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THE THREAT  
OF COAL  
MINING  
FROM INDONESIA  
TO  
NORTH CAROLINA

VOLUME 10, ISSUE 2



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John Paul DeJoria,  
Co-founder and Chairman of the Board  
Photographed with his son (and Joe)

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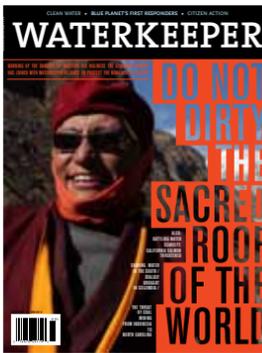
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It's why Toyota proudly supports the Waterkeeper Alliance for its stewardship of the world's waterways.

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**ON THE COVER:**  
His Holiness the Gyalwang Drukpa, the spiritual leader of more than 30 million followers, believes there is a strong connection between how we treat the environment and how we treat each other.

Design by BoyBurnsBarn/John Turner  
Photo by Drukpa Publications

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M A G A Z I N E



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The official magazine of Waterkeeper Alliance

**MISSION:** Waterkeeper Alliance connects and supports local Waterkeeper programs to provide a voice for waterways and communities worldwide.

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1.5 million  
square miles of watersheds

25 countries

# Who Is Waterkeeper Alliance?

more than 222 waterways

Photos: Tijuana Waterkeeper

**Tijuana Waterkeeper Margarita Diaz** is working to protect the Tijuana River Watershed (TRW), which straddles the U.S./Mexico border and is home to more than 1.5 million people, as well as to many rare, protected and endangered plant and animal species. South of the border, as the city of Tijuana succumbs to accelerated urban growth, its rivers, wetlands, and beaches have become a marine treasure buried under concrete. A life-long steward of the environment, Margarita Diaz refused to stand by idly, as growth threatened her local rivers, wetlands and beaches – all vital to the health of the community and the environment. After leaving a career in architecture and sustainable housing to become the Tijuana Waterkeeper, Diaz's contagious passion continues to unite communities across borders to take a collective stand, demanding strong environmental laws, enforcement, and transparency.

Every day around the world, polluters are poisoning our waterways and the public suffers the consequences. Waterkeepers are on the water fighting to protect everyone's right to swimmable, drinkable, fishable water. We are the world's fastest growing environmental movement and a powerful force working to protect and defend our most precious resource, both locally and globally.

Visit [Waterkeeper.org/donate](http://Waterkeeper.org/donate) to join Waterkeeper Alliance as a supporting member and make a difference in the fight for clean water.

You can also join Waterkeeper Alliance by mail. Send your check, payable to Waterkeeper Alliance, to: WATERKEEPER membership, 17 Battery Place Suite 1329 New York, NY 10004 or contact us at [info@waterkeeper.org](mailto:info@waterkeeper.org)



Waterkeeper Alliance is a 501(c)(3) non-profit organization. Your \$10 contribution or more entitles you to a one-year subscription to WATERKEEPER magazine, which has annual subscription value of \$12. The balance of your contribution is tax deductible to the extent of the law.

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# Ripples



WILD SALMON FILL OUR FREEZERS, THEY SHAPE OUR CULTURES, AND THEY PRODUCE COUNTLESS JOBS AND DOLLARS FOR OUR LOCAL ECONOMIES.

THE STREAMS FEEDING THE CHUITNA RIVER, INCLUDING MIDDLE CREEK, ARE HOME TO SOME OF THE LAST WILD SALMON ON THE PLANET. PHOTO BY: SAM WEIS

BOB SHAVELSON / INLETKEEPER

## COURT KEEPS ALASKAN STREAM FLOWING AND SALMON JUMPING

Concerned Alaskans formed Cook Inletkeeper, on the state's south-central coast, in the wake of the Exxon Valdez oil spill, and 25 years after that disaster, it is still leading the fight to protect some of Alaska's most precious resources – none more precious than wild salmon. The state is home to some of the last remaining wild salmon on the planet, and protecting them is a mainstay of Cook Inletkeeper's work.

"Healthy wild salmon are the heart of our Alaskan identity," says Cook Inletkeeper Bob Shavelson. "Wild salmon fill our freezers, they shape our cultures, and they produce countless jobs and dollars for our local economies."

Recently Inletkeeper joined local fishermen, hunters and property-owners in securing a precedent-setting court decision requiring the state to move ahead with an in-stream flow reservation in an important salmon stream threatened by the proposed Chuitna coal strip mine in Upper Cook Inlet. It would be the largest coal strip mine in Alaska and the first in the state's history to mine through and completely destroy a wild Alaska salmon stream.

A coal company serving Asian markets – PacRim Coal, a Delaware corporation funded by Texas investors – had filed papers to remove the entire streambed, bank-to-bank to a depth of 350 feet, obliterating

the underlying water flow paths essential for the survival of migrating and spawning salmon. But in a case brought by the Chuitna Citizens Coalition and Cook Inletkeeper against the Alaska Department of Natural Resources, the judge ruled that the state had "unreasonably withheld agency action" with regard to the plaintiffs' applications for in-

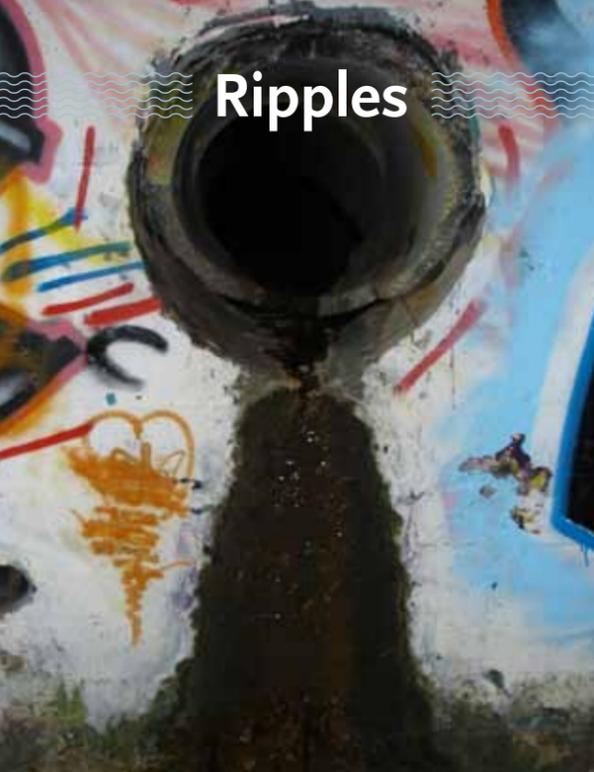
stream water rights and that their constitutional right to due process had been violated. A strong team of experts enlisted by Inletkeeper demonstrated it is impossible to rebuild a salmon habitat after such destructive strip-mining.

Yet these streams remain in danger, not least because Alaska Governor Sean Parnell, who had promised he would "never trade one resource for another," introduced legislation that would exclude Alaskans from important natural-resource decisions, undermining Inletkeeper's efforts to reserve water in salmon streams. In response, Inletkeeper helped spearhead a statewide organizing effort among Alaska Natives, sport and commercial fishermen and small-business owners, prompting thousands of comments to lawmakers and standing-room-only crowds at public hearings. "As a result, the bill was killed in the legislature this session," says Shavelson. "But it will be back in a different form, because Alaska remains a state more beholden to large mining, oil and gas corporations than to the people and communities who rely on healthy, sustainable fisheries."

Noting that wild-salmon runs have all but disappeared across the lower 48 states, Shavelson states the case succinctly:

"The last line in the sand is Alaska."





MILWAUKEE RIVERKEEPER HAS BEEN TESTING OUTFALLS IN MILWAUKEE'S RIVER-SYSTEM FOR E. COLI, ENTEROCOCCUS AND A HUMAN-SPECIFIC STRAIN OF BACTERIOIDES TO BETTER UNDERSTAND THE FLOW OF BACTERIA FROM LOCAL RIVERS.



PHOTO BY: MILWAUKEE RIVERKEEPER

## KEEP FINDING AND FIXING SEWAGE CONTAMINATION IN MILWAUKEE, SAYS EPA

Milwaukee Riverkeeper has been working with the University of Wisconsin-Milwaukee School of Freshwater Sciences' Professor Sandra McClellan and her lab since 2008, monitoring and identifying sources of sanitary-sewage contamination of the stormwater systems in targeted areas of the Menomonee and Kinnickinnic River watersheds. But the work is hardly finished. So it is good news that the EPA Great Lakes Area of Concern Program has issued a new \$468,000 grant that will extend the collaboration through 2014 and 2015.

The Riverkeeper and University lab staff will continue to collect one dry-weather and three wet-weather samples from stormwater outfalls at bacteria "hot spots" in both watersheds. Samples are tested for E. coli, enterococcus and, using DNA analysis, a human-specific strain of bacterioides. The grant will also allow testing of surface waters to better understand the flow of bacteria from local rivers. The purpose is to find and eliminate the sources of sewage contamination in local rivers, which, along with associated viruses and pathogens, are threatening public health and keeping local waterways from the "fishable, swimmable" goals of the Clean Water Act.

Sewage contamination from three area rivers – the Menomonee, Kinnickinnic and Milwaukee – is a major cause of Lake Michigan beach closings in Milwaukee. Bacteria loads in

local streams greatly exceed what would be expected simply from stormwater runoff, and these loads have increased over the past two decades while other water-quality measures have improved – which indicates that bacteria is coming from leaking and failing sewage infrastructure.

Analysis of data from 2008 to 2013 shows that approximately 150 of the 308 stormwater outfalls that were sampled multiple times produced at least one positive test for human-sewage contamination. In 23 outfalls, human bacteria were found in every sample. Given the huge extent of the problem, the partners are focusing their efforts on outfalls with consistently high results for human bacteria, and on pipes that flow in dry weather, a sure indicator that they are constantly discharging sewage to area waterways.

The data that is collected is helping Milwaukee and surrounding municipalities to better plan and conduct diagnostic testing of failing stormwater sewer systems, using such methods as dye testing and smoke testing, and then to repair the damaged infrastructure. In the past year, six projects have been undertaken to repair some of the worst conditions. The team is also working with the Milwaukee Metropolitan Sewerage District to locate broken pipes and illicit connections that contribute to contamination.

"Total Maximum Daily Load" pollution-reduction plans targeting bacteria in the three rivers are being drafted and will likely be approved by this summer. In addition, a new stormwater permit for the Menomonee River watershed – one of only four in the United States – requires all the municipalities it serves to develop a common protocol for targeting sources of human sewage contamination to the stormwater sewer systems.

KINNICKINNIC RIVER STORMWATER SAMPLING RESULTS (HIGHEST HUMAN BACTERIOIDES COUNTS PER OUTFALL) 2013

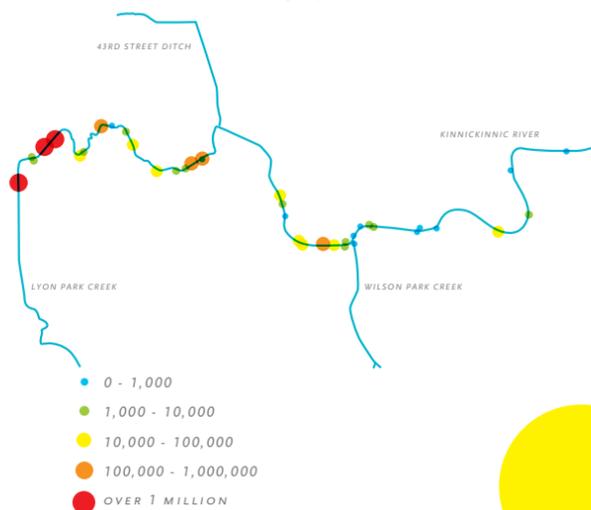
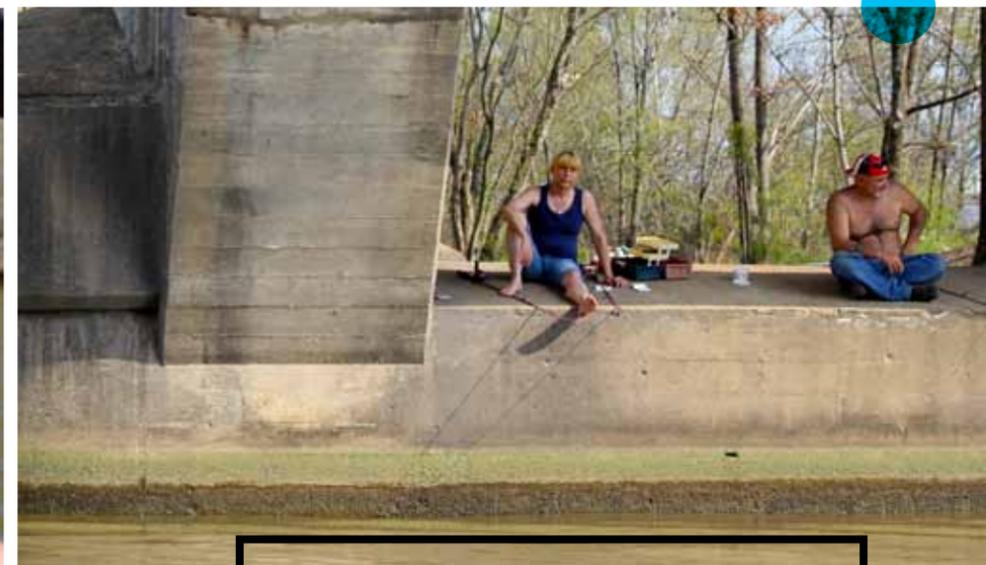


PHOTO BY: COOSA RIVERKEEPER



DESPITE 26 FISH ADVISORIES OVER THE LAST 12 YEARS THAT FISH AT SEVERAL COOSA RIVER LOCATIONS ARE UNSAFE TO EAT, ANGLERS HAVE REMAINED LARGELY UNAWARE OF THE PROBLEM.

## SOMETHING FISHY ON ALABAMA'S COOSA RIVER

Fishermen along Alabama's Coosa River have been living dangerously. They've been eating the fish they catch.

