



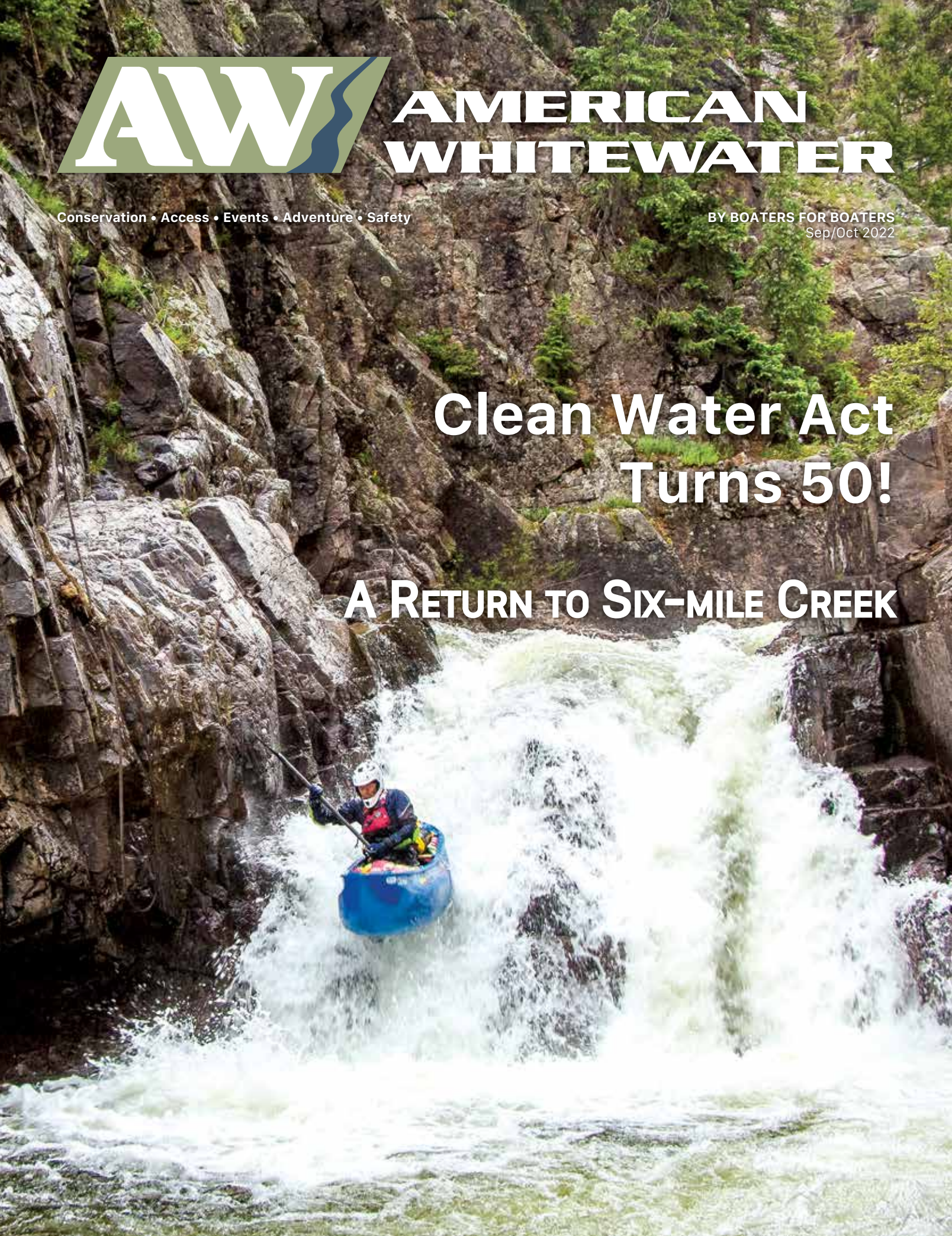
# AMERICAN WHITEWATER

Conservation • Access • Events • Adventure • Safety

BY BOATERS FOR BOATERS  
Sep/Oct 2022

## Clean Water Act Turns 50!

### A RETURN TO SIX-MILE CREEK



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## American Whitewater Journal

Sep/Oct 2022 – Volume 62 – Issue 5

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The Clean Water Act directs states and Tribes to make Outstanding Natural Resource Waters (ONRW) designations as the highest tier of protection and American Whitewater is using this tool to advocate for the protection priority river segments across the United States, including Lime Creek in Colorado (pictured).

PHOTO BY JOHN BAKER

Publication Title: American Whitewater  
 Issue Date: Sep/Oct 2022  
 Statement of Frequency: Published Bimonthly  
 Authorized Organization's Name and Address:  
 American Whitewater  
 P.O. Box 1540  
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# PURPOSE

## RIVER STEWARDSHIP: AN INTEGRATED APPROACH

Our mission: "To conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely," is actively pursued through our conservation, access, safety and education efforts under the umbrella of River Stewardship. The only national organization representing the interest of all whitewater paddlers, American Whitewater is the national voice for thousands of individual whitewater enthusiasts, as well as over 100 local paddling club affiliates.

AW's River Stewardship program adheres to the four tenets of our mission statement:

**CONSERVATION:** AW's professional staff works closely with volunteers and partner organizations to protect the ecological and scenic values of all whitewater rivers. These goals are accomplished

through direct participation in public decision-making processes, grassroots advocacy, coalition building, empowerment of volunteers, public outreach and education, and, when necessary, legal action.

**RIVER ACCESS:** To assure public access to whitewater rivers pursuant to the guidelines published in its official Access Policy, AW arranges for river access through private lands by negotiation or purchase, seeks to protect the right of public passage on all rivers and streams navigable by kayak or canoe, encourages equitable and responsible management of whitewater rivers on public lands, and works with government agencies and other river users to achieve these goals.

**SAFETY:** AW promotes paddling safely, publishes reports on whitewater accidents, maintains a uniform national ranking system for whitewater rivers (the International Scale of Whitewater Difficulty) and publishes and disseminates the internationally-recognized American Whitewater Safety Code.

**EDUCATION:** AW shares information with the general public and the paddling community regarding whitewater rivers, as well as river recreation, conservation, access, and safety. This is accomplished through our bi-monthly AW Journal, a monthly e-news, [americanwhitewater.org](http://americanwhitewater.org), paddling events, educational events, and through direct communication with the press.

Together, AW staff, members, volunteers, and affiliate clubs can achieve our goals of conserving, protecting and restoring America's whitewater resources and enhancing opportunities to safely enjoy these wonderful rivers.

AW was incorporated under Missouri nonprofit corporation laws in 1961 and maintains its principal mailing address at PO Box 1540, Cullowhee, NC 28723; phone 1-866-BOAT-4-AW (1-866-262-8429). AW is tax exempt under Section 501 (c) (3) of the Internal Revenue Service.

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Founded in 1954, American Whitewater is a national non-profit organization (Non-profit # 23-7083760) with a mission "to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely." American Whitewater is a membership organization representing a broad diversity of individual whitewater enthusiasts, river conservationists, and more than 100 local paddling club affiliates across America. The organization is the primary advocate for the preservation and protection of whitewater rivers throughout the United States, and connects the interests of human-powered recreational river users with ecological and science-based data to achieve the goals within its mission. All rights to information contained in this publication are reserved.

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The opinions expressed in the features and editorials of American Whitewater are those of the individual authors. They do not necessarily represent those of the Directors of American Whitewater or the editors of this publication. On occasion, American Whitewater publishes official organizational policy statements drafted and approved by the Board of Directors. These policy statements will be clearly identified.

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**A**T A RECENT gathering in New Hampshire, a friend and AW member asked me what my plan was for the future of American Whitewater. It's a fair question.

The most honest answer, the one I gave him, is that I don't have one yet. But before you wad up this *Journal* and call the board chair, hear me out!

A good plan takes time; a great plan requires understanding. Values are not a plan. Priorities are not a plan. Intentions are not a plan. Together these make something we'll call a compass. I can tell you about my compass.

## PEOPLE.

People are the most important asset we have. Behind every written public comment, FERC filing, legislative action, donation sent, or volunteer hour given, is a person with a passion for the rivers and creeks we love. Continuing to take care of the people who take care of our rivers is my top priority. American Whitewater is strong because our members, donors, partners, board, and staff agree on *why* we do this work. *How* we make progress, and *what* we do to get there are always evolving—those provide plenty of room for debate. But the *why* is our north star and there is a place at American Whitewater for anyone who follows it. Yet there are many who do share these values for clean water, healthy rivers, and public access who we still need to join the team as allies. Coalition building has always been a key to American Whitewater's success and it's work that is important to me. We have a big tent already; let's make it bigger together.

## SYSTEMS.

There is an idea that has been credited to different people over the years that goes something like this: "A system is perfectly designed for the outcomes it produces." In practice, this means that challenges like loss of access, watershed impairment, and species decline are often the results of complex national or global systems that produce these local outcomes. Addressing the systems that cause these recurring issues is something American Whitewater has always been good at through its policy work. And, the scale and complexity of our challenges are growing. Climate change driven aridification, domestic and international energy policy, and other complex social challenges trickle down to our watersheds and affect local communities and paddlers every day. The work we do with partners on place-specific issues in their home watersheds needs to be supported by addressing the systems that cause those challenges. American Whitewater has an increasingly important role to play in action at the systems level.

## COLLABORATION.

One of the things that makes American Whitewater unique is the grassroots engagement from our members. Our regional directors get to work closely with folks on the ground caring for their home rivers. Channeling and uplifting local knowledge and passion is an irreplaceable part of what makes American Whitewater special, and uniquely successful. We also depend upon a constellation of partners to advance our mission at a national scale. Coalitions like Outdoor Alliance are an important part of what helps us to make sense of complex challenges and align our

# HORIZON LINES



Clinton at Havasu Creek, 2017.  
PHOTO BY AMANDA SWEETLAND

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voices behind common causes. Healthy collaboration requires building trust and weaving a network of interdependence between partners. Trust-based collaboration is a necessary strategy for solving problems that are too big for any one organization to tackle alone, and we already do this well at American Whitewater. Continuing to invest in reliable partnerships, and creating new alliances with communities not currently represented in our work, is a culture I'm committed to.

## ROOTS.

I began my paddling career as a Midwestern kid in a skateboard helmet, with a waterski vest and aluminum paddle from Walmart. I hucked myself down farm runoff, and dodged barbed wire with my friends before I knew any better. Part of what I've always loved about paddling whitewater is that it takes some guts and it keeps you honest. So does working at American Whitewater. We are going to do amazing things together in the years to come. We will keep doing what works, innovate when we need to, learn hard lessons, and fail better next time. But the courage to stretch requires strong roots. Continuing to stay grounded in the mission, and delivering for those who have delivered for American Whitewater over the years, is important to our team. And, as a volunteer and member for nearly 20 years myself, I value this personally. Let's remember where it all started, and what it's all for: spending time with our family and friends on the river, and sharing the ride whenever we can.

While I'm just over two months on the job, our excellent team is helping me sketch a map of what the partnership and priorities landscape looks like today. A good map will make sure whatever plan we craft together will be well informed by the experiences and values of our membership. For now, I'm following my compass, and by this time next year I'm sure I will have a few more lines to write about what is on the horizon.

Thank you for your trust and support! I'll SYOTR soon.

Handwritten signature of Clinton Begley.

Clinton Begley, Executive Director



Clinton & Ashley spend quality time together. McKenzie River, Oregon.  
PHOTO BY LILLIAN HOWARD

## CALIFORNIA RIVERS THROUGH NATIVE EYES: THE NORTH FORK MONO TRIBE

BY THERESA LOREJO-SIMSIMAN

CHAIRMAN RON GOODE of the North Fork Mono Tribe and I met nearly a decade ago in the context of the hydropower projects that impact the San Joaquin River. We first sat across from each other in meetings with other river stakeholders on the Big Creek 4 Hydropower project owned by Southern California Edison. It was on this project we worked together to negotiate and implement a plan for long term operating rules that today return ecological and recreational flows back to the Horseshoe Bend reach of the San Joaquin. Chairman Goode also played a key role in helping American Whitewater secure a whitewater boating access trail and put-in built by Southern California Edison that does not impact cultural resources.

We again crossed paths during the start of the relicensing process for the Kerckhoff Hydropower project owned by Pacific Gas & Electric (PG&E). As we were going through a study plan for whitewater boating, Chairman Goode pointedly questioned the use of “Squaw’s Leap” as a name for one of the whitewater sections and why it was still being used in official documents. I was horrified by the thought that we had used the name for so long without considering its hurtful connotation. Then Chairman Goode said something I will never forget: he didn’t point fingers, harshly admonish me, or ask that I get the name removed from every whitewater boating guide and website in existence—he simply looked at me and made a request. “Where you have the power to make that change, do so.” As the California Stewardship Director for American Whitewater, I did have that power and the next day we made changes to the name on our website. To be clear American Whitewater did not make the changes to our website to “get in good” with the NF Mono Tribe, nor to get a pat on the back—it was simply the right thing to do.

As our work together progressed on the Kerckhoff Hydropower project, American Whitewater turned to our funding network to help find resources for the North Fork Mono Tribe to map and identify the historic Mono Trail. PG&E was reluctant to recognize and include the trail in their management plans because it didn’t exist on a map. The significance for paddlers is that the historic Mono Trail runs along the San Joaquin River Gorge, which is threatened with inundation by perpetually renewed plans for the Temperance Flat Dam. Many will recall this proposed dam would



Chairman Ron Goode North Fork Mono Tribe and Theresa Lorejo-Simsiman California Stewardship Director American Whitewater Smalley Cove on the San Joaquin River.

PHOTO BY TAYLOR PENNEWELL

flood and impact key whitewater resources on the San Joaquin River. The diligent work of the Tribe resulted in the inclusion of the Mono Trail map in the Historic Property Management Plan for the Kerckhoff Hydropower project which now bolsters our line of defense against the construction of any new dam.

American Whitewater’s relationship with the North Fork Mono Tribe continues as we work together to negotiate final protection, mitigations, and enhancements that value cultural resources, recreational opportunities and returning flows to the San Joaquin River below Kerckhoff Dam. And now, after nearly a decade of work with Chairman Goode I am happy to feature the North Fork Mono Tribe in this issue’s California Rivers Through Native Eyes.

# TRIBAL SPOTLIGHT NORTH FORK MONO TRIBE

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By TAYLOR PENNEWELL, REDBUD RESOURCE GROUP  
As Told By CHAIRMAN RON GOODE, NORTH FORK MONO TRIBE

## LOCATION

The North Fork Mono Tribe is a California State Recognized, Aboriginal Tribe with Tribal Non Profit 509 a(2) status, whose ancestral lifeways rely on the health of the Willow Creek watershed. This watershed, fed by Peckinpah Mountain meadows and draining into the San Joaquin River, provides food and invaluable resources to the North Fork Mono community.

