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1.5 million square miles of watersheds

24 countries

# Who Is Waterkeeper Alliance?

more than 215 waterways

Photo: 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.

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# In This Century of Water Wars, U.S. Agency Waves a White Flag

BY ROBERT F. KENNEDY, JR.

Water has now emerged as the target of choice for the robber barons of globalization. As freshwater supplies dwindle, global investors are scrambling to own what's left. "Water promises to be to the 21st century what oil was to the 20th century," Fortune observed in May 2000. The magazine forecast that the 21st century's top-performing financial domain will be privatization of water, "the precious commodity that determines the wealth of nations." The sector is off to an impressive start. The World Bank already values water privatization at \$1 trillion. Fortune expects a multi-trillion dollar value. The World Bank's former executive Ismail Serageldin predicted that the "wars of the 21st century will be fought over water."

And the wars have already begun; locals often push back against water moguls whom they regard as bullies trampling democracy and basic human rights. When Bechtel, in 2000, privatized the Bolivian city of Cochabamba's water and then raised rates high enough to threaten the lives of poor residents, the city erupted in deadly violence. The "Bolivian Water War" ejected Bechtel and toppled the city government. Energy- and water-price hikes following the damming of Belize's waterways by the Canadian company Fortis in 2008, prompted popular rebellions and nationalization of that company's assets. Control of Syrian waters by corporate agriculture during a prolonged drought helped trigger the current rebellion there. Chile effectively became a neo-colonial vassal after the Pinochet dictatorship sold her rivers (along with her forests, minerals, and even roads, railroads and airports) to foreign syndicates – including Fortis – divesting Chile's people of their power to craft the destiny of their homeland. Chile's leading human-rights lawyer recently told me, "Today, Chile has only the trappings of democracy, since we have no sovereignty over the resources of our nation."

And now it's happening here! Many Americans are surprised to learn that Chinese and European sovereign wealth funds and global conglomerates are taking control of our nation's waterways.



THE ART ABOVE AND ON THE FOLLOWING PAGES WAS DISPLAYED AT THE 10-YEAR ANNIVERSARY CELEBRATION OF THE BOLIVIAN PEOPLE'S VICTORY OVER ATTEMPTS BY THE MULTINATIONAL CORPORATION BECHTEL TO PRIVATIZE THE WATER IN COCHABAMBA, BOLIVIA'S THIRD LARGEST CITY. CREATIVE COMMONS PHOTO BY KRIS KRUG VIA FLICKR



CREATIVE COMMONS PHOTO BY KRIS KRUG VIA FLICKR

Hydropower is our country's largest source of renewable energy, accounting for approximately 10 percent of domestic electricity production, and foreign syndicates are rolling up U.S. waterways by purchasing the assets of industrial companies which once held hydropower licenses.

Brookfield Asset Management, a Canadian company funded by overseas corporations and governments – including \$200 million from China – recently announced the purchase of nine hydroelectric dams in Maine and one in California and Brookfield now owns 38 dams in Maine, giving the company dominion over the state's rivers and half its hydropower capacity. Brookfield's acquisitions are part of a disturbing trend of foreign companies and governments privatizing American rivers.

Ironically, the organ for this massive transfer of public wealth is the Federal Energy Regulatory Commission (FERC) – an agency that is failing to fulfill its mandate to keep America's waterways in public ownership

and to assure that the nation's waters are used for public not private benefit.

During the Gilded Age, aluminum and steel companies dammed America's rivers to power their smelters, routinely corrupting state legislatures and federal officials to win exclusive licenses to privatize public waterways in perpetuity. Riverside communities lost their rights to drinking water, irrigation, flood-control, water-storage and recreation. "Keep your eye on the aluminum company," Theodore Roosevelt warned in 1915, "that is trying to get control of your water powers. Don't let go of them. We have been too free in the past. I have no objection to big business making money but I do not want it to make it at the expense of the public interest."

Like most Americans of that era, Teddy Roosevelt regarded the control of our nation's waterways as a central concern of democratic governance; commonwealth assets like rivers and streams, he believed,

should not be held by private interests for private gain.

In 1920, shortly after Roosevelt's death, Congress heeded his warning and passed the Federal Water Power Act. Renamed the Federal Powers Act in 1935, this statute created FERC to protect the public interest. The law provided that rivers could still be dammed and water diverted by private users, but only after a showing that private use would serve a compelling public benefit. Recognizing that a permit is a giving away of a public treasure, the law required FERC to "focus on the economic benefit – not to the company but to the public."

Beginning in 1935, FERC issued permits to local power authorities and to aluminum and other industries to build private dams. In return, these companies promised that their dams would primarily provide electric power to their factories and smelters, and FERC required proof that these plants would bring jobs and prosperity. But today, as many of the 50-year licenses come up for renewal, the agency is allowing those companies to close their factories and effectively sell our rivers to foreign investors without any meaningful demonstration of a public benefit.

Here is an example of how it works: In the 1950s, FERC issued the Aluminum Company of America (now, simply, Alcoa) a 50-year license to operate four hydroelectric dams on the Little Tennessee and Cheoah Rivers. This project, known as Tapoco, encompassed 86 miles of transmission lines and 14,500 acres of land, and produced 378 megawatts of total generating capacity. Tapoco's primary purpose was to support Alcoa's aluminum smelter and rolling-mill operations in Alcoa, Tennessee. These operations were the region's principal source of employment. To win the FERC license, Alcoa had to prove that its electric facilities would drive economic activity and bring prosperity. The license gave the company ample time to recover its capital investment. The license also limited free access to river water for citizens, towns and other users at a particular level, and required them to pay Alcoa to divert river water above that level for drinking, agriculture or industrial needs. FERC permittees effectively own the river.

Alcoa applied to renew its Tapoco license in February 2003, and on Jan. 25, 2005, FERC awarded the company a new 40-year license without requiring any written guarantee that the company would maintain its manufacturing jobs that were worth \$400 million to the local economy. Four years later, Alcoa shuttered the bulk of its facility and laid off 450 workers.

In 2010 Alcoa refurbished one of the dams with \$12 million in federal subsidies. Then,



CREATIVE COMMONS PHOTO BY CHRIS BOCQUET VIA FLICKR.



PHOTO BY KRIS KRUG.

## IN MEMORIAM:



### David C. Slade, Champion of the Public Trust Doctrine

*David C. Slade died peacefully on December 7, 2013 after battling colon cancer for many years. Lawyer, author and champion of the Public Trust Doctrine, David left Waterkeepers and river lovers nationwide several critical legacies, including two books "Putting the Public Trust Doctrine to Work" and "The Public Trust Doctrine in Motion", as well as a landmark U.S. Supreme Court Case called Phillips Petroleum V. Mississippi.*

*David was the Counsel of Record for the Thirteen Original States in support of Mississippi. The Court, citing the 13 States brief, affirmed the original states' claim that all lands washed by the ebb and flow of the tide – regardless of navigability – were held by the State in trust for the benefit of the public, substantiating Mississippi's claim to her tidelands. The Phillips Petroleum v. Mississippi decision also affirmed that each state that joined the union also received her trust lands under the Equal Footing Doctrine.*

*David attended our annual conference in Georgia this past year, and shared a beer and some of his prodigious legal wisdom with many of the Waterkeepers there. When David introduced himself to the Alliance's president, Robert F. Kennedy, Jr., he got a massive growling bear hug, which David subsequently told me several times might have been the ultimate affirmation of his life's work. David often mentioned Bobby's speeches and loved the way Bobby talked about the Public Trust Doctrine.*

*His excitement and sense of possibility were contagious and if you spent two minutes around him you couldn't help but get excited about the growing use of the Public Trust Doctrine by our courts to protect our rivers and the rest of our "commons".*

*In his final year, David crusaded among Waterkeepers to pollinate his ideas and his belief that the Public Trust Doctrine was bigger than life, and could ultimately be the final protector of our rivers. I could feel David's anxiety over work left undone, and in a way it was evident that David felt that Waterkeepers would carry the torch.*

*Jeff Kelble, Shenandoah Riverkeeper*

in March 2012, the company suddenly shuttered the remainder of its Tennessee smelter plant and quickly sold its newly minted 40-year license and its Tapoco hydroelectric facilities for \$600 million to Brookfield Asset Management. Brookfield now owns 25 percent of Tapoco. The remaining 75 percent is owned by global institutions and foreign governments, including China, whose investments Brookfield manages.

Tapoco's new owners have no obligation to benefit the region's economic interests. The dams will simply enrich Brookfield and its global investors by producing wholesale power for sale to the highest bidder. Private control of public water resources will inhibit local economic growth. The project will no longer drive industrial activity in Tennessee and North Carolina. Local governments will not be able to recruit new business to the region by offering them water and lower-cost electricity in exchange for jobs. As water becomes more scarce and electric rates rise, the new owner will charge local governments, farmers and water consumers higher rates for consumption and water usage. The profits will leave the United States. With no control over the bulk of river flow, localities will lose flexibility to deal with extended water-shortages.

Brookfield is one of many corporations capitalized by foreign sovereign wealth funds to privatize America's waterways. The company has acquired over 130 hydropower generating-stations and 30 river systems in the United States – more than any other FERC license holder. With more than 10 percent of FERC licenses in its portfolio, Brookfield controls over 3,000 megawatts of generating capacity – enough to power 2.2 million homes. These acquisitions make it the largest of an army of foreign entities jockeying to privatize America's waterways for profit.

Alcoa is following its Tapoco strategy with North Carolina's Yadkin River. (You can read the whole story of Yadkin Riverkeeper Dean Naujoks' fight for his river starting on page 32.) In 1958, FERC licensed Alcoa's 216-megawatt Yadkin dams to power the company's local smelter, which employed nearly 1,000 workers. In 2007, Alcoa fired its workers, closed the Yadkin smelter and began selling electricity from the Yadkin dams outside North Carolina, generating \$30 million for the company last year alone. Despite fierce local opposition, Alcoa is applying to renew its Yadkin power license for another 50 years.

North Carolina has sued to stop the relicensing. "The Yadkin River is North Carolina's river," Governor Pat McCrory has stated. "We should be able to use it for North Carolina water needs and to create North Carolina jobs." But, unfortunately, FERC will almost certainly give Alcoa kneejerk support to relicense its dams and then sell the river to the highest bidder. Since the passage of the 1935 Federal Power Act, FERC has never refused to renew or transfer any hydropower license.