Since 2002 the state's Department of Public Health (ADPH) has issued 26 fish-consumption advisories reporting PCB- and mercury-contamination on the river and warning that fish at various locations are not safe to eat. But with concerns that the advisories aren't being properly distributed to anglers, Coosa Riverkeeper has begun a project to educate them about fish-consumption advisories and help reduce their exposure to contamination. Called "Clean Fish, Healthy Communities," it is funded by the Alabama Chapter of the Sierra Club.

An initial goal of the project was to survey the fishermen to determine their fish-preparation and -consumption habits and their awareness of ADPH's advisories. More than 50 fishermen

THERE IS A SUBSTANTIAL LACK OF AWARENESS OF ADVISORIES AMONG THE ANGLERS, MANY OF WHOM HAD CAUGHT AND CONSUMED RIVER FISH FREQUENTLY FOR YEARS.

were interviewed at public-fishing locations at Logan Martin Dam and Neely Henry Dam on the Coosa. Results showed that there is a substantial lack of awareness of advisories among the anglers, many of whom had caught and consumed river fish frequently for years. While 40 percent of respondents said they were aware that fish-consumption advisories exist, less than half of those had even a vague idea of what advisories say, and only eight percent of all respondents had a clear idea. These numbers are especially troubling because 91 percent of the respondents said that, if they were aware of the advisories, they would heed them. Clearly, changes are needed to ensure the effective distribution of advisories to anglers.

ADPH, in fact, is not the only state agency involved in the monitoring process. The Alabama Department of Environmental Management catches the fish that ADPH tests. And ADEM's fish-collection standards and determination of what sections of streams are safe or unsafe have been controversial. Their advisories do not consider the seasonal migration of some fish up and down specific reservoirs; moreover, state law does not require the agency to post advisories at popular public fishing-spots. Such postings are the most effective means of alerting anglers of contaminated fish.

Guaranteeing proper signage for fish consumption advisories may require state passage of "fishermen right-to-know laws," which would mandate placement of consumption advisories at popular fishing locations and make it a crime to remove or deface advisory signs.



PHOTO BY: WATERKEEPERS BAJA CALIFORNIAS

ON WORLD WATER DAY, THE SIX GROUPS THAT MAKE UP WATERKEEPERS BAJA CALIFORNIAS UNVEILED IDENTICAL COMMUNITY MURALS AND INVITED RESIDENTS TO WRITE WHY THEY LOVE WATER. AND ON LOCAL BEACHES, THE CELEBRATION INCLUDED GAMES SUCH AS SACK RACING.

## IN BAJA CALIFORNIAS, PAINTING, SINGING, DANCING AND MARCHING FOR CLEAN WATER

To celebrate World Water Day, March 22nd, in Mexico and raise awareness about the necessity of clean water, the Waterkeeper organizations of Waterkeepers Baja Californias launched their "I Love Water" ("Yo Amo El Agua") campaign by unveiling identical interactive community murals in Tijuana, Puerto San Carlos, La Paz, Cabo San

Lucas, Cabo Pulmo and La Ribera. Each mural asked, "Why do you love water?" and invited the public to write, paint, draw or scribble their answers.

Every community participated in its own distinctive way. Tijuana Waterkeeper hosted a 1700-person beach cleanup, collecting 13 tons of trash, and even got news photographers to put down their cameras and join in signing the mural. In Puerto San Carlos, where the mural was painted on the back of the local church, Magdalena Baykeeper held a parade of children chanting, "I love water." La Paz Waterkeeper's contingent, which included a number of Boy Scout troops, painted several walls and banners around the city – from schoolyard walls to a mural displayed along the city's famed boardwalk, el Malecon, during a huge citywide triathlon. In Cabo San Lucas, Los Cabos Coastkeeper had people dancing on the beach to celebrate clean water. In Cabo Pulmo and La Ribera, their partner organization, Amigos para la Conservación

de Cabo Pulmo, had been monitoring water quality for the last year, in some cases enlisting area youth so that they could learn about the importance of this precious resource. On World Water Day they hosted a clean-water festival offering food, music and games on the beach, while teaching more young people how to do beach monitoring. Each of these communities was celebrating the watchful presence of the Baja Californias Waterkeepers along their coast.

The Baja Peninsula, 750 miles long and ranging from 40 to 200 miles wide, is the least densely populated area in Mexico. Much of its 1,900 miles of coastline remains pristine, with at least eight areas under official protections. The peninsula is also fortunate to have the largest concentration of Waterkeepers in Mexico, each working closely with the others. Despite the relatively good condition of their waters, every day presents a new challenge for the Waterkeepers, engaging them to fight ill-conceived mega-developments, protect fisheries, deal with inadequate urban infrastructure and regulation, patrol marine parks for illegal fishing, ensure that local zoning and planning protects drinking-water sources and marine ecosystems, monitor pollution at their swimming beaches, and tag and protect sea turtles. The members of Waterkeepers Baja Californias are not deterred by these challenges nor are they waiting for government help. They know that it's up to them and their conservation colleagues along the peninsula to ensure, by constant vigilance and effort, that it remains a national – and international – treasure.

You can learn more about the work of WATERKEEPERS Baja Californias at [www.WaterkeepersBaja.org](http://www.WaterkeepersBaja.org).

EACH MURAL ASKED, "WHY DO YOU LOVE WATER?" AND INVITED THE PUBLIC TO WRITE, PAINT, DRAW OR SCRIBBLE THEIR ANSWERS.



# BIN<sup>27</sup>

*Finest Reserve*  
Limited Edition



Image courtesy the artist; Fraser Gallery, Los Angeles; Paul Kasmin Gallery New York.

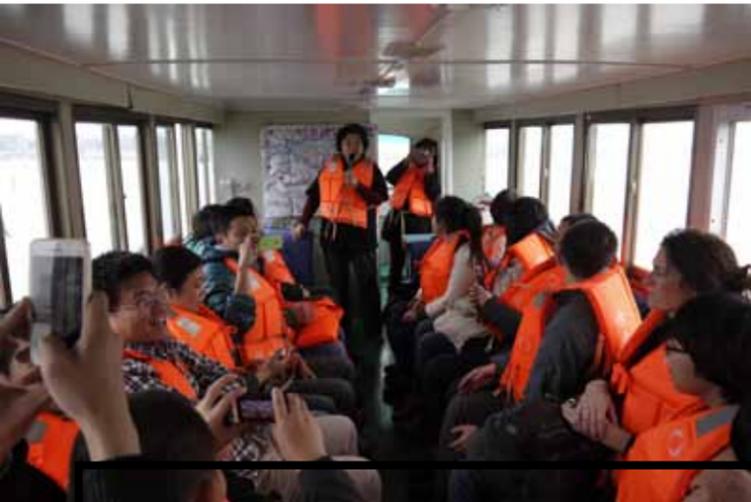
Babylon Chatta, 2012

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HOW TO DECREASE CHINA'S RELIANCE ON COAL REMAINS A COMPLEX ISSUE, AND THE WORKSHOPS DEMONSTRATED HOW CHINA'S CURRENT ENERGY POLICIES CONTINUE TO EXPAND COAL MINING.



DURING THE ENERGY AND WATER WORKSHOP IN XIANGYANG, CHINA PARTICIPANTS CRUISED THE LOCAL WATERWAY ON THE MIDDLE HAN RIVERKEEPER'S BOAT, THE FIRST SUCH VESSEL IN CHINA, NOW NEARING RETIREMENT.



PHOTOS BY: MIDDLE HAN RIVER WATERKEEPER STAFF

# HELPING CHINA KICK ITS DEADLY COAL HABIT

Waterkeeper Alliance and its partner, Pacific Environment, an international organization that works to protect the living world of the Pacific Rim, conducted a first-ever Energy and Water Workshop in Xiangyang, China in March. The workshop focused on coal and finding solutions to stopping pollution caused by China's energy sector. Xiangyang, a city of about half a million in northwestern Hubei Province, has played a critical role in China's history for its accessibility to other parts of China via the Han River. Because of its location, it was also the site of many bloody

battles during the Three Kingdom period, from 220 to 280 A.D. Today the battle continues, as Xiangyang is located at the center of an area, including Xinjiang province and Inner Mongolia, in which the Chinese government proposes to concentrate coal production.

The conference was co-hosted by Waterkeeper Alliance and Middle Han River Waterkeeper, and attended by Waterkeeper organizations from the Middle Huai River, Upper Yellow River, Qiantang River and Black Reef Coast and several other grassroots environmental groups. Staff from Waterkeeper Alliance, Pacific Environment, Greenpeace and China's Institute for Public and Environmental Affairs conducted the workshop sessions. The groups were excited to discuss ways to initiate and implement projects to educate their communities about water pollution caused chiefly by the production, consumption and transportation

of coal in China, where the central government's policy on energy resources has been focused on development of the coal base. Now, however, there is talk about reduced energy consumption in the 13th Five Year Plan, to begin in 2015 – even the possibility of a national cap on coal consumption. Waterkeepers in China are committed to vigilantly tracking these plans.

But how to decrease China's reliance on coal remains a complex issue, and the workshops demonstrated how China's current energy policies continue to expand coal mining and processing, exacting a heavy price on its people, wildlife and ecosystems through rising amounts of dangerous toxins in water and air. Much credit is due to international environmental groups like the Natural Resources Defense Council and Greenpeace, who have pushed for a national cap with Beijing policy-makers on limiting coal-industry growth. The Institute for Public and Environmental Affairs is targeting one of the biggest consumers of coal: the cement industry produces over half of the world's cement and accounts for some 30 percent of China's industrial emissions. Waterkeeper Alliance and Pacific Environment are working to help Waterkeepers and other local environmental groups in China promote clean water and air policies.

The gathering included a cruise on the Han River, which flows through the heart of Xiangyang. The Han is actually safe for fishing and swimming, partly due to the work of a local environmental organization called Green Hanjiang, the parent organization of Middle Han River Waterkeeper, which has been working with city residents to stop water pollution for more than 10 years. The Middle Han River Waterkeeper boat, launched in 2008, was the first Waterkeeper boat in China. It is now nearing retirement after travelling many sea miles patrolling the river, collecting water samples and educating thousands of youths and other local residents about the river's importance and challenges. Undaunted by this development, Middle Han River Waterkeeper is seeking sponsors for a new Waterkeeper boat to extend its 10 years of outstanding work.

When Waterkeepers gather, the passion and commitment run high. This workshop was no different.



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TROUT-FISHING AND RECREATIONAL BOATING AND RAFTING ARE TREASURED ACTIVITIES ON MONTANA'S SPECTACULAR SMITH RIVER.

## A MONTANA WATERKEEPER HEADS OFF CANADIAN MINING INVASION

Canadian copper-miners are looking south to Montana's famed Smith River. The spectacular Smith, a headwater tributary of the great Missouri, flows northwest across the mountains of west-central Montana. Its trout and recreational boating and rafting are state treasures. But the Montana Department of Environmental Quality (DEQ) considers it a resource ripe for development, and has issued a permit to Tintina Resources, a "penny-stock" Canadian company, to dig, as part of the Black Butte Mining Project, an unprecedented 18-foot-wide exploratory mining decline along a mile of acid-creating rock near Sheep Creek, a major tributary of the Smith River. They hope to ultimately develop a full-scale mine that could produce more than a billion pounds of ore.

But Upper Missouri Waterkeeper hopes otherwise, and intends to make sure that the State and Governor Steve Bullock hear the chorus of voices opposed to the Black Butte Project.

"Hard-rock mining and Montana's DEQ are battling zero when it comes to protecting Montanans and our watersheds from acid-mine drainage," says Guy Alsentzer, the Upper Missouri Waterkeeper. "With the scope and size of this project, and an area as valuable and as sensitive as the Smith River's headwaters, this type of a mining project simply shouldn't happen."

In March Upper Missouri Waterkeeper joined a lawsuit challenging DEQ's decision to allow exploratory mine development, and the organization distributed an online petition to "Save Our Smith," exhorting officials to "permit river trips, not pits." It also held public forums to better inform people of the project's risks, and to clarify for decision-makers the far-reaching negative impacts of the mine.

Hard-rock mining in the Smith's watershed creates unacceptable risk for its clean water and the local economy. According to the Montana Fish, Wildlife and Parks commission, the river hosts an estimated 11,155 "angler days" per year, generating an estimated \$1.2 million in revenue. A record 7,323 applications have been received to float the river this year.

"The 'boom and bust' economics promised by a copper mine simply don't hold a cup of water next to the guarantee of thousands of good jobs and millions in economic value that are currently generated annually by a clean, healthy Smith," said Alsentzer.

Conversely, hard-rock mining is devastating. The U.S. Environmental Protection Agency has identified it as the nation's top toxic-producing industry, accounting for 41 percent of all toxics reported in 2010. The agency estimates that the headwaters of 40 percent of the watersheds in the western United States are contaminated by pollution from hard-rock mining. Moreover, taxpayers often are stuck with the cost of reclaiming the damage done at mining sites. A recent clean up of two copper mines in New Mexico ran up a bill estimated at more than \$800 million. Such expenses and the limits of current technology to protect water resources underline the urgency of preventing these destructive ventures.

"Clean, readily available water is one of the few things that draws Montanans from all walks of life together" concludes Alsentzer. "Some places are too unique, too special to risk for short-term profits."

## EPA AWARDS GO TO HACKENSACK AND BUFFALO NIAGARA RIVERKEEPERS

Each year during Earth Week, the U.S. Environmental Protection Agency honors individuals, businesses and organizations with "Environmental Quality Awards," recognizing significant contributions to improving the environment and public health in the previous calendar year. This year, in Region 2, which covers New York, New Jersey, Puerto Rico, the U.S. Virgin Islands and eight federally recognized Indian Nations, two Waterkeeper organizations, Hackensack Riverkeeper and Buffalo Niagara Riverkeeper, were among those honored. EPA Regional Administrator Judith A. Enck presented the awards at a ceremony at EPA's offices in Manhattan.

"Today we celebrate the exemplary work of people who work tirelessly to protect the environment and give their time and energy to create a cleaner and healthier future for us all," she said. "Their extraordinary contributions serve as an inspiration to all who strive for a more sustainable environmental future."

Hackensack Riverkeeper was recognized for its highly successful year-round Eco-Programs. Its award citation noted that, during 2013, these programs "provided nearly 7,000 people with a mixture of environmental education and recreational opportunities on the river and empowered them to become active participants in preservation through widely attended volunteer river cleanup events." The Eco-Cruise program, which invites visitors to tour the Passaic and Hackensack Rivers and Newark Bay, alone attracted 3,470 people last year.

