I really need/want, especially as a well-intentioned older white man who is by nature a ‘smoother’ and conflict adverse, is to practice to become more able to have ‘uncomfortable’ discussions.”

Bekah offered, “The agenda for the course was promising, but I left the class feeling that we just didn’t have time to get into all of it. I had hoped to feel more equipped to facilitate discussions on these topics, as well as learning about the history of social justice in the outdoors, and gaining some tips for marketing and messaging.”

Angie agreed and added, “I would have loved even more instruction and discussion on related topics or practices such as ‘when/not to’, ‘how to do’, ‘who should do’, etc. While this course still needs some refining (content and technology), it did a great job at beginning conversations around diversity, equity and inclusion, and gave me a foundation to continue learning from.”

James Vonesh concluded his comments with the wisdom of experience in offering, “... it was the first time this was taught, and no one gets it perfect the first try (or ever!)” ♦

## Policy, Culture, and Organizational Change

by Members of the A-DASH Collaborative  
(Reprinted with permission from America Outdoors Association.)

The outdoor industry is focusing on creating a working environment that is more welcoming to all sorts of people. A large focus of this discussion has been about sexual harassment and assault prevention. At the December 2021 America Outdoors conference, the A-DASH (Anti-Discrimination and Sexual Harassment) Collaborative presented a session focusing on organizational policies around sexual harassment. It was encouraging to see the majority of outfitters in the session expressed that they had a sexual harassment policy in place.

However, organizations experience a tension between the policies that exist and the realities of the workplace culture. It is difficult to translate policy into action when the culture of an organization does not reflect the policy — particularly when creating a culture of belonging. However, the merging of policy and culture is necessary to create a welcoming workplace where everyone feels comfortable.

To create a culture of belonging, a company needs to build trust inside the organization. Trust begins with commitment expressed by leadership; detailed policies and procedures that act as a framework to encourage the behaviors you want (and discourage those you don’t); and ongoing and repeated staff training that reinforces the importance of preparation, prevention, mitigation, and follow-up. Keeping training, transparency, and reinforcing expectations in mind when managing personnel can help turn policy into culture.

### Elements Of A Culture Change

*Training* should be supported by a guiding framework of policies and procedures to help support a team that embraces the behaviors that are important, if not critical, to being a top-notch service provider and offering an environment to which folks want to return. Codes of conduct, employee handbooks, and policies and procedures should not live in a desk drawer. These should be considered “living documents” that can change and be amended as the culture of the organization transforms.

*Transparency* in your policies and procedures goes a long way to creating psychologically safe workspaces, where people know what to expect. Everyone benefits when behavioral expectations are clear and specific. However, telling staff once is not enough. By setting out exactly how you expect them to comport themselves, rewarding the positive behaviors you see and creating accountability for folks or teams that fall short in these areas, you create a trusting environment where everyone knows what is expected of them and that there is a path for them to excel.



Above: Risa Shimoda who, along with Maria Blevins, hosted discussion tables (at both an Inclusion Roundtable hour and annual Women’s Roundtable hour) on the topic of sexual harassment.

Right: Presenters Jim Miller and Gina McClard.

Photos: Maria Blevins



*Reinforcing expectations* around communication, particularly encouraging the interrupting of unwanted comments and behaviors, helps employees feel safe. Knowing your staff understands how to redirect a co-worker’s off-color joke or discriminatory behavior allows people to respond to unwanted attention. And, you have more eyes and ears on the ground which can help prevent bigger behavioral problems down the road.

Efforts to create and foster your desired work culture must be championed at every level and department of the organization. Fund these initiatives as a line item in your budget, not as an afterthought. Putting people first in your policies and procedures will codify interpersonal (soft) skills and allow for ongoing performance coaching.