There is an alternative. The New York Power Authority has leveraged the state's low-cost hydropower to stimulate new business investment, creating 360,000 jobs across the state. For example, this year, under Governor Cuomo's leadership, NYPA used low-cost power to leverage an agreement with General Motors to keep and expand its manufacturing plant in Niagara (rather than moving it

abroad), and signed a contract incentivizing Alcoa to invest \$600 million in new infrastructure for the life of a 30-year dam permit.

FERC's practice, in contrast, has been to grant exclusive use of our water resources to private companies and foreign governments and corporations to generate hydroelectricity and seize de facto control of public waters for 30 to 50 years, without regard for the mandates for public benefit the Federal Power Act stipulates. We are rapidly hemorrhaging national wealth as hydroelectric profits flow overseas. Jobs, once created by our waters, are vanishing and not being replaced. To use their own drinking water, American communities are being forced to pay private interests, many of them foreign, for "lost" hydropower revenues.

In short, FERC is deeding our rivers to foreign investors, giving them huge profits and control over our rivers, our landscapes and our electric grid while endangering America's freedom, security and prosperity. It is time for Congress to put a moratorium on renewing FERC licenses until it can tighten the reins on this rogue agency and revive the 1935 Federal Power Act's original intention to "promote the development of safe, reliable and efficient energy infrastructure that serves the public interest."



CREATIVE COMMONS PHOTO BY KRIS KRUG VIA FLICKR

"Keep your eye on the aluminum company," Theodore Roosevelt warned in 1915, "that is trying to get control of your water powers. Don't let go of them. We have been too free in the past. I have no objection to big business making money but I do not want it to make it at the expense of the public interest."

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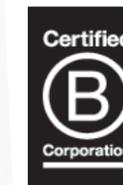
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**ON THE COVER:**  
Yadkin Riverkeeper Dean Naujoks' fight with Alcoa is based on his unshakable conviction that "the Yadkin River belongs to the people of North Carolina."  
Christine Rucker Photography

Design by BoyBurnsBarn/John Turner

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

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## Ninth Circuit Orders River Clean-ups in L.A.

On August 8th, the U.S. Ninth Circuit Court of Appeals held Los Angeles County and the County Flood Control District responsible for cleaning up the Los Angeles and San Gabriel Rivers. The lawsuit, initiated by Los Angeles Waterkeeper and Natural Resources Defense Council in 2008, sought to hold the county responsible for documented violations of the Clean Water Act since 2003, which had injected into the waterways a toxic mix of mercury, arsenic, cyanide, lead and fecal bacteria contained in billions of gallons of stormwater runoff. The ruling came after the Supreme Court of the United States remanded the case to the Ninth Circuit in January.

"This opinion is a turning point for all of Los Angeles," said Liz Crosson, executive director of Los Angeles Waterkeeper. "Stormwater runoff is the number-one source of pollution in Los Angeles's rivers and beaches, and L.A. County is the largest discharger of stormwater. Holding the county responsible for its pollution and working with them to find region-wide solutions is the biggest victory we could imagine."

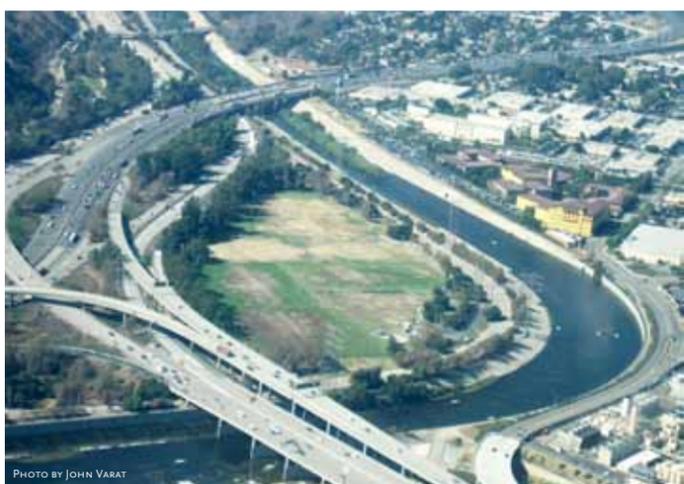


PHOTO BY JOHN VARAT

EACH YEAR BILLIONS OF GALLONS OF UNTREATED STORMWATER POLLUTION ARE DISCHARGED INTO LOS ANGELES RIVERS AND ULTIMATELY TO POPULAR BEACHES, CAUSING ILLNESS IN RESIDENTS AND TOURISTS ALIKE. THIS POLLUTION CAN BE PREVENTED THROUGH THE DEVELOPMENT OF GREEN INFRASTRUCTURE SOLUTIONS, SUCH AS ON-SITE WATER CAPTURE AND FILTRATION.

"This opinion is a turning point for all of Los Angeles. Stormwater runoff is the number-one source of pollution in Los Angeles's rivers and beaches."





## Write It Down: Canada Needs the National Water Centre

Founded by Lake Ontario Waterkeeper, the National Water Centre is located in St. John, New Brunswick, Canada's oldest city. Inspired by the work of Waterkeepers and other grassroots water stewards, the center's goal is to find creative solutions to water problems and to promote a culture that celebrates Canada's waterways.

Lake Ontario Waterkeeper Mark Mattson points out that the center's work is more critical than ever because changes to Canadian environmental law that started in the 1990s have minimized the public's rightful interest in Canada's waterways.

"The only way Canadians can enjoy clean water in the future is if citizens, artists, scientists, educators, and leaders have an opportunity to come together to protect the country's waterways, because no institution or sector can do that alone," Mattson says. "We hope the center can help make that happen."

One way it hopes to make it happen is by encouraging academic and artistic exploration, and last summer the center held its first writers' retreat.

Toronto-based writer Tanis Rideout, who has been called the "poet laureate" of Canadian Rock, and is the author of the novel *Above All Things*, was one of the attendees. Here are some of her reflections:

"There are few better places to write than a shoreline – the sun rising and setting across the water, changing its color, its tone, its mood; the whisper of lapping waves; the chatter of canoeists, the sleek shadows of sailboats; the stepping away from your desk and into the cool dark of it. Water provides sustenance and refreshment in so many ways. It's easy to forget how much you need it when you can't access it.

"This summer I had all of the above in spades when I had my first taste of this at the new National Water Center, on the



PHOTO BY LAKE ONTARIO WATERKEEPER

NESTLED IN 50 ACRES OF FOREST ON THE KENNEBECAS RIVER, THE CENTER WILL SERVE AS A HAVEN FOR ARTISTS, THINKERS, AND LEADERS TO IMMERSE THEMSELVES IN NATURE WHILE FOSTERING THE IDEAS THAT WILL HELP CREATE A SWIMMABLE, DRINKABLE, FISHABLE FUTURE FOR ALL.

Kennebecas River. I wrote, and swam, and hiked the property. I saw deer and sunsets. I gazed and daydreamed. I even did quite a lot of writing. It was a productive and restful week, and I returned to Toronto with a renewed sense of purpose in my work and what my work can do, as well as with a reminder to spend more time on the water.

"The center in St. John, New Brunswick is a beautiful home high above the shoreline, with spectacular views across the river, a gorgeous beach, acres of hiking trails and plenty of room to reflect and think and gather with like-minded individuals . . . Writing and reading are forms of community building. As a writer, as a poet, as a citizen I want to strive

**"The only way Canadians can enjoy clean water in the future is if citizens, artists, scientists, educators, and leaders have an opportunity to come together to protect the country's waterways."**

to connect people to places and ideas.

"The new center provides a link for activists like Waterkeepers – committed to protecting and reclaiming our waterways – and artists – writers like me, musicians, painters, who are often the ones who bring environmental issues to life for the community. It is a place to create new stories, to mythologize our landscape, to remind people who live on, or simply visit, its shores, that the water belongs to all of us. The center will be yet another way to ensure that we have access to swimmable, drinkable, fishable water, not just there, but everywhere."

## Court Moves Against Gulf Death-Sentence

In late September, the U.S. District Court in Eastern Louisiana ordered the U.S. Environmental Protection Agency to determine within six months whether or not to set new limits on the phosphorus and nitrogen pollution that is fueling dangerous algae growth in the Mississippi River basin, the Gulf of Mexico, and waters in all 50 states.

The suit, led by attorneys at the Natural Resources Defense Council (NRDC), was filed a year and a half ago on behalf of Waterkeeper Alliance and other environmental groups. It challenged EPA's denial of the Mississippi River Collaborative's 2008 petition to EPA to establish quantifiable standards and cleanup-plans for nitrogen and phosphorus pollution – charging that EPA had unlawfully refused to respond to the question of whether or not such federal action is required by the Clean Water Act. The court agreed with plaintiffs, holding that the agency's refusal to provide a direct answer was unlawful.

The parties have long struggled to break decades of inaction from the federal government on the issue of nitrogen and phosphorus pollution, which has formed an 8,000-square-mile "dead zone" in the Gulf, severely damaged drinking-water supplies, and devastated roughly 15,000 other waterways in the U.S.

EPA estimates that "more than 100,000 miles of rivers and streams, close to 2.5 million acres of lakes, reservoirs and ponds, and more than 800 square miles of bays and estuaries in the United States have poor water quality because of nitrogen and phosphorus pollution."

Despite the severe consequences to human health, fisheries and businesses throughout the U.S., EPA has failed to take action.

"For too long, EPA has stood on the sidelines while our nation's waters slowly choke on algae," said NRDC senior attorney Ann Alexander. "They have acknowledged the problem for years, but could not muster the gumption to address it. The court is telling the agency that it is time to stop hiding from the issue and make a decision."

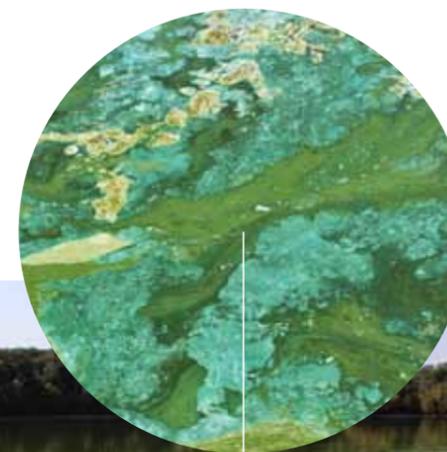
Much of this nitrogen and phosphorus pollution comes from the unsustainable production methods used by corporate-controlled industrial livestock operations which produce roughly a billion tons of animal manure annually. The algae that nutrient pollution creates starve other aquatic life and can rob water of the oxygen that fish and crustaceans need to survive, resulting in massive fish kills. According

to EPA, "some algal blooms are harmful to humans because they produce elevated toxins and bacterial growth that can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water."