As leaders in ecosystem restoration and management in the state of California and beyond, North Fork Mono tribal leaders work hard to protect the delicate and interwoven relationships between the plant, water, and animal systems of the region.

## RELATIONSHIP TO PLACE

For at least 8,000 years, the North Fork Mono Tribe has stewarded their homelands using a wide range of Traditional Ecological Knowledge practices that have been passed down through the community from generation to generation. With territory spanning the wetlands of the Central Valley, to the forested foothills of what are now the Sierra Nevada mountains, the tribe continues to use fire as one of the primary methods for protecting the biodiversity of the ecosystem and supporting waterways.

Through evidence corroboration and fieldwork, tribal monitors today are able to note trails and trade routes, village sites, gathering spaces, and more. Currently over 5,000 unique village sites spanning the tribal territory are documented, with the majority of sites believed to be unrecorded still.

“There is no one better to advocate for the land and water in the valley than the original stewards of the land and water.”

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Restoring cultural burning on the homelands of the NF Mono Tribe.  
PHOTO BY TAYLOR PENNEWELL





## SETTLEMENT

Its location in the heart of the Sierra Nevada foothills made the North Fork Mono particularly vulnerable to the effects of California's 1849 Gold Rush. Following the discovery of gold, nearly 90,000 miners flooded the Central Valley and foothill region of the state. The influx of foreign settlers forced the North Fork Mono and many other Native communities in the region to retreat high into the mountains, where they could attempt to protect themselves from settler violence.

In 1850, the Act for the Governance and Protection of Indians was passed, and tribal communities in the region were often forced into legalized indentured servitude or murdered.

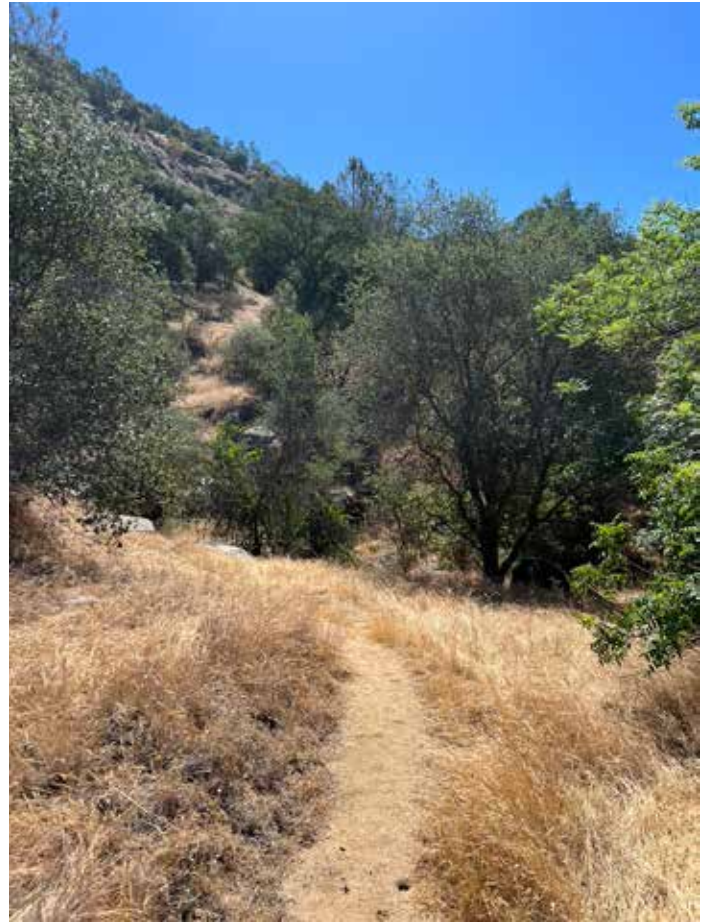
Having survived this era of extreme violence, the North Fork Mono now dedicates its work towards fighting the legacy of ecological destruction brought on by settler colonialism.

Throughout the 20th century, 14 dams were built along the San Joaquin River, creating massive challenges for the watershed, which spans high up in the Sierra Mountains, and drains into the Pacific Ocean. These dams, including Kerckhoff Dam, Redinger Dam, and more, are used to irrigate industrial farms and provide water to urban megacenters in drought-stricken Southern California.

Since the construction of the Kerckhoff Dam in 1920, the tribe has conducted studies in partnership with universities that have documented massive decreases in trout, mussel, and salmon populations as water levels oscillate, and migration patterns are interrupted. Tribal community members who were once able to access the San Joaquin's abundant resources must fish at higher elevations, where the water flow is not as severely impacted. Not only this, but reservoirs such as Kerckhoff and Millerton Lake leave culturally significant sites, items, and ceremonial grounds underwater.

## CONTEMPORARY ADVOCACY WORK

Tribal leaders on the North Fork Mono council have worked to document the impact of water engineering and recreation projects along the San Joaquin river for decades. Through this work, it has managed to bring worldwide attention to the ecological destruction brought to California through settler colonialism, and has built trusted partnerships with



Work continues to document and map the historic Mono Trail along the San Joaquin River.

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Indigenous and non Indigenous groups alike. Without the tribe's clear documentation, the Native voice would likely be missing from political conversations in which Native culture and livelihood are integral.

Among the many accomplishments of Ron Goode, NF Mono Tribe Chairman, is the publication of the Tribal Indigenous Communities Climate Change Assessment of 2017/18. In addition, Chairman Goode serves on the Native American Advisory Committee for the California Department of Water Resources and is the co-founder and Chair of the California Tribal Water Summit. Successful summits took place in 2009, 2013, and 2018. Another summit is planned for 2023 with plans to address climate change and hydropower projects that impact tribal homelands.

# STEWARDSHIP

Through its tribal archeology and monitoring programs, Native youth and adults are gaining the skills needed to continue the tribe's advocacy and cultural revitalization projects. Recently, the tribe completed a river trail restoration project, where it documented its ancestral trail and village sites along the San Joaquin River, proving that the tribe has a legal right to consult on future water engineering projects. Near Lake Kirckhoff, the tribe's archeology team has identified numerous culturally significant sites, evidence it can use to improve its tribal sovereignty and influence in future engineering projects.

Despite the tribe's well documented evidence highlighting the ecological and cultural impact of dams on the San Joaquin, there are still plans to build Temperance Flat Dam, a proposed new project that would flood and further impact North Fork Mono's ancestral territory. The North Fork Mono are leading the fight against the dam, with its ecological and cultural studies in hand.

In recent years, tribes and indigenous communities around the world have sought out partnerships with the North Fork Mono. Their leadership's experience with cultural mapping, Native archeology, and cultural ecological studies has the potential to improve tribal sovereignty for all indigenous people, as communities learn to collect their own data, and educate the public about their continued existence and stewardship practices.

## CALL TO ACTION

### NORMS FOR INTERACTING WITH CALIFORNIA'S WATERWAYS:

As tribes like the North Fork Mono Indians revitalize their land and cultural lifeways, it is important that the non-Native community observe respect, reciprocity, and support of Native peoples. Together, Native and non-Native communities can practice norms that protect our ecosystems, encourage cultural revitalization, and bring collective healing for the violence inflicted onto Native peoples.

- Treat all plant, animal, and inanimate natural resources as cultural resources that must be protected. Consider the role that your actions have on the ecosystem balance and access to cultural resources.
- Consult tribes and follow through with feedback when designing programs and building infrastructure. Do not construct infrastructure on top of, or at, significant cultural sites.
- Take responsibility for the hydroelectric damming projects already in place. Advocate for the removal of projects that cause destruction to the ecosystem and to Native culture or enforce maintenance of existing projects to avoid accidents.
- Uplift local Native communities and support the fight for federal recognition when applicable.

## SOURCES

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# CLEAN WATER ACT TURNS 50

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BY KEVIN COLBURN AND BOB NASDOR



Chelan River (WA)  
PHOTO BY DANIEL PATRINELLIS

## INTRODUCTION

**R**IVERS WERE IN rough shape going into the 1970s. They were dangerously polluted, and getting worse all the time. Many of the rivers we safely paddle and swim in today were terribly polluted in the 1960s and 70s. The Clean Water Act (CWA) changed that. In a single lifetime, this law inspired sweeping improvements to our rivers, even as our country continued to grow and develop. This year the Clean Water Act turns 50 years old, so it's a perfect time to express gratitude for this law, celebrate the many values of clean rivers, and take action to support the Clean Water Act. Let's all work to ensure that 2022 is not the peak of the trend of our rivers getting cleaner, and the peak power of the Clean Water Act. We still have a long way to go to ensuring our rivers are all safe and thriving.

## BACKGROUND

The Clean Water Act (CWA) is the primary federal statute protecting our nation's waters. Enacted in 1972 as an amendment to the Federal Water Pollution Control Act of 1948, the CWA sought to eliminate the discharge of pollutants into navigable waters and to achieve water quality that provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water. Senator Edmund Muskie, the lead sponsor of the Clean Water Act and an environmental champion from Rumford, Maine declared in 1970 that, "No polluter will be able to hide behind a federal license or permit as an excuse for a violation of water quality standards," and "No polluter will be able to make major investments in facilities under a federal license or permit without providing assurance that the facility will comply with water quality standards."

# STEWARDSHIP

The passage of this landmark law has more than doubled the number of waters meeting water quality standards, dramatically improving our drinking water, aquatic habitat, and recreation from tributary streams to mainstem estuaries by reducing pollution discharges to protect existing uses of our rivers. While tremendous progress has been made toward restoring our nation's waters since the CWA was enacted with bipartisan support overriding President Nixon's veto, much remains to be done. Today, a monument to Sen. Muskie sits in a park alongside the Androscoggin River in Rumford, Maine where he was born, gazing scornfully at a dewatered stretch of the river where hydropower dams and paper mills have diverted and polluted the river, harming aquatic habitat and eliminating whitewater boating opportunities.

## WATERS OF THE UNITED STATES (WOTUS)

One big challenge facing the CWA is the politicized tug-of-war over which water bodies are covered by the Act at all. The language of the Act leaves some room for interpretation over which waters are so-called Waters of the United States and thus covered by the Act. There has been a barrage of court cases and federal rules over the past two decades that have offered differing and often less-than-clear views on how the Act should be interpreted, which has resulted in the Act covering more or fewer waters.

There is little argument that the Clean Water Act covers pollution discharges into large rivers themselves, but that is about where the consensus ends. When it comes to intermittent streams like desert rivers that dry up seasonally, small ephemeral headwater streams, and wetlands of many kinds, the debate is alive and kicking.

On October 3rd, the Supreme Court of the United States heard a case that will likely redefine which waters are covered yet again. At the same time, the Environmental Protection Agency and Corps of Engineers are working on a new federal CWA rule that will change and define how the CWA will be implemented by the agencies. As it has been for two decades, the future scope of the Clean Water Act is very much in question.

American Whitewater has engaged consistently on this issue for many years. We have testified in Congress, written many comment letters, rallied our community, and most recently sat on an EPA-hosted panel discussion that was broadcast nationally. Paddlers have an important voice in this issue. We know that when it rains small streams and desert rivers and wetlands flush their contents downstream. More than just knowing it, we are in the water when that happens. We have a vested health interest in ensuring that unregulated pollution can't be discharged in waterways that will pollute whitewater runs. We've always advocated for a science-

PHOTO BY BRIAN MILLER





Beaver River, NY  
PHOTO BY BARBARA GASKIN

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Little North Santiam River (OR)  
PHOTO BY JOHN DITMARS

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based approach that accomplishes the basic goals of the Clean Water Act and keeps people and communities safe from harm.

## **ROLE OF STATES IN PROTECTING RIVERS (SECTION 401)**

Another ongoing challenge is the role the CWA plays in guaranteeing flows below dams. States have primary responsibility for assuring that federally-permitted activities such as hydropower dams meet state water quality standards. Prior to the CWA, the Federal Power Commission allowed the complete dewatering of rivers for hydropower dams, and we are still dealing with that legacy today. The primary mechanism for maintaining and restoring a high level of water quality is Section 401 of the CWA. An applicant for a federal license to conduct an activity resulting in a discharge into navigable waters is required to first obtain a certification from the state where the project is located. Section 401 allows states to require that these projects include requirements for minimum instream flows, recreational use such as whitewater boating, and other measures to prevent harmful impacts from hydropower dams.

The preeminent role of states as clean water guardians has been under assault in recent years with new EPA rules in 2020 weakening states' Section 401 authority. AW has spearheaded efforts to challenge the 2020 rules through litigation and through advocacy efforts. These efforts have resulted in the current administration rewriting the rules to restore states' authority to protect our rivers. At the same time, we are working to make sure that states use their authority to protect recreation and all existing uses that are harmed by hydropower dams.

## **WHAT'S NEXT?**

American Whitewater is going to keep pushing for science-based approaches to fulfilling the inspiring goals of the Clean Water Act. We'll keep the paddling community in the loop as opportunities arise to speak up on behalf of clean water. We know water flows downhill, and that rains make rivers rise, and no one can have more fun telling those stories than paddlers.