Receiving the award on behalf of his staff, Riverkeeper Capt. Bill Sheehan declared that he was "extremely honored," and described "the folks who participate in these programs" as "part of our growing network of volunteers who help protect and advocate for our beloved Hackensack River."

Buffalo Niagara Riverkeeper's recognition came for its repeated success over the last 25 years in bringing together many partners to solve complex environmental problems. Its citation read, in part, "The Buffalo Niagara Riverkeeper has successfully leveraged water-based investments with millions of dollars of private investments for the region and is leading initiatives for impaired waterways in the lower Great Lakes and Niagara River watershed."



## Our Commitment

Instilling a culture of environmental sustainability to help ensure Deer Valley Resort stays green for future generations while maintaining its commitment to guest service.

"All ski resorts, whether on public or private property, are charged with being stewards of the land. It's a responsibility that should not be taken lightly and we at Deer Valley certainly do not," says Bob Wheaton, resort president and general manager. "The truth is, we've kept sustainability in mind since the resort's inception. Deer Valley is committed to the environmentally friendly practices we have in place and we will continue to focus on adopting new, innovative programs."

### NSAA 2014 Sustainable Slopes

Deer Valley Resort signed on 13 years ago as a member of the Sustainable Slopes Environmental Charter. As a ski resort whose existence depends on a pristine mountain environment, we take our responsibility as stewards of the land very seriously. Deer Valley's ongoing environmental efforts include supporting a detailed, resort-wide recycling program, implementing a comprehensive forest management plan, monitoring and testing downstream water discharge, revegetation and reseeding projects and preserving open space within resort boundaries.

Deer Valley® has also committed to upgrading our snowmaking system by purchasing low energy and ultra-low energy efficient snow guns. The resort's snowmaking reservoirs drastically reduce dependence on our precious water resources and create a wetland habitat for fish and other wildlife.

Other environmental efforts include participating in Rocky Mountain Power's Blue Sky™ renewable energy program, using Nest® Learning Thermostats in lodging properties to reduce energy consumption and holding a mountain clean-up day, collecting trash and removing invasive weeds.

### Reuse, Recycle, Rethink

All of Deer Valley Resort's operations incorporate practices to reduce and recycle, compost food waste, rethink consumption and use local, sustainable food items.



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## LANDMARK VICTORY FOR CLEAN WATER

In March, Pace Law School's Environmental Litigation Clinic, on behalf of Waterkeeper Alliance, Trout Unlimited, Hudson Riverkeeper, and other environmental and sporting groups, won a landmark case challenging the U.S. Environmental Protection Agency's "Water Transfers Rule."

The suit was brought in 2008, less than two weeks after the Bush-era EPA issued the Water Transfers Rule. Under the rule, EPA attempted to exempt transfers of polluted water from one waterbody into another from the statutory requirement that all point-source pollutant discharges into waters of the United States be made in accordance with the stipulations of a Clean Water Act discharge permit. Incredibly, EPA's ill-advised regulatory exemption under the rule would apply even when the transferred waters were severely contaminated with pollutants and the receiving waters were pristine.

"We argued that the language of the Clean Water Act left no ambiguity that water transfers require permits," said Professor Karl Coplan, co-director of the Pace Clinic.

"Under this unwise and illegal regulation that has now been struck down by the court," observed Professor Daniel Estrin, supervising attorney at the Pace Clinic, "salt water

could be transferred into fresh water; sediment-laden water could be sent into clear drinking water reservoirs; warm waters could be pumped into cold water habitats; chemical laden waters could be dumped into waters employed in farm and ranch irrigation; and invasive species could be transferred into waters not yet infested—all without the human health and ecological protections guaranteed by a CWA discharge permit. This flew in the face of the Clean Water Act's primary objective, i.e., to 'restore and maintain the chemical, physical, and biological integrity of the nation's waters.'"

These issues are of enormous interest to environmental and public health advocates across the country. Indeed, a simple perusal of the list of counsel that appeared in the case demonstrates the importance of the issue to numerous stakeholders. In addition to approximately 20 states and the Canadian province that intervened (approximately ten on each side of the dispute), the City of New York intervened to support EPA's regulation. On plaintiffs' side were several other environmental and sporting groups, as well as the Missosukee Tribe of Indians from Florida (transfers of contaminated water by big sugar corporations have caused tremendous environmental harm to drinking water supplies in the Florida Everglades).

"Our clinic at Pace Law School," said Estrin, "has taken the lead on these issues in the federal and state courts for approximately 15 years in connection with the City of New York's discharges of mud and silt through the Shandaken Tunnel, part of the city's water-supply system, and the resulting despoiling of the Upper Esopus Creek, a world-renowned trout stream in the Catskill Mountains."

"Judge Karas vacated the Water Transfers Rule and remanded it to EPA for reconsideration," said Coplan. "Let us hope that EPA, at least, reconsiders the rule rather than continue its decades-long fight against water quality on this particular issue."

AS A RESULT OF A FEDERAL DISTRICT COURT RULING, THE CITY OF NEW YORK WILL NO LONGER BE PERMITTED TO DRIVE MUD AND SILT FROM THE ASHOKAN RESERVOIR INTO THE UPPER ESOPUS CREEK, A WORLD-REKNOWNED STREAM FOR TROUT FISHING.



PHOTO BY: DAN ESTRIN



PHOTO BY: J. BARTHOLOMEW

## POUDRE WATERKEEPER SPEAKS, FORT COLLINS LISTENS

The City of Fort Collins, Colorado, has been listening to Poudre Waterkeeper and other community voices, and the Cache la Poudre River is getting a makeover.

The Cache la Poudre, which flows from Rocky Mountain National Park in north central Colorado

Collins is embarking on a multi-million-dollar restoration effort to recover the river's ecology and enhance its recreational value. The plans include limiting stormwater runoff, removing diversions, and reducing the height of embankments to allow the river to reclaim part of its natural floodplain — thereby nourishing riparian wetlands.

Poudre Waterkeeper can take a bow for its instrumental role in this effort. Since its founding in 2005, it has encouraged the city and the community to better appreciate and restore the river corridor, advocating for the Poudre through strong community-outreach activities and media relations.

"The Poudre River through town has been neglected for far too long," says Waterkeeper Gary Wockner. "The city's vision for natural-habitat restoration is definitely focused in the right direction. We believe that if more people appreciate and enjoy the river, it will lead to more long-term protection for the river. People protect and defend what they love."

southeast through Fort Collins and Greeley, is a popular destination for fly-fishing, whitewater rafting and kayaking. But as with so many rivers the world over, the Poudre has been severely damaged by developments such as diversion dams, gravel-mining and urban stress in places like Fort Collins.

Over the next few years, however, the City of Fort

FORT COLLINS'S RESTORATION INVESTMENT WILL ALLOW THE SEVERELY DAMAGED POUDRE RIVER TO RECLAIM PART OF ITS NATURAL FLOODPLAIN.

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PETER SAW  
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EVERYTHING  
AND  
EVERYONE,  
AND HE  
FOUGHT TO  
PRESERVE THE  
DIGNITY AND  
IN SOME CASES  
THE VERY  
EXISTENCE  
OF WEAKER  
BEINGS.



PHOTO BY PETER A. LAKE

## PETER MATTHIESSEN: A PERSONAL REMEMBRANCE

BY  
MURRAY FISHER

This summer marks my fifteenth year in the Waterkeeper movement. For all that time, my favorite description of what Waterkeepers do is that they speak for those who don't have a voice, whether it be a body of water or the people who depend on it for their way of life. No one embodied those Waterkeeper values more passionately and powerfully than author, naturalist, professional fisherman and defender of the voiceless Peter Matthiessen, who died on April 5th, 2014.

Like many in the Waterkeeper movement, my life was greatly influenced by him. As a college student, his novel *At Play in the Fields of the Lord*, which was set in the jungles of Peru, inspired me to spend a year working for a biologist in South America. And his transcendent descriptions of the natural world in his nonfiction books *The Tree Where Man Was Born* and *The Snow Leopard* helped solidify my commitment to a career protecting and preserving the natural world.

So, while working for Hudson Riverkeeper in 1999, I was thrilled to learn that Peter's son Alex would be the new Riverkeeper. I quickly learned that Alex had his father's intense intellectual energy and passion for the environment. During nearly a decade as Riverkeeper, Alex tripled the size of the organization and bravely took on causes such as closing the Indian Point nuclear plant. He became not just my mentor, but also my good friend.

Several years ago, Alex invited me to join him on a fishing trip to a remote island in the Bahamas along with his uncle Carey and his dad Peter.

One evening Peter invited me to fish with him the next day, alone except for the presence of a local guide. It was a perfect day and we each caught several bonefish. I have rarely felt such spiritual kinship with anyone than with this 80-plus-year-old, world-famous author. We obsessed over every creature of the air and sea, prodding our guide to pursue bird after bird so that we could identify them. Peter was fascinated by my creation of the New York Harbor School and urged me, to my astonishment, to write a book about it. He even offered to read drafts, write a foreword, and connect me with editors and publishers. But our conversation was not limited to work and nature. When he learned that I had recently wed, he engaged me, to my further amazement, in a long discussion about women and marriage.

Peter wanted to catch a large, fast, elusive fish called a permit, which inhabits the Bahamian flats, and, as the day wore down, our guide suddenly pointed out a pair of massive ones speeding toward the stern of our boat. Peter was back there but he wasn't prepared to make a cast. Yet he got his rod and line together and, casting almost perfectly, struck just above the pair and spooked them away. He was visibly upset. It was the end of the day, one of the last days of the trip, and maybe his last visit to the Bahamas. That evening he went down to the flats in front of our lodge to practice casting. I was stunned by his commitment to improvement even in these late years of his life.

Peter saw the beauty in everything and everyone, and he fought to preserve the dignity and in some cases the very existence of weaker beings that had been maligned, oppressed or even threatened with extermination by more powerful ones. He embraced wild landscapes as well as wild animals and disenfranchised people. His heart was big enough to sincerely care about all creatures; his intellect was deep enough to learn the finest details about them, and his passion was fierce enough that he devoted much of his life to protecting them.

And in those ways, Peter Matthiessen was the ultimate Waterkeeper, his country's most eloquent champion for those whom Waterkeepers represent. As he once remarked, and as was quoted in his National Public Radio obituary, "I go along with Albert Camus, who famously said, 'The responsibility of the writer is to speak for those who cannot speak for themselves.'" To honor his astounding body of work and to continue that mission, I urge Waterkeepers to do as I have done: go buy every book he's written and commit to reading and sharing them over the course of your life. You will be glad you did.

MURRAY FISHER IS CO-FOUNDER OF THE NEW YORK HARBOR SCHOOL AND PRESENTLY HEADS THE NEW YORK HARBOR FOUNDATION.



## A SONG OF MOURNING – AND CELEBRATION – FOR PETE SEEGER

BY  
KARL S. COPLAN

It may be a hyperbole to say that there would be no environmental laws without Pete Seeger, but the world-famous musician and activist, who died at age 94 in New York City on January 27th, played a huge role in galvanizing the environmental movement. His great gift was the power of song – not just as performance but also as political participation.

Here in New York's Hudson Valley we like to take credit for the birth of environmental law, pointing to cases like the opposition in the early 1960s to Consolidated Edison's plan to deface Storm King Mountain to build a generating-plant. In the lawsuit, *Scenic Hudson v. Federal Power Commission*, activists successfully asserted environmental rights before there were hardly any environmental laws on the books, and Pete's Hudson River Sloop Clearwater organization was part of that suit. No one then and in the following years was as instrumental as Pete Seeger in organizing and inspiring people to push for environmental change. He and his sloop became a visual and audible symbol for environmental activism, and it is hard to imagine the "environmental decade" of the 1970s without the guidance of this folksinger with deep family roots in American soil, who first brought local citizens together to clamor for a cleaner Hudson River and eventually brought people everywhere together to agitate for a cleaner world.

Pete came of age during the Great Depression, when, like so many of his generation, his passion for economic

justice led to an embrace of communism. Although he left the Communist Party in 1949, as evidence of Soviet tyranny became irrefutable, his early enthusiasm for the causes of labor, peace and civil rights never wavered, and remained inextricable from his music. He never escaped the suspicion and vigilance of elected officials. But he remained calm and good-humored through it all. When he was called to testify before the House Un-American Activities Committee in 1955, he refused to confirm whether he had ever been a communist or a vegetarian, but offered to sing for them.

His advocacy for clean air and water was a natural progression in his long and unrelentingly dedicated life. He loved his river and he loved his country and all its natural beauty. In 1972, Pete sailed the *Clearwater*, laden with a petition containing hundreds of thousands of signatures, to Washington in a spectacular gesture that strongly influenced Congress to pass the Clean Water Act, one of the most important events in the American environmental movement.

He kept the sloop afloat until the day he died. And it is floating still, one of the most vivid symbols in our country of the fight for clean water

KARL S. COPLAN IS A PROFESSOR AT PACE LAW SCHOOL AND CO-DIRECTOR OF ITS ENVIRONMENTAL LITIGATION CLINIC.