In the Gulf of Mexico, algal growth has driven levels of oxygen at the sea floor so low that virtually nothing can live there. Similar invasions are causing dramatic devastation in the Great Lakes, the nation's two largest estuaries, the Chesapeake Bay and North Carolina's Albemarle-Pamlico Sound, and many other waters of national importance.

The court's decision does not tell the agency how to address the problem, only to make a decision on the issue. However, EPA has repeatedly acknowledged the severity of the problem and stated that federal intervention is appropriate because states are not doing enough to solve it.

"It should be apparent that pollution limits are essential to controlling pollution," said Kelly Foster, senior attorney for Waterkeeper Alliance. "With this decision, we are hopeful that EPA will finally do what it has long known is necessary to address the Gulf Dead Zone and the staggering number of other fisheries, water supplies and recreational waters decimated by nitrogen and phosphorus pollution across the nation."



**"Some algal blooms are harmful to humans because they produce elevated toxins and bacterial growth that can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water."**



JOE PAYNE (RIGHT), WAS AMONG THE WATERKEEPERS WHO HELPED FOUND WATERKEEPER ALLIANCE. FRIENDS OF CASCO BAY HONORED JOE FOR HIS ENVIRONMENTAL STEWARDSHIP WITH A NEW RESEARCH VESSEL CHRISTENED IN HIS NAME.

## Joseph E. Payne Patrols Casco Bay (the Man and Now the Boat )

Since 1991, Joe Payne has been the eyes, ears and voice of Casco Bay, patrolling its waters to improve water quality, protect its prized lobsters, and deal with threats from oil spills to sewage pollution.

In September he was honored for his decades of work with a new research vessel that was christened in his name. More than 250 people converged on Yarmouth, Maine's Yankee Marina & Boatyard to celebrate the launch of The Research Vessel (R/V) Joseph E. Payne. It replaces Donovan's Delight, a 26-foot Seaway that was donated to the organization in 1993. From collecting scientific data to investigating mysterious plumes of pollution, these boats are essential to the work of Friends of Casco Bay and Casco Baykeeper.

A two-year capital campaign enabled Friends of Casco Bay, based in South Portland, to replace the older vessel and create a fund to maintain its small fleet that includes a pump-out boat that removes raw

sewage from recreational boats.

R/V Joseph E. Payne is a 28-foot lobster-style boat with a wide work deck and an inboard diesel engine, and is the fourth Baykeeper vessel. Called an "AJ 28," it was designed and built by Alan Johnson of AJ Enterprises in Winter Harbor, Maine, and retrofitted as an ideal research vessel by Yankee Marina & Boatyard and New England Fiberglass, Portland. Because the boat will be on the water year-round, its bow and stern have been reinforced to break ice. It is fast enough to complete a 75-mile circuit around the 230-square-mile bay, collecting data, during the short daylight hours of winter.

"This new boat is going to help Friends of Casco Bay continue and expand their critically important work to protect the waters of Casco Bay," said Maine Congresswoman Chellie Pingree. "With the future bringing even greater challenges, including climate change, ocean acidification, sea-level rise, invasive species, and more, this will be an

important tool for the work that Friends of Casco Bay will have to do."

The Board of Directors of Friends of Casco Bay chose to name the new boat in honor of Baykeeper Joe Payne. Surprised and embarrassed by this tribute, Joe noted that one usually has to be dead for a boat to be named after him, but ultimately he acquiesced, commenting that the honor was too big to refuse. It was, said Rep. Pingree, "a fitting tribute to his two decades of service."

A native Mainer, licensed boat captain, marine biologist, and grandson of a Portland fisherman, Joe helped to found Waterkeeper Alliance in 1999, along with six other Waterkeepers and environmental attorney Robert F. Kennedy, Jr. As proud as he is of his years of service, Joe says he is just as proud of the Waterkeeper movement's exponential growth. Today there are more than 200 Waterkeepers patrolling and protecting rivers, bays, lakes, creeks and coastlines in 23 countries on six continents.



### 2013 LIMITED EDITION ARTIST SERIES

The 2013 BIN 27 Limited Edition Artist Series was created exclusively by acclaimed American artist **Barnaby Furnas**.

For centuries, the Port industry relied on the Douro River to carry their world-renowned Port wines from the vineyards to the coastal town of Vila Nova de Gaia.



Limited Edition 2013 Artist Series Poster

## Coal's Poisoned Legacy in North Carolina

Rampant toxic coal-ash pollution from Duke Energy's L. V. Sutton power plant in Wilmington, North Carolina is forcing the local government to abandon groundwater wells that now provide drinking water to a local community. A new, multi-million-dollar water line must be built to replace the wells.

Duke has long stored its coal ash at Sutton in giant lagoons without synthetic liners, and toxic substances such as arsenic and selenium have leaked from the lagoons into the surrounding environment. Duke's pollution has decimated fish populations in nearby Sutton Lake, a popular recreation area where many people fish for sport and sustenance. According to the North Carolina Wildlife Resources Commission, largemouth bass decreased in numbers and size by 50 percent between 2008 and 2010. Duke's coal ash has also contaminated ground water, and the plume is migrating towards wells that supply drinking water to the Flemington neighborhood of Wilmington.

Because state and federal environmental regulators had failed to address the pollution

problems around Sutton, Waterkeeper Alliance, Cape Fear River Watch, the Sierra Club, and the Southern Environmental Law Center (SELC) sent Duke a notice of intent to sue in June. The groups then filed a federal lawsuit against Duke in September.

With so much attention being drawn to Duke's unabated toxic pollution, Cape Fear Public Utility Authority (CFPUA), which oversees drinking water distribution around Wilmington, has determined it must abandon its groundwater wells in the vicinity of the Sutton plant. Duke asked the authority to agree to never use groundwater beneath a 15-square-mile tract of land surrounding the coal ash ponds as a source of drinking water. The authority has proposed to construct a new water line at an estimated cost of \$2.25 million. Under the proposal, CFPUA would shoulder \$472,000 of the project costs, while Duke – a \$27-billion company – would pay the rest. The new water line would ensure clean drinking water for some area residents, however, it would not address Duke's ongoing groundwater pollution nor assist people who

currently have wells in the 15-square-mile area that might become contaminated.

State regulators, who had previously ignored the problems, responded to Waterkeeper's actions by filing their own enforcement lawsuits against Duke. The state's lawsuits accuse Duke of illegal water pollution from coal ash lagoons at the Sutton plant – as well as each of the other 13 coal-fired power plants in the state.

"Our enforcement actions are forcing Duke to take responsibility for its years of illegal pollution of the water resources of the Wilmington community," said Frank Holleman, senior attorney for SELC. "It is good that the Flemington community will get a reliable source of clean drinking water, but it is a shame that Duke is ruining a public water resource, and now Duke must clean up its pollution."

Drinking water in Flemington, a low-income neighborhood, was first contaminated in 1978, and at one point emergency water was supplied by the U.S. Army and carried home in buckets by residents. Eventually,

two new drinking-water wells were drilled, but were located just a half-mile from the power plant. A contaminated water plume is now slowly creeping toward the new wells, and, in the words of the *Wilmington Star News*, Flemington residents have again become "sitting ducks."

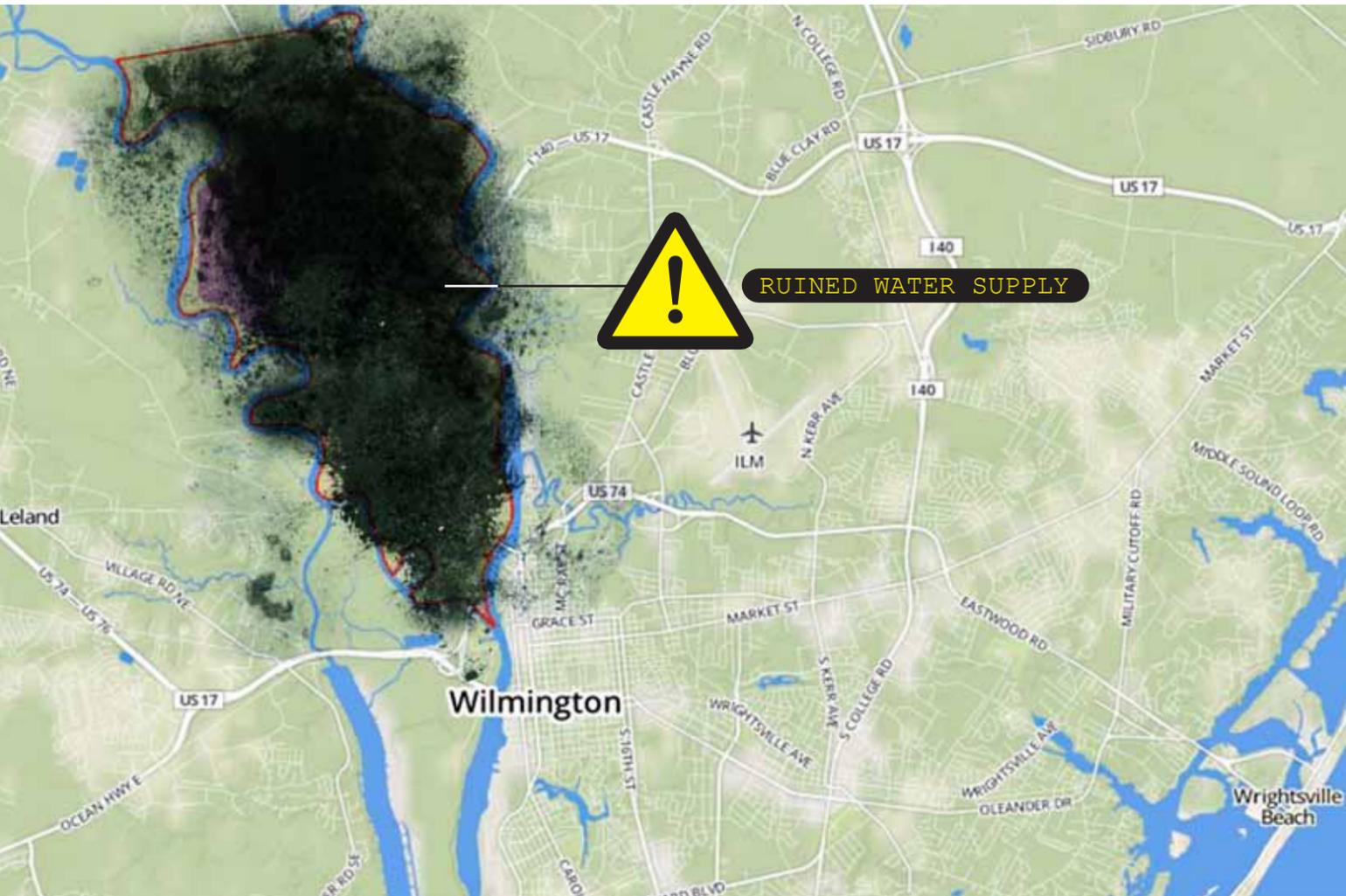
"There is no reason that the local community should be paying almost half a million dollars to make up for Duke's illegal pollution," said Kemp Burdette, the Cape Fear Riverkeeper. "Duke should pay the full cost and should clean up its pollution."