Although organizational culture change feels daunting, a good first step is having policy in place. Then through training, transparency, and reinforcing expectations, that policy can become company culture. In this difficult moment of hiring and retaining exceptional staff, creating a welcoming work environment and a culture of belonging can help an outfitter recruit and keep terrific and diverse staff. ♦

For more on how to create cultures of belonging and build policies and procedures that support a culture of transparent communication, reach out to the [A-DASH Collaborative](#).

Presenters at the 2021 AOA Conference: Jim Miller, Gina McClard, JD, Maria Blevins, PhD, and Risa Shimoda.



# Creeks are everywhere in Tennessee and its history

by Bill Carey — Reprint courtesy of *Tennessee Magazine*. Photos courtesy of *Tennessee History for Kids*.

Thousands of smaller waterways served early settlers not just in hydration but in navigation, industry and town planning.

There’s a small body of water called **Trace Creek** in the woods behind my house, and all the time I’ve spent exploring it has rubbed off on me. That’s why this column is about creeks.

I teach third graders that a creek is a flowing body of water smaller than a river. As inadequate as that explanation is, that’s the best I can do. I also know for a fact that there are bodies of water out west (in New Mexico, for instance) which are called “rivers” there but which would almost certainly be called “creeks” here.

The creek behind my house is a dry bed of limestone in the fall, which is why my son and I can walk almost all the way to the Harpeth River in August along the creek bed and not get our feet wet until about two-thirds of the way. However, for much of the year, Trace Creek is about six inches deep and makes a wonderful babbling sound as the water moves downstream.

How many creeks are there in Tennessee? No one knows. However, there doesn’t appear to be a place in Tennessee that is further than three miles from a creek. I studied a detailed atlas and counted 37 creeks in Madison County; 31 in Bedford County; and 13 in McMinn County (where some of the creeks are very long!). If we average that number and multiply it by 95 counties, that gives us an estimate of 2,500 creeks (and that doesn’t count the bodies of water known as “branches.”)

If a person did try to compile a list of creeks, they’d have to deal with the fact that some of the names come up repeatedly. Tennessee has at least 16 different **Mill Creeks**, at least 14 **Indian Creeks** and at least 10 **Cane Creeks**.

Today people can rarely name the creeks that they pass on their way to work. But in the 1800s, people knew all about creeks. When an event was described in the newspaper article, the creek near it was often cited. When a horse was missing, the owner often cited the creek where it was last seen.

Paul Clement’s massive tome of first-person accounts of early Middle Tennessee history, called *Chronicles of the Cumberland Settlements*, has 19 mentions of **Mill Creek**, 11 of **White’s Creek** and 11 of **Richland Creek** (all in present-day Davidson County). Most of the citations have to do with violence between settlers and Native Americans. “William and Joseph Dunham were out in the waters of Richland Creek,” a settler named Hugh

Bell recalled. “One was killed and the other wounded. I aided in bringing the wounded one, who soon after died.”

Creeks also played an important role in the economic development of Tennessee. Before steam power, many of Tennessee’s creeks had water-powered mills that were used to grind corn or gin cotton. In Hardeman County, in 1832, there were four mills along **Spring Creek** and two mills on **Clear Creek** (according to Matthew Rhea’s map).

The other thing you might find along a creek in antebellum Tennessee was an iron furnace. In the 1850s there were more than 30 blast furnaces employing more than 3,000 free and enslaved workers, most of them on small tributaries of the Cumberland and Tennessee Rivers. Among the better known were **Yellow Creek** (Dickson County); **Blooming Grove Creek** (Montgomery County) and **Forty Eight Creek** (Wayne County). Here are some other well-known creeks in Tennessee history:

- **South Chickamauga Creek**, which flows south from Hamilton County into Georgia, is famous as the site of one of the bloodiest battles of the Civil War.
- On the other end of Hamilton County, a body of water known as **Suck Creek** comes tumbling off Walden’s Ridge and pours into the Tennessee River at a location once known as The Suck. Prior to the damming of the Tennessee River, this was a notoriously dangerous place for boats.
- **Cove Creek** in Anderson County was a little-known body of water until the Tennessee Valley Authority built a dam near its mouth, turning it into part of a man-made lake. For a time that lake was known as Cove Creek Lake, until it was renamed for Nebraska Senator George Norris.
- Visitors to the Great Smoky Mountains admire **Abrams Creek**, which flows down the middle of Cades Cove in Blount County. They also treasure **LeConte Creek** in Sevier County, which has a waterfall along it called Rainbow Falls.
- Of course, LeConte Creek isn’t the only creek with a famous waterfall along it. Benton Falls in Polk County is on **Rock Creek**. You can find Piney Falls along Rhea County’s **Little Piney Creek**. Marion County’s Foster Falls is on **Little Gizzard Creek**. Grundy County’s Greeter Falls is on **Firescald Creek**.
- Knox County’s **Second Creek** flows between downtown Knoxville and the University of Tennessee. As such, it became the body of water at the center of the 1982 World’s Fair.

(continued on page 37)



Above: There is a wonderful network of bike paths under the interstates in Knoxville — one of them follows Third Creek. Below: Trace Creek





# Editorial

## River of Dreams

by Gary G. Marsh

A 1989 sports fantasy drama film — entitled *Field of Dreams* and starring Kevin Costner, Amy Madigan, James Earl Jones, Ray Liotta, and Burt Lancaster — is about a farmer who hears a ‘voice’ and builds a baseball field in the family’s Iowa cornfield that attracts the ghosts of 1919 White Sox baseball legends. You may have seen the movie and I’ll bet you have had some dreams, some of which have eventually come true. I have an RMS dream... an organizational and facility dream.

I see a regional or national RMS Center located along a river — complete with a conference and training facility, museum, and library — providing a relaxing venue for those who meet and/or visit. A place (or the potential for such a place) may already exist in the mind, vision, or shared dream of a person or entity — perhaps a benefactor, organization, university, or homeowner? RMS has a planned giving program established for this very purpose. A present or future gift of real estate offers valuable income tax and estate tax savings. For more information, go to the Planned Giving Guide found at <https://www.river-management.org/donate-rms>.

Over the years, the RMS National Board has held annual meetings in a diversity of venues, e.g., Nature Conservancy ranch upstream from Heller Bar on the Snake River, Flathead Lake Biological Station in Polson, MT, the Murie Center in Jackson Hole, etc. I dream of a place that RMS could call *home* — not only a place to meet but to support all the professionals who study, protect and manage North America’s rivers.

I imagine a place where river professionals could meet, network, train, mentor, plan, and commiserate with kindred

spirits. The ultimate dream would be a facility akin to the U.S. Fish & Wildlife National Conservation Training Center in Shepherdstown (dedicated in 1997 via West Virginia’s Senator Bryd and others). The facility could be chartered and jointly operated in partnership with interest groups, community or business leaders, academia, river organizations, and/or benefactors. The facility’s infrastructure would provide a classroom environment, internet access, indoor/outdoor cooking facilities, and river access.

While much (if not all) of RMS’ historical documents, Journal articles, proceedings (from symposia, workshops and River Ranger Rendezvous), research articles, hydropower summaries, Wild and Scenic River training curricula, listserv conversations, photos, Chapter events, projects, and business documents are stored online, there is an advantage to having them in a library or museum for hands-on use. RMS also currently partners with 12 universities and colleges offering River Studies and Leadership Certificates. RMS has an online River Training Center, A-Dash Collaborative, and National Rivers Project which could have a base of operation at such a facility. In addition, RMS previous award winners, legends, and river authors along with their published work and biographies could be made available. Related books, periodicals, and research could be available for students, members and visitors.

RMS merchandise along with other outfitter and/or river-related sale items could be housed in a sales, gift, and donation area. Relevant river artwork, posters, maps, and river safety/interpretive materials could also be displayed. Dependent on space, various kinds of river

craft (historic to modern) and interpretive displays could be available. Sculptures from recycled river clean-up materials could be displayed to inspire the Leave No Trace (LNT) ethic. The RMS national display and extra printed materials could be stored here.