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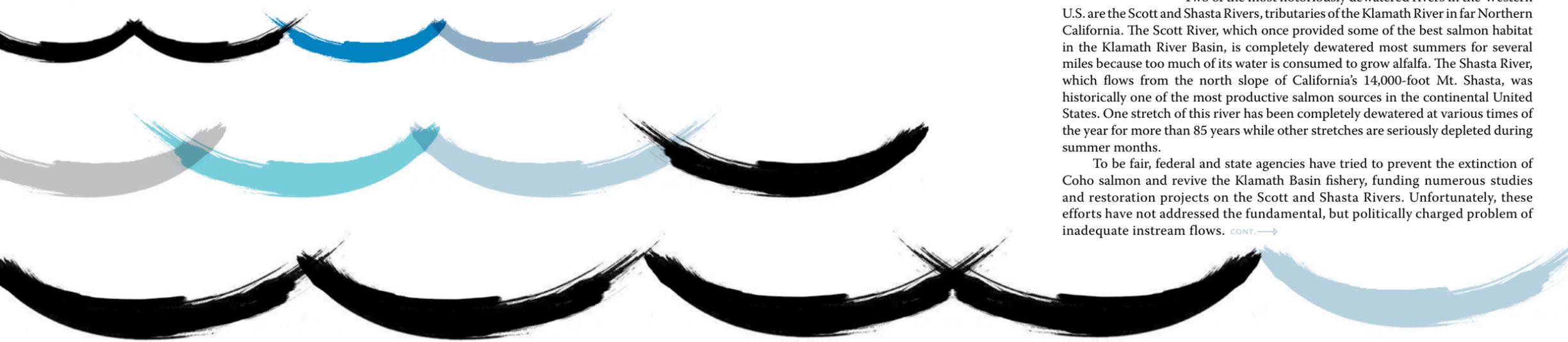
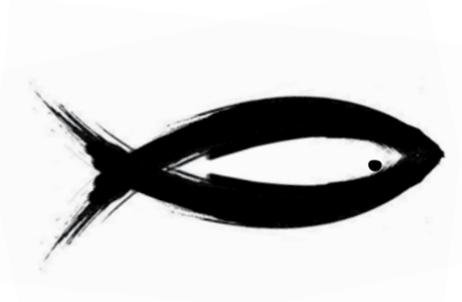
# SCARCITY

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THREE STORIES  
FROM CALIFORNIA TO GEORGIA TO COLOMBIA

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# FISH OUT OF WATER



## KLAMATH RIVERKEEPER WANTS CALIFORNIA'S LAWS ENFORCED, WATER TO FLOW, AND SALMON TO THRIVE.

**E**xcessive water-diversions have left many rivers and streams in the Western U.S. completely dry, or with flows that are inadequate to sustain fish, wildlife and recreation. Laws exist to protect stream and river flows, commonly known as "instream flows," but state and federal agencies often fail to enforce them.

Two of the most notoriously dewatered rivers in the Western U.S. are the Scott and Shasta Rivers, tributaries of the Klamath River in far Northern California. The Scott River, which once provided some of the best salmon habitat in the Klamath River Basin, is completely dewatered most summers for several miles because too much of its water is consumed to grow alfalfa. The Shasta River, which flows from the north slope of California's 14,000-foot Mt. Shasta, was historically one of the most productive salmon sources in the continental United States. One stretch of this river has been completely dewatered at various times of the year for more than 85 years while other stretches are seriously depleted during summer months.

To be fair, federal and state agencies have tried to prevent the extinction of Coho salmon and revive the Klamath Basin fishery, funding numerous studies and restoration projects on the Scott and Shasta Rivers. Unfortunately, these efforts have not addressed the fundamental, but politically charged problem of inadequate instream flows. [CONT. →](#)



FISH LEFT STRANDED AND DYING IN THE SCOTT RIVER, WHICH ONCE PROVIDED SOME OF THE BEST SALMON HABITAT IN THE KLAMATH RIVER BASIN.

IN SOME STRETCHES, THE SCOTT RIVER, LEFT AND RIGHT, IS COMPLETELY DEWATERED IN THE SUMMER BECAUSE TOO MUCH OF ITS WATER IS CONSUMED TO GROW ALFALFA AND OTHER CROPS.

## IT'S THE LAW, RIVERS NEED WATER

**F**ederal and state laws that should protect instream flows are powerful when enforced. The federal Endangered Species Act prohibits water-diversions that kill or harm endangered fish or jeopardize a species' existence. The federal Clean Water Act allows states to establish minimum instream flow standards when "prompted by legitimate and necessary water quality considerations."

California's constitution prohibits "waste and unreasonable use of water," while California fish-and-game code requires all dam operators to release sufficient water to maintain downstream fish in "good condition." Also, California water code recognizes that it is "beneficial" to use water for recreation, fisheries and wildlife. Accordingly, the state has a legal obligation (which it often ignores), to determine the amount of water that must be retained in rivers and streams to sustain these beneficial uses of water.

The Public Trust Doctrine, which can be traced to England and the Roman Empire, protects the public's right to use navigable waters for fishing and navigation without interference by private parties. This common law doctrine has been interpreted differently by different states. California's duty under the Public Trust Doctrine was clarified by the famous Mono Lake Case of 1983 (National Audubon Society v. Superior Court), which stated that California shall "protect the people's common heritage of streams, lakes, marshlands and tidelands..." This case specifically affirmed the duty of California to limit water diversions when necessary to protect various public uses of navigable waterways. This court-case and years of pressure from public-interest organizations have prompted the California Water Board to establish a Public Trust Enforcement Unit.

## RESTORING FLOWS IN THE SCOTT AND SHASTA RIVERS

**S**ome of the most egregious violations of these key state and federal laws exist in the Scott and Shasta River watersheds of Northern California. To uphold these laws and restore flows, Klamath Riverkeeper has advanced a strategy of litigation, administrative petitions, and advocacy.

In 2010, Klamath Riverkeeper and its allies petitioned the California Water Board to list the Scott and Shasta Rivers as "flow-impaired" under section 303(d) of the Federal Clean Water Act. If properly implemented, this section of the Act could trigger regulatory actions to restore instream flows. In May 2014, the California Water Board indicated that it would use the North Coast region of California, and specifically the Scott and Shasta Rivers, as a test case for California to list rivers as flow impaired under the Clean Water Act.

In 2012 Klamath Riverkeeper and the Karuk Tribe filed a lawsuit alleging that the operators of Dwinnell Dam on the Shasta were violating the Federal Endangered Species Act. Since the dam was built in 1926, its operators had released water for fish on just a handful of days. The California Department of Fish and Wildlife, whose own studies have quantified the amount of water needed to sustain Shasta River salmon, neglected its statutory obligation to ensure that the dam operators release enough water to keep fish in "good condition."

## CALIFORNIA'S GROUNDWATER LEGISLATION AND INSTREAM FLOWS

To this day, California does not regulate groundwater or even require well owners to report the quantity of water they extract. Because groundwater and surface water are interconnected, it can be difficult, if not impossible to protect instream flows without limiting groundwater extraction.

This year, two groundwater bills have been introduced into the California State Legislature that would require local entities to sustain-

ably manage their groundwater supplies. Thus far however, it is uncertain whether this legislation would protect instream flows. One of the bills states that a groundwater basin could qualify as "sustainable" even if groundwater extraction directly impacts instream flows. The bills also have unclear directives for state enforcement and do not require collection or reporting of groundwater extraction data.

Klamath Riverkeeper is currently coordinating efforts with tribal, fishing, conservation, and environmental-justice interests to introduce legislative language that would prevent groundwater pumping from adversely affecting instream flows or groundwater quality.

In December 2013, a favorable litigation settlement required the dam operators to release – depending on precipitation levels – 2,250-to-11,000 acre-feet of water per year for fish. The settlement also initiated an Endangered Species Act permitting-process that will result in long-term flow requirements.

For years, the U.S. Forest Service has refused to enforce an instream water right it holds on the Scott River that was established for fisheries and "recreational, scenic, and aesthetic purposes." After years of advocacy by Klamath Riverkeeper and the Karuk Tribe, the agency reluctantly requested that the California Water Board evaluate this instream water right. On May 16, 2014, the Water Board issued a "curtailment letter" to stop water users from illegally diverting the U.S. Forest Service's instream water right.

California, like many Western States, allows water right holders to voluntarily dedicate all or a portion of their water right to satisfy instream needs. There is potential for such transactions because many water right holders voluntarily reduce water usage – often through water conservation projects funded by state or federal agencies. Moreover, land trusts often purchase land with water rights, but lack the capacity to dedicate their water rights to meet instream needs.

Despite the opportunity, very few instream water dedications have occurred in California largely because the process is unnecessarily complex, time-consuming and costly. Klamath Riverkeeper is now advocating that California streamline this process, and that both California and Federal agencies require that water conserved with public money be dedicated instream.

The California Water Board, following court decrees that were established without consideration of the Public Trust Doctrine, Endangered Species Act or other key laws, maintains that it cannot curtail established water rights. However, the Water Board has acknowledged that the decrees could be updated to bring them into compliance with key laws. Klamath Riverkeeper is conducting a legal analysis to determine whether it should reopen water-right decrees to restore balance between instream and out-of-stream water-uses.

## COOPERATION THE KEY TO VICTORY

**P**rotecting instream flows will be increasingly challenging in the face of growing demand for water and impacts to water supplies from climate change. Some strategies to address this challenge will remain site-specific, but others can be applied nationwide, such as enforcing key federal laws or enacting policies requiring that water conserved with public money be dedicated to rivers rather than to private interests. Only by working together to the greatest extent possible can advocates for our naturally flowing rivers and streams succeed. **W**

## CHATTAHOOCHEE RIVERKEEPER AND PARTNERS WORK TO SETTLE INTERSTATE WATER CONFLICT

**T**his is the story of three rivers, the Chattahoochee, Flint and Apalachicola, the three states that covet their waters, and the decades-long battles fought over their respective rights to that water. A saga in its own right, this prolonged conflict also may be a valuable cautionary tale for the 21st Century, as water conflicts threaten to become more the norm than the exception for communities around the world. Since the founding of Chattahoochee Riverkeeper 20 years ago, Sally Bethea and her staff have worked with partners throughout the Apalachicola-Chattahoochee-Flint (ACF) river basin to try to resolve Georgia's ongoing water conflict with Alabama and Florida.

The conflict begins at the Chattahoochee's headwaters, just north of metro Atlanta, where Buford Dam, operated by the U.S. Army Corps of Engineers, forms Lake Lanier, which is at the center of the conflict.

Over the years, the metro Atlanta region has relied more and more on Lake Lanier for drinking water, and the Corps has acquiesced by modifying operations to hold more water in Lanier during drier months. While metro Atlanta continues to grow and prosper, downstream communities in all three states have to get by on depleted river flows and virtually all other uses suffer.

Beginning as a tiny Appalachian spring in the Blue Ridge Mountains of north Georgia, below Atlanta the Chattahoochee flows southwest to form the Georgia-Alabama border before merging with the Flint River at Lake Seminole to form Florida's Apalachicola River, which empties into the Gulf of Mexico.

We ask a lot of a relatively small watershed. Combined, Lake Lanier and the upper Chattahoochee River basin are the major source of drinking water for metro Atlanta, serving nearly four million people. At just a little more than

1,000 square miles, the Chattahoochee watershed is among the smallest in the nation serving a major metropolitan area. Along its 430-mile course, the Chattahoochee is encumbered by 13 main-stem dams and further impacted by a myriad of withdrawals and discharges for municipal, industrial, agricultural and power-generation purposes.

The Chattahoochee's influence on the ACF river basin does not end at Lake Seminole or the Florida border, especially during drought. Because Flint River flows are not moderated by dams, the Corps relies on Lake Lanier to compensate for drought conditions in the Flint by releasing more water downstream. Without this drought relief, low river flows may pose a serious risk to the ecological health of the ACF system. For federally protected freshwater mussels, low flows limit mobility and increase mortality. Dams combined with low flows impede anadromous (freshwater-spawning) Gulf sturgeon from migrating north into their historic range. Low flows entering Florida's Apalachicola Bay increase bay salinity and contribute significantly to oyster mortality.

### REPEATED DROUGHTS INTENSIFY WATER CONFLICT.

The ACF basin contains enough water to meet human and ecological needs most of the time; however, during droughts, consumption takes its toll on the system. During the Southeast's 2006-2009 drought, as rainfall waned and dam releases increased to provide downstream relief, Lake Lanier dropped to historically low levels and conflict

over ACF management came to a head. Municipalities were forced to buy water from neighboring jurisdictions. Fishing, boating and property-values suffered, and many businesses went bankrupt. The state responded, albeit late, by enacting emergency outdoor-watering restrictions, which reduced metro Atlanta's water-use by 20 percent in 2008.

Then came historic rainfall, and by late 2009 the basin recovered and Lake Lanier was full again. But historic rain was too much rain, and, according to the U.S. Geological Survey, portions of the upper ACF basin experienced either 100-year or 500-year catastrophic floods. Recovery was short-lived, however. In 2011, the Southeast experienced another drought, this time with devastating impacts on the lower ACF basin. The Flint River reached record lows, tributaries and wells ran dry, and farmers faced financial ruin. Once again, the region looked to Lanier to mitigate these effects. The Corps of Engineers released just enough water to comply with the Endangered Species Act. But the State of Georgia ignored all climate indicators, including the U.S. Drought Monitor, and opted not to declare a state-level drought or to impose restrictions on use.

The 2011 drought ended in April 2013, but by then the damage had been done. The Apalachicola Bay oyster population was decimated, forcing Florida Governor Rick Scott to seek federal assistance for businesses and families impacted by the decline. The University of Florida Oyster Recovery Team confirmed that the massive oyster die-off was caused in part by high salinity resulting from reduced freshwater flows out of the Chattahoochee and Flint Rivers. Yet the relative impacts on oyster decline of low rainfall versus high water consumption remain central to a lively debate waged inside and outside the courtroom for the past two decades. CONT. —>

BY LAURA HARTT, WATER POLICY DIRECTOR, CHATTAHOOCHEE RIVERKEEPER

TOP: PHOTO BY TOM WILSON MIDDLE: PHOTO BY CHATTAHOOCHEE RIVERKEEPER BOTTOM: PHOTO BY CHATTAHOOCHEE RIVERKEEPER

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## COURTS GET INVOLVED, BUT HAVE RESOLVED LITTLE

When the Corps of Engineers built Buford Dam and formed Lake Lanier in the 1950s, the agency had clear Congressional authorization to manage the reservoir for flood-control, navigation and hydropower. For several decades the Corps relied on the 1958 ACF Water Control Manual, which governs dam operations throughout the ACF river basin, to balance these competing purposes. As dam operations evolved over time, the Corps began to place a higher priority on water supply for metro Atlanta. But, rather than formalize operational changes by updating the manual through an open, public process, the Corps chose to develop an interim plan for operation of Lake Seminole's Woodruff Dam. These interim plans have been revised at least twice to try to accommodate Georgia's increased water consumption while addressing downstream concerns, including survival of endangered species in the lower part of the basin.

Alabama and Florida have challenged the Corps's interim operations, alleging that Georgia's use is excessive, unauthorized and harmful to their states. Meanwhile, Georgia has challenged the Corps's reluctance to grant the state unfettered access to Lanier to satisfy future water-supply needs. All three states, attempting to resolve their conflict, have taken the Corps to court.