The coal-fired Sutton Steam Plant is scheduled to shut down at the end of this year and be replaced by a natural-gas-fueled plant, and officials at Duke Energy Progress must determine whether to decommission the coal-ash ponds. They could cap the ponds with liners, but SELC attorney Nick Torrey has stated that engineers have concluded that this solution is "basically cosmetic," and a utility spokesperson has conceded that a method of total excavation, by which the ash is removed and placed in a lined landfill, is being considered.

"Waterkeeper Alliance will continue bringing legal challenges to force Duke

Energy to address decades of contamination from hazardous coal ash waste at Sutton and 13 more sites in communities all across North Carolina," said Donna Lisenby, Global Coal Campaign Coordinator for Waterkeeper Alliance. "This is the first time a power company has directly acknowledge that their coal-ash impoundments are leaking into ground water and it will never be safe to drink this water. All of Duke's toxic-waste dumps must be cleaned up for the health and safety of thousands of North Carolinians who rely on water nearby."

"Our enforcement actions are forcing Duke to take responsibility for its years of illegal pollution of the water resources of the Wilmington community."



DUKE ENERGY'S COAL ASH POND DISCHARGES, LIKE THE ONES SEEN HERE, HAVE CONTAMINATED GROUND WATER AND DRINKING SUPPLIES FOR SURROUNDING COMMUNITIES. WATERKEEPER'S ENFORCEMENT ACTIONS ARE NOW FORCING DUKE TO TAKE RESPONSIBILITY FOR THE POLLUTION.



PHOTOS BY HANN BAYKEEPER

In spite of all this, herbs, shrubs and baobab trees two meters tall bloom luxuriously along the canal. But the lizards and other reptiles that bask in the sun are covered in oil. In 2005, firefighters took three hours to extinguish a fire that spread over the toxic waters.

When Hann Baykeeper members returned from Mexico, they campaigned to alert the public about conditions in Canal 6, and enlisted the support of the mayor of Dakar, government agencies and journalists for an ambitious cleanup operation on August 11, 2012. National coverage on seven television stations and involvement of the mayors of three cities along the bay and other officials helped make the event a great success. Senegal's national office of sanitation spent over \$250,000 to clean Canal 6 for the first time, mobilizing three heavy engines and eight large dump-trucks, and deploying 40 people working 14 hours a day to collect 2,700 tons of garbage. Canal 6 was cleaner than it has been in 40 years.

The two years since that concerted community action led by Hann Baykeeper have yielded great progress. In August, thanks to the advocacy of Hann Baykeeper, a budget of 33 billion West African francs – nearly 68 million U.S. dollars – was appropriated to clean up the bay. The funding comes from the State of Senegal, the French Development Agency and the European Investment Bank.

Canal 6 is still not a pristine waterway, and it still is not safe for swimming and fishing. But Hann Baykeeper is proud to have built a strong community of advocates for clean water, and it has no intention of slackening its efforts until the bay glistens again as when Mbacke Seck was a child.

## In Senegal, a Clean Canal and \$68 Million for a Clean Hann Bay

**Mbacke Seck**, executive director of Hann Baykeeper, the first Waterkeeper organization in Africa, is 49 years old and remembers as a child looking out on a bay that was clear and calm and washed onto white sandy beaches lined with coconut palms. It was a wonderful place to swim and fish and lie in the sun.

But today the bay he watches over, on the west coast of Senegal, south of the capital city of Dakar, is dirty, dark, oily, and smelly, rank with organic pollutants. The sand is black and poorly maintained. It is so severely polluted that swimming and fishing in it is no longer possible.

After more than a decade fighting against marine pollution in many forms, Hann Baykeeper staff took on a new challenge after viewing the pristine beaches of La Paz, Mexico while attending the 2010 Waterkeeper Alliance Annual Conference there, beaches that were zealously protected by a brother Waterkeeper organization, La Paz Coastkeeper. They determined to clean up a waterway that empties into Hann Bay called Canal 6.

Canal 6 was built to drain rainwater into the sea, but its three-kilometer length became lined with chemical, plastic and fish-processing plants, all of which, contrary to environmental law and code, have dumped their wastewater into the canal. Seck and his staff have counted 42 illegal connections where polluted, smelly

waters have been discharged.

Along Canal 6 are also many car-repair and other small shops that directly discharge oil and mechanical and plastic waste into the canal every day. In some places, the garbage is so clustered and compact between the canal's banks that it forms a bridge. And when the heavy rains come – the rain that Canal 6 was created to deliver harmlessly into the sea, it discharges garbage, plastics, oily sludge – and thousands of cubic meters of heavily polluted water onto the beach and into the bay.



And when the heavy rains come – the rain that Canal 6 was created to deliver harmlessly into the sea – it discharges garbage, plastics, oily sludge, and thousands of cubic meters of heavily polluted water onto the beach and into the bay.

# AbTech

I N D U S T R I E S

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Working together to protect our world's waterways.

## In Melbourne, the Yarra's Last Polluter Surrenders



EPA VICTORIA CHAIR, CHERYL BATAGOL (RIGHT), YARRA RIVERKEEPER IAN PENROSE (SECOND FROM LEFT) AND TWO MOBIL TERMINAL STAFF STUDY THE NEW WATER MANAGEMENT SYSTEM.

In contrast to many rivers flowing through the world's large cities, the Yarra River in Melbourne, Australia does not suffer greatly from industrial pollution. One reason is that the State of Victoria's Environment Protection Authority (EPA Victoria) has been working for four decades to stop such contamination of the river. Except for small government-owned wastewater-treatment plants in the outer suburbs, all industries have been required to pump their effluent into the city's sewers and not into waterways. Or so it was thought.

In 2011 a newspaper reported that a large fuel-terminal operated by the international oil company Mobil had its permit renewed by EPA Victoria to discharge wastewater into the Yarra. The terminal is the largest fuel-storage-and-distribution facility in Melbourne and its wastewater discharge permit was the last of its kind in Victoria.

According to Yarra Riverkeeper Ian Penrose, who is a former oil-industry executive, the granting of this permit was a hangover from the past when the river was treated as a drain. "But this," he said, "is unacceptable in modern times. What is also surprising is that a large and wealthy company like Mobil was lagging behind community standards on caring for our waterways."

The Yarra Riverkeeper Association's surprise and concern that this pollution was still permitted was publicized in radio and

television reports. Penrose emphasized that Yarra Riverkeeper works hard to appear regularly in the media—as many as 50 times a year.

"Our contact with the media on this particular issue was just two interviews," said Penrose, "one over the phone that went live on a morning mainstream radio station, and the other on camera with one of the four major TV networks, which aired on their evening news

program. However, they were sufficient for Mobil to acknowledge our concerns and for their senior executive to seek a meeting with me."

A year later Mobil informed the Yarra Riverkeeper that it was now diverting its wastewater into the sewer system. And the company did not stop there. It collected, treated and diverted into the sewer all the stormwater running off its large industrial site, so that none of it now enters the Yarra. Mobil invited the Yarra Riverkeeper to the state environment minister's official launch of the new water management facility in August 2013.

In a letter to the Riverkeeper, the CEO of EPA Victoria, John Merritt, stated that his organization "believes the Yarra Riverkeeper Association is providing a valuable community service and gives tangible support to the work of the EPA".

EPA Victoria has given several grants to the Riverkeeper, and, said Penrose, "was intimately involved in Mobil's improved water management systems. It is very aware of and supportive of our ongoing advocacy against water pollution."



PENROSE, ABOVE RIGHT, WITH MOBIL EXECUTIVES.

### EX-POLLUTERS



After Yarra Riverkeeper's intervention, Exxon Mobil agreed to divert discharged wastewater from the Yarra River.

## A Special Day in California Goes Swimmably



California Coastkeeper Alliance's summer-long briefings of state legislators on key coastal-water-quality and marine-ecosystem policymaking culminated in the lawmakers' designating July 25th as "Swimmable California Day," formally recognizing the right of Californians to waters that are safe and clean for swimming, and that "continued efforts are needed to address polluted stormwater runoff, trash, and other threats to the health of California's ocean, coastline, and waters." CCKA staff used the resolution as an opportunity to visit with every California legislator and brief him or

her on key water issues. The visits started a dialogue about a wide range of issues affecting California waterways, and the resolution passed with bipartisan support from more than 60 California legislators.

Waterkeepers launched floats and hosted swims and raft trips in San Diego, Riverside, Orange County, Los Angeles and Santa Barbara in the southern part of the state, and the Russian River and Klamath regions in the north, to encourage people to get out and use their local waters, and learn more about local coastal and inland water-quality issues. The celebrations

were well-attended by mayors and state legislators, many of whom took the opportunity to jump in the water themselves.

California Coastkeeper (CCKA) worked with "3 Fish Studios," the artistic home of painters and printmakers Annie Galvin and Eric Rewitzer, to create the Swimmable California mascot, an addition to the Studios' iconic bear-print series, which is being sold online to benefit CCKA.

CCKA also used the day to engage businesses as ambassadors for clean, healthy coasts. Orange County Coastkeeper Board President Steve Bone, who is also president of the Huntington Beach Marketing and Visitors Bureau published an EcoWatch piece in which he reminded readers that the "millions of dollars in tourism revenue" for the state "rests on the promise of clean, safe water."