I can envision an adjacent park/beach area where students could be taught swiftwater and river safety topics, river management outdoor ethics, campsite sanitation/human waste, LNT/low impact techniques, and any number of river management subjects.

Does the River Management Society need a home base or should we continue with a virtual field and stadium? Maybe my dream will promote your thoughts or actions.

By the way, over 65,000 people visit the 1989 Iowa film site annually. On August 11, 2022, the Cincinnati Reds (who won the 1919 World Series marred by the Black Sox scandal) will host the second Field of Dreams game against the Chicago Cubs on an 8,000-seat adjacent field in Dyersville, Iowa. ♦



## Book Review

by Bill Sedivy

I’m pretty confident in suggesting that no other person has more first-hand knowledge about the rivers of America than Tim Palmer. During a career spanning five decades, Tim has canoed, rafted, hiked, photographed, and written about rivers and streams from Maine to California, and from Montana to the Mexican border. During his watery wanderings, he also has developed unique, macro-level perspectives on what makes the rivers of the U.S. special and important. It’s that big picture view, I believe, that makes Palmer’s *Field Guide to Rivers of the Rocky Mountains* a great read for river enthusiasts and river managers across the U.S.

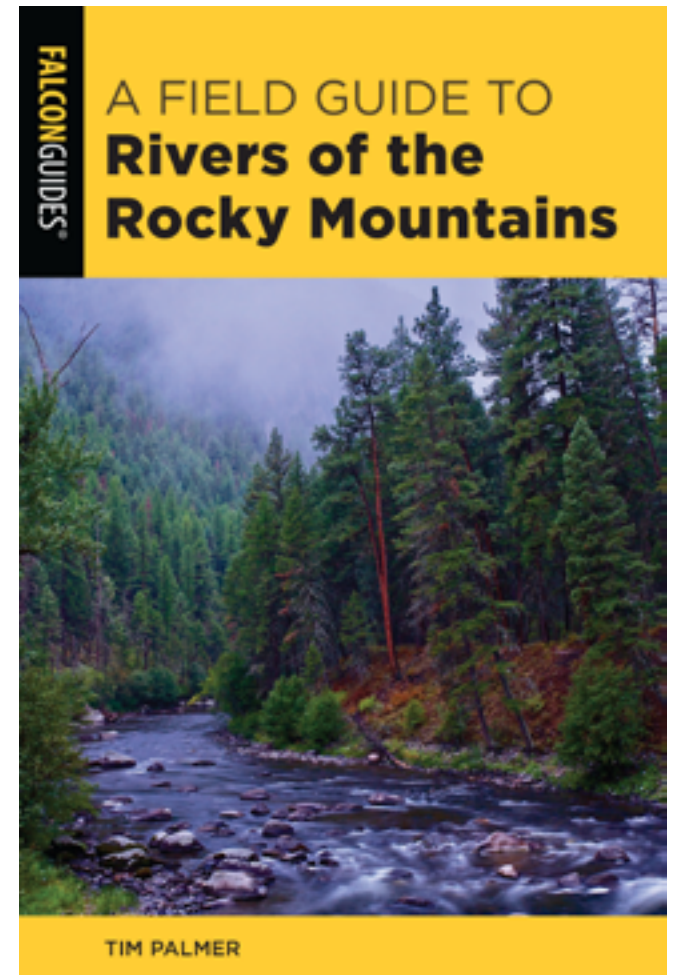
... *Rivers of the Rocky Mountains* covers 70 recreationally significant rivers of the Rocky Mountain region, including streams in Colorado, Wyoming, Montana and Idaho. Like many other river guides, Palmer’s latest book (number 31) contains important and accurate information on rapid difficulty and other boating hazards, as well as information on flows, gauges and shuttles. It doesn’t offer mile-by-mile maps, locations of campsites, or move-by-move descriptions of how to run rapids. But Palmer’s easy writing style and 200 excellent photographs gives readers so much more — including a richer, well-rounded perspective on the rivers of the Rockies, and excellent trip planning tools for paddlers, fishermen, hikers and anyone else who cherishes spending time on or around moving water.