In 2009, a federal district judge deciding that water supply, unlike hydropower, navigation, and flood control, was not an authorized purpose of Lanier, ruled against Georgia and the Corps. The district court gave Georgia three years to reach a water-sharing agreement with Alabama and Florida that would have Congressional approval. In response, Georgia not only appealed but also formed a Contingency Task Force to evaluate other water-supply options. Chattahoochee Riverkeeper (CRK) and other environmental groups provided input to the Task Force, recommending a set of mandatory conservation measures to help close the water gap, while committing to good water stewardship to neighboring states. The Task Force essentially agreed with us, conceding that conservation was the most immediate and cost-effective water-supply option available and recognizing that there simply is

LEAK-REPAIR, PLUMBING RETROFITS, ENERGY-EFFICIENT APPLIANCES, CONSERVATION PRICING, LARGE-SCALE RAINWATER-HARVESTING, AND RE-USE—COULD SAVE NEARLY 400 MILLION GALLONS OF WATER PER DAY.

no water-supply substitute for Lake Lanier. In early 2010, Georgia's General Assembly passed the Water Stewardship Act to implement some of the Task Force's conservation recommendations.

In 2011, the legal landscape shifted again when the Eleventh Circuit Court of Appeals reversed the lower court's decision, ruling that water supply is indeed an authorized purpose of Lanier. The Eleventh Circuit vacated the lower court's three-year deadline, giving the Corps just one year to determine the extent to which it could operate Lanier to meet water supply and the other authorized purposes. In 2012, the U.S. Supreme Court refused to hear Alabama and Florida's appeal of this decision, and the next day the Corps determined that it did have discretion to operate Lanier to meet all of Georgia's current and future needs, as long as other authorized purposes are met.

In August of 2013, U.S. Secretary of Commerce Penny Pritzker declared the oyster-fishery collapse in Apalachicola Bay to be a federal disaster, and Florida Senators Bill Nelson and Marco Rubio held hearings on the issue in the city of Apalachicola. Afterward Rubio and Florida Governor Rick Scott announced the State's intent to file a lawsuit in the Supreme Court, requesting appointment of a special master to allocate water in the ACF basin. The suit was filed on October 1, 2013 and the Court, awaiting input from the Corps of Engineers, has delayed until this fall its decision about accepting the case.

## WHAT CRK IS DOING TO RESOLVE THE CONFLICT

Because continued access to Lake Lanier remains the region's most sustainable option for meeting metro Atlanta's long-term water-supply needs, reaching a water-sharing agreement with Alabama and Florida is critical. Demonstrating good stewardship to its downstream neighbors will help Georgia secure an agreement that is both equitable and amicable. As a result, CRK is working with local governments, businesses and citizen groups to promote water conservation as the region's

PREVIOUS PAGE: TOP, AN ATLANTA RESIDENT SAMPLES THE WATER. MIDDLE, THE HEADWATERS OF THE CHATTAHOOCHEE. BELOW, FLY FISHING ON THE CHATTAHOOCHEE.

### APALACHICOLA-CHATTAHOOCHEE-FLINT (ACF) RIVER BASIN



ABOVE, IN RECENT YEARS DROUGHTS HAVE TAKEN THEIR TOLL ON LAKE LANIER, ONE OF THE MAIN SOURCES OF DRINKING WATER FOR METRO ATLANTA.

most timely, cost-effective and environmentally neutral water-supply option. We also are working with regional planners to ensure that water conservation remains a high priority as metro Atlanta plans for future growth.

Our 2012 report on the conservation efforts in the upper Chattahoochee, "Filling the Water Gap: Conservation Successes and Missed Opportunities in Metro Atlanta" acknowledges that metro Atlanta's water-conservation efforts have generated modest reductions in use, yet argues that more can and should be done.

In fact, we determined that several cost-effective measures—leak-repair, plumbing retrofits, energy-efficient appliances, conservation pricing, large-scale rainwater-harvesting, and re-use—could save nearly 400 million gallons of water per day. That's enough to serve nearly 2.6 million people.

Reducing consumption, however, will not fully resolve the long-standing dispute over ACF water allocation. The Corps' operation of federal dams on the

Chattahoochee also will have a significant impact on ecological flows throughout the system. The Corps has resumed its update of the ACF Water Control Manual. During the update, which will proceed unless there is further interference from the courts or Congress, the Corps will have to address all authorized purposes, including flood-control, navigation, hydropower, and water supply, as well as any applicable federal laws

## CRK REMAINS AS COMMITTED AS EVER TO RESOLVING THE TRI-STATE WATER CONFLICT IN ORDER TO ENSURE ENOUGH CLEAN WATER FOR PEOPLE AND WILDLIFE THROUGHOUT OUR WATERSHED.

such as the Clean Water Act, Endangered Species Act, and National Environmental Policy Act (NEPA).

To influence the Corps' decision-making process, CRK is engaged with the "ACF Stakeholders," a consensus-based group focused on development of sustainable alternatives to current Corps operations. Formed in 2009, the stakeholders equally represent thirteen user interests – including water supply, navigation, recreation, power-

generation, agriculture, commercial seafood, and the environment – in all three states and all three river basins. The principal guiding factor for the group in reaching consensus is recognition that all user interests must share the pain during times of drought. The group is exploring several proposals to improve conditions across the ACF basin and intends to share its results with the Corps this summer – providing input to the Corps's

Environmental Impact Statement (EIS) required under NEPA. The Corps is scheduled to submit its draft EIS and propose a preferred alternative by August 2015, and release its final EIS and record of decision by July 2016.

In spite of tremendous challenges, "CRK remains as committed as ever to resolving the tri-state water conflict in order to ensure enough clean water for people and wildlife throughout our watershed," says Riverkeeper Sally Bethea. For more information on what CRK is doing to protect and restore the Chattahoochee, visit us online at [www.chattahoochee.org](http://www.chattahoochee.org). **W**

# DROUGHT COMES TO CASANARE



DROUGHT-STRIKEN WETLANDS IN COLOMBIA WITH ANIMALS DYING ALONG DRIED UP WETLANDS.

PHOTOS BY: RIO META WATERKEEPER

**IN A REGION OF COLOMBIA, INDUSTRIES WASTE WATER AS CLIMATE WARMS AND ANIMALS DIE.**

**BY LUIS OVELIO LUGO, RIO META WATERKEEPER AND IPPOLITA DI PAOLA, LATIN AMERICA REGIONAL COORDINATOR**

**O**n World Water Day, March 22nd, Colombian newspapers published horrific photos of dead wildlife, victims of a devastating drought that has created an environmental crisis. The conditions threaten public health, and thousands of animals and fish have already succumbed to the deadly weather in the Paz de Ariporo municipality in the department of Casanare.

This severe water shortage rings an alarm that calls for adjustment of local and international environmental policies relating to water.

In Colombia, the Rio Meta, Rio Pauto and Rio Cravo Sur Waterkeepers have spent years fighting for access to clean water as a basic human right. We have advocated for industry compliance with national law and educated citizens about the detrimental effects of industrial hydrocarbon and uncontrolled expansion of thirsty agriculture and livestock industries at the expense of small farmers, rural communities and the environment. It is clearly time for Colombian environmental policy and institutions to be strengthened, and for citizens of all countries to reconsider policies that place economic interests, unsustainable technologies and consumption of dirty energy before the environment and public health. Global water- resources need to be a priority in all political and policy conversations, and communities must organize to defend and conserve our water.

The Orinoquia region of east-central Colombia, which includes Casanare, is seasonably vulnerable to environmental pressures because it is an expansive savannah with submerged wetlands during the wet season, April to December, and desert-like conditions with temperatures consistently above 100° Fahrenheit from January to March. Its principal industry has long been cattle farming, and it is rich in wildlife, including rare animals like capybaras – the largest of all rodents – as well as turtles, alligators, foxes, jackals, wild pigs and deer. Its fish come in many varieties.

This magnificent region has encountered one of the worst dry seasons in Colombia's history, shrinking reservoirs already threatened by excessive demand from cattle farms, exploratory oil-drilling and unsustainable land-use for commercial crops. These unregulated industries share the blame for the widespread dehydration and loss of Orinoquia's extraordinary wildlife. They have not only overused the region's water but further damaged the environment by contributing to greenhouse-gas emissions, as is demonstrated in the 2014 report of the Intergovernmental Panel on Climate Change. Yet simplistic public statements ignore this reality.

The Waterkeepers of Casanare call on the Colombian Ministry of Environment, Ministry of Mines and Energy and National Authority of Environmental Licensing to fulfill their legal obligation to prevent large-scale environmental disasters and protect public

health and key ecosystems. Our experience as Waterkeepers has given us insider knowledge that responsibility for this environmental disaster is multifold:

Seismic oil-exploration has infiltrated surface water and destroyed the headwaters that supply Casanare's wetlands, streams and lagoons.

Oil-exploration and exploitation have created excessive demand on aquifers.

The severe heat during January, February and March, which immediately followed months of flooding, has been identified as a consequence of climate change.

Farm-owners have failed to take preventative measures such as building water-reservoirs for their cattle.

The vast expanse of savannah, which has historically been used for rearing livestock and is home to various species of wildlife, is now being used for monoculture production of rice, African palm and commercial reforestation, which require unsustainable amounts of water and destroy the wetlands and headwaters of the savannah. [CONT. →](#)

# ENVIRONMENTAL



PHOTOS BY: RICO META WATERKEEPER

# DIS

ROTTING ANIMAL CARCASSES BEAR WITNESS TO ONE OF THE ORINOQUIA REGION'S WORST DROUGHTS, WHICH HAS BEEN EXACERBATED BY EXCESSIVE DEMANDS FOR WATER FROM CATTLE RANCHES, EXPLORATORY OIL DRILLING AND UNSUSTAINABLE LAND-USE FOR COMMERCIAL CROPS.



# AFTER

CAPYBARAS, THE LARGEST OF ALL RODENTS, GET A DRINK AT A RARE WATER HOLE.

In addition, a dangerous situation rapidly devolved into an environmental emergency because of the following institutional failures:

The Ministry of Environment has not recognized the strategic importance of wetland-savannah ecosystems for wildlife.

Regional environmental policy has not included plans for contingency measures and strategies to prevent conflict over water-shortages caused by excessive and inequitable demands.

Our ecosystems are delicate, complex and interconnected, and it is critical that we use our developing knowledge of climate change to assess and improve economic and environmental strategies, locally and internationally. To achieve significant change

we need to pressure the appropriate governmental bodies to hold the oil, agriculture and livestock industries accountable for the environmental damage that they cause.

One community leader spoke for many fellow-Colombians when he said, "There are several oil companies intervening in this area and they do not respect the people living here and our customs for conserving the ecosystems we depend on. They give us no explanations, the government awards them licenses, and no one is considering those of us living and raising families in this area."

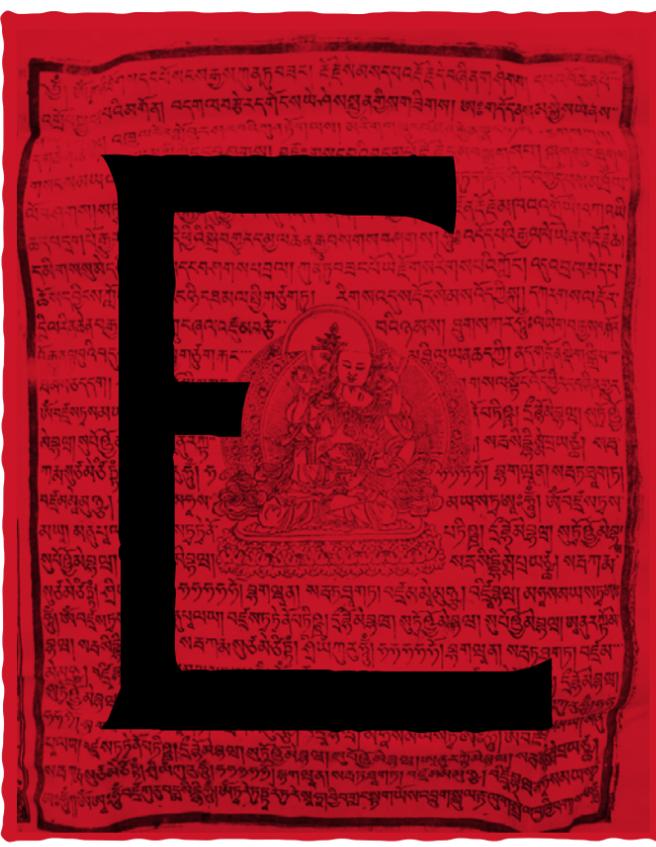
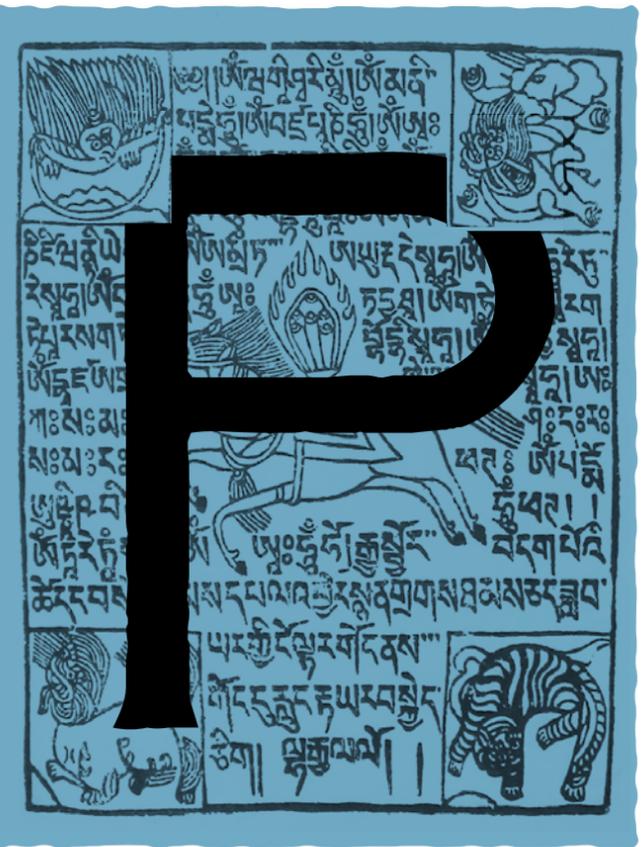
And now extreme drought and thousands of wildlife deaths have struck Casanare, Colombia. And nearly every month we hear of another environmental disaster caused by extreme weather somewhere in the world. If we do not immediately adapt our behavior to mitigate the disastrous consequences of climate change, how many more will be affected tomorrow, and where? **W**



A HIMALAYAN BUDDHIST LEADER JOINS WITH WATERKEEPER ALLIANCE TO CREATE A NETWORK OF WATERKEEPERS WORKING OUT OF HIS MONASTERIES IN NEPAL, BHUTAN AND INDIA.