"In Huntington Beach alone, ten miles of uninterrupted beachfront draw an annual visitor population of more than 16 million people," he added. "The city's annual U.S. Open of Surfing alone wrangled in \$21.5 million in spending throughout Orange County, with \$16.5 million in Huntington Beach."

The outdoor apparel company Patagonia featured Swimmable California Day and CCKA's Polluted Runoff Campaign on its website, alongside a report of its installation of bioswales to reduce runoff from its headquarters site in Ventura to the nearby Ventura River and the ocean.

## A Victory for Oregon's Salmon Streams

Rogue Riverkeeper, their allies and supporters celebrated a big win in August when Oregon Governor John Kitzhaber signed a bill to better protect rivers and fish from the impacts of suction-dredge gold mining, a

practice that searches for gold by vacuuming up the bottom of streams. Suction-dredge mining degrades salmon spawning-beds, mobilizes mercury, kills insects on which fish feed, and creates long-term encampments

that impact riparian vegetation and deposit trash along our streams.

Suction-dredgers have flocked to Oregon since California imposed a moratorium on such mining in 2009 due to water quality impacts. In 2012, about 2,400 suction-dredge miners were registered in Oregon — double the number in 2011. The Oregon law, which is a compromise from an original bill that called for a total statewide moratorium, limits the number of dredging permits to one-third of 2012 levels. It limits miners to one dredge every 500 feet, and bars miners from leaving their equipment unattended in our public waters.

The new law further directs the Governor's office to work with agencies and stakeholders to present a science-based suction-dredging framework for the legislature's approval in 2015. The framework's goal would be to simplify the dredge-permitting process and provide better protections for threatened salmon and trout. If the legislature refuses to enact these new regulations, a five-year moratorium on suction dredging in salmon habitat would go into effect in 2015.

"The new law is a strong first step forward," said Rogue Riverkeeper Forrest English, "and we'll be there every step of the way to ensure proper implementation of the new law, while seeking additional ways to safeguard rivers and fish from in-stream mining."



PHOTO BY ROGUE RIVERKEEPER

SUCTION DREDGING REPRESENTS A CHRONIC AND UNNATURAL DISTURBANCE TO THE RIVER AND IS KNOWN TO HARM FISHERIES, AQUATIC HABITAT, AND DEGRADE WATER QUALITY.



PHOTO BY M. MEYER  
A NEIGHBORHOOD WATER WATCH VOLUNTEER COLLECTS A GRAB SAMPLE FROM FLAT CREEK AT GEORGIA AVE. IN GAINESVILLE, GA. THIS IS 1 OF 9 STREAM SITES IN GAINESVILLE MONITORED BY CRK'S NWW PROGRAM.

## Chattahoochee Riverkeeper Program Is Georgia's "Most Active" Water-Monitor

Nearly 10,000 gallons of raw sewage entered Atlanta's Tanyard Creek in July when a sewage lift-station at an apartment complex shut down, causing the waste to flow directly into the creek, contaminating it with extremely high bacteria levels and killing a great number of fish. Power at the complex had been turned off because bills had not been paid.

Chattahoochee Riverkeeper discovered the spill through its Neighborhood Water Watch Program (NWW) and brought it to the attention of the city's Department of Watershed Management (DWM), which located the source and later had power restored at the site. Water samples taken subsequently by the Riverkeeper revealed significantly lower levels of bacteria until the following month when E. coli levels were once again beyond measurement. This led to the discovery of yet another sewage spill, which was found flowing from a different storm drain. The city's investigation indicated a blockage in a private lateral sewer-line, and DWM worked with several nearby businesses to fix the problem.

Urban streams require constant attention and regular monitoring to keep them healthy and safe for people and wildlife. The Neighborhood Water Watch Program, which started out on a small scale three years ago, has become one of Chattahoochee

Riverkeeper's most impressive success stories. The program now collects about 1,300 samples per year from more than 40 sites in local waterways. Last year the NWW Program was buoyed with new grant funding and an increase in staff. Its funders include U.S. EPA's Urban Waters Grant Program, the Kendeda Fund, LUSH Cosmetics, the Courts Foundation, United Parcel Service and the Waterfall Foundation.

NWW partners with dozens of neighborhoods groups, schools and citizens, and presently enlists volunteers each week to collect water samples from 43 stations in Atlanta and Gainesville. These samples are tested via an EPA approved Quality Assurance Project Plan (QAPP) at Chattahoochee Riverkeeper's labs for various contaminants, including E. coli and results are entered into the database of Georgia's Adopt-A-Stream (AAS), a volunteer water-quality-monitoring program with about 200 groups across the state. Results are also posted on Chattahoochee Riverkeeper's website – [www.cattahoochee.org/nww](http://www.cattahoochee.org/nww).

In 2013, for the third year in a row, Chattahoochee Riverkeeper was named the most active AAS group in the state, based on samples collected and analyzed in 2012.



PHOTO BY M. MEYER

PHOTO BY D.L. SIMMONS

Water samples taken subsequently by the Riverkeeper revealed significantly lower levels of bacteria until the following month when E. coli levels were once again beyond measurement.

PATAGONIA PRESENTS

# DAMNATION



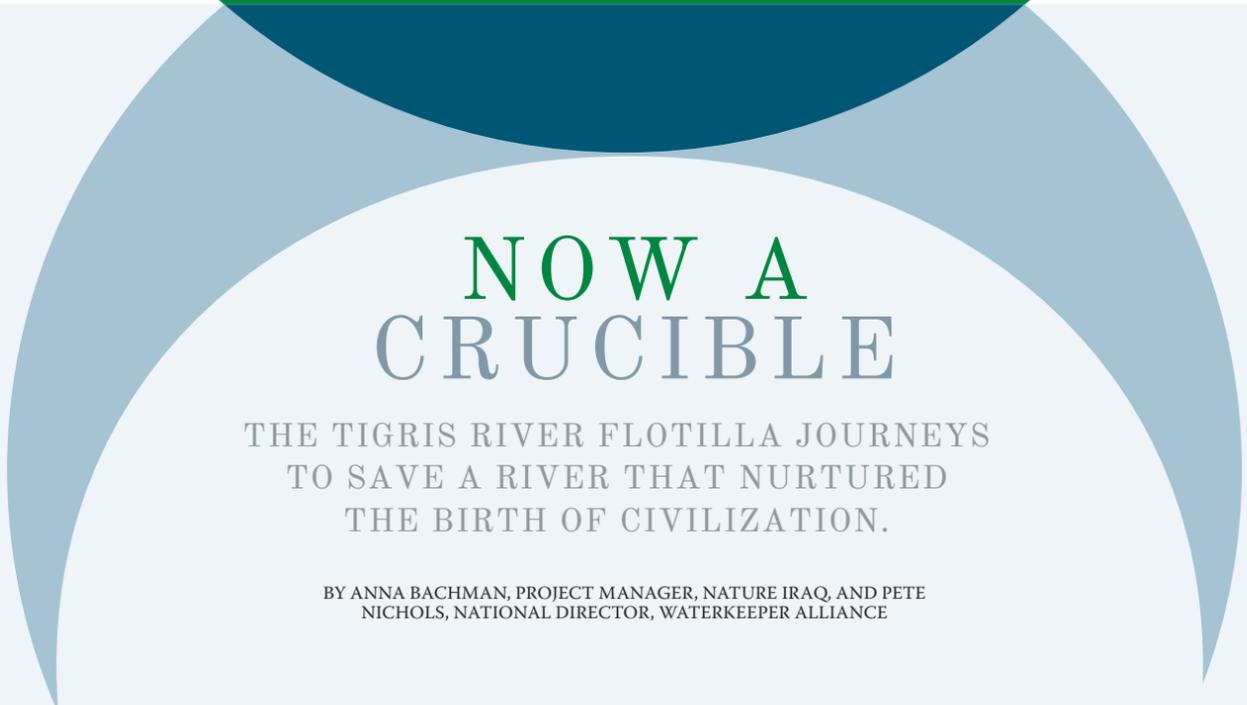
Dam removal is no longer the work of a fictional Monkey Wrench Gang. It's real, upon us, a cornerstone of the modern environmental and cultural movements.

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ONCE A  
CRADLE,



NOW A  
CRUCIBLE

THE TIGRIS RIVER FLOTILLA JOURNEYS  
TO SAVE A RIVER THAT NURTURED  
THE BIRTH OF CIVILIZATION.

BY ANNA BACHMAN, PROJECT MANAGER, NATURE IRAQ, AND PETE  
NICHOLS, NATIONAL DIRECTOR, WATERKEEPER ALLIANCE



RASHAD SALIM IN A TRADITIONAL GUFFA. THE GUFFAS' CIRCULAR DESIGN WAS NEITHER FOR SPEED NOR SEA-WORTHINESS, BUT TO FACILITATE CARRYING THE LARGEST POSSIBLE CARGO WITH THE MOST ECONOMICAL USE OF MATERIAL. THIS WAS IMPORTANT, PARTICULARLY ON THE TIGRIS, BECAUSE THE GUFFA WAS OFTEN ABANDONED AFTER ONE LONG RIVER VOYAGE. PHOTO BY REFIK TEKIN, METROGRAPHY



THE MESOPOTAMIAN MARSHLANDS OF SOUTHERN IRAQ ARE THE HOME OF THE MA'DAN MARSH ARABS (WHO HAVE A DIRECT ANCESTRAL LINK TO THE PEOPLES OF ANCIENT SUMER). THEIR SHEIKS ONCE TRAVELED IN THIS WATERY WORLD IN GRACEFUL, LONG TARADA, LIKE THE ONE SEEN HERE, WHICH WERE THE WAR CANOES OF THE MARSHES. THEY CARRIED UP TO 12 PEOPLE AND COULD COVER 80 KILOMETERS IN A DAY WITH EASE. PHOTO BY ANNA BACHMANN, NATURE IRAQ

“GREATER  
INDEED THAN THE  
CREATION OF MAN  
IS THE CREATION  
OF THE HEAVENS  
AND THE EARTH.”

– KORAN 40:57



IN SEPTEMBER and early October of 2013, water advocates from the Waterkeepers Iraq Program of Nature Iraq, Hasankeyf Matters, Iraqi Sheiks, and citizens from across the region took part in an epic journey of several hundred miles down the Tigris River from the ancient town of Hasankeyf in southeast Turkey to Chibiash at the center of the recently, albeit partially, restored southern marshlands of Iraq.