... *Rivers of the Rocky Mountains* is divided into two sections. *Part 1* provides an excellent, yet concise primer on river ecology, with more focused discussions on regional geography and geology, hydrology, climate, plant life, fisheries, wildlife and river protection efforts. *Part 1* could be important reading for new river rangers and managers, and new conservation advocates who may struggle at first to find the right words to explain why their river is so important ecologically, and why it deserves protection.

In addition to basic logistical information (length, flows, whitewater difficulty, etc.), *Part 2* offers overviews of the character of each river segment covered in the book. Organized by state and watershed, brief narratives on fish, access, hiking and paddling are also provided. Palmer’s narratives, along with his photos, combine to paint a vivid picture of each river covered.

Tim Palmer’s *Field Guide to Rivers of the Rocky Mountains* is a good read from cover to cover, worth taking along wherever you go in the Rockies, and will make an excellent gift for any river enthusiast or professional. It’s another wonderful effort from America’s premiere river ambassador. ♦

For information on purchasing, visit: <http://falcon.com/books/9781493052400>



Bill Sedivy has been Lead River Ranger on the Rogue River, Senior Ranger on the Snake River, a professional guide and director of Idaho Rivers United.

### Endorsements

*Field Guide to Rivers of the Rocky Mountains* is an encyclopedia of essentials for paddling and streamside hiking, but far more than that with rich backstory, natural history, and luminous photos. It inspires my next round of adventures to some of the most important rivers on the continent. — Al Kesselheim, author of *The Wilderness Paddler’s Handbook* and *Let Them Paddle*

Tim Palmer has spent his life married to rivers, and his eloquence about that marriage has been of immense service to my own. Brilliant — as Tim’s work always is — this book reminds us that our world, even in crisis, offers endless wonders of beauty and life. — David James Duncan, author of *The River Why* and *River Teeth*

Whether you’re a seasoned river rat or new to the culture, this book is a must-have companion for your glove box and dry box as you explore the incomparable rivers of the Rocky Mountain West. — Mike Fiebig, American Rivers’ Director of River Protection in Colorado, raft guide, and kayaker



# New Merchandise in RMS Store!

## RMS Hats

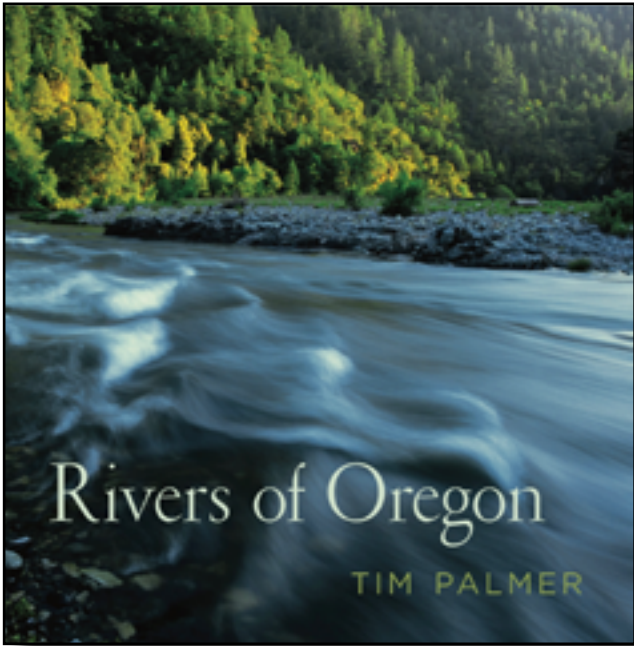
We have two different styles available featuring the RMS logo on a stone colored six-panel design. Option (A) is 100% bio-washed cotton twill with an adjustable backstrap and brass buckle. Option (B) is 55/45 cotton/poly blend with a white mesh back and snapback closure. Don't miss this opportunity to look cool, protect your head, and of course, support RMS with your purchase! Hats are \$20 each and available in the [RMS Store](#) with other awesome gifts, gear and essentials.