BY MARC YAGGI,  
EXECUTIVE DIRECTOR,  
WATERKEEPER ALLIANCE

*“When drinking water, think about the source”*  
- Tibetan proverb



Making the pilgrimage to Druk Amitabha Mountain in Kathmandu, Nepal is a transformative experience. The mountain is home to the Drukpa school of Buddhism, one of the oldest and most prominent Buddhist lineages, led by His Holiness the Gyalwang Drukpa. His Holiness, the 12th lineage holder in the line of reincarnated masters is a warm, charismatic, progressive leader and humanitarian. He teaches a core message of service and is a great champion of gender equality, compassion towards all people, and the protection of our natural resources.

At Amitabha Mountain, His Holiness became the first Tibetan monk to allow nuns to be trained in the martial art Kung Fu, a bold move that has empowered them and broken barriers in gender equality across the region. At Amitabha and other Drukpa sites in the Himalayan region, Live to Love International, founded by His Holiness, has set up “eye camps” where remote villagers afflicted with cataracts and other vision problems can come for free procedures. When Sharon Khan, our international director, and I visited Amitabha Mountain in March, we witnessed more than 100 villagers, some of whom had been blind for 10 or 20 years, undergoing operations to restore their sight.

His Holiness’s devotion to protecting our natural surroundings has earned him the sobriquet “The Guardian of the Himalayas.” He believes there is a strong connection between how we treat our environment and how we treat each other. “If we can’t respect nature,” he asks, “how can we respect ourselves?”

The Himalayas, “the roof of the world,” also are often referred to as “the third pole,” because they contain the largest field of glaciers outside the polar caps. These formations feed, among other rivers, the Brahmaputra, Mekong, Irrawaddy, Yellow, Yangtze and Ganges, providing drinking-water to roughly four billion people – nearly half the world’s population. But these glaciers and sacred rivers are now threatened by climate change, plastic pollution, raw sewage, and



TOP: THIS GLITTERING BUDDHA SITS ON DRUK AMITABHA MOUNTAIN, HOME OF THE DRUKPA SCHOOL OF BUDDHISM, LED BY HIS HOLINESS THE GYALWANG DRUKPA.  
ABOVE: THE BAGMATI, A SACRED RIVER THAT FLOWS THROUGH KATHMANDU, IS CHALLENGED BY POLLUTION, DECAYING INFRASTRUCTURE AND EXCESSIVE WITHDRAWALS, BUT HAS BEEN IMPROVED BY WEEKLY CLEANUPS DEPLOYING THOUSANDS OF CITIZENS.

FOR THE HIMALAYAS

CONT. →



THIS SECTION OF THE BAGMATI RIVER WAS ONCE CLOGGED WITH TRASH FROM BANK TO BANK. IT IS HOPED THAT A BAGMATI RIVER WATERKEEPER WILL SOON BE FORMED.

other water-quality and -quantity problems. Such impacts to critical resources reverberate globally, shaking our faith in our planet's future. But as His Holiness teaches his followers, "nothing is impossible when we walk together."

Deeply committed to educating and empowering the region's residents to protect their waterways and the communities they sustain, His Holiness has for the past six years embarked on a series of epic spiritual journeys by foot, called "Eco Pad Yatras," lasting one to three months, during which he and his followers, numbering as many as 700, trek through some of the most treacherous terrain on earth collecting plastic and other waste and spreading the message of ecological compassion in one village after another, encouraging villagers to reduce their use of non-biodegradable materials and to embrace a new, greener way of living. On one Pad Yatra, the trekkers in these remote regions collected 10,000 items of paper trash, 5,000 cans and nearly half a ton of plastic litter, which they carried down, strapped to their backs. These amazing journeys were recently captured in an award-winning documentary, "Pad Yatra: A Green Odyssey."

In the fall of 2013, His Holiness and members of Live to Love International, including its president, Carrie Lee, visited our Waterkeeper Alliance office in New York, and we agreed to embark together on another epic journey to work with Himalayan communities to protect their precious region and its waterways. Our new journey began with the creation of the Himalayan Glacier Waterkeeper in Ladakh, India, home to one of the Drukpa sect's major monastic centers,

the Hemis Monastery, which is more than 1,000 years old and contains the world's largest collections of Buddhist relics. Representing the Waterkeeper movement, Sharon Khan and I next visited His Holiness at the Amitabha Mountain monastery to celebrate his birthday.

We witnessed the amazing power of the nuns in their commitment to service. They spend countless hours in remote villages, working to bring villagers into the eye camps, practicing Kung Fu, and studying the teachings of Gyalwang Drukpa. Their compassion and strength will make them great advocates for the region's waterways. We were also fortunate to spend time with other Buddhist spiritual leaders, including His Eminence the IXth Khamtul Rinpoche of Bhutan, who pledged enthusiastic support for protecting the region's waterways and expanding the Waterkeeper movement across the region, including in Bhutan.

During our final meeting with His Holiness at the end of the week, we all lamented the degraded conditions of many of the sacred rivers of the Himalayas, and resolved to create together a network of Waterkeeper organizations and affiliates, trained by veteran Waterkeepers, across Nepal, Bhutan, India and other parts of the region. The task of education in these communities will be demanding, as was illustrated by His Holiness in his account of cleaning trash from a river and being asked by local villagers if he was being paid to do that work, or if he was just crazy! Tackling the threat of climate change to the Himalayas will require a global effort, but it begins with the strong, compassionate voice of Drukpa Buddhism spreading across the waters of the Himalayas.

PHOTO BY MARC YAGGI



PHOTO BY MARC YAGGI



PHOTO BY WENDI LEE



PHOTO BY MARC YAGGI

CLOCKWISE FROM TOP LEFT, ONE OF THE THREE BUDDHAS THAT ADORN DRUK AMITABHA MOUNTAIN IN KATHMANDU, NEPAL. AT HEMIS MONASTERY IN LADAKH, INDIA, BUDDHIST PRAYER FLAGS, HUNG BY WATERKEEPER ALLIANCE, APPEAL FOR PROTECTION OF THE HIMALAYAN GLACIERS AND THE FOUR BILLION PEOPLE THEY SUPPLY WITH FRESHWATER. MARC YAGGI, FAR LEFT, HIS HOLINESS THE GYALWANG DRUKPA, SHARON KHAN, NEAR RIGHT, AND CARRIE LEE, WHO HEADS LIVE TO LOVE INTERNATIONAL, DISPLAY THE BANNER OF THE NEWLY FORMED HIMALAYAN GLACIER WATERKEEPER.

On the way out of Kathmandu, we passed along the sacred Bagmati River, which trickles through the town. In this nation with the second-most water resources in the world, the Bagmati's flow is greatly diminished by decaying infrastructure, growing population and inefficient agricultural withdrawals. Our friends at Nepal River Conservation Trust (NRCT) showed us a few of the many trouble spots on the river, including raw sewage discharges and plastic pollution.

As Nepal emerges from a difficult decade following the murder of its royal family, there is a growing sense of hope for its natural resources. A collaborative group of non-government organizations, government agencies, and others conducts weekly cleanups of the Bagmati, drawing 2,000-to-7,000 citizens for each effort. These events inspired the government's chief secretary to vow to bathe in the river in April 2014, which he did along with several other prominent government officials. And for the first time in the country's new constitutional history, government officials will join stakeholders from the private and nongovernment sectors in a National River Summit, organized by NRCT for September 24-27, to prepare recommendations to govern the rivers of Nepal.

This new activism, along with the prospect of a new Bagmati River Waterkeeper and more local Waterkeepers raises great hope for the sacred Bagmati and the region's other rivers. And an inspiring religious leader, His Holiness the Gyalwang Drukpa, guides that hope from the heights of Amitabha Mountain. **W**

"IF WE  
ARE FACING  
THE RIGHT  
DIRECTION.  
ALL WE  
HAVE TO DO  
IS KEEP  
WALKING."

- BUDDHA

# THE P O P H O F A E O F R I S A S O D N I COAL AND GOLD MINING IN INDONESIA THREATEN THIS MAGNIFICENT ARCHIPELAGO.

BY SHARON KHAN,  
INTERNATIONAL DIRECTOR,  
WATERKEEPER ALLIANCE



PHOTOS BY LAURI MILYVIRTA - GREENPEACE INTERNATIONAL

**I:** COAL POLLUTION IN BORNEO AND SUMATRA Borneo and Sumatra – the very names conjures images of wild jungle, with massive trees covered in vines and surrounded with some of the world’s most abundant and rare wildlife. An island paradise that might evoke memories of the Swiss Family Robinson, in which one can breathe oxygen-rich air, hear a natural symphony voiced by more than 1000 species of primates, frogs, mammals and birds, and view a palette painted by a thousand different kinds of orchid. But if you want to visit such a place, you had better hurry, for if King Coal, palm oil plantation owners and gold-miners have their way, the teeming biodiversity of Borneo, Sumatra, Java, Lombok and other Indonesian islands will be wholly destroyed by giant strip mines, toxic gold mines and row upon row of monoculture palm-oil trees.

Borneo and Sumatra, which are just two of the 17,700 islands that make up the country of Indonesia, have massive coal reserves, which contribute largely to Indonesia’s being the world’s largest exporter of coal. Yet the coal industry generates only four percent of Indonesia’s economic output, according to a recent Greenpeace Indonesia Report. The report also points out that much of the government revenue from mining is lost on mitigating the environmental costs of mining, such as responding to the floods, rebuilding infrastructure, and other economic losses that result from declining human and environmental conditions. Yet, Indonesia still has plans for major investment to facilitate coal exports, and to expand coal-fired power-generation.

In February, Waterkeeper Alliance, whose coal campaign has a



PONDS LIKE THE ONE PICTURED ARE THE TOXIC LEGACY OF MINING OPERATIONS AND ONE OF THE LEADING CAUSES OF POLLUTION IN RURAL INDONESIA.

hard-hitting international component that investigates and confronts toxic coal pollution all over the world, was invited to Indonesia to help stop further development of coal facilities.

Donna Lisenby, the Alliance’s global coal campaign coordinator, and I travelled to the Indonesian city of Samarinda, on the Mahakam River just off the east-central coast of Borneo, where over 70 members of non-governmental organizations from India, Indonesia, Malaysia, the Philippines, Thailand, Korea and Vietnam gathered to learn the best strategies to stop coal polluters, in an area where coal-mining is destroying forests, streams, farmlands and fisheries. Donna led workshops on how to track and monitor water-pollution caused by the mining and transportation of coal.

Both of us then accompanied a local team on a field trip to investigate water-pollution resulting from hundreds of such operations in Samarinda. The group included members of Greenpeace Indonesia and “JATAM,” an Indonesian network of NGOs and community-based organizations working to protect residents from the environmental destruction and dehumanization wrought by the invasion of the mining, oil and gas industries. Not long after our jeep left the meeting venue, we came across an enormous open-pit coal mine – and a local farmer who was more than happy to spend a good part of his day leading us to the

places where polluted water was being discharged.

His motivation was clear: for years he has been suffering losses because he has had to irrigate his rice fields with poisoned water. When the coal companies stripped the lush tropical forest and exposed hundreds of acres of coal-waste to rainfall averaging more than 150 inches a year, pristine meandering streams became gushing torrents laden with acid-mine drainage and sediment. Predictably, the farmer’s crop-yields plummeted.

WHEN THE COAL COMPANIES STRIPPED THE LUSH TROPICAL FOREST AND EXPOSED HUNDREDS OF ACRES OF COAL-WASTE TO RAINFALL AVERAGING MORE THAN 150 INCHES A YEAR, PRISTINE MEANDERING STREAMS BECAME GUSHING TORRENTS LADEN WITH ACID-MINE DRAINAGE AND SEDIMENT.

Pollution from coal loading and transport operations along the Mahakam River severely threatens the health of river communities it serves. According to Greenpeace Indonesia, more than a million people are exposed to coal-dust blown off the many large uncovered barges that ply the river every day.

In the capital city of Jakarta, on the island of Java to the south, we participated in a press conference organized by “WALHI,” the oldest and largest environmental-advocacy NGO in Indonesia. The main

CONT. →

PERVASIVE CORRUPTION AND PAYOFFS TO LOCAL OFFICIALS MAKE IT EXTREMELY HARD TO STOP THE ILLEGAL PRACTICES OF THESE LABOR-INTENSIVE GOLD MINING ACTIVITIES, ESPECIALLY IN REMOTE AREAS WHERE OPERATIONS ARE MOST LIKELY TO OCCUR.



SARAH AGUSTIORINI, A VOLUNTEER WITH JATAM, COLLECTS WATER FROM A POND LEFT OVER FROM A MINING OPERATION TO TEST FOR TOXINS.

message of the conference was that coal mining would destroy Indonesia's environment and the health of her people if the proposed mines covering thousands of acres were built. Afterward, Donna travelled with WALHI staff to investigate coal-mine pollution that pours into the rivers and coasts of the island of Sumatra near Bengkulu. Then she returned to Borneo to conduct a field investigation of the KPU Puma coal mine on a hillside 10 kilometers northeast of downtown Samarinda, above the Mulawarman University Botanical Gardens and Biological Preserve. Her team visited a fish farm right outside the gardens, where the farming family has complained that the Puma mine has been killing their fish.

The fish farm receives water from three different streams, and the investigation team hiked through the jungle up what they deemed was the problematic stream into the Kebun Raya Universitas Mulawarman, a biological-reserve area, where they measured the water's pH level at 3.79. (Acidity of water increases as pH levels fall further below seven.) They continued upstream and reached the mine responsible for the acid-drainage. Two earthen wastewater ponds had been constructed on the giant strip-mine site where the ground slopes quite steeply toward the botanical garden. The water in the ponds was deep, rusty red. The western pond contained dead vegetation. The eastern one had a pH level of 2.98.