For well over a year, the organizers of this “Tigris River Flotilla,” from the Iraqi conservation organization Nature Iraq, which is sponsoring the Waterkeepers Iraq Program, and its U.S.-based supporter, the Nature Iraq Foundation, had planned this undertaking to promote the long history of cultural connections that the Tigris River has fostered between Iraq and Turkey, and their peoples. They were concerned that the rich history of the Tigris, cultural as well as ecological, and the region, was rapidly being lost as this once mighty river, and life-blood of the cradle of civilization, is dammed, diverted, and polluted to a state that would be unrecognizable to the ancient civilizations that were birthed along its banks.

Once these waters teemed with fish and its floodwaters replenished the nutrients and built the soils of the lands where agriculture was first practiced. But all has changed.

One of the biblical rivers of the Garden of Eden, the Tigris River drains an area of 144,788 square miles (375,000 square kilometers), covering large parts of Turkey, Syria, Iran, and Iraq. But for decades its flow and that of its partner, the Euphrates, have been greatly reduced, and the riparian states they pass through have struggled futilely to craft an agreement for sharing these waters equitably.

The idea for the flotilla was inspired by a 1914 National Geographic article, “Where Adam and Eve Lived,” which described journeys down a vibrant Tigris that supported communities with its bounty and provided a conduit for regional commerce – a vitality that has all but vanished in the intervening 100 years. The principal goals of the 21st-century flotilla were to bring greater awareness in the riverside communities about the threats to the Tigris in Turkey and Iraq and to empower them to take action to protect the Tigris and their quality of life. At key points along the route, village presentations and community education forums emphasized the importance of the Tigris. Local citizens were also interviewed about the importance of the Tigris to them. Most importantly, the people who live along its banks were able to glimpse some of the river’s glorious past and begin to envision a healthier future.

One especially intriguing feature of the expedition was the rebuilding of several traditional boats that had not traveled on the river in decades. The few remaining boatmen with the knowledge and skills

for this task emerged to pass on ancient techniques to this generation of stewards of the river and its culture. The boats included one of the world’s most ancient coracles (a “guffa”), a raft on animal-skin floats called a “kalak” and a sheikh’s canoe traditional in the Mesopotamian Marshlands—a long and graceful “tarada.” All made the journey from Hasankeyf to southern Iraq with Iraqi, Turkish, and Western passengers on-board. This band of river advocates included several sheiks, revered community leaders from the marshes of southern Iraq, who made the long journey to Hasankeyf to show their support for the Flotilla and the revitalization of the Tigris.

While the cultural significance of the river is vitally important to the people of the region, the quality and quantity of the water of the Tigris is equally critical to Waterkeepers Iraq. Throughout the expedition, staff members from Nature Iraq and Waterkeepers Iraq collected extensive water-quality data, (some of which is being analyzed by the

South Riverkeeper in Maryland). The result of this data analysis will help to guide future efforts to protect and restore this resource and tell the story of what lies beneath its surface.

Water-quality and cultural issues aside, what we are finding is that the geopolitical realities of water issues will play a significant role in how the Tigris is protected. The challenges are immense but not insurmountable. While Iraq develops a long-range plan for water-resource allocations, the Kurdistan Regional Government in the north of the country is making its own plans, often irrespective of Baghdad’s wishes, and Turkey and other upstream neighbors appear to be taking advantage of the Iraqi government’s disarray to make decisions that will further lower the quantity and the quality of water flowing south. Layered on top of this are the effects that climate change is having on the region.

Azzam Alwash is the founder of Nature Iraq and winner of the

2013 Goldman Prize for his leadership in restoring the southern Iraqi Marshlands. He had this to say about the Flotilla: “The Tigris has shaped the culture of this region, fed the creation of modern agriculture and civilization as we know it. It is critical that we protect and restore this river for the good of its people who, as we have seen on this Flotilla, are ready to be our partners in that endeavor.”

Fortunately, Nature Iraq, its Waterkeepers Iraq Program, and the Nature Iraq Foundation are taking the challenge to protect these rivers head-on, conducting research and developing strong water-policy both independently and in concert with Iraqi government agencies.

In the face of all this, one positive reality endures: our experience on the Tigris affirmed the fact that this river and the river-dependent communities are resilient, and dedicated to protecting the Tigris and restoring the cultural and ecological richness that nurtured civilization in its infancy. **W**



EXPEDITION MEMBERS FLOAT DOWN THE TIGRIS ON A KALAK, A TRADITIONAL RAFT MADE OF STRONG REEDS AND WOOD AND SUPPORTED WITH GOAT SKIN. IT WAS USED FOR DOWNSTREAM TRANSPORTATION ON THE TIGRIS, AND COULD TAKE AS LITTLE AS A FEW DAYS TO TRAVEL FROM MOSUL TO BAGHDAD. PHOTO BY ANNA BACHMANN, NATURE IRAQ

# WATER FIGHT

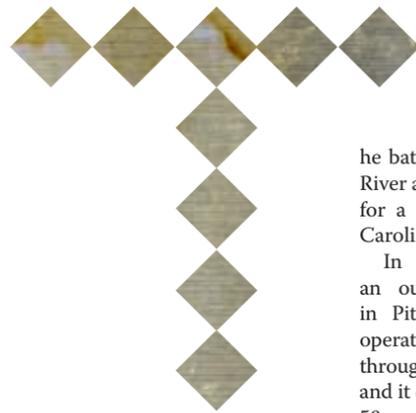
FOR 5 YEARS, YADKIN RIVERKEEPER DEAN NAUJOKS HAS LED THE FIGHT TO DEFEND  
BY GAYLE TUCH, BOARD PRESIDENT, YADKIN RIVERKEEPER

THE PUBLIC TRUST AGAINST ALCOA'S HOSTILE RIVER TAKEOVER ATTEMPT.



THE BADIN DAM ON THE YADKIN RIVER. ALCOA BEGAN PRODUCING ALUMINUM IN BADIN, N.C. IN 1916 AT ITS BADIN WORKS. THE TOWN WAS BUILT TO SUSTAIN THE OPERATION, AND THE FOUR YADKIN RIVER DAMS WERE BUILT LARGELY TO SUPPORT THE ELECTRIC NEEDS OF ALCOA'S BADIN WORKS. THE PLANT WAS CLOSED IN 2007.

PHOTO BY NANCY PIERCE



he battle over who owns the Yadkin River and controls the drinking water for a vital region of central North Carolina began nearly 100 years ago.

In 1915, aluminum giant Alcoa, an out-of-state corporation based in Pittsburgh, began building and operating four hydroelectric plants throughout the Yadkin River basin, and it eventually managed to secure a 50-year lease to use the Yadkin River to power its aluminum smelter in

Badin. The company once employed nearly 1,000 workers in the area, but after many decades it curtailed operations, and in 2007 permanently shut down the Badin facility. The electricity produced from the Yadkin River is now diverted out of North Carolina, prompting former Democratic Governor Beverly Perdue, state lawmakers, Yadkin Riverkeeper and local communities to oppose Alcoa's being granted a new 50-year license by the Federal Energy Regulatory Commission (FERC) to control its four hydro-power dams on the river.

Proponents of local control of the river view Alcoa as a multinational behemoth that monopolizes and exploits the Yadkin River's hydroelectric capacity, with little benefit to the people of North Carolina. For decades the company illegally disposed of spent aluminum "pot liner" and PCBs (polychlorinated biphenyls) that contaminated the river and the community around the now-shuttered aluminum plant.

In 2009, Yadkin Riverkeeper and Stanly County Commissioners filed a suit to challenge Alcoa's Water Quality Certification. In a stunning decision, the North Carolina Department of Environment and Natural Resources revoked it, after documents were uncovered and presented into evidence that detailed the company's intentions to withhold information in its application regarding failure to upgrade dams to meet dissolved-oxygen standards—measures critical to the river's health. River Network ranked this legal victory as one of the top national "river victories" in 2010. And, since then, the opposition has expanded to include environmental-justice organizations, economic-development groups and lawmakers from both sides of the political aisle.

Alcoa appealed the 2010 decision, but dropped its appeal in October 2012. The company then turned around and reapplied for a Water Quality Certification rather than going through the appeal process.

But the victory, according to Yadkin Riverkeeper Dean Naujoks, "not only kept us alive in this important fight for public recapture, but also provided us the opportunity to address major environmental and public health issues linked to Alcoa's aluminum smelter." As a result of the legal challenge, the Yadkin Riverkeeper learned about serious public-health threats from extensive PCB contamination in the Yadkin River, and 46 hazardous-waste sites that many people living in the community adjacent to the plant were completely unaware of.

"Over the past five years," he added, "we have exposed Alcoa's toxic legacy and health risks created by the contamination throughout the entire region."

The Riverkeeper forced Alcoa to remediate PCB contamination in Badin Lake – which the company had no intention of doing.

"Yadkin Riverkeeper," says Naujoks, whose stubborn streak is legendary, "never wavered from our position that this water is a public-trust resource and should be used to provide safe, clean drinking-water and to create prosperity throughout the region, as required under the Federal Power Act – not for outsourcing profits for investments overseas as Alcoa has done."

#### A NEW BATTLEGROUND

Alcoa has made repeated claims of ownership of the Yadkin riverbed, but has refused to produce any deeds or an easement conveying legal title to the property. So, in December 2011, Yadkin Riverkeeper petitioned the North Carolina Department of Administration (DOA) to claim the bed as public-trust property and defend the State's title.

The following April, after the Secretary of Administration denied the Riverkeeper's request, the Uwharrie Regional Resource Commission (URRC) – representing the Uwharrie Mountains and National Forest – passed a resolution once again asking the DOA to determine "whether the state or Alcoa owns the Yadkin riverbed." The inquiry was based on a recent North Carolina General Assembly report stating that, under state law, the DOA "has a statutory duty to prepare and keep current an inventory of all state-owned lands," and that the department "presumes that all lands under navigable rivers are owned by the State."

Alcoa responded to the URRRC resolution by dispatching a team of lobbyists to slip a law deep into the state budget that permanently shut down the commission. The company also ran relentless attack-ads against Stanly County commissioners who opposed its re-licensing settlement agreement, and the County agreed to accept \$3 million and free water to drop its opposition. The commissioners were bullied into supporting an agreement by which, according to a recent economic report, the State stands to lose \$1.2 billion over the next fifty years.