## Rivers of Oregon by Tim Palmer

We want to thank Tim for his contribution to our store and for the special 50% discount pricing (for RMS members) — only \$20 for a hardcover copy!

“Rivers are the essence of Oregon,” writes award-winning author and photographer Tim Palmer. In over 140 brilliant photos and evocative, informative text, *Rivers of Oregon* captures the life, beauty, and magic of Oregon’s remarkable array of waterways. The book’s engaging essays address the nature and ecology of flowing waters, the joy of travel on these lifelines of the planet, and the historic saga of Oregonians’ commitment to preserve, protect, and restore the best of their state for future generations.



(Tennessee, from p.32)

“There doesn’t appear to be a place in Tennessee that is farther than three miles from a creek.”

- David Crockett once had a mill in Lawrence County, along **Shoal Creek**. The creek is now the centerpiece of the state park named for him.
- Today, few motorists probably notice that there is a creek that runs in the median along I-24 in Marion County, just south of the Tennessee River. However, **Running Water Creek** comes up twice in Tennessee history — the first as a site of a Chickamaugan Indian village and the second as the site of an important railroad bridge during the Civil War.
- Several Tennessee state parks have as their centerpiece a dammed creek. Radnor Lake State Park in Davidson County exists because **Otter Creek** was dammed by the Louisville & Nashville Railroad in 1914. The Civilian Conservation Corps dammed **Byrd Creek** during the Great Depression, creating the lake at Cumberland Mountain State Park. The lake at Natchez Trace State Park in West Tennessee is, in actuality, **Browns Creek**.

We have no idea how most creeks got their name, but here’s a curious story in that regards: If you look at Rhea’s 1832 map, there is a “Cole Creek” in Anderson County. After the Civil War, coal mining took off in the area. Cole Creek was rechristened **Coal Creek**. In the 1880s and 1890s, Coal Creek became nationally famous because of labor troubles and violence, a period now known as the Coal Creek War. In fact, Coal Creek is, today, the only creek in Tennessee named in the 238 pages of social studies standards.

So people forgot about Mr. Cole, but they kept the name — sort of. ♦

# RMS Membership Program – Important Updates for 2022

It’s a new year, so we want to take this moment to remind members of important updates to our membership program. Following our Board meeting last October, several changes have taken place which expand member benefits or impact membership levels and dues.

Student members and the main contacts for each organizational membership may now vote and hold office in RMS Chapters or on the National Board.


The Professional membership level is now called Individual, with no changes to benefits. This is our primary membership level which includes all member benefits. The name change means DOI employees may now be eligible to upgrade to this membership level. Upgrading from Associate or Organizational memberships to Individual means you will receive additional member benefits including a printed copy of the RMS Journal, ability to vote and hold office, access to the Professional Purchase Program, and the ability to apply for training scholarships.

RMS no longer makes a distinction between the types of organizational memberships (NGO, Government or Corporate), and only distinguishes organizational membership levels by size (1-2, 3-4, 5-8 people.)

Annual dues increased on January 1, 2022. RMS has not changed its dues in several years despite increased programming, outreach efforts, and a growing staff. This slight increase in annual dues allows us to continue improving the quality of opportunities and services provided to members, while keeping our dues among the most affordable.

RMS leadership and staff have big plans for 2022 and look forward to hearing from, working alongside, and supporting you! Please feel free to reach out to RMS Communications Coordinator Bekah Price, Executive Director Risa Shimoda, or to your national Board Officers if you have any questions about these changes.