The evidence is clear that water pollution caused by coal mines seriously endangers the aquatic culture and biodiversity of Indonesia. And, since Indonesia is the world's largest exporter of coal, and plans to dramatically increase its exports, it is and will continue to be a major contributor to global climate-change. As the world's voice for clean water, Waterkeeper

Alliance has a solemn responsibility to help to diminish the threat that this beautiful island-country poses to the earth.

## II: MERCURY POISONING IN JAVA

While Donna Lisenby continued to investigate coal pollution in Indonesia, I travelled eight hours from Jakarta to the southern part of West Java, with Yuyun Ismawati, a 2009 Goldman Prize winner (the environmental community's most prestigious award) for her work to rid waterways in Bali from waste pollution. We visited the hills of Mount Halimun Salak National Park and the remote village of Cisit, where villagers are being poisoned by mercury used in artisanal and small-scale gold mining (ASGM). Yuyun, co-founder of BaliFokus, an NGO that has gained national recognition, was recently named by Forbes Indonesia as one of Indonesia's most inspiring women for her environmental work and efforts to stop mercury pollution resulting from gold mining – the world's leading cause of the direct flow of mercury into waterways. BaliFokus works with the Indigenous Peoples' Alliance of the Archipelago (AMAN) and "Telapak," a forest advocacy group, to promote "Community Green Gold Mining" in Indonesia, an initiative to support local management of natural resources and environmentally sound management of small-scale, or "artisanal," gold mining.

In January 2014, The New York Times and the Pulitzer Center on Crisis Reporting featured Yuyun's work in Cisit, where men mine and carry gold-ore home in sacks and women machine-process it in ball-



A BARGE LOADED WITH COAL FOR EXPORT. INDONESIA IS NOW THE WORLD'S LARGEST EXPORTER OF COAL.

PHOTOS BY LAURI MILYVIRTA - GREENPEACE INTERNATIONAL

mills to separate the gold from the ore. The crushed ore is tumbled with various ingredients, including mercury, to form gold nuggets that are then purified by burning off the mercury over an open flame, allowing it to escape into the air. Outdoor air samples taken by Yuyun's team in various parts of Cisit showed mercury readings of 5,000 to 50,000 nanograms per cubic meter – 5 to 50 times the safe limit determined by the U.S. Environmental Protection Agency and the World Health Organization. These groups stipulate that people should be evacuated from areas where readings exceed 10,000 nanograms per cubic meter.

Industrial gold-mining companies in Indonesia are forbidden to use mercury during processing, but ASGM practices are not regulated yet. Pervasive corruption and payoffs to local officials make it extremely hard to stop the illegal practices of these labor-intensive gold mining activities, especially in remote areas where ASGM operations are most likely to occur. In 2011, Yuyun identified more than 850 "hotspots" of illegal small-scale gold mining across the country, which have released more than 150,000 tons of mercury into the air, water and soil. Most of this activity takes place in areas where the contaminated water is used for drinking, bathing, washing, and fisheries, and agricultural activities.

In October 2013, Indonesia's Constitutional Court issued a landmark ruling recognizing territorial boundaries of two indigenous ethnic groups – the Kuntu in Jambi and the Kasepuhan Adat Cisit in Cisit and several surrounding villages – giving them the right to manage the natural resources of the land on which they have lived for centuries. For about 15 years before the court's decision, illegal miners from other parts

of Indonesia had been coming into Kasepuhan territory to extract gold and process it with mercury, without awareness or concern about the impact. During this time the Cisit community watched more and more of their people become sick from mercury in the air, water, and soil, often ingesting it in their staple foods of fish and rice. On the 10th of October 2014, Indonesia, together with other 93 other countries, signed the Minamata Convention on Mercury. The global community agreed to regulate and restrict the use of mercury to protect human health and the environment.

The elders of the Kasepuhan clan have spent more than a decade fighting to stop these operations in the national park and their territory. Now one of these elders, Abah Okri, is working with BaliFokus and AMAN to implement Community Green Gold Mining practices, including mercury-free gold processing, and to introduce alternative livelihoods, such as high-quality artisanal crafts and eco-tourism. The Cisit Waterkeeper organization Yuyun hopes to establish would introduce white-water rafting on the nearby Cisungsang River. Another opportunity for economic development would be a micro-hydro power project on the Ciater River that runs beside the village, which would provide both clean energy and sustainable income for the villagers. Neither the plant nor any of the other operations would use poisoned water or mercury.

Waterkeeper Alliance looks forward to working with other grassroots groups in Indonesia to bring an end to the coal mining, mercury use and other toxic pollutants that are poisoning this island nation's beautiful waters and people. **W**

# WHO WILL TELL THE PEOPLE

IF THE DAN RIVER COAL-ASH SPILL PROVED ANYTHING, IT IS THAT AS GOVERNMENT REGULATORS DO THE BIDDING OF POWERFUL CORPORATIONS, IT IS LEFT TO CITIZENS' GROUPS TO STAND UP FOR DEMOCRACY AND SOUND THE ALARM.

BY HALEY TWIST

When Ben Adkins describes the Dan River, his words reveal profound reverence for the 214-mile-long river that runs through his hometown of Eden, North Carolina. To Adkins, a 36-year-old father of two, the Dan is more than just a source of drinking water for communities downstream and a destination for paddlers and tourists; it is a defining element of his life. This river, according to Adkins, is the first place he ever felt God's presence. Yet he knows well that on February 2nd, 2014, this river he cherishes suddenly, drastically changed, potentially for years to come.

On the afternoon of February 2nd, as many people prepared to watch Super Bowl XLVIII that evening, a maintenance worker patrolling the grounds of Duke Energy's Dan River coal-fired Steam Station in Eden, North Carolina, noticed that the water level in the plant's nearly 60-year-old coal-ash waste pit seemed lower than usual. Upon further inspection, utility workers discovered that a 48-inch metal stormwater pipe running beneath a coal ash disposal pond had collapsed, delivering a torrent of toxic sludge straight into the Dan River. By the time the utility managed to stop the spill more than three days later, an estimated 150 million tons of coal-ash slurry – and about 1,200 pounds of arsenic, 435 pounds of chromium, and 325 pounds of lead, among a long list of other toxic heavy metals found in coal ash – had spilled directly into the river.

Even after the river water returned to its natural greenish-brown color, a layer of thick, gray ash settled on the bed of the river for at least 70 miles downstream, threatening drinking water supplies from Danville, Virginia all the way to Virginia Beach. Deposits of floating ash lingered in eddies behind rocks and fallen tree limbs for over a week. Shortly after the spill, the water level in the river receded in the interim between two



DONNA LISENBY, CENTER, WATERKEEPER ALLIANCE'S GLOBAL COAL CAMPAIGN COORDINATOR, LED COMMUNITY MEMBERS IN NORTH CAROLINA FOR COAL ASH WEDNESDAY, WHERE CITIZENS GATHERED AT THE GOVERNOR'S MANSION IN RALEIGH TO DEMAND THAT DUKE ENERGY CLEAN UP THEIR COAL-ASH PONDS.

snowstorms, leaving a chalky-gray “bathtub ring” of ash on the bank at the high-water line for miles downstream.

Now, as the scorching North Carolina summer rolls in and memories of the mid-winter spill have begun to fade, people have resumed fishing and swimming in the Dan, unaware of the layer of solid ash that still rests on the river bottom, now concealed by two or three inches of soft sediment deposited by snowmelt and runoff from heavy spring rains. At Draper Landing, the only public access point on the river between Eden and Danville, a laminated sheet of paper dangles inconspicuously from a nail on a maple tree. On the sheet, in bureaucratic fine print, a notice from the North Carolina Department of Public Health warns visitors to avoid contact with the contaminated water.

If there has been a silver lining to the Dan River spill, it has been the very public exposure of a broken government that is either unwilling or incapable of protecting its citizens and natural resources from irresponsible – and in many cases, blatantly illegal – coal-ash disposal practices. Wastewater discharges from coal-ash impoundments are by far the largest source of toxic water pollution in the United States, yet there is currently little in the way of uniform federal standards to require utilities to reduce or eliminate this waste stream, as required by the Clean Water Act.

The absence of federal standards has left the regulation of coal ash almost exclusively to the individual states. And in coal-dependent states, where electric utilities exert tremendous political influence, a combination of lax regulation and nonexistent enforcement allow corporate polluters to dump millions of pounds

of toxic pollution into rivers and lakes with almost complete impunity. In North Carolina, for example, landfills that receive ordinary household garbage are subject to far more regulatory requirements (impermeable liners, leachate collection systems, etc.) than landfills and impoundments filled with toxic coal ash. State-issued Clean Water Act permits allow Duke Energy to discharge many toxic pollutants in unlimited quantities. Worse yet, the North Carolina Department of the Environment and Natural Resources (DENR), the primary agency responsible for overseeing Duke's compliance with environmental laws, never brought a meaningful enforcement action to address Duke's noncompliance, even though illegal groundwater contamination and discharges from leaking dams and pipes had been documented at Duke facilities for decades.

In the three years prior to the spill, Waterkeeper Alliance and six North Carolina Riverkeepers meticulously documented illegal water pollution leaking from unlined ash dumps at three Duke Energy coal-fired power plants in the state. Lawyers from the Southern Environmental Law Center representing the Waterkeepers sent notices of intent to sue Duke Energy for Clean Water Act violations at three plants. The first two notices concerned pollution at Duke's Asheville Plant and the Riverbend Steam Station near Charlotte. Each time the Waterkeepers threatened to sue, state regulators suddenly leapt into action, suing Duke first, thereby preempting the citizen enforcement actions to a great extent. After filing the lawsuits, the state secretly negotiated an exceedingly lenient settlement with Duke, which would have imposed inordinately small fines for extensive pollution, and would have allowed the pollution

to continue unabated while insulating Duke from liability. The proposed settlement met massive resistance from the public, and the parties subsequently withdrew it before the judge could ever rule on its adequacy.

At the third plant, the L.V. Sutton Plant in Wilmington, selenium in illegal coal ash discharges into Lake Sutton – a popular fishery – is causing rapid population declines and physical mutations in several fish species. Groundwater contamination emanating from the coal-ash dumps is also creeping off Duke's property, threatening the drinking water supply for nearby residents. When Waterkeeper Alliance, the Cape Fear Riverkeeper, and the Sierra Club sent a third notice letter for pollution at the Sutton Plant, North Carolina responded as it had the first two times, blocking the citizen action by suing Duke itself. This time, however, the state accused Duke of illegal coal-ash pollution not only at the Sutton Plant, but at all 11 of Duke's remaining coal-ash dumps across the state. According to Waterkeeper Alliance attorney Pete Harrison, this move was clearly designed to thwart any plans the Waterkeepers may have had to take action at additional sites in the future.

“To be perfectly honest,” Harrison says, “we had no plans to pursue enforcement at any of the other plants. The state overshot the mark. What was significant about this unprecedented maneuver was that you had the state of North Carolina going on the record, under oath, accusing Duke Energy of threatening the health and welfare of the people of North Carolina with its illegal toxic pollution – at every single one of its coal facilities across the state.”

After state regulators filed the suite of coal ash enforcement lawsuits against Duke Energy in August of 2013, the litigation

CONT. →



AERIAL PHOTO BY RICK DOVE/WATERKEEPER ALLIANCE

WATERKEEPER ALLIANCE SENT PLANES AND PHOTOGRAPHERS INTO THE AIR IN THE DAYS FOLLOWING THE COAL ASH SPILL ON THE DAN RIVER.

stagnated while the pollution continued unchanged. Six months later, the collapsed pipe at the Dan River plant flooded the river with coal ash, shining a national spotlight on Duke's lawless ash-management practices, and the regulators who allowed the utility to get away with it. Within days, the U.S. Department of Justice launched a massive criminal investigation, specifically examining whether Duke had provided any favors or "items of value" to state employees in exchange for leniency and other concessions.

Harrison remains hopeful that "a serious criminal prosecution would help solve a lot of problems with 'captured' agencies, where powerful industries come in and dominate government to the point where the government agencies that are supposed to protect our health and our environment are no longer doing that." The ongoing criminal probe appears to focus on the state's collusion with Duke Energy to obstruct threatened citizen-enforcement lawsuits, and to a greater extent, the regulatory breakdown that allowed the Dan River spill to occur. Immediately after the public received notice of the spill on Monday evening, more than 24 hours after Duke became aware of the problem, questions arose as to why there had been such a delay in notice in the face of such a serious endangerment to public health. Hours after discovering the spill on Sunday

afternoon, Duke Energy called the state's spill-reporting hotline. However, nobody answered the phone and nobody heard Duke's voicemail until it had become irrelevant.

Officials at DENR only became aware of the spill on Monday morning when Duke called an agency field office in Winston-Salem. Finally, on Monday evening, Duke, DENR, and Danville Utilities each issued a press release within an hour of one another, informing the public that tens of millions of gallons of toxic waste had spilled into the Dan River. By then, the ash had long since reached the public drinking water intake at Danville, a city of 43,000. Danville Utilities' press release proudly declared its "success" in removing all of the contaminants ingested by its water treatment system, though it was later revealed that the utility had relied completely on water quality data supplied to it by Duke Energy.

"Whenever you have an environmental disaster like the Dan River spill, those responsible for the disaster and the authorities responsible for responding to it often try to suppress public information," says Harrison. "Responsible parties suddenly find themselves facing huge liabilities, and if they can influence regulators to cut corners and conceal information, they will – even if it exposes the public to harm. That is why it's vital for citizens to keep a close eye on the response to this kind of crisis, making sure the public gets the whole story."

Harrison, who specializes in coal-related

water pollution issues, and Donna Lisenby, Waterkeeper Alliance's global coal campaign coordinator, led a Waterkeeper team that would prove instrumental in "guarding the guards," in the wake of the Dan River spill. Not long before the spill, Lisenby developed a set rapid response protocol for Waterkeeper Alliance, which she based on three fundamental elements: rapid deployment to the scene, thorough documentation of impacts and government response, and rapid distribution of the information collected to the public.

Before she joined Waterkeeper Alliance in 2013, Lisenby had been a Riverkeeper in North Carolina for 15 years, and a firefighter before that. Lisenby's experience responding to emergency situations included a previous coal-ash spill. On the night of December 22, 2008, when a dike collapsed at a huge coal-ash impoundment near Kingston, Tennessee, Lisenby and Hurricane Creekkeeper John Wathen were among the first on the scene, paddling kayaks through a thick gray soup of spilled coal ash in the Emory and Clinch Rivers. Their photography and water sample results helped inform the world of how severe the Kingston spill had been, at a time

when few people had even heard of coal ash. When Lisenby got news of the Dan River spill Monday evening, she immediately initiated the rapid response protocol she had developed. Early Tuesday morning, Lisenby and her truck, loaded with boats, cameras and water-sampling tools arrived at the site of the spill. Catawba Riverkeeper Sam Perkins and Yadkin Riverkeeper staff member Justin Quinlivan joined Lisenby. With limited public access to the river upstream of the spill, the team's first task was to gain access to the water.

After surveying maps, they determined that the cow pastures across the river from the power plant would be ideal. Lisenby contacted the landowner and he allowed the team to use his fields as a base camp. From there, the team set out in their kayaks, and after a frantic paddle across the rushing river, they arrived at the toe of the ash pond. High above them, Chapel Hill attorney and pilot Bob Epting and Larry Baldwin, who coordinates field investigations of North Carolina factory farms for Waterkeeper Alliance, captured striking aerial images of the gray plume of coal ash extending for miles downstream of the spill.

The crew in kayaks soon arrived at the spilling pipe, and despite warnings from Duke Energy personnel instructing them to leave, they collected samples of the sludge that continued

The EPA's arsenic standard for safe drinking water – the level below which consumers are protected from the effects of long-term exposure – is 0.01 parts per million. The arsenic concentration logged by Waterkeeper Alliance at the Dan River spill site registered .349 parts per million –nearly 35 times greater than the standard.

Waterkeeper Alliance's samples, which were tested within 48 hours, indicated that the Dan River was polluted with arsenic, lead, boron, manganese, and other contaminants. Current medical knowledge links such pollutants to learning disabilities, birth defects, Alzheimer's disease, Parkinson's disease, asthma and various types of cancer. Yet Erin Culbert, a Duke Energy representative, says these health concerns "are based in the inaccurate perception that coal-ash is toxic." Coal ash, she concedes, contains low levels of arsenic, but its toxicity, she claims, is questionable.

"Assessing toxicity," she contends, "is more than whether a specific element is present; it's also about what form that element is in, whether there is actual exposure to people or animals, and whether the magnitude of that exposure is sufficient to cause a concern."

Filmmaker Rhiannon Fionn has travelled across America to gather personal stories of exposure to coal ash for her forthcoming film, *Coal Ash Chronicles*. "I do feel like the

Although there are currently no federal regulations that specifically govern coal-ash storage, and state regulation is minimal, Duke Energy's Culbert places North Carolina ahead of other states for its dam-safety standards and groundwater-monitoring requirements for ash basins. In May, North Carolina State Senate Republican leaders filed a coal-ash-regulation bill at the General Assembly in Raleigh, proposing the gradual closure of several coal-ash storage-basins in the state, including ones at the Dan River, Riverbend, Asheville, and Sutton plants. According to Raleigh's News & Observer, environmental groups believe the bill should require Duke Energy to close all of their storage-ponds. But North Carolina Governor Pat McCrory, a former Duke Energy executive for 28 years before taking office, has proposed a much more lenient bill of his own.

As coal-ash pollution has received more attention, the state has issued several citations to Duke Energy for similar leaking pipes beneath many of its North Carolina facilities, although little has been done to correct problems. Inspection reports dating back to 1986 demonstrate that Duke Energy had been warned about the corroding pipe that failed at the Dan River plant more than 20 years ago, but the utility never took action to fix it.

**! WATERKEEPER ALLIANCE'S SAMPLES, WHICH WERE TESTED WITHIN 48 HOURS, INDICATED THAT THE DAN RIVER WAS POLLUTED WITH ARSENIC, LEAD, BORON, MANGANESE, AND OTHER CONTAMINANTS. CURRENT MEDICAL KNOWLEDGE LINKS SUCH POLLUTANTS TO LEARNING DISABILITIES, BIRTH DEFECTS, ALZHEIMER'S DISEASE, PARKINSON'S DISEASE, ASTHMA AND VARIOUS TYPES OF CANCER.**



to pour out of the pipe. Lisenby claims that, although independent inspectors found and flagged the busted pipe as a problem years ago, neither Duke Energy nor the State investigated the situation. "They just let that old, corrugated metal pipe sit underneath that coal-ash basin, corroding away over the decades," she says.

The water samples that Lisenby and Quinlivan collected turned up very different lab results from those that were taken by Duke Energy and analyzed in a private lab in Huntersville, N.C. According to Lisenby, the State, Duke Energy and the EPA collected samples two miles downstream from where the spill occurred, while the Waterkeepers took theirs directly from the source of the spill. Quinlivan, who spent over 77 hours on the river in the weeks after the spill, says that it was almost as if DENR selected its sampling points in places where pollution concentrations would appear to be lower.

Waterkeepers have a right to say "I told you so," says Fionn. "The lack of regulations is bad, but it's been bad for a long time. The Dan River spill – and other cases of coal-ash contamination in the state – could have been prevented if DENR was doing its job, instead of pandering to political and corporate interests."

After Lisenby's international duties took her away from the Dan River, Pete Harrison deployed to the scene to continue the investigation. Along with five North Carolina Riverkeepers, he examined other Duke Energy facilities in North Carolina with coal-ash dumps, and documented illegal pollution at 11 of them. They also discovered that the company had pumped an estimated 61 million gallons of wastewater into the Cape Fear River from another coal-ash pond. Neuse Riverkeeper Matt Starr, French Broad Riverkeeper Hartwell Carson, and Cape Fear Riverkeeper Kemp Burdette investigated other facilities.

Duke Energy claims it has taken responsibility for the spill and in a March 12th letter to Governor McCrory, CEO Good explained that the company permanently sealed the broken pipe at Dan River, removed some coal ash from the water, and continues to test water quality. The company plans to close or remove ash ponds at its Dan River, Sutton, Riverbend and Asheville plants, however the fate of the other 11 sites remains in question. Ben Adkins still goes down to Draper Landing several times a week. The landing had always been a place where Adkins could go to clear his mind, but now it stirs thoughts of regret for what has been lost. "My kids deserve to swim here and fish here," he says. "I deserve to be able to teach them those things – here." **W**

*Haley Twist is a free-lance writer living in Charlotte, North Carolina. She studies religion and journalism at the University of North Carolina at Charlotte.*



DOWNTOWN PITTSBURGH, WHERE THE ALLEGHENY AND MONONGAHELA RIVERS JOIN TO FORM THE MIGHTY OHIO.

# WHERE THE OHIO BEGINS, RIVER RALLY INSPIRES ADVOCATES TO CONTINUE

BY PATRICK J. LYNCH, INTERNATIONAL DIRECTOR FOR THE FUTALEUFÚ RIVERKEEPER, IN CHILEAN PATAGONIA.

I'm writing from Pittsburgh, Pennsylvania, where Waterkeeper Alliance and River Network have just hosted the annual River Rally conference, from May 30 to June 2. This is the birthplace of the Ohio River, where the Allegheny and Monongahela Rivers meet. And meeting here also are several hundred water-advocates, including more than 50 of us who have traveled from all over the world to share stories about our work and unite around the simple and wonderful idea that all communities deserve clean water and healthy rivers.

From Latin America alone, 33 organizations across 11 countries were represented. My own organization is Futaleufú Riverkeeper in Chile, the Patagonia region's first Waterkeeper program. This year the increasingly global movement welcomed its newest Latin-American group, the Rio Motagua Waterkeeper, started by Jeanette Noack, from Guatemala City who works with the Alianza de Derecho Ambiental y Agua and the Environmental Law Alliance Worldwide and has served throughout Central America for over a decade an environmental attorney.

One of the longest travelers to the conference was Nabil Musa, the Upper Tigris Waterkeeper in the Kurdistan region of Iraq, who arrived after completing a first-ever descent of the Choman-Rawanduz River, with support from the American Canoe Association's Dave Burden. Nabil is an artist and performer who lived in exile before deciding that returning home and helping communities clean up their rivers was his calling.

Another visitor from afar was Ranjan Panda, the new Mahanadi River Waterkeeper in India's Odisha state. Like the "Futaleufú," a word from the

Mapuche people's language, "Mahanadi" means "Great River," a waterway that supports multiple ecosystems and provides irrigation and drinking water for millions of people. But big rivers are also big targets for destruction. Ranjan warns that over-development and urban drought exacerbated by climate-change could, without government action, cause the Mahanadi to dry up completely. He is known in India as a "climate crusader," and has thousands of followers in his campaign to maintain healthy rivers.

The highlight of this year's conference was the welcoming of one of the world's most celebrated Buddhist leaders, His Holiness the Gyalwang Drukpa, spiritual head of 30 million followers, who spoke about his decision to found the Himalayan Glacier Waterkeeper. His ambitious goal is to protect all the rivers of the Himalayas, a region so massive that it provides water for over half the world's population.

Environmental challenges are increasingly interconnected. Climate change is the most obvious common threat, but many other potentially catastrophic problems demand collective action across borders. The fracking industry, which got started right here in Pennsylvania, now stretches to the tip of South America. The mining industry also continuously expands on every continent. In places as far apart as Nepal and my own base in Patagonia, we've learned that nowhere is off-limits to these forces. Many countries have few legal protections to prevent projects that threaten waterways, and citizen opposition doesn't always achieve the level of coordination needed to be



PHOTO BY JOHN WATHEN

PHOTO BY PETE HARRISON

very effective. Unlike in Pennsylvania, where dozens of anti-fracking groups are challenging corporate influence and state corruption through lawsuits and policy work, in other regions there are few opponents. Groups like Waterkeeper Alliance and International Rivers, which connect local organizations with larger campaigns, play a critical role in giving us the tools we need to engage our fights.

One of the most important realizations offered by River Rally is that almost every successful movement at some point started with a single person. Maybe it was a kayaker upset about her river's being polluted, or a fisherman with a sick catfish on the end of his pole. It's important for us to be reminded that every movement begins small, and that growth is achieved when the initiators attract others who share the belief that residents of a country or region have rights to healthy rivers, or a right to say no to fracking, or a right to keep foreign companies from damaging their environments.

At River Rally, international water-advocates share difficulties and learn from the successes of the movement in the United States to protect rivers and watersheds. We listen. We demonstrate to each other how our struggles are connected. We encourage one another to build bridges across borders so that we can be stronger voices in our own communities. Ultimately, everyone's work helps everyone else. We may live thousands of miles apart, but each of us benefits when one of us stops a river from being dammed or a glacier from being covered with mining dust.

It's fitting, therefore, that Waterkeeper Alliance seeks partnerships with groups like River Network and International Rivers, which has launched similar campaigns around the world. What started almost 50 years ago as a group of commercial fishermen on the Hudson River trying to reclaim their river from industrial polluters now includes over 220 representatives from six continents. And this is just the beginning - His Holiness plans to launch 150 new Waterkeepers



PHOTO BY JOHN WATHEN

PHOTOS CLOCKWISE FROM TOP LEFT, AMONG THE FIVE RECIPIENTS OF RIVER HERO AWARDS WERE THREE WATERKEEPERS, FAR LEFT, TIJUANA RIVERKEEPER MARGARITA DIAZ, SECOND FROM RIGHT, CASCO BAYKEEPER JOE PAYNE, AND RIGHT, KANSAS RIVERKEEPER LAURA CALWELL.

HIS HOLINESS THE GYALWANG DRUKPA MEETS SENEGAL'S HANN BAYKEEPER MBACE SECK. AN OLD FERRY CAPSIZED IN THE ALLEGHENY RIVER ACROSS FROM DOWNTOWN RECALLS THE CITY'S INDUSTRIAL PAST WHILE MOST EVERYTHING ELSE IN THE AREA POINTS TO PITTSBURGH'S PROMISING POST-INDUSTRIAL FUTURE.

across the Himalayas in the coming years.

As Robert F. Kennedy Jr. said in his keynote address, corporations cannot steal our natural resources without first contending with all of us. The more of us there are who work on these issues, the harder it is for big multinational companies like Endesa or Drummond or Sinohydro to push through projects that destroy local resources, then send their profits back overseas. River Rally proves not only that we have strength in numbers but also in our increased connection and coordination.

Still, the world needs more. More groups like River Network and Waterkeeper Alliance to address cross-boundary issues and change the global paradigm of water- and river-management. More leaders like Jeanette Noack and Ranjan Panda and Nabil Musa who are willing to take on difficult issues where they live and reach beyond their borders to seek further knowledge.

We are lawyers, street performers, venture capitalists, artists. And as River Rally comes to a close, we can take home with us the words of His Holiness the Gyalwang Drukpa, who at one point smiled during his speech and announced, "I am very, very happy to be part of your family."

Back home in the watersheds where we work, we may be few. But there is a global movement growing every day, and I look forward to our working together and getting the help our communities need to win these battles.

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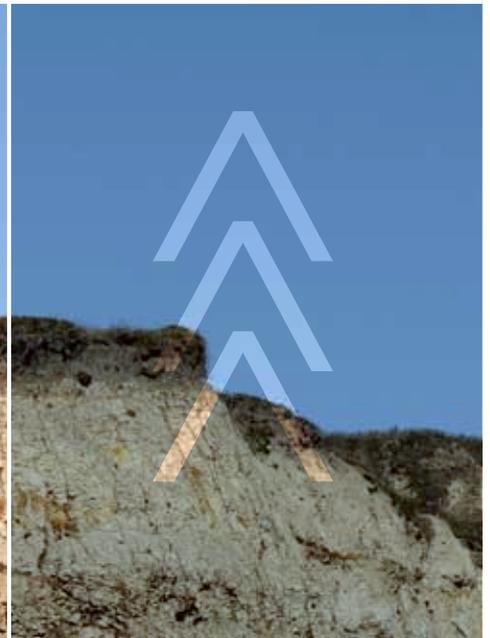
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