By August 2013, Alcoa had eliminated most of its opposition. It appeared that it would receive a new 50-year license, but the DOA surprisingly announced that the State held title to the Yadkin River bed and filed a "petition for declaratory judgment" in Superior Court, seeking to put to rest the claims that a private company could own the riverbed.

Republican Governor Pat McCrory defended the filing, saying, "the benefits of the Yadkin River belong to North Carolina's people." The governor's support, which made national news, was immediately followed by the State's Division of Water Resources' denial of Alcoa's re-application for Water Quality Certification – needed to secure a new 50-year license to operate the hydro-power dams on the river – until "conflicting claims of ownership are resolved." In a single day, an issue that seemed all but over swung back in favor of the people of North Carolina.

#### DEFENDING THE PUBLIC TRUST

On October 28, 2013, United States District Court Judge Terrence W. Boyle granted a motion filed by Duke Environmental Law and Policy Clinic on behalf of Yadkin Riverkeeper to allow the Riverkeeper to intervene as a plaintiff with the State of North Carolina in the case against Alcoa Power Generating, Inc. Judge Boyle's conclusion stated: "The Riverkeeper contends that the State is the sole and exclusive owner of the relevant portions of submerged Yadkin River bed, and that its presence as an intervener plaintiff would protect this interest should the State's position change during the course of this litigation."

"This," said Dean Naujoks, "has been a remarkable turn of events. We

**"OVER THE PAST FIVE YEARS, WE HAVE EXPOSED ALCOA'S TOXIC LEGACY AND HEALTH RISKS CREATED BY THE CONTAMINATION THROUGHOUT THE ENTIRE REGION."**

THE ELECTRICITY PRODUCED FROM THE YADKIN RIVER'S FOUR HYDRO-POWER DAMS HAS BEEN DIVERTED OUT OF NORTH CAROLINA BY ALCOA SINCE 1907, WHEN IT SHUT DOWN ITS ALUMINUM WORKS. YADKIN RIVERKEEPER DEAN NAUJOKS, BELOW LEFT, HAS TAKEN HIS STAND BASED ON HIS BELIEF THAT THE RIVER IS A PART OF EVERY NORTH CAROLINIANS' BIRTHRIGHT.

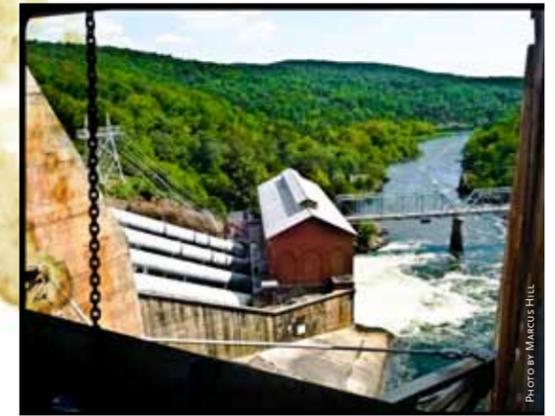


PHOTO BY MARCUS HILL



PHOTO BY CHRISTINE BUCKER PHOTOGRAPHY

BELOW: TUCKERTOWN DAM, HYDRO DAM ON THE YADKIN RIVER, OPERATED BY ALCOA, NORTH CAROLINA



PHOTO BY NANCY PIERCE



PHOTO BY MARCUS HILL



PHOTO BY MARCUS HILL

know this is far from over but we have survived to fight another day!”

The U.S. Supreme Court has held, under what is known as the “Public Trust Doctrine,” that the beds under all navigable rivers, lakes and streams are owned by the states and held in trust for the public. Federal courts also have held that states own all waters and submerged land, and that the people have a right to fully enjoy these resources for a variety of uses, including drinking water, navigation, fishing and recreation. Defending the principles of the Public Trust Doctrine establishes a larger national precedent by essentially defending public ownership of all waters across the country. A state cannot divest itself of this ownership or responsibility.

In defiance of North Carolinians’ birthright to the use of their rivers’ water, Alcoa’s relicensing settlement agreement requires that it be repaid for lost hydroelectric revenues if communities in the region need to draw drinking water from the Yadkin over the next 50 years – which they most certainly will.

Alcoa now finds itself in expensive legal disputes and could face further expenses if the State undertakes costly environmental cleanup measures to address the “massive footprint of toxic industrial pollution” referenced in the State filing. Moreover, if the State’s riverbed challenge were successful, FERC likely would have to deny the settlement agreement and

restart the entire re-licensing process, which would allow for competing proposals to be evaluated.

Summing up Yadkin Riverkeeper’s long, arduous but ultimately fulfilling struggle against Alcoa, Dean Naujoks said:

“We have significantly raised the profile of this important river. We have generated state and national media coverage. We have engaged famed environmentalists like Erin Brockovich and Robert F. Kennedy, Jr., in this important fight and leveraged scientific research and pro-bono legal support for the Yadkin River. We have made substantial improvements in water quality that never would have been possible if we had decided against taking on a \$25 billion dollar company. Most importantly, we involved citizens and communities to stand up and defend this vital public resource.”

Naujoks emphasized the Riverkeeper’s support of the North Carolina Department of Administration’s “outstanding leadership” on the issue of state ownership.

“After all,” he says, “it is their duty under the North Carolina Constitution, which states, “It shall be the policy of this state to conserve and protect its lands and waters for the benefit of all its citizenry.” W

*You can follow Yadkin Riverkeeper on Facebook or [www.yadkinriverkeeper.org](http://www.yadkinriverkeeper.org)*



## A LEGACY OF CONTAMINATION

“I later saw spent pot-liner waste dumped at the north end of the plant (in the 1980s), where it routinely ran off into the lake. Calcide coke-dust and coal-tar-pitch dust mixed with other contaminants also ran from the baking furnaces out into the Badin Lake swimming area through Alcoa’s discharge pipes. It was jet black, the same color as the dust in the carbon plant. Fire brick with arsenic was dumped everywhere around the plant and in the Badin community. At the end of the rodding area, there was a giant crane that handled the transformers, which resulted in numerous spills of

PCB-laden oil. PCB oil was also frequently used to spray the dirt roads around the plant, throughout the community and around the four dams Alcoa operated, which ultimately ran off into the lake but has never been addressed.”

—Ken Hunycutt, 33-year Alcoa employee and supervisor, in a letter to EPA

From 1917 to 2007, Alcoa owned and operated an aluminum-smelter along the banks of Badin Lake and the Yadkin River. During those 90 years, cyanide, arsenic, coal tar pitch, fluoride, PCBs, PAHs and other toxins were generated and improperly disposed of, and they continue to seep into groundwater and into the Yadkin River through Alcoa’s 13 outfall pipes.

For years Alcoa buried the hazardous material (spent aluminum pot-liner) throughout the town of Badin at 46 identified locations, which were eventually capped but not lined. As a result, buried waste continues to contaminate the soil, ground water and surface water years after aluminum production has ceased. According to Alcoa’s 2008 National Pollution Discharge Elimination System Permit, “The results indicate that the seep contains significant concentrations of cyanide and fluoride and causes measurable increases in the in-stream concentrations of both pollutants. The seep is not treated prior to discharge” and is currently contaminating ground water as well as leaching into the lake and adjacent streams through Alcoa’s discharge pipes.

When Alcoa shut down the aluminum-smelter and ceased operation in 2007, Badin community-members felt a direct impact economically. More importantly, residents of Stanly County and the Badin community have been plagued with a variety of serious health issues, including cancer, infertility and infant mortality. According to the Stanly County Community Health Assessment of 2011, these issues occur in residents of Stanly County at nearly twice the national average. And chronic health issues in west Badin are significantly higher.

In a concerted effort to restore the health of the community and of Badin Lake, Yadkin Riverkeeper began working closely in 2008 with Stanly County Commissioners, community leaders and the Duke Environmental Law and Policy Clinic to investigate Alcoa’s historic legacy of contamination. Vigorous testing and research exposed how the company misled State and federal officials regarding dissolved-oxygen standards, and its State-issued Water Quality Certification was revoked. Alcoa also was shown to have failed in its storage, treatment and/or disposal of hazardous waste.

For years Alcoa denied responsibility for the hazardous waste the company left behind in Badin, but the multinational corporation has settled claims with more than 200 residents who have been harmed or whose family members have died from exposure to contaminants linked to the smelter. In 2009 Badin Lake was added to EPA’s list of waterways impaired for fish-consumption

because of PCB contamination. Advisories are now posted at the lake warning against eating more than six ounces of largemouth bass and/or catfish per week. Children 15 and under and pregnant women are advised against consuming any fish at all. Still, many residents and recreational users of the Yadkin River who subsist on fish are unaware of these caveats and continue to consume the fish at an unsafe rate.

Yadkin Riverkeeper has conducted testing in Badin Lake that has linked PCB-contaminated mussels and fish to the seven types of PCBs that the EPA says Alcoa produced. Falls Reservoir, downstream from the lake, also tested positive for more than twice the allowable EPA levels of PCBs for safe fish-consumption. The North Carolina Department of Health and Human Services, however, has not posted advisories there to alert people about the dangers.

The racially segregated community of West Badin is more than 90 percent African-American and is located adjacent to the smelting facility, where most all of the hazardous waste lies. Yet the EPA refuses to recognize Badin as an environmental-justice community, which would trigger citizen engagement and further investigation into Alcoa’s polluted sites. Yadkin Riverkeeper is working with the newly formed Concerned Citizens for West Badin to narrow this information gap and help raise the voices of residents who feel Alcoa should be required clean up the deadly mess it has dumped in their community.

“We worked in the “green end” of the plant, where they attached carbon to the rods to be used in the pots for making aluminum. I feel that I am blessed to be alive -- most others were not so lucky. Almost all the employees that worked at the green end of the plant—Supervisors James Calloway, B.J. Jackson, Doug Eisenhower, Wayne Eisenhower, Tom Wall, Larry Watkins, K.C. Burleson, Freeman Gilbert, Alexander Kendall, William Brown, Betty Bowden, Eddie Mauldin, Raymond and Jim Ellebe and Dwight Wagner—are now all dead from their exposure to contaminants at the plant. Many died in their 40s or early 50s from cancer or leukemia”. Valerie Tyson, 27-year Alcoa employee, in a letter to EPA.

THE TOWN OF BADIN IS STILL STRUGGLING TO GET BACK ON ITS FEET ECONOMICALLY SINCE ALCOA SHUT DOWN ITS BADIN FACILITY.

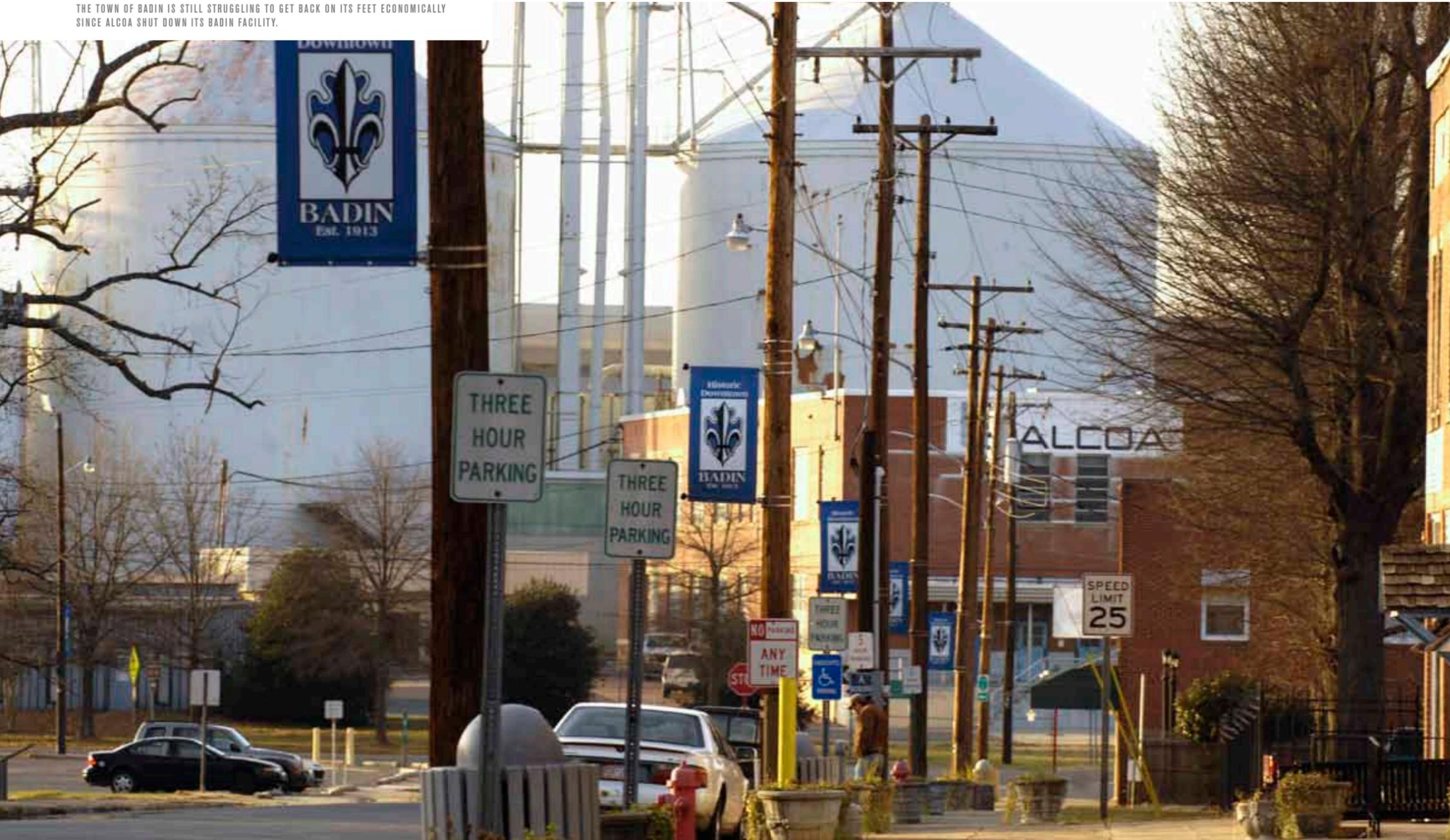


PHOTO BY NANCY PIERCE



**CYCLONE PHAILIN, THE SECOND-STRONGEST TROPICAL CYCLONE EVER TO MAKE LANDFALL IN INDIA AFFECTED MORE THAN 12 MILLION PEOPLE IN THE STATE OF ODISHA, INDIA, ALONG THE BAY OF BENGAL. MAHANADI RIVER WATERKEEPER RANJAN PANDA, WAS ON THE GROUND ASSESSING THE SITUATION OF THE VICTIMS AND TRYING TO CONNECT THEM WITH RELIEF AND OTHER SUPPORT.**



## CYCLONE ALLEY'S DEADLY ARITHMETIC

IN THE ERA OF CLIMATE CHANGE, PREPARATION IS BETTER BUT NOT GOOD ENOUGH ALONG THE BAY OF BENGAL. BY RANJAN PANDA, MAHANADI RIVER WATERKEEPER

**O**n October 12, as the category-5 cyclone Phailin approached eastern India, I was busy keeping a tab on all information and transmitting it to thousands of followers in social media. When Phailin arrived about 9:30 p.m. and began to devastate the coast of Odisha on the Bay of Bengal, people were still calling me from various parts of the coast, and I fortunately was able to inform, counsel and guide them at a crucial time.

This was the area's most devastating cyclone in 14 years. The storm and floods it caused affected more than 12 million people in the state of Odisha. At least 69 people have been killed by the cyclone, consequent flood and a later tropical depression. But current technology helped the government and people to be better prepared than in 1999, and casualties were enormously reduced. About 10,000 people died in the previous cyclone.

Still, the flood-damage this time has been more extensive, affecting 18 districts, compared to 12 in '99. The state government has requested from the central government a budget for immediate repair and relief operations of 5831.41 crore Indian rupees (\$933 million). Moreover, when the following depression struck the state during rice-harvesting season, incessant rains took more lives and damaged many more crops. Phailin and its aftermath, the government reports, have destroyed over 860,000 hectares, or 2.1 million acres, of crop and damaged 830,000 houses.

### THE SITUATION IN THE FIELD

I HAVE BEEN TRAVELLING IN THE DISASTER-AFFECTED AREAS TO ASSESS THE SITUATIONS OF THE VICTIMS AND TO TRY TO CONNECT THEM WITH RELIEF AND SUPPORT ORGANIZATIONS. It is clear that, following the cyclone, the state was caught napping as a waning Phailin triggered heavy rain in north Odisha, particularly the districts of Balasore and Mayurbhanj. It failed to respond to distress calls even as thousands were marooned in flood water.

By the time the government mobilized rescue and relief operations, the flood had spread to several other districts. And, contrary to the tall claims of officials, it struggled to provide food, medicine and other essential items. On the evening of October 17th, five days after Phailin struck, I arrived at the small Mayurbhanj tribal village of Kulukutha nadasahi and found that the people had just received their first relief materials. But the supply was insufficient – just 125 kg of chura (flattened rice), 9 kg of guda (or jaggery, a sweet fruit product) and 100 small pouches of water for a village that had been stranded for five days and had lost all its homes and nearly all its food. Its only well had been contaminated, and on this afternoon some relief workers and government officials had come and put bleaching powder into it. Lacking kerosene, residents were attempting to cook whatever food they could find with the wet twigs and sticks. Small fish were the only sustenance they could gather from the fields and the now-calm river nearby.

In three other villages in that area we found the situation to be almost the same, and the next day, at Nizampur gram panchayat in neighboring Balasore district, the situation was worse. Nothing had reached the villagers there except for some cooked food provided by local businessmen. A news report that day stated that throughout Balasore each individual had received only 50 grams of chura in six days.

There was palpable anger over this shoddy relief operation. Cyclone and flood victims in several districts were reported to have raised public protests, and police had been sent to maintain law and order after roads were blocked across affected districts by people demanding relief. I witnessed one such blockade where people burnt effigies of government officials, including the chief minister of Odisha.

### THE URGENCY OF CLIMATE CHANGE

AFTER THIS PHASE OF RELIEF OPERATIONS PASSES, REHABILITATION WILL BE A BIGGER CHALLENGE, AND THE GOVERNMENT AND CIVIL SOCIETY MUST PREPARE NOT ONLY FOR THESE CHALLENGES BUT ALSO FOR THE STILL GREATER CHALLENGE OF CLIMATE CHANGE. They must face the reality that cyclones will be more frequent and devastating in the era of global warming.

The Bay of Bengal and Odisha coast have always been highly vulnerable to destructive cyclones. According to meteorologist and hurricane-hunter Jeff Masters, 26 of the 35 deadliest tropical cyclones in world history have occurred in Bay of Bengal. During the past two centuries, he says, 42 percent of all deaths associated with tropical cyclones have occurred in Bangladesh and 27 percent in India.

This time the Indian Meteorological Department (IMD) predicted the force and timing of a great cyclone more accurately than in the past, but not as accurately as new technology makes possible, and it did not properly gauge the intensity, speed and movement of the storm after landfall. It is fair to say that IMD offered better projections than international organizations such as the U.S. Navy, which failed miserably, but India's agency needs to do better. Its predictions should have been made at least two weeks earlier to allow governments to prepare properly for evacuation and post-disaster operations.

Speaking to the National Disaster Management Authority at Delhi on October 29th, Indian Prime Minister Manmohan Singh said, "Much remains to be done to make our country disaster-resilient. Our forecasting and early-warning capabilities need to be strengthened and upgraded. Our communication systems need to be improved to ensure that disaster alerts and warnings reach the last person in the village without delay." Governments at all levels must seriously take note of these remarks.

I have been voicing concerns about climate change on and along the Bay of Bengal for about two decades, pointing out that it is raising sea-levels, accelerating drought and causing recurring disasters. More recently, I warned that Odisha is on a fast path to desertification. Through the years, people laughed at me. But now nearly everyone wants to work against climate change. Succeeding in that work, in India and across the world, means building disaster-resilient communities.

As Mahanadi River Waterkeeper, I am now trying to focus more on the Mahanadi River, which is one of the most important river systems in India.

The river basin has been cursed by an abundance of coal. Most of the coal mines in Odisha are located there and a rapid increase in mining and the combustion of coal by power plants are seriously threatening the river. The installed thermal-power-generation capacity of Odisha is close to 7500 megawatts, but plans are in place to raise this by about 75,000 MW. Of the