Thank you for all that you do to make RMS the best it’s ever been! ♦



**As of January 1, 2022  
New Membership Dues:**

Individual \$60  
(or 5 years for \$240)

Associate \$40

Student \$30

Organizational \$75 (1-2),  
\$150 (3-4), \$300 (5-8)

Lifetime \$750



# Welcome – New RMS Members

## Individual

Lynne Carpenter, Geologist - Geologic Hazard Program Lead  
USDA Forest Service, Lakewood, CO

Paul Formisano, Associate Professor of English  
University of South Dakota, Vermillion, SD

Chelsea Muise, Recreation, Lands, Minerals Program Lead  
USDA Forest Service, Williams, AZ

Christopher Estes, Aquatic Resources & Habitat Scientist  
Chalkboard Enterprises, LLC, Anchorage, AK

Julie Sutton, River Manager  
Arkansas River Tours, Cotopaxi, CO

Leigh Johnson, Program Manager  
Wilderness, Wild & Scenic Rivers, Caves, CDAs  
Albuquerque, NM

## Lifetime

Shaun Witt, President  
Expedition Discovery Foundation, Frisco, CO

*(Executive Director, from p.2)*

of the nation’s most heavily visited rivers. Jimmy Gaudry stirred a core group to produce the National Wilderness Skills Institute, which hosted 930+ attendees over the course of a week in May. A team of Matt Blocker, Lisa Byers, Tappan Brown, Kirsten Heins and Dave Cernicek collaborated with River Training Center Coordinator Angie Fuhrmann to host a virtual River Ranger Rendezvous that introduced river rangers and managers to each other over a dozen states. David Brown, who is an invaluable resource for both his current role at Tennessee Paddlesports and past leadership of the American Outdoors Association, shared a late-breaking report on an interagency initiative to figure out how best to support non-powered river recreation in response to the explosion in use.

Blue is the hoped-for hue of ever cleaner water as river managers and outfitters continue to work with guests to minimize the overwhelm of trash, and as Adventure Scientists continue to organize sampling of out-of-the-way streams. Its pursuit is ongoing, as are we as an organization, with you as an important thread in the tapestry of river management.

To your success as a brand new or longtime member in 2022, and may we borrow from each other generously and work together to know the clear blue color of successfully stewarded streams! ♦

*Risa Shimoda*

Risa Shimoda  
Executive Director

## Organizational

Gigi Richard, Fort Lewis College, Durango, CO

Aaron Deters, Executive Director  
Kansas Alliance for Wetlands and Streams, Holton, KS

Tali MacArthur, Program Manager, Watershed Outreach  
Pennsylvania Environmental Council, Pittsburgh, PA

Joe Moore, Programs Coordinator  
CU Maurice River, Millville, NJ

Sheena Pate, Watershed Coordinator  
Flathead Rivers Alliance, Whitefish, MT

## Student

Leighann Fraley, Northern Arizona University, Avondale, AZ

David Bailey, University of Washington, Everett, WA

Caitlin Brogan, Northern Arizona University, Flagstaff, AZ

Lauren Tango, Northern Arizona University / SES, Flagstaff, AZ

Give the gift of  
membership to a  
colleague, student,  
retiree or friend!



# Chapter Officers

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## PACIFIC

(vacant)

## MIDWEST

(vacant)

**Canadian River Management Society**  
Contact: Max Finkelstein  
tel (613) 729-4004 / dowfink@gmail.com

RMS is fueled by the amazing energy of its members – and, chapters are always looking for leaders who care about the management of rivers. Potential chapter officers are team players who love working with others and believe a regional dialogue would help local members and the organization as a whole – are you ready to serve?

RMS is a nonprofit organization.  
All contributions are tax-deductible.