# STEWARDSHIP

## PROTECTING WATER QUALITY IN THE WEST

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BY KESTREL KUNZ AND THOMAS O'KEEFE

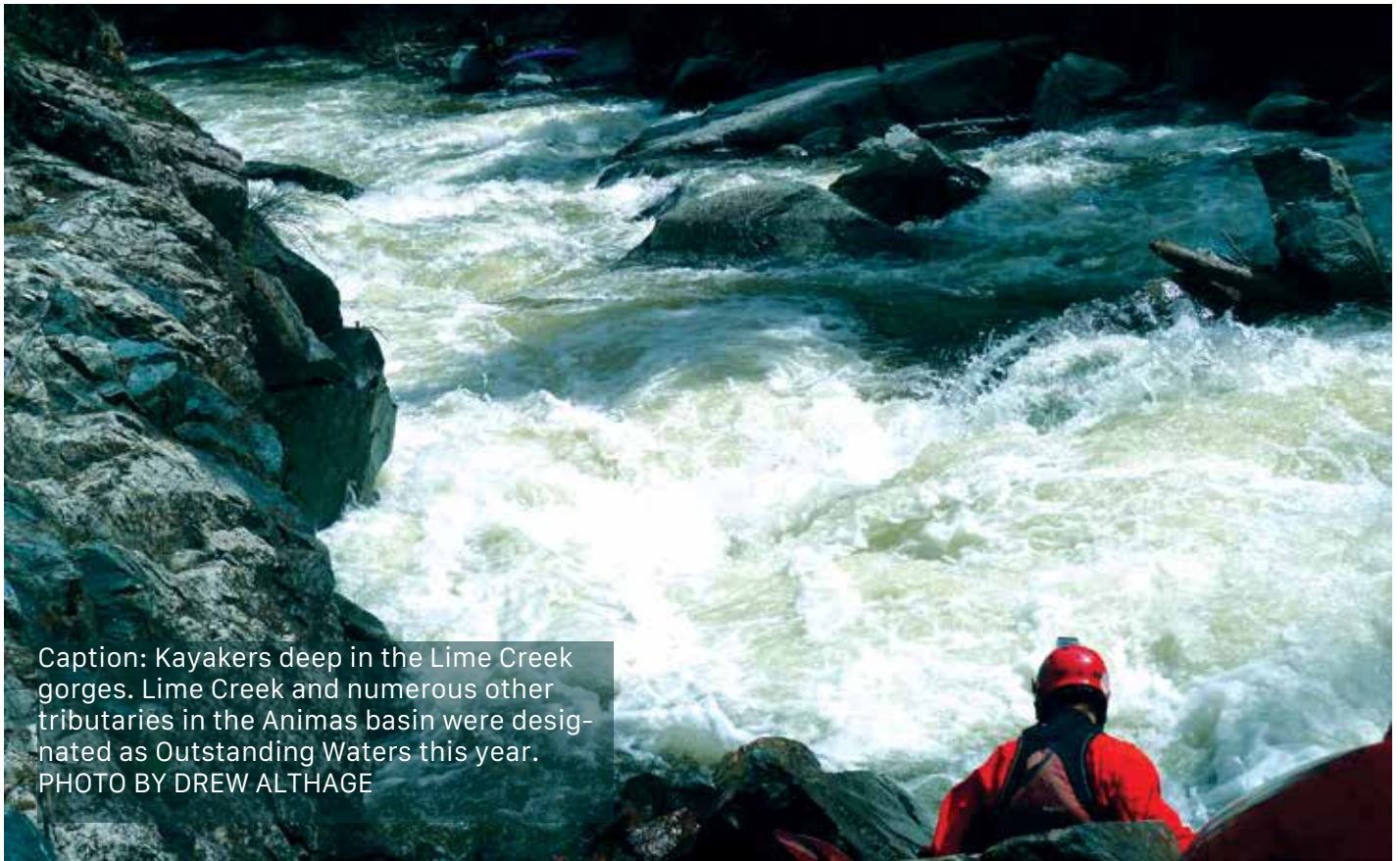
**A**S PADDLERS, THE water quality of the rivers we recreate on determines a lot more than whether or not we will get sick if we take a rough swim. High water quality is an indicator of the wild and undeveloped rivers that we love. For many of us, it is the whitewater or the scenic multi-day that draws us to rivers. But it is the pristine water quality that makes these rivers come to life before our eyes, with vibrant fish communities, and healthy native riparian vegetation. Wild and free-flowing rivers are core to our work at American Whitewater, and their water quality is critical for both our health and the health of the river.

The 1972 Clean Water Act's Outstanding Natural Resource Waters (ONRW) designation is an important tool that American Whitewater is using to protect priority river segments across the United States. The 50-year-old Clean Water Act directs states and Tribes to create water quality standards and a plan to protect those standards every three years. While every state and Tribe must adopt an "antidegradation policy" that includes Outstanding Natural Resource Waters as the highest possible tier of protection, they are given discretion to determine which streams are deserving of that protection. The designation acknowledges the high water quality that currently exists and ensures it is protected at that level for the future. It provides protection from future development, mining, and other uses that would degrade the water quality below its current high level, while honoring existing uses at the time



Paddlers gearing up to paddle the headwaters of the Taylor River during Spring runoff. The Taylor River above Taylor Park Reservoir is one of 25 streams that received the highest possible level of water quality protections.

PHOTO BY PHIL URBAN



Caption: Kayakers deep in the Lime Creek gorges. Lime Creek and numerous other tributaries in the Animas basin were designated as Outstanding Waters this year.  
PHOTO BY DREW ALTHAGE

of designation. Each state has its own regulatory process and American Whitewater has actively been working to designate ONRWs in both Washington and Colorado.

### WASHINGTON

In 2021 American Whitewater joined in a petition to designate three rivers in Washington State as Outstanding Waters: the Cascade River in the Skagit River watershed, the Napeequa River in the Wenatchee River watershed, and the Green River in the Toutle River watershed. Whitewater boaters know the Cascade as a classic whitewater run in the North Cascades with exceptional water quality and big Class V rapids. The Green River flows from the north side of Mount St. Helens and was spared the most severe impacts from the 1980 eruption. The headwaters have a network of trails that provide access for hiking, horseback riding, and mountain biking along a river where water quality has been threatened by proposals for industrial-scale mining that would impact downstream water quality. Access issues on private timberlands have made it more difficult to boat the Green River in recent years but we still have an interest in protecting water quality with the hope of one day restoring access for boaters. The Napeequa River is a little-visited tributary of the Wenatchee River with its water providing downstream benefits for recreation,

fisheries, drinking water, and irrigation. The Napeequa River itself is extremely remote, drawing only a handful of off-trail hikers and explorers including at least one kayak descent. Recognizing and protecting the water quality of these rivers is important.

In August 2022, Washington State’s Department of Ecology announced a rulemaking to formally evaluate our petition for these three spectacular rivers. A public webinar to introduce the rulemaking will occur this fall and the proposed rule to formally designate these rivers as ONRWs will be proposed in the summer of 2023. The proposed rule will be available for public comment prior to adoption that could occur in the fall of 2023. Keep an eye on our website for opportunities to participate in the public process and provide comments. A successful process will establish a framework for future designation of ONRWs in the state.

### COLORADO

In Colorado, American Whitewater has been working with a diverse group of conservation and recreation stakeholders to designate priority rivers as Outstanding Waters (the term that Colorado uses for ONRWs). Colorado reviews its water quality standards on a rolling three-year basis for each of its 14 river basins. The designation process includes three formal hearings

# STEWARDSHIP



with Colorado's Water Quality Control Commission, at least two years of representative water quality samples, and stakeholder outreach with businesses, landowners, local governments, and other stakeholders invested in the watershed. The proposed streams must have high water quality, possess exceptional recreational or ecological values, and must warrant greater protection. Over the past two years, we worked to prove these criteria for 26 streams in Colorado's Gunnison, Dolores, and San Juan River Basins—the most recent basins up for review. This work culminated in a final hearing in June 2022, where American Whitewater staff and our partners presented our proposal to the Water Quality Control Commission.

On June 14, 2022, the Commission voted 7-1 to protect 520 miles on 25 streams across Southwest Colorado, adopting the first proposal of its kind. Our proposal included beloved paddling segments like the headwaters of the Taylor River, Escalante Creek, Lime Creek, and many others that were acknowledged for their exceptional ecological and recreational attributes. The successful proposal set a precedent for water quality and recreation in Colorado by being the largest Outstanding Waters package and by having the first Outstanding Waters streams designated for their recreational values.

This win for water quality is an example of successful collaboration among a diverse group of river advocates, businesses, and scientists.

“These waterways provide critical habitat and exceptional recreation experiences that are valued by Coloradans across the state,” said Orla Bannan, the strategic engagement manager for Western Resource Advocates' Healthy Rivers Program. “This is the climate action we need to conserve our natural landscapes—so our communities, wildlife, and rivers can thrive. We will continue to work to determine the best way to protect Colorado watersheds from harmful practices that would permanently degrade the quality of our most important streams and protect our precious water resources for generations to come.”

Many of these streams also provide exceptional fishing opportunities and this multi-year effort has strengthened our partnerships with the angling community. Working together, we were able to help elevate our shared priorities and protect water quality for both of these experiences.

“The more one fishes in our wild, pristine Southwestern Colorado waters, the more one comes to think of a trout not as just



something to be caught, but as a partner in the beautiful web of life,” said Duncan Rose, the conservation co-chair for Dolores River Anglers, Trout Unlimited. “With partnership comes responsibility. Only through actively protecting and conserving such waters for generations to come can we be reasonably assured of that delicate relationship persevering.”

Our Outstanding Waters proposal was bolstered by support from local businesses that rely on clean, healthy rivers and have direct connections to these special places. Through petitions and testimony to the Water Quality Control Commission, our business partners helped move this proposal across the finish line.

“Healthy rivers are so important to a business like ours because it’s our way of life, our livelihood, and our responsibility to protect them. When we come together we are stronger to help promote and preserve the beauty of the river,” said Ashleigh Tucker, managing partner at 4Corners Riversports in Durango, Colorado. “We have been helping folks get on the waters in the West since the early 80s. We have a large retail space here in Durango, do online sales, and we also run a paddle school. At the paddle school we strive to teach paddling and river safety, but also how to create river stewards to help protect our rivers for future generations. We are excited to support the Outstanding Waters

proposal from American Whitewater, Conservation Colorado, and other partners who are putting their hearts out there to help protect Colorado’s rivers.”

Following the unprecedented win for water quality in Southwest Colorado, American Whitewater is gearing up to advocate for dozens of Outstanding Waters designations in the Colorado and Yampa Basins. Alongside our conservation and recreation partners, we have identified over 18 river segments that are deserving of Colorado’s highest water quality protections in these basins. Identified segments include Fish Creek and the Elk River and numerous other tributaries to the Upper Colorado, Yampa, and North Platte drainages. Over the next two years, we will collectively work to sample water quality in these streams, talk with local stakeholders, and rally the boating community around these protections. It is up to our community to keep convincing decision makers that high water quality is important for recreation and for the healthy watersheds that draw us out of our houses and to the wild rivers around us that are untouched by development and pollution.

Join us in celebrating these important wins for water quality during the 50th year of the Clean Water Act!



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Colorado River, Grand Canyon. | Photo: Evan Stafford

# BILL ADDRESSING CLIMATE CHANGE AND PROTECTING RIVERS BECOMES LAW

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BY EVAN STAFFORD



Lower Salmon River (ID)  
PHOTO BY EVAN STAFFORD



**O**N AUGUST 16, 2022, the President signed the country's largest-ever bill focused on addressing climate change: the Inflation Reduction Act. The health of, and our ability to enjoy, our rivers has been and stands to be affected significantly by increasing wildfire, drought, and rising temperatures. This bill represents a game-changing step towards significantly reducing the impacts of climate change on our fresh water streams and paddling opportunities.

The passage of the Inflation Reduction Act would not have happened without outreach from people like you. Our community leaned on their representatives to not only address climate change, but to utilize the health and composition of our public lands and rivers to improve our nation's climate resiliency. This bill does just that, with significant funding for protecting and restoring forests, and rural and urban wild spaces, concepts that safeguard rivers, fish and wildlife, outdoor recreation areas, and other public resources, while also maintaining and supporting local businesses. We all rely on America's healthy forests, watersheds, and wetlands to capture and store carbon, ensure clean drinking water, and sustain local economies.

Outdoor Alliance CEO Adam Cramer says, "Passage of the Inflation Reduction Act is nothing short of monumental—it's the biggest step on climate we have taken as a nation. It proves that America can address the climate crisis with conviction, and lead as the world expects us to."

Enacting legislation that sees our public lands and waters as a strategic asset in fighting climate change, and putting in motion long-term incentives that encourage innovation and a greater commitment to addressing our changing climate took decades of advocacy by organizations like American Whitewater. Some of us teamed up as members of the Outdoor Alliance coalition in 2005, with one of a few overarching goals being to inspire and push alongside every single one of you and let our representatives and government know that we care about the health of our rivers, our communities, and all the natural resources we rely on.

This is truly just the beginning. We see a compounding effect as this legislation on paper turns to action, and we believe the will to protect and restore our rivers will grow alongside fresh and novel approaches to increasing our communities' climate resiliency. Thank you for demanding Congress and the administration take action. There is always more to do, yet right now we invite our community to celebrate this vote and recognize it as a victory, an imperfect but crucial first step in taking action to strengthen our rivers and communities' resilience to a changing climate.

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# WORLD RAFTING CHAMPIONSHIPS ON THE VRBAS AND TARA RIVERS IN BOSNIA AND HERZEGOVINA MAY 24 - JUNE 1, 2022

By CHLOE TIPPETT



USA U19 Women Registering for the World Rafting Championships in Banja Luka. PHOTO BY AARON TIPPETT

## THE FORMATION OF THE CALIFORNIA POPPIES

I GREW UP on the river. My parents met 30 years ago as guides and raised me and my brother as whitewater kids. Today, our family owns a rafting company, Coloma Lotus Whitewater. Growing up I had a vague awareness that raft racing was a thing. One of my mother's guide school instructors had been a founder of Project RAFT and several of my parents' rafting friends had been on teams that had competed. But I still didn't know much about it. Truth is, I had always been more interested in kayaking.

In fact, I spent my middle school years kayaking. I attended an independent study charter school and traveled to rivers throughout the US, Canada, France and even Chile. Unfortunately, when the pandemic struck in March 2020—I was in France training

kayak slalom at the time—my international kayak travels came to an abrupt halt. I started kayaking on nearby rivers instead. Pretty quickly more kids in the Tahoe-Truckee region of California started kayaking, too, as schools were closed and structured activities cancelled.

As I entered high school, I continued to spend time on the river. My parents encouraged me to join raft racing practices led by Sue Norman. I knew Sue from having been a Junior Ambassador for Rivers for Change when I was in elementary school, so I decided to give it a try. At that time, Sue was still coaching a local girls' team that she had previously taken to US Rafting Nationals in 2019. I started training with them occasionally on the Truckee River, the South Fork American River, and Donner Lake. Over time, though, some of the girls left for college and others moved on

# RIVER VOICES

to other sports. In 2020 and 2021, the US Rafting Nationals were cancelled due to Covid, as were the World Rafting Championships, so opportunities to compete were nonexistent anyway.

Despite that, a core group of us (which still included one of the original girls) was having fun and decided to get more serious about training regularly on the water and in the gym. Together we formed the California Poppies U19 Women Raft Racing Team.

Late in 2021 the International Rafting Federation (IRF) announced that the World Rafting Championships would be a go for spring 2022. We were interested in competing, even though we had never had an opportunity to actually race together before. Since there was no time to host national team trials, the United States Rafting Association (USRA) selected teams based on applications, which included our individual river resumes and team training videos. We were thrilled to be chosen as the U19 Women's team. We would be the first youth team ever to represent the USA in international rafting competition.

It didn't take long, though, for there to be uncertainty about the event. China backed out of hosting due to Covid and, shortly after Bosnia and Herzegovina announced that they would host World Rafting Championships, Russia invaded Ukraine. Although the IRF condemned the war, it did not cancel the World Rafting Championships. Our parents debated whether we should go. Ultimately, we agreed with the IRF's philosophy, which stems from its origins as Project RAFT, of promoting peace through

**Top Left:** World Rafting Championships Opening Ceremony Fireworks over Kastle Fortress in Banja Luka.

PHOTO BY IRF

**Top Right:** USA U19 Women at the Tara River after the last race of the World Championships.

PHOTO BY AARON TIPPETT

individual friendships formed at international events. And so it was decided: we were going.

At this point, we had only a few months to prepare. The group, which also includes Tatum Akers, Laurel Anderson, Hannah Hammond, Kennedy Kruse, Sue Norman, and our families and friends, rushed to build awareness (we did newspaper interviews and presentations to local organizations), fundraise, secure sponsors, borrow gear, design logos, order uniforms, and plan the trip.

Before we knew it, it was late May, and we were off to spend two weeks in Bosnia and Herzegovina. I think I can speak for all of us in saying that it was the experience of a lifetime.

## WORLD RAFTING CHAMPIONSHIPS IN BOSNIA AND HERZEGOVINA

The IRF's event is very much a World Championship. It turned out to be a much bigger, more elite event than I ever could have imagined.



USA U19 Women Gold Medal Winning Sprint Run on the Vrbas River at the World Rafting Championships in Bosnia and Herzegovina.  
PHOTO BY IRF



We had had a small glimpse into the seriousness of the event two weeks before leaving when we found out that, as athletes, we were subject to the World Anti-Doping Code and had to take an extensive course, submit our compliance, and apply for exemptions. But it still didn't really sink in until we arrived in Sarajevo. We were surprised to see billboards for the races at the airport, along the roads, and in various towns.

It then really hit us at registration in Banja Luka. There were 61 teams from 22 countries registered. Many had elaborate, matching uniforms, and some, like the Czech teams, even came in vehicles wrapped with their logos, loaded with gear. Photographers took team photos; we were given athlete credentials as well as race bibs with our race category and country flag. We eventually figured out how to wear the bibs properly as a team—front paddlers wear them with the flag facing forward and back paddlers wear them with the flag facing backwards so that the country is identifiable from all sides. In getting to know other teams, we learned that many were Olympic-level athletes and all had extensive whitewater experience as competitive raft racers, slalom kayakers and canoeists, and Class V river guides. We also discovered that we were the youngest team.

We were amazed by the Opening Ceremony and had so much fun participating in the boat parade. At night, in front of a large crowd, each country's teams paddled past the Kastle Fortress, which was lit up. Since countries went in alphabetical order, we paddled last along with the USA Open Women's team from Colorado. After the

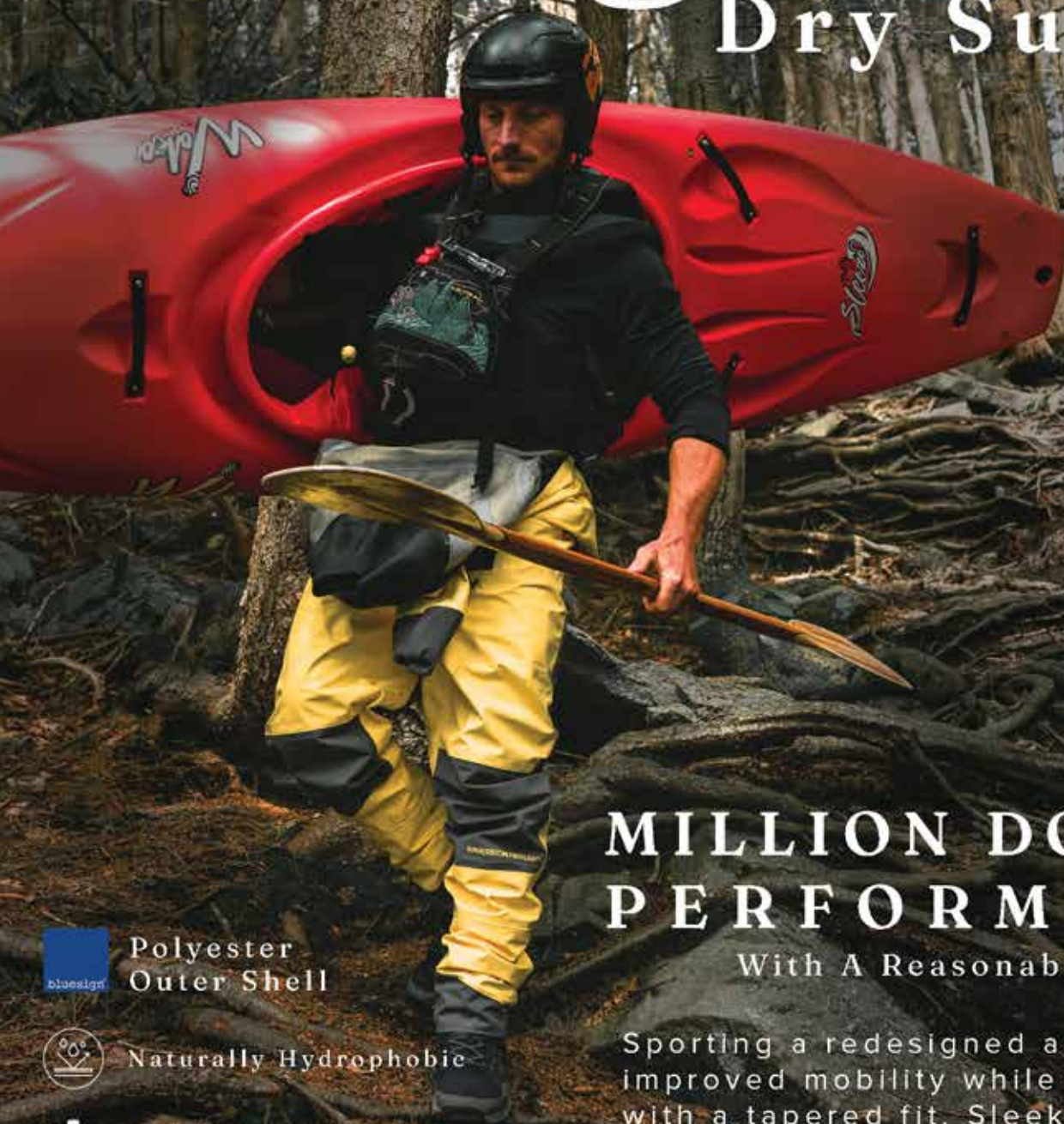
parade, race officials gave speeches that focused on international unity and environmental stewardship. The Mayor of Banja Luka and the Serbian President of Bosnia and Herzegovina spoke, too. It was clear from them, as well as from the presence of the US Ambassador and from the fact that the United States Agency for International Development (USAID) was a sponsor, that this event was important for international relations and for local tourism. But these athletes are rafters. And no matter where they are from, or how competitive they are, or how formal the occasion, they are going to make it fun and have a good time. We became a large flotilla, with athletes dancing on rafts as music played and fireworks went off.

There are four different races at IRF World Championships: Sprint, Head2Head, Slalom, and Downriver. Age categories include Youth, Juniors, Open, and Masters and are separate for men and women.

The Sprint and the Head2Head were hosted over three days by Rafting Centar Kanjon on the Vrbas River. The race venue, White Chuck Rapid, is a series of big waves that flow towards a large rock. During the training day we witnessed swims, flips, wraps, and extreme high sides. We had done relatively well and went into the races feeling confident, despite our lack of prior competitive raft racing experience. Although we unknowingly paddled our boat backwards (it turns out that unlike our boats at home where the release valves are in the back, in these boats the release valves are in the front!), we nailed our line in the Sprint and won by a significant margin. The USA Open Women also won in Sprint

# 7 Figure

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that day, so it was cool to celebrate together. In Head2Head, we established an early lead, but then got pushed and bumped the rock, just barely missing gold.

Next up was Slalom, which proved to be a challenge. Slalom is considered the main event and is televised live. The Open teams compete at night under lights. As a youth team, we were scheduled earlier in the day. Actually, we were slated to go literally first, which is a tough position to be in. We had not had a chance to train on the course in advance, so it would have been helpful to at least get to watch other boats run the course before we had to go. To make matters worse, there was a start delay due to a live TV issue, so we had to wait in our boat in the start eddy for 40 minutes getting wet, cold, and increasingly nervous. Our first run was disappointing. Our second run was smoother but still far from clean. The Czech U19 Women didn't have a clean run either, but they looked solid. Their C1 slalom experience showed, and they definitely deserved the win. We spent the rest of the day and evening watching the other teams. Team after team struggled. We came to realize that this was an exceptionally hard slalom course, even by World Championship standards. Of over 120 race runs that day there were only three that were clean (both of the Brazilian Open Men's runs and one of the Japanese Open Men's).

Exhausted from jet lag, ceremonies, training, competitions, evening spectating, meeting with dignitaries and officials, and socializing with our new friends, we were looking forward to finally having what was supposed to be a day off. It was scheduled as a travel day from Banja Luka to Foca for the Downriver Race on the Tara River. We loaded the athlete buses and along with a caravan of 40 vehicles we were escorted by police for what we expected to be a three- to four-hour drive. Instead, this turned into a 10-plus hour expedition complete with traffic, a broken down bus, and a Brazilian dance party in the aisles.

We arrived in Foca tired and hungry. The minute we walked off the bus, though, the entire mood changed. Not only is Foca beautiful (it is on the tentative list to become a UNESCO World Heritage site), but the whole town had come out to welcome us. Local teens, who quickly became our friends, led us through another Parade of Nations. We learned that the initials for USA in Serbian are SAD (Sjedinjene Americke Drzave), which made us laugh. People of all ages lined the streets, cheering, holding homemade signs, giving us high fives and fist pumps. At the end of the parade we all came together for a big party. Everyone had a great time.

We spent the next two days at Tara Raft Camp in the Perucica Rainforest. The Tara River is so blue that you can see right through



USA U19 Women Getting out of the Water after the Parade of Nations at Opening Ceremonies.  
PHOTO BY AARON TIPPETT



USA U19 Women on the banks of the Vrbas River in Banja Luka.  
PHOTO BY AARON TIPPETT

it and so clean that we drank straight from it. The Downriver section is only Class II+, but I enjoyed paddling it anyway because it is so beautiful. Even the shuttle ride was beautiful. We also got to zipline, which was fun. Next time, though, I will bring some of my own food because I'm vegetarian and meat is what is on the menu!

The last night of the World Championships was probably the best. Closing Ceremonies in Foca was a party that none of us will ever forget. We congratulated our Czech competitors (Czech teams won Overall Gold in 5 categories), cheered for the USA Open Women (they won Overall Silver in the Open Women's category), and received our Youth Women Overall Silver medals and trophy. We also thanked our coach for creating this opportunity for us, met with the US Ambassador, and danced with the many friends we had made along the way.

Over the two weeks we spent in Bosnia and Herzegovina and through every interaction I had with officials, athletes, and locals, I both found and believe that I also furthered the unity that the World Rafting Championships are intended to foster. I truly became part of the global river family.

## FUTURE OPPORTUNITIES FOR AMERICAN RAFT RACING TEAMS

Even if you think of yourself as a kayaker, like I do, and even if you previously thought of rafting as a recreational activity, like I did, it's worth getting involved in raft racing.

After my experience at the World Rafting Championships, my parents formed a U14 raft racing team for my brother and his

friends. Many other families also reached out considering doing the same. When asked for my perspective, I shared the following:

1. Although raft racing is surprisingly competitive and athletically demanding, it is also really fun. The camaraderie between teams definitely stands out.
2. Raft racing provides unique travel opportunities. Competitions are held in incredible places and as an athlete you get to experience those places as part of the river community, rather than just as a tourist.
3. Raft racing develops what my parents like to call "life skills": teamwork and sportsmanship, obviously, but also public speaking, interviewing, writing, fundraising, planning, etc. It also provides opportunities to connect with all sorts of people from all around the world.

My hope is that our team's experience at the World Rafting Championships will encourage whitewater boaters of all types and from around the country to support the USRA's efforts to further develop youth participation in raft racing. I also hope that we will have inspired kids, teens, adults, and masters alike to want to represent the United States in future international rafting competitions.

*Chloe Tippett is a 15-year-old Sophomore at North Tahoe High School, a USRA Youth Board Member, and a California Poppies U19 Raft Racing Team Member.*

# PERFORMANCE // REIMAGINED



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# NRS



# FIFTY YEARS OF The Clean Water Act



1972-2022

The Clean Water Act turned fifty in 2022! Enacted in 1972, the Clean Water Act, CWA for short, sought to bring all navigable waters of the United States to a level of water quality that would protect and enhance fish, shellfish, and wildlife populations, provide clean and safe waters for recreation in our streams, lakes and wetlands, and provide clean and safe drinking water for our communities. It's a perfect time to reflect and express gratitude for this law, celebrate the many values of clean rivers, and take action to support the Clean Water Act. We can all work together to ensure that our rivers keep getting cleaner, and that the power of the Clean Water Act remains intact.

Photo by John Baker



REMEMBRANCE

# AN UNCOMPROMISING HERO: REMEMBERING SARAH RUHLEN 1996-2022

BY TRACY HINES

**W**HITewater PADDLING AND exploration is defined by the courage and character of the individual taking on the endeavor. In the present era, bigger rivers, larger drops, and extreme acrobatic acts have elevated the standards at the upper end of the sport. Pushing the limits boldly is often considered the mark of courage in paddle sports. While making advancements in any area is important, progression in many cases comes with loss.

Loss of gear or time due to injury are simply unfortunate parts of the equation of paddling, but when it comes to the lives of other river folks, calculating and contemplating loss is a fundamental part of a learning process. The loss of a friend is an aspect of the sport that makes one rethink things. What did this person leave behind? What lessons did this person teach us? These are simple, vital questions to ask.

Sarah Ruhlen redefined the meaning of courage as it applies to whitewater kayaking. Sarah, at a very young age, was stricken with Type 1 juvenile diabetes. The progression of her disease later caused her to develop an autoimmune system disorder that she recently succumbed to. Whitewater paddling was a part of Sarah's life from an early age. Despite her physical impairments that arose due to her condition, she paddled consistently. She worked in the whitewater industry as a paddlesport instructor. She was proficient in multiple craft: open canoe, kayak, C-1, and raft. Sarah was also an accomplished photographer and videographer who had work published in multiple paddlesport publications.

Her courageous nature led Sarah to be candid about how her disease impacted her life. Furthermore, her openness about her mental health struggles helped and inspired many people in the whitewater community. Mental health conditions are not rare in

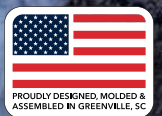
the paddlesport community, and Sarah's ability to be open and honest about how her metabolic condition impacted her moods really hit home with many paddlers. Sarah would write about how she was feeling either in a social media post or in an article, and her accompanying photographs always spoke volumes. Sarah was a true artist and the photographs she made of herself and others were her canvas. This simple act of complete honesty gave others strength to speak out, sparking valuable discussions about physical and mental health and paddling. Sarah had the ability to kindly encourage others. Through her open admission of her own experiences, she showed other people who faced challenges that they were not alone.

One of Sarah's final social media posts was of her with an insulin pump system attached to her midsection. The photo was taken, not in a hospital room, but in a field of wildflowers. Sarah was smiling gleefully, lighting up the entire photograph. The accompanying text spoke about her autoimmune condition and indicated that she was choosing happiness in spite of it. Another fitting thing about this photo of Sarah was that it was taken by one of her close friends who had also struggled greatly due to Type 1 diabetes. The girl was a few years younger than Sarah and looked to her as a mentor. Through Sarah's simple displays of uncommon courage and kindness, she left behind a legacy. Sarah was a pioneer in the sport. She showed that imperfection can often be the thing that becomes one's greatest asset. Sarah used her impairments as a tool to inspire others. In an era when the rules are changing, the definition of what a great hero of sport looks like doesn't have to be a stoic figure with rippling muscles performing acrobatics off a big waterfall. In Sarah's case, her heroism was showing others what it truly meant to live life without compromise.



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# A RETURN TO THE RIVER

BY BRIAN WRIGHT

The first canyon of Alaska's  
Sixmile Creek.  
PHOTO BY BRADEN GUNEM

## LEAN IN CLOSER.

Let me tell you a story about whitewater. A story that's about more than boiling holes, surging eddies, beat downs, and swims (though there is some of that). It's a story about life. Death. Risk. Coming of age. A midlife crisis. It's a story about a person fumbling to remember what's truly important. It's a story about me. But it could probably just as well be about you, for we all have our obstacles, our fears, and our triumphs.

Oh, and it takes place in Alaska. Which is pretty badass....

To understand this story completely, let's backpaddle. Upstream and back in time until we find a naïve 11-year-old paddling a tandem canoe, poorly, with his mother on a bump-and-grind stretch of Arizona's Verde River. Though we may have dumped that 15-foot Mad River more than once that day, the seeds were planted for a hobby that grew into a lifelong passion.

In the months that followed that first-ever river trip, I threw myself into the sport of whitewater paddling. I bought an inflatable kayak and ticked off some classic Southwest rivers: the Dolores above

Bedrock, the Green through the Gates of Lodore. By the time the leaves withered on their branches that fall, I was a river addict.

As a kid, I had a knack for plunging neck-deep into my interests. Sports, dinosaurs, extreme weather: when a topic grabbed my curiosity I pursued it with reckless intensity as if nothing else in the world mattered. With this eagle-eyed focus, I passed my middle school years memorizing river guidebooks when I should have been studying pre-algebra and world history. By the time I was 13, I could quote the lengths, major rapids, and boating history of every significant river in the American West. My heroes shifted from Michael Jordan and John Elway to Walt Blackadar and Eric Jackson. And any chance we had, my father and I loaded up his Chevy Blazer and blasted across Arizona, chasing every fleeting stretch of floatable river that dry state had to offer.

I loved everything about whitewater: dissecting a rapid while scouting from shore, feeling the rush of adrenaline at an approaching horizon line, executing the envisioned line with surgical precision, and basking in elation in the eddy at the bottom. But paddling was always more than just rapids and risk. I loved the smell of the river, the wildlife that gathered along its edges, the side hikes that revealed enigmatic wonders, and the



camaraderie of huddling around a campfire with friends while swapping whitewater tall tales.

For the next 12 years my love of the river bloomed. I bought my first hardshell kayak. I became a certified instructor and attempted to inspire my passion in others just discovering the sport. At the relatively tender age of 21, I became part owner of a paddle shop in Glenwood Springs, Colorado, a hamlet of 10,000 nestled on the alluvial delta where the Roaring Fork and Colorado Rivers collide. I competed in FibArk, even made finals once in the expert division. I joined a town committee that built the first ever whitewater park on the Colorado River. And at every opportunity, I threw myself down any harrowing chute, roaring plunge, or tree-lined gorge I could find. Whitewater and rivers were the love of my young life.

In 2008, however, everything changed. The Great Recession seized the country. Crippled by a difficult market and my own mismanagement, my kayak shop floundered then failed. Broken-hearted and stripped of my life's savings, my love of the river withered and began to dry up. I shifted to other pursuits: rock

climbing, mountaineering, hiking, playing guitar. My paddling skills atrophied; my paddle hung forgotten in a dark garage.

It wasn't until ten years later, and 2,500 miles away, that I met the other character in this story, the one that would rekindle my love for whitewater in a way that my now almost-middle-aged body had almost forgotten.

This character was a river.

Not just any river, but a rowdy gem that carves through a lush Alaskan gorge of towering conifers and flood-smoothed granite. Its clear-blue waters dump over dark ledges and whirl around gumdrop boulders draped with emerald moss. Occasionally, carmine-hued sockeye leap and flop up its steep plunges to spawn, then die.

This river is called Sixmile.

Located in Southcentral Alaska, Sixmile Creek was "discovered" by western culture in 1895 when gold panners hoping to lift



Braden Gunem drops into Staircase Rapid on Sixmile's third canyon.  
PHOTO BY BRIAN WRIGHT

## RIVER VOICES



Brian Wright runs Staircase  
Rapid at low water.  
PHOTO BY CLAIRE CRIPPS



their fortunes from its waters first stumbled upon it. These hardy pioneers erected rustic cabins along Sixmile and spent long, lonesome days sieving through the silt and gravel of its riverbed in search of “the Color.” To date it is estimated that 2,000 troy ounces of gold have been found in Sixmile, a score worth about \$3.5 million at today’s rate. It wasn’t until much later, however, that a different brand of adventurer discovered the creek’s whirling water: river runners.

In the early days, Sixmile was considered cutting edge, dared only by teams of experts during ideal conditions. Though today much more difficult whitewater is routinely explored all across the Last Frontier, Sixmile maintains its reputation of demanding respect and awe. And if the number of fatalities and near misses that still trouble this relatively small river is any metric, Sixmile’s fearsome reputation is well earned.

Akin to more famous classics like Gore Canyon, the Upper Gauley, and the Chattooga, Sixmile is the region’s premier test piece: an entrance exam one must pass before toeing into Alaska’s more harrowing stretches. Like those other benchmark rivers, Sixmile clocks in at high Class IV to low Class V, has reliable water, is conveniently located with easy access (especially by Alaska standards), and is even home to a whitewater festival.

Though I knew of Sixmile by reputation for many years, my inauspicious introduction came in the summer of 2017 during the Sixmile Creek Whitewater and Bluegrass festival, a quirky, Alaskan-style (low on organization, high on character) event. In front of my eyes, a non-racing attendee attempted the Class IV First Canyon in a lake kayak with fishing waders, swam in the first rapid, and became pinned on a submerged log. For nearly five minutes the swimmer was trapped, water fanning over his head. Were it not for the brave, and perhaps foolhardy, decision of another boater to jump in upstream and grab him, he almost assuredly would have died.

Shaken by the experience, I walked away proclaiming that I would never paddle Sixmile: I was too rusty and too much of a chicken to build back up to this test.

Three years later, however, I was bobbing in a kayak at the top of one of Sixmile’s signature rapids, Merry Go Round, wondering what the heck I was doing. Beside me floated Braden, another approaching-middle-age kayaker also attempting some sort of whitewater comeback. We sat on river right, trying to pick some sense from the chaos of exploding waves and hydraulics below.

It was the Fourth of July and the sun was blistering hot. Clouds from a previous storm had peeled apart to reveal flawless

## RIVER VOICES

blue horizon to horizon. Sixmile was rolling along at 1,450 cfs, which translated to 10.0' on the river's only gauge. It was a strong medium level, and the highest I'd seen it.

The previous summer I'd found my way back to whitewater through the sport of packrafting. Though I'd once written off those tiny rubber craft as a novelty not worthy of whitewater respect, in Alaska—a place where the rivers are many but roads are few—packrafts are a craft that just makes sense. Starting on lakes and slowly graduating to easy rivers, I remembered how much I loved being on the water and couldn't seem to remember why I'd quit. As my skills slowly returned, I began daring more and more challenging rivers. My mind turned back to Sixmile. Did I still have what it took to paddle such a fearsome river?

I was about to find out.

"Should we scout this one?" I asked, trying not to sound nervous. Braden, perhaps brazen after flawlessly navigating all of what Sixmile had thrown at us so far without even a single combat roll, shook his head and peeled out.

As I watched him accelerate down Merry Go Round's entrance tongue, I grappled with the usual risk vs. reward debate. I had a pregnant wife at home, a dog, a desk job, and a mortgage. There were many people who cared about and relied on me. But it was only Class IV+. Even if I were to crash, I would most likely wash up somewhere at the bottom. Images of the paddler I'd seen almost drown three years earlier not so far from this very spot, however, kept returning to my head. He likely hadn't known the risk he was taking and it very nearly cost him everything. My mind also turned to a friend I lost while paddling in Ecuador and other people in my life who died before their time while braving one variety of risk or other. Gone was that naïve kid clumsily stabbing a canoe paddle into a lazy desert river: I'd learned that life was messy, tragic, and fragile. To live was to take risk, but was the reward I sought selfish or worthwhile? Was this "comeback" just a midlife crisis? Or was it somehow a noble, coming-into-wisdom moment my life desperately needed?

The truth was, I had no idea.

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Braden Gunem in Sixmile's stout whitewater.  
PHOTO BY BRADEN GUNEM

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Braden Gunem navigates Merry Go Round Rapid  
at low water.  
PHOTO BY CLAIRE CRIPPS

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I knew from descriptions that Merry Go Round should be taken far left. Braden, however, entered almost dead center. Directly in front of me, he soared over a rounded hump and plummeted precipitously out of sight.

The result was violent and instantaneous.

His bow launched skyward in an acrobatic rear endo. He cartwheeled once, then twice. I struggled to watch while bracing through the heavy haystacks farther left. As I blew past, I caught a glimpse of him side-surfing what looked like a hole from hell. Eyes like dinner plates, he caught an edge, was sucked down into the maw, and vanished.

Rocking through the rapid's tail waves, I spotted his head upstream of me bobbing in the frigid water beside his swamped kayak.

"Swim!" I shouted, nervously eyeing the next horizon line, which announced a nasty plunge aptly named Jaws. Braden clawed into a river right eddy but his heavy boat floated on downstream. I tucked into a micro eddy at the lip of Jaws just in time to watch his green kayak bash down the torrent without a captain. A few moments later, Braden arrived at my side looking waterlogged and disgruntled.

"I tried to save it," I said. "But I wasn't going to chase it through that." We gawked at the growling chute below us.

"Looks like I'm walking," he said and got to work thrashing down the rocky shore.

I was left alone with Sixmile. I pondered a portage but decided walking would only drive a compulsion to return. Instead, I settled on what looked like the easiest line and wedged my legs back into my kayak. In a way, it was perfect there would be no witness for this final test.

For all my scouting anxiety, Jaws passed in a blur of leaping haystacks and growling holes and I found myself at the bottom, wolf-howling at the empty canyon walls.

Two corners later, I passed Braden fighting down the craggy shoreline. His kayak was nowhere in sight. I shouted that I would paddle ahead to search for it and got only a terse wave in response. I navigated the last of Sixmile's rapids until the river dove into a deep pool and went silent.

My midlife crisis was complete.

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The entrance of the boxlike first canyon of Sixmile Creek.  
PHOTO BY BRIAN WRIGHT

At the take-out, a friendly kayaker had spotted Braden's empty kayak and wrangled it to the opposite shore. I drained the boat, tied two throw bags together, and yanked it across to the takeout beach. Only moments later, a shape appeared floating downstream. It was Braden.

"Hey hey!" I cried. He kicked into the eddy and hauled out onto the sand like a sea lion.

"It was too rugged to hike," he said. "So I swam."

We laughed. We cracked beers. The sun was out, and there was not a trace of wind. Everyone and everything was accounted for. Sixmile rolled by, serene and placid below the rapids.

I guess my comeback was a success. I was still approaching middle age. I was still facing the challenge of impending parenthood. My dog, my empty cubicle, my mortgage were all still waiting. These were important things: the joys and trials that make life what it is. But for one sunny July afternoon all my worries were set aside and I was immersed in the feeling of water rushing under my kayak and the scent of the river hanging in the crisp Alaskan air.

For one moment, it had been just me and my old friend, the river.

## MAKING THE RIVER SAFER: CANNABIS AND PADDLING

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BY TERESA GRyder

**Editor's Note:** *As the author notes below, this topic inspires a wide range of opinions and feelings among readers. To help keep the article as objective and factual as possible (so it can be as useful as possible to our readers), the author has diligently provided links (permanent links, where possible) to credible sources explaining or solidifying claims made in the article. Boxed words or phrases are linked to outside sources. Please consult these linked sources if you want to understand the author's analysis or subject better.*

I WAS 28 years old, living the river life with my guide buddies in South Carolina. On days when we weren't working we paddled, so we were on the Chattooga almost every day. One beautiful summer afternoon we were at Woodall Shoals again, getting ready to launch at 2.2 on the gauge, a healthy flow. When one of my friends offered me a marijuana pipe, I thought "Sure, why not?". I had smoked cannabis a few times before without much effect. I didn't think that smoking a little before a run would have any impact on my paddling. I was buzzed when I charged over Seven Foot Falls in my Perception Dancer and ran head-on into the rock wall below the drop, spraining both ankles as the momentum of my body slammed my feet into the metal footbraces. I was unable to hike out so I paddled the rest of the run, humbled and in pain.

Just as it was then, cannabis is on the river today. Some paddlers step out of sight before a run for a "safety meeting" and return saying "safety third." Others vape in eddies (despite the risks in an unregulated market) or have a bong hidden alongside their home run. More people are trying edible cannabis as the options expand. People buy marijuana gummies at the store and make pot brownies at home. Clouds of white smoke escape from cars during shuttles.

It's reasonable to be concerned about the intersection of cannabis use and whitewater paddling. Being a naturopathic doctor in Oregon, I have studied cannabis. Being curious, I've experimented. My goal with this article is to open up a conversation about cannabis in the boating world. Cannabis is not going away. Instead it is increasingly available across the country and almost certainly on the rise in boating circles. Nineteen states have already legalized recreational use, and enforcement has been lax in states that still ban it. The federal government hardly prosecutes

anyone for cannabis anymore. The current federal legalization bill is stalled but some version will likely pass in the future because public opinion continues to shift in favor of legalization.

With cannabis use increasing, it is a good time to examine cannabis use in our world. Is boating after smoking a joint ever a good idea? Does the answer to that question depend on the person? Does the difficulty of the river play a role in this decision?

They say you learn good judgment by first having bad judgment. My judgment on the Chattooga was terrible; it's obviously unwise to experiment with a new drug on hard whitewater. But the question remains: did the drug impact my ability to hit my line? Current research on driving and cannabis suggests that it may have. Studies are ongoing to understand the impairments and who experiences them. Boating and driving have enough in common that we can apply information from driving research to help us avoid wrecks both on the road and on the river.

Driving simulators have been used to evaluate driving performance before and after smoking cannabis. This is better than setting stoners loose on the highway in the name of science. Most drivers displayed decreased performance 30 minutes after smoking cannabis and remained impaired until after 90 minutes. The reduction in performance was not huge, but it was clinically significant. At three and a half hours after smoking, drivers were almost back to baseline, and nearly all were recovered at four and a half hours. In contrast, the impairment caused by edible cannabis lasts in the neighborhood of eight hours. So far there is no evidence that CBD impairs driving performance.

It's possible that cannabis makes you overconfident. One study asked study participants when they thought they were sober enough to drive. They knew when they were impaired, with one exception. At 30 minutes most participants were hesitant to drive but at 90 minutes they felt ready to get behind the wheel. This was deemed a danger zone because if you feel sober but you're still impaired, you are underestimating your own impairment and the risk it presents. If this same pattern applies to boating



(and why wouldn't it?), boaters' ability to "drive" the boat could be objectively impaired for 90 or more minutes after smoking cannabis, even after the high starts to fade.

It's well known that cannabis produces different effects amongst users. Scientists have repeatedly looked for correlations between THC levels, cannabis amounts, and impairment level, and found none. Zero. I haven't seen a good explanation yet of THC blood patterns, but the buzz is that they are not useful for determining impairment at the time of a wreck. Some drivers can smoke a lot, have high THC levels, and still perform well on driving tests. Others are more impaired with lower levels of consumption and THC. This finding is likely due to tolerance.

Tolerance is a condition in which your body gets used to a drug so that more is needed to achieve the same effect. Tolerance occurs due to regular use. A daily cannabis user could have high levels of THC in their blood and not be impaired. Many studies have found that occasional users are more likely than daily users to be compromised by cannabis use. Of all cannabis users, approximately 50-60% are daily users, depending on which study you read.

Modern cannabis is a lot stronger than it used to be. It's been bred to contain more THC, which is the most psychoactive component. This may be part of the reason that occasional users are so much more affected than regular users. The potency of marijuana increases the odds that daily use will induce tolerance.

How can we keep the "cannabis curious" from getting hurt on the river? This is an open question, but I have a few ideas. Let's limit experimentation to relatively safe environments—not on a dangerous river. Let's discourage children and teens from trying cannabis, because the health risks are greater if you start using early in life. And if one of your paddling buddies is having a problem, you may choose to intervene. We all need a little help sometimes.

Perhaps the most important thing I learned from reading up on driving and cannabis is that those who only occasionally use the drug have higher levels of impairment when they partake than regular users. One possible way to manage this risk is for regular users to avoid sharing their drugs with occasional users until safely back at home.



Cannabis is on the river. Having conversations about the best way to manage this whitewater risk factor could lead to improved safety.  
PHOTO BY TERESA GRYDER

## SAFETY MEETINGS



Cannabis use on the river can affect paddler safety, just like wearing inappropriate gear and making important decisions casually.  
PHOTO BY TERESA GRYDER

Cannabis is joining the list of legal and popular adjusters of the mind, along with alcohol and coffee. We can't pretend it isn't on the river, so let's figure out how to minimize harm. Let's continue to look out for each other, and help anyone who needs it. I wish I had known about the risks I was taking that day when I sprained my ankles on the Chattooga. My injuries healed relatively quickly, but not everyone will be so lucky. My hope is that our safety meetings will enhance our safety on the water, and off.

*Teresa Gryder is a Naturopathic Physician and lifelong paddler living in the Pacific Northwest.*

The legalization of medical marijuana has increased its prevalence in society and on the river.



# AMERICAN WHITEWATER ACCIDENT REPORT JANUARY- JUNE 2022

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BY CHARLIE WALBRIDGE

**T**HIS YEAR'S SIX-MONTH accident report has more river running deaths than usual. Some of this is a reflection of unusually high water in the Rocky Mountain West. Of 36 total fatalities, 16 occurred in Idaho (5), Montana (4), Colorado (4), and Oregon (3). Late spring snowfalls combined with high temperatures (and in some cases, rain!) led to rapid snowmelt and record floods, including those that washed out the northern entrance to Yellowstone Park. A large number of deaths in "easy" whitewater, many without life vests, shows that the pandemic-fueled influx of new paddlers is continuing. Boatwise, we lost five whitewater kayakers, nine recreational kayakers, four canoeists, four commercial rafters, 12 private rafters, and two standup paddleboarders. Causes included 10 paddlers without a PFD, 10 flush drownings, six accidents at low head dams, four pins at strainers; two pins on rocks or sieves, and three heart attacks. River difficulty at the scene was as follows: three in Class V, 11 in Class IV, five in Class III, and 11 in Class I and II (low head dams are unrated). My thanks go to all of you who contacted me with information about these unfortunate events; your efforts make this report possible.

## WHITEWATER KAYAKS

We had seven whitewater kayaking fatalities reported; five in the U.S. and two involving Americans paddling overseas. Both of the two foreign accidents were on the Quijos River in Ecuador and involved groups of very skilled paddlers. On January 20th a group of eight kayakers put on the Quijos river near Baeza, Ecuador to paddle the classic Bridge to Bridge section. This is a continuous Class IV run with long boulder garden rapids. It's very popular and several members of the group had run it before. The water level was moderate. At "Split Rock" rapid, Jacob Clark, 31, swam after being caught in a hydraulic in the left channel. He was flushed into the next rapid and became unresponsive. About five minutes later, a member of the group bailed out and swam him towards shore while a second rescuer used a throw line to get him in above a major drop. Mr. Clark was not breathing and had no heartbeat and, despite efforts of three rescuers who administered extended CPR, he could not be revived.

There was another death on the Quijos River a few weeks later. On February 11th a group of seven kayakers—two guides and five

guests—were on the Bombòn section of the Quijos. The river level was low, reading 4.3 on the online gauge below the Oyacachi/ Quijos confluence. At 1 pm the group stopped to scout the rapid Curvas Peligrosas from a gravel bar on river left. Four guests and two guides decided to run it. Patrick Riley, 62, successfully avoided the big hole on the first curve, but flipped on an eddy line downstream of the hole. He rolled up, drifted out of the eddy, and flipped again. He was pushed into shallow water on river left, above the wall between the first and second curves of the rapid. Suddenly his kayak stalled while he was still upside down. Mr. Riley's head and upper body were pinned against a rock while he was still in his boat! Mr. Riley pulled his sprayskirt and kicked free of his kayak, but he was still trapped underwater. Guides and group members got to him quickly, but he was under for too long. Although a doctor was available, CPR was not successful.

The Southeast saw two deaths of whitewater kayakers this past spring, the first of which was on the West Fork of the Little River in Alabama. On February 6th Carin Burford, a solid, experienced paddler, was pinned in the second drop. Her group's report (edited) describes what happened:

"In the second rapid, as the river turned left, most of the current ran directly to the center rock forming an upstream pillow. The right line through the slot required a diagonal maneuver facing right to go around the middle rock. Carin did not clear the center rock and hit the rock sideways while trying to drive to the right. She quickly flipped upstream and her boat pinned. Carin was caught underwater....

"Carin's boat was hard to reach. A rescuer attempted to float a rope under her boat hoping she could grab it. He did not see any movement or attempt to exit by Carin. Two other paddlers were able to reach the center rock. They tried to dislodge Carin's boat by lifting from the stern, then attempted to pry it free using a paddle. One rescuer entered the water downstream in an attempt to lift and dislodge the boat, then tried to pull Carin free from her kayak. Then a rope was tossed from a river right boulder and attached to the stern with a sling. It took several attempts by three people pulling from several different angles to release the boat.

# SAFETY

“The boat came free, and Carin floated out. We estimate she had been submerged seven minutes. She was pulled ashore quickly, and CPR was performed for 25 minutes until EMS arrived. She could not be revived.

“We later noted a sizable dent in the right bow of Carin’s boat. This would have been the downstream side of the nose when the boat was inverted. We believe that a subsurface rock or shelf caught her kayak and prevented it from washing downstream. Based on post-accident visits, we also discovered a downstream log which may have complicated the pin.”

More details on this rescue are available in the American Whitewater Accident Database.

There was a second Southeast fatality on North Carolina’s Oconaluftee River. Megan Thomson, 34, met two other kayakers at the Oconaluftee visitors center on February 24th. At the Smokemont Campground put-in, Ms. Thompson and another paddler decided to walk up the road a little bit and put in higher up, just upstream of the old campground bridge. They noted that there was a big root ball to avoid on the left and another tree past that on river right that angled into the middle of the river. A report prepared by Justin Lee describes what happened:

“We put in around 2 pm and we came around the corner... just above the first root ball strainer to be avoided on the river left. The rapid here is called Smokemont Rapid...the move was to punch the wave hole and immediately eddy out river right to avoid the first root ball that is about 10-15 yards downstream...I caught the eddy on river right. Megan came in and her stern got caught and she had to brace to right herself in the kayak. This knocked her off her line and the small eddy on river left turned her around and then she flipped. Her roll failed, which put her up against the root ball while still in her kayak....

“I could not get out of my boat from the position I was in because I had left the eddy to give her room in the eddy. While I watched her fight to free herself from her kayak, I had to paddle aggressively to avoid the tree on river right and then catch an eddy on river left.... I was able to get out about 30 feet down below where she was pinned and made my way back up to her.

“The root ball was wedged into some river-left boulders and the tree trunk itself was on the left bank. The tree was probably 20 feet long from the root ball. I was able to physically pull on Megan with all my force...but could not move her enough for her to get air. There was water flowing over her helmet at this point and the entanglement was very complex. She was able to get out of her kayak, but could not free herself from the root ball mass.

“After unsuccessfully attempting to free her, I then ran up the road around 100 yards to contact the Smokemont Park Police, who called for more help...it was around 2:30 pm. A team of firemen and other responders successfully freed her from the root ball around 3 pm. The Park Service and all those involved were extremely professional and I have nothing but good things to say about them.

“The pin was exceptionally severe. Speaking with the extraction crew, I learned that there was a tree root that came across her chest underneath the shoulder straps of her PFD. Her paddle was vertically pinned up against her and was between her back and her vest extending vertically up out the top of her vest. This explains why the rescuer could not pull her free.”

Three other kayaking fatalities occurred in the Pacific Northwest at high water. On May 8th a group of four expert kayakers put on Montana’s Yaak River. They’d waited a day for the river to drop. It had gone down, but only slightly, and at 7.6 feet was still extremely high. Partway down, they scouted a big rapid which turned out to be even bigger than it looked. Here Steve Koning, 50, flipped and swam. The others tried to help, but the river was very fast and turbulent. One observer called it “like the North Fork of the Payette, but with sharp turns between sheer-walled cliffs.” The group chased him through several huge rapids. They had him on a boat stern several times, but kept losing contact when their kayaks got surfed or crashed into riverside cliffs. Eventually the group spread out and lost him; Mr. Koning was last seen floating face down. Finally they were able to eddy out. They activated an emergency beacon and one person hiked out and ran along dirt roads until he found someone with a phone. Mr. Koning’s boat was found downstream, near the confluence with the Kootenai River; rescue teams later found his body four miles further downstream.

Legendary Idaho whitewater kayaker Jim Grossman died during a high-water run of Idaho’s rambunctious South Fork of the Salmon. The river was running at six feet, a bit high for this challenging Class V big water run, when Mr. Grossman launched with his son and a friend. They all knew the river, having paddled it many times. At this level Greyhound Bus Stopper is a huge river-wide hole. His two companions snuck down the sides, but Mr. Grossman, for reasons which are not clear, ran it down the middle. After a violent 45-second surf, he bailed out. One of his friends chased him while the other pursued his boat. He washed through Fall Creek Rapid, the next big drop, and was unconscious when a paddler caught up with him and towed him ashore with a rescue PFD tether. CPR was unsuccessful. A Garmin InReach GPS was activated, and Two Bear Air brought his body out to civilization.

The Little White Salmon is one of Washington State’s crown jewels, known for its Class V Whitewater. An early rapid, the Oregon Slot, has a tight move on the left to sneak past a giant log

jam. At flows 3.2 and lower it becomes very tight, and you can get deflected into the heinous strainer. There have been several very close calls here in the last few years. On June 22nd Mike Feeheely, 36, hit a rock, spun out, and flushed into the log jam backwards, despite paddling hard to avoid it. His helmet and life vest flushed out below. Friends hiked in and recovered his boat that evening. To date, his body has not been found. Many runs, even “easy” ones, have must-make moves that we glide past routinely. This accident reminds us all to sharpen our focus in tight places.

## RECREATIONAL KAYAKS

Recreational kayakers usually get into trouble when they don't take basic safety precautions, or find themselves in moving water that their skills and gear aren't ready for. We had two reported deaths of kayakers without life vests: Richard Lackey (76) on the Conestoga River in Pennsylvania and Bernardo Garcia (50) on Idaho's Snake River. Mr. Lackey was paddling alone, so we don't know exactly what happened. The same is true for Christopher Aubrey, who was alone when he drowned on California's Klamath River.

We have a brief report that Shane Stephenson, 45, was swept into a strainer on the Iowa River on May 7th. We also heard that Ronald Swigert, 72, died on Pennsylvania's Tuscarawas River on May 31st when his kayak capsized and he could not get free. No further details on either accident are available, and we encourage anyone with information to contact us.

## LOW-HEAD DAM FATALITIES

Low-head dams continue to take a toll on all kinds of river runners, and the total (6 incidents, 8 deaths) over the last six months is much higher than usual. On January 1st, three paddlers ran a low head dam on the Conasauga River in Tennessee. A 19-year-old, who was not wearing a life vest, drowned. On April 26th Joseph Bendix, 26, and Marianna Dukes, 23, were kayaking Oregon's Long Tom River. When the pair did not arrive at the take-out, authorities were notified. A search turned up both their bodies below a double-drop low-head dam.

On May 15th Caleb Gage, 32, was canoeing with a friend above a low-head dam on the Missouri River when their boat capsized. His friend made it ashore, but Mr. Gage, who was not wearing a life vest, washed downstream and was last seen clinging to a seat cushion as he tumbled in the hydraulic. Firefighters spotted his body floating in the river when he resurfaced three days later. On June 25th a dam on Michigan's St Joseph's River was the scene of another drowning. Witnesses saw Daniel Forsythe, 26, kayak over the dam, and when he did not resurface, they called 911. A dive team located his body; the fact that he did not float suggests that, once again, a life vest was not worn.

There was another dam-related death at the wing dam on the Delaware River near Lambertville, New Jersey. This structure does not go all the way across the river, but extends out from the sides and leaves the center open. At low flows the “wings” are out of the water, and a rapid here is popular with local paddlers. On May 22nd the river was running high, 16,000 cfs at Trenton, overtopping the wings and creating a nasty hydraulic. Jonathan Gentile, 38, was paddling with his father in recreational kayaks. They were above the river right wing when they both washed over. Both were wearing life vests, but the younger Mr. Gentile recirculated at the base of the dam and drowned. His father was uninjured.

There was a double drowning at Boshers' Dam on Virginia's James River. It could have been a lot worse. The river was running at nine feet on May 30th, a very high level, when a group of 12 people in rafts, duckies, and SUPs launched on a flatwater stretch upstream. The entire group washed over the dam, the scene of many drownings over the past few decades. Newspaper photos show several craft recirculating in the hydraulic. People were scattered all over the river. Some were rescued by nearby kayakers; others were picked up later by emergency responders. Two women, Lauren Winstead, 23, and Sarah Erway, 28, drowned. Kayakers joined the search for their bodies over the next week.

## CANOES

There were three canoeing deaths in the last six months. In each case, the paddler was not wearing a life vest, an oversight which probably cost him his life. On May 7th Justin Grossman disappeared after a brief struggle when his canoe flipped on the Willamette River in Oregon. Then, on May 18th, Brian Hanson, 56, was reported missing after his canoe capsized at Clabber Creek Shoals on the Buffalo National River in Arkansas. His partner survived by holding on to their canoe. Finally, an unidentified 25-year-old man disappeared on June 4th after his canoe flipped on Ohio's Tuscarawas River. His partner managed to swim ashore and summon help.

## COMMERCIAL RAFTS

Commercial outfitters had four deaths over the past six months. Two, on the Ocoee and Arkansas Rivers, were probably the result of heart attacks during swims. On June 11th a guest on a Grand Canyon rafting trip who had just hiked in to join a trip at Phantom Ranch was swimming in the river to cool off when the current pulled her out into the center where she disappeared. Unfortunately, no life vest was worn. On June 15th there was a drowning during a high-water raft trip on the North Fork of Washington's Nooksack River. The raft flipped at The Nozzle; a guide and three guests got ashore, but a 33-year-old man and his son did not. First responders located their bodies. There is no mention of a backup boat in any of the reports.

# SAFETY

Samuel Martin, 45, an experienced Hudson River guide, died after his raft hit a rock in the run-out of the Hudson Gorge, which is straightforward Class II-III. Mr. Martin and two others were ejected into the river and he was unresponsive when brought back into the boat. The coroner later determined that the cause of death was cardiac arrest.

## PRIVATE RAFTS

This year the private rafting accidents statistics tell a grim story: 11 out of 12 fatalities were out West. Seven out of eleven were due to flush drowning, a category for those who drown swimming whitewater while wearing a life vest when there are no other complications. It's most common in high water years like this.

On March 26th a seven-boat private trip encountered trouble in Hance Rapids in Arizona's Grand Canyon. This is a long, powerful Class IV rapid. Mary Kelly, 68, and husband Randy had been rafting for over 40 years and knew the river well. Tom Martin describes the accident that claimed her life:

"During the scout, the plan was to pull hard right to left in a downstream ferry, passing above Emilio's Hole...named for Emilio Solares who drowned there in 1994. As Randy pulled away from shore, he delayed...a few seconds prior to the start of his downstream ferry left. When the hole came into view, he saw too late that he would not achieve his intended entrance. The boat dropped sideways into Emilio's Hole and flipped, throwing him and his passenger, Mary, into the river. While their 18-foot rental raft stayed upside down in the hole, Mary and Randy were flushed out from under the raft and began to swim Hance Rapid.... The next boat was not far behind Randy's and saw no swimmers.... The third

boat, not far behind the second, was rowed by Mary and Randy's son David. He spotted a helmet downstream and gave pursuit.

Randy recounted that by the time he cleared the large holes at the bottom of the rapid, he was panting hard. He made eye contact with Mary and shouted to her to get ready for Son of Hance.... At the bottom...and still gasping for breath, Randy saw Mary floating face down in the water about 40 feet away as David closed in on Randy. David's passenger reached out, grabbed Randy's jacket and pulled him in the boat as David changed course and now headed for Mary. David quickly pulled Mary out of the river and up on the raft's front deck. She was unresponsive. They opened her PFD and his passenger started CPR while David worked the boat to a small sandy beach on river right. He then swapped out with the passenger to continue CPR.

Sadly, this effort was unsuccessful.

On June 21st two Shredders (two-man paddlecats) launched on Wyoming's Class IV Gros Ventre River. The river was running at 1914 cfs, which is quite high. At Hermit rapid one raft flipped; one of the two paddlers got back into the raft and the two chased after Steve Davis, 55. They were unable to catch up with him, and called for help. He was found hung up on a log jam some distance downstream.

This year the stretch of the Middle Fork of the Salmon above Dagger Falls was unusually high, with more than the typical number of dangerous strainers. Robert Gray, 63, was floating the Middle Fork near Boundary Creek on May 24th when his raft struck a log jam and tossed him into the 40-degree water. Mr.



Hance Rapid on the Grand Canyon;  
Emilio's Hole circled in red.  
PHOTO BY TOM MARTIN

Gray, tired and cold, was carried away by the swift current. His body was found some distance downstream, pinned in another logjam. There have been seven other strainer-related deaths on this section since the year 2000. Kevin Lewis comments: "This section collects a ton of wood due to forest fires and the winter avalanches that shear off the dead trees and deposit them in big snow bridges across the stream. When the snow melts out in the spring the trees remain until a high-water flush event happens and moves the wood downstream. The problem is that we have fewer and fewer flush events and more wood is accumulating in the Marsh Creek section."

There were three flush drowning deaths in Colorado involving private rafts, two on the Arkansas and one on the Poudre. Details are sketchy, but there were two things they all had in common: high water and one-boat trips. High water makes a flip more likely, and one-boat trips mean that there is no backup when that happens. Two similar accidents occurred in Montana, on Rock Creek and the Middle Fork of the Flathead. In both cases the rivers were extremely high.

Two other deaths could have been prevented if the victim had been wearing a life vest. On April 6th three fishermen took a raft out to an island on the Connecticut River near the Vermont state line. Partway through the day, the raft broke loose, and Jonathan Zukowski, 31, entered the water to grab it. He lost his footing slipped underwater, and disappeared. On June 5th Julie Freeman, 44, disappeared after her raft flipped on Montana's Stillwater River. Four others in her boat got ashore safely. Her body was found in the Yellowstone River, miles downstream.

## RIVERBOARDS

Riverboards accounted for two moving water deaths this year. One occurred on April 30th, at the Bend Whitewater Park on Oregon's Deschutes River. Ben Murphy, 17, was surfing the park's adjustable wave feature when he fell of his board and was trapped underwater. An investigation showed that the tether on Mr. Murphy's board got tangled in the wave adjustment mechanism, and that this was responsible for his death. The park has modified the wave mechanism to eliminate any gaps that could catch or trap someone, and the wave reopened in mid-June.

On June 15th Kimberly Moore, 42, was SUPing with a group of six others on the Colorado River in Grand Junction, CO when her board got caught in debris pinned on the 5th Street bridge. Ms. Moore was not wearing a life vest, and her tether did not have a reliable quick release. She was pulled underwater and held there until first responders recovered her body.

## NEAR MISSES AND RESCUES

This spring several kayakers saved the lives of wayward citizens who found themselves struggling for their lives in whitewater. On

April 4th a two playboaters rescued a man who was drowning at the whitewater park on the Chattahoochee River in Columbus, GA. Clay Wright said that the man "appeared, bouncing over the rocks in the middle clutching a bag...in jeans, boots, and a winter jacket despite the 70-degree weather, and disappears in the eddy below...he yells 'help—I can't swim' but he's in that boily middle eddy and goes under again as we get there. I can see the tan jacket and white bag waving around under my boat, but can't reach down far enough to grab on.... We drift down following his path—hoping he'll surface before the big seam below. I saw Haley bending over her bow struggling to stay upright—she snagged him! As she held him up, I bulldozed them out of the current to a rock in the middle of the river. Rachel Scheffe ran back to call it in and 20 minutes later she was guiding an EMS raft crew down and ferrying him to shore."

On April 25th Darren Bade was finishing a surf session on Ohio's Cuyahoga River when he heard cries for help. A child wading in the river a quarter-mile upstream had slipped and was carried away by the current. His mother, who could not swim, jumped in after him and the two began fighting for their lives. "I was kayaking here, and I was hiking back up the river when somebody was yelling that there [were] some people in the river." Darren said. "I quickly got back in [the water]...and assisted them to get out of the water and on the island until the fire department could come over...the girl didn't look like she was doing real well. By the time I got to her, I didn't know if she was breathing or not." He held onto them until rescue swimmers from the Kent Fire Company arrived, followed by a rescue boat to bring them ashore. Both parties were fine after rewarming.

## YOU CAN HELP!

American Whitewater needs your help to gather accident reports for us to share with other paddlers. First-person accounts from experienced paddlers, newspaper articles, and online posts are all important. Since media articles are often inaccurate or incomplete, clarifying comments from paddlers familiar with the area are really useful. While serious incidents involving skilled whitewater paddlers are rare, they often have important things to teach us. What we learn may help someone avoid trouble, or show how to better manage emergencies. Accurate accounts of these accidents also keep malicious rumors from at bay, a useful feature in this age of Internet gossip.

To report a whitewater accident, near miss, or serious injury, please go to the Safety page on [americanwhitewater.org](http://americanwhitewater.org), click "report an accident," and enter the information. Or you can email me at [ccwalbridge@cs.com](mailto:ccwalbridge@cs.com) or message "Charlie Walbridge" on Facebook. Feel free to share newspaper articles, internet links, chat room posts, or even rumors! I'm not an "investigator," but I often research sketchy reports online to find out what happened. I can also help you prepare an accident report, if needed.

# LETTER TO THE EDITOR

**D**EAR EDITOR,

I am an avid sea kayaker, an expert on heat and cold stress, an internationally recognized authority on cold water safety, and the founder and director of the National Center for Cold Water Safety. I am writing to alert American Whitewater, its members, and the whitewater paddling community in general to a deceptively dangerous threat: cold water.

Defining cold water has important safety implications because it's the baseline for recommending when paddlers should wear thermal protection like wetsuits or drysuits. The fact that there isn't a universally accepted definition of cold water has led to conflicting recommendations about thermal protection—a situation that compromises safety.

In 1983, the US Coast Guard formally defined cold water as anything below 60 °F, but as the result of a 1998 Congressional inquiry, they subsequently raised their threshold to 70 °F. The American Canoe Association (ACA) sets its thermal protection threshold at 60 °F, and American Whitewater (AW) recommends 50 °F. I believe and, as I will document, scientific research supports, that AW's threshold should be raised to 70 °F.

The National Center for Cold Water Safety advises paddlers to treat any water below 70 °F with caution. That's also the point at which we recommend thermal protection like wetsuits or drysuits. There's a very sound rationale for why our 70 °F recommendation differs from the ACA and AW guidelines.

First, we know from scientific research that a person's ability to control their breathing begins to decline at water temperatures below 77 °F. That's why the International Olympic Committee mandates that pool temperatures for swimming competition be maintained between 77-82 °F. Second, this research also demonstrates that life-threatening symptoms of cold shock reach maximum intensity between 50-60 °F.

Cold shock is a lot more complicated and dangerous than just gasping for air. Without thermal protection, the instant that cold water makes contact with a large area of your skin, you'll experience a number of potentially lethal shock responses. These fall into three categories which are discussed in detail on our website: [www.coldwatersafety.org](http://www.coldwatersafety.org).

- Loss of breathing control
- Heart and blood pressure problems
- Impaired mental ability

For paddlers, the most significant of these is loss of breathing control. Swimming through rapids while being repeatedly submerged is both physically demanding and mentally stressful. More importantly, if you can't hold your breath in that situation, you're going to drown.

When we say that cold shock results in a "total loss of breathing control," we're referring to the following physiological responses:

First, one or more initial gasps that are full-lung inflations. If you gasp underwater, you will immediately drown.

Second, gasping is directly followed by hyperventilation. This interferes with swimming ability and makes holding your breath extremely difficult.

Third, the average length of time that a paddler can breath-hold is dramatically reduced in cold water. In water below 60 °F it's one third of what it is in warmer water. The lower the water temperature, the greater the problem. One study of volunteers in 41 °F water found average breath-hold time reduced from 45 to 9.5 seconds, with one subject reduced to 0.2 seconds. Volunteers participating in that test were relaxed and starting from a resting aerobic state, not swimming through rapids, potentially exhausted before even exiting their boat, and struggling to keep their heads above water.

Considering these facts about cold shock, it's easy to see why unprotected whitewater paddlers who wind up swimming in 50-60 °F water are at elevated risk of drowning. That's why the National Center for Cold Water Safety recommends thermal protection below 70 °F and why we're urging American Whitewater to do the same and raise their current recommendation from 50 °F to 70 °F.

For more information on cold water safety, please visit our website.

Sincerely,  
Moulton Avery



## REFERENCES:

Keatinge, W.R. and Nadel, J.A. Immediate Respiratory Response to Sudden Cooling of the Skin. *J. Appl. Physiol.* 20:65-69, 1965.

An excellent publication with references embedded in the text is *Survival In Cold Waters (2003 / 2007)*, <https://apps.dtic.mil/sti/pdfs/ADA519342.pdf> which was authored by Dr. Chris Brooks and published by Transport Canada. On pp16, in the section on cold shock, Dr. Brooks notes the following with respect to water temperature:

“...it is now known that the cold shock response begins at water temperatures below 25 °C (Reference 90) and peak at a temperature between 10-15 °C” (References 154 and 155).

154. Tipton, M.J., Stubbs, D.A, Elliott, D.H. Human Initial Responses to Immersion in Cold Water at Three Temperatures and after Hyperventilation. *J. Appl. Physiol.* 70(1):317-322, 1991.

155. Tipton, M.J. The Relationship Between Maximum Breath Hold Time in Air and the Ventilating Responses to Immersion in Cold Water. *Eur. J. Appl. Physiol.* 1992: 64: 426 – 429.

## RESPONSE TO MOULTON AVERY'S LETTER ON COLD WATER SAFETY By EVAN STAFFORD

American Whitewater first adopted its whitewater safety code in 1959 and has maintained it since as one the premier sources for river safety information. It was most recently updated in 2005. Maintaining an up-to-date and accessible safety code for river recreation is central to American Whitewater's mission and this spring we were awarded a grant from the Coast Guard to revisit, redesign, update, and re-package the Safety Code for easy consumption, distribution, and availability in an effort to maximize its educational reach and impact. Opening this process, American Whitewater will conduct a review of the safety code by expert river safety and rescue professionals this fall. This invitation-based review will include an online collaborative editing and commenting exercise and a webinar-based consensus-oriented discussion of significant topics. It will eventually review a draft revised Safety Code, and formally adopt the revised language and graphics.

We thank Moulton Avery for his recent well-researched and thoughtful letter to the editor regarding the temperature threshold at which American Whitewater recommends thermal protection in cold water in our safety code. Avery makes several compelling points about the danger of cold whitewater and provides much good insight into the temperature threshold at which cold water should be defined. During our process for revising the safety code, we intend to take a deliberate look at our recommendations for cold water and ambient air temperature, and plan to enter Mr. Avery's comments into our discussion. Our current safety code on this topic reads as follows:

“Cold. Cold drains your strength and robs you of the ability to make sound decisions on matters affecting your survival. Cold-water immersion, because of the initial shock and the rapid heat loss which follows, is especially dangerous. Dress appropriately for bad weather or sudden immersion in the water. When the water temperature is less than 50 °F., a wetsuit or drysuit is essential for protection if you swim. Next best is wool or pile clothing under a waterproof shell. In this case, you should also carry waterproof matches and a change of clothing in a waterproof bag. If, after prolonged exposure, a person experiences uncontrollable shaking, loss of coordination, or difficulty speaking, he or she is hypothermic, and needs your assistance.”

We believe there are opportunities for improving the clarity of our information concerning cold water and ambient temperature in this description, and the references to potential gear options are fortunately mostly relics of the past, as we've become accustomed to the wider availability of a broad range of whitewater-specific paddling gear suitable for an equally broad range of temperatures. We believe there is an opportunity to make a stronger statement, specifically regarding the danger of cold water above 50 °F during this revision and anticipate making a new statement which includes a higher temperature recommendation for wearing thermal gear, identifying more current gear options and their intended use, and potentially highlighting some of the research Avery brought to our attention regarding cold shock at temperatures above 50 °F. Advice that doesn't change over the decades: paddlers should dress for the conditions, dress to swim, and dress for an in-water rescue.

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*For more information about making a bequest to American Whitewater*  
CONTACT Bethany Overfield : 1.866.262.8429 or [bethany@americanwhitewater.org](mailto:bethany@americanwhitewater.org)

# AFFILIATE CLUBS

## AW'S ORIGINAL PURPOSE

BY BETHANY OVERFIELD

American Whitewater's original purpose since 1954 has included distribution of information among its Affiliate Clubs. We have over 100 current AW Club Affiliates and they are all doing great work on your behalf; if you don't belong to a club, consider joining one.

American Whitewater has two levels of Affiliate Clubs - a Supporting Affiliate Club or an Affiliate Club. Affiliate Clubs that choose AW's \$100 annual level are recognized in the AW Journal, on our website club page, and in our annually published Honor Roll. In order to be recognized at this level, a Club needs to maintain an annual \$100 contribution.

Affiliate Clubs that choose AW's \$400 Supporting Affiliate Club annual level are recognized in the AW Journal, on our website club page, and in our annually published Honor Roll as well as being listed as sponsors of an AW stewardship presentation each year. In order to be recognized at this level, a Club needs to maintain an annual \$400 contribution. A Supporting Affiliate Club can revert to the \$100 Affiliate Club annual level at any time.

An Affiliate Club that is already being recognized as an AW Lifetime member is recognized in the annual Honor Roll as a Lifetime member. They do need to contribute either at the \$100 or the \$400 level annually to be recognized as an Affiliate Club in the AW Journal and under the Affiliate Club heading of the published Honor Roll. Is your club missing from this list? It might have expired. Contact me at [membership@americanwhitewater.org](mailto:membership@americanwhitewater.org) to square your club membership away!

## SUPPORTING AFFILIATE CLUBS

### Alaska

Fairbanks Paddlers, Fairbanks

### Arkansas

Arkansas Canoe Club, Little Rock

### Colorado

Dolores River Boating Advocate, Dolores  
Colorado Whitewater Association, Denver

### Georgia

Georgia Canoeing Association Inc, Winston

### Kentucky

Bluegrass Wildwater Association, Lexington  
Viking Canoe Club, Louisville

### New York

KCCNY, Brooklyn

### North Carolina

West Asheville Canoe and Kayak Organization (WACKO), Asheville

### Ohio

Keelhaulers, Cleveland

### Oregon

Oregon Kayak and Canoe Club, Portland

### South Carolina

Foothills Paddling Club, Greenville  
Palmetto Paddlers, Columbia

### Washington

Paddle Trails Canoe Club, Seattle  
Washington Kayak Club, Redmond  
Washington Recreational River Runners, Renton

## AFFILIATE CLUBS BY STATE

### Alaska

Nova River Runners Inc., Chickaloon

### Alabama

Coosa River Paddling Club, Wetumpka  
Huntsville Canoe Club, Huntsville

### Arizona

Outdoors Unlimited, Flagstaff

### California

Redwood Empire Paddlers, Santa Rosa  
River City Whitewater Club, Sacramento  
Smith River Alliance, Crescent City

### Colorado

Diversify Whitewater, Fort Collins  
Friends of the Yampa, Steamboat Springs  
High Country River Rafters, Wheat Ridge  
Rocky Mountain Outdoor Center, Buena Vista  
Royal Gorge River Initiative Org, Canon City  
San Miguel Whitewater Asso, Telluride  
Team Colorado Whitewater Racing Club, Longmont  
Upper Colorado Private Boaters Asso, Glenwood Springs

### Connecticut

Housatonic Area Canoe & Kayak Sq, Lakeville

### Delaware

AMC Delaware Valley Chapter, Oaks (PA)

### Idaho

Idaho Whitewater Association, Boise

### Indiana

Hoosier Canoe Club, Brownsburg  
Ohio Valley Paddlers, Evansville

### Iowa

Iowa Whitewater Coalition, W. Des Moines

### Kentucky

Elkhorn Paddlers, Lexington

### Maine

Penobscot Paddle & Chowder Society, Freeport

### Maryland

Blue Ridge Voyagers, Rockville

### Minnesota

Northland Paddlers Alliance, Duluth  
Rapids Riders, Eagan

### Missouri

Missouri Whitewater Association, St. Louis  
Ozark Mountain Paddlers, Springfield

### Montana

Beartooth Paddlers Society, Billings

### Nevada

Sierra Nevada Whitewater Club, Reno

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Adobe Whitewater Club of New Mexico, Albuquerque

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AMC Delaware Valley Chapter, Oaks (PA)

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### North Carolina

Carolina Canoe Club, Raleigh  
Landmark Learning, Cullowhee  
Mind Body Play, Asheville

### Ohio

Friends of the Crooked River, Akron

### Oregon

Lower Columbia Canoe Club, Portland  
Northwest Rafters Association, Roseburg  
Oregon Whitewater Association, Portland  
Willamette Kayak and Canoe Club, Corvallis

**Pennsylvania**

AMC Delaware Valley Chapter, Oaks (PA)  
 Canoe Club of Greater Harrisburg, Harrisburg  
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**Tennessee**

Appalachian Paddling Enthusiasts,  
 Jonesborough  
 Chota Canoe Club, Knoxville  
 Clean Water Expected in East Tennessee,  
 Sevierville  
 East Tennessee Whitewater Club, Oak Ridge  
 Eastman Recreation Club, Kingsport  
 Tennessee Scenic River Association, Nashville  
 Tennessee Valley Canoe Club, Knoxville

**Utah**

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 Utah Whitewater Club, Salt Lake City

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 Canoe Cruisers Association, Middlebury  
 Coastal Canoeists, Richmond  
 Float Fishermen of Virginia, Roanoke

**Washington**

Northwest Whitewater Association, Spokane  
 Spokane Canoe & Kayak Club, Spokane  
 Yakima River Runners, Selah

**Washington, DC**

Canoe Cruisers Association

**West Virginia**

Friends of the Cheat, Kingwood  
 Mason Dixon Canoe Cruisers, Bolivar  
 WV Wildwater Assn, S. Charleston

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North East Wisconsin Paddlers, Inc., Neenah  
 Rapids Riders, Eagan  
 Sierra Club/John Muir Chapter, Madison

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American Packrafting Association, Wilson  
 Jackson Hole Kayak Club, Jackson

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AW offers a discounted Affiliate Club membership of \$25, a \$10 savings. If you are renewing your AW membership or joining as a new member, select the Affiliate Club Discounted Personal Membership online at <http://americanwhitewater.org/content/Membership/join-AW/> Or, if you are renewing or joining by mail or telephone just mention the name of the Affiliate Club you belong to and you can take advantage of the \$25 membership.

A list of AW Affiliate Clubs can be found on our website at <http://americanwhitewater.org/content/Membership/join-AW/>. If you do not see your Club listed here please encourage them to renew their Club membership or to join AW as a new Affiliate Club. Your Club's membership and your personal membership enable our staff to be active and engaged in the process of river stewardship. When you join or renew your membership your support is helping to meet the many challenges whitewater rivers face.

If you have any questions about the Affiliate Club membership, please contact me. I can be reached at 866\_BOAT-4AW or [membership@americanwhitewater.org](mailto:membership@americanwhitewater.org).

## JOIN AMERICAN WHITewater AS A CLUB AFFILIATE!

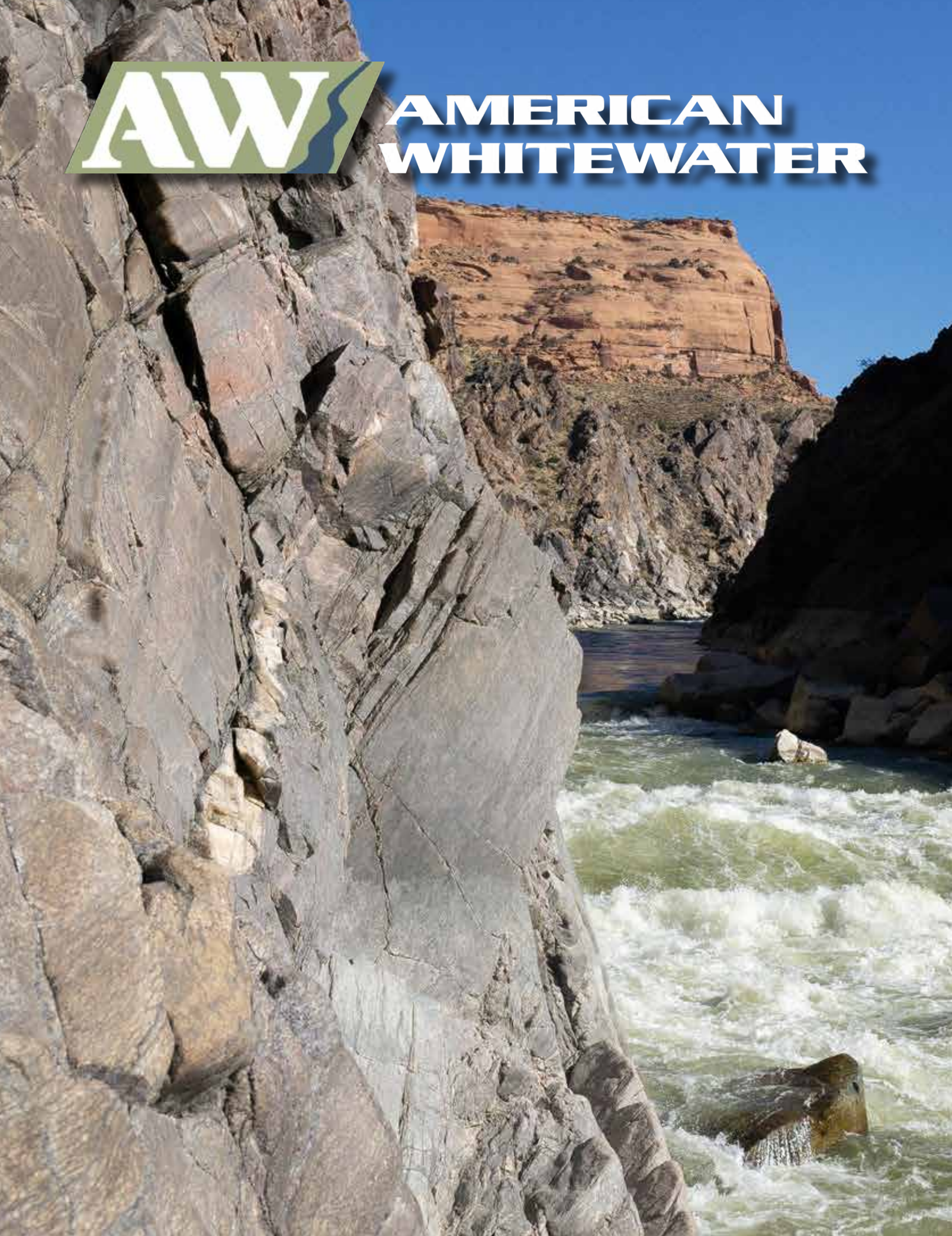
### 10 REASONS TO JOIN AW AS AN AFFILIATE CLUB

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8. Post Club information on the AW Website to help paddlers find you.
9. Gain Club satisfaction from lending support to AW's stewardship efforts.
10. Improve your club members river karma.

For more information, contact Bethany Overfield at [membership@americanwhitewater.org](mailto:membership@americanwhitewater.org) or sign-up on line at [www.americanwhitewater.org/membership](http://www.americanwhitewater.org/membership).



# AMERICAN WHITEWATER



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# Whitewater River Defenders

Since 1954

Big Creek, NC – By Evan Stafford