# Become a Member

Name \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone \_\_\_\_\_

Organization \_\_\_\_\_

Office \_\_\_\_\_

Work Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Work Phone \_\_\_\_\_

Email \_\_\_\_\_

Job Title \_\_\_\_\_

Duties/Interests \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Rivers you manage \_\_\_\_\_

\_\_\_\_\_

Membership Category (please check one)

- ☐ Individual \$60/yr (\$240 for 5 years - save \$60!)
- ☐ Associate \$40/yr
- ☐ Student \$30/yr
- ☐ Lifetime \$750 (for individuals only)
- ☐ Organizational (1-2 people) \$75/yr
- ☐ Organizational (3-4 people) \$150/yr
- ☐ Organizational (5-8 people) \$300/yr

Membership benefits are described online:  
[www.river-management.org/membership](http://www.river-management.org/membership)

Who referred you to RMS? \_\_\_\_\_

Make checks payable to "RMS" –  
RMS also accepts VISA or Mastercard:

Card #: \_\_\_\_\_

Exp date: \_\_\_\_\_ Amount: \_\_\_\_\_

Send this form, with payment, to:  
RMS, P.O. Box 5750, Takoma Park, MD 20913-5750  
(301) 585-4677 • [rms@river-management.org](mailto:rms@river-management.org)



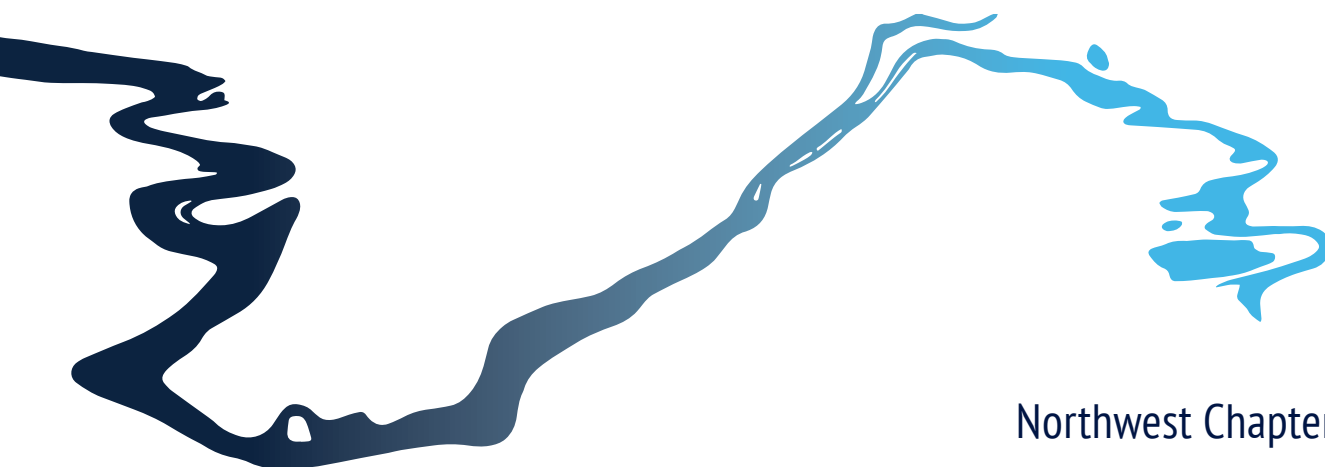


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## Northwest Chapter Focus

### RMS Journal Submission deadlines:

Spring 2022	Vol. 35, No. 1	Northeast	Feb
Summer 2022	Vol. 35, No. 2	Pacific	May
Fall 2022	Vol. 35, No. 3	Alaska	Aug
Winter 2022	Vol. 35, No. 4	Southeast	Nov
Spring 2023	Vol. 36, No. 1	Midwest	Feb
Summer 2023	Vol. 36, No. 2	Southwest	May
Fall 2023	Vol. 36, No. 3	Northwest	Aug
Winter 2023	Vol. 36, No. 4	Northeast	Nov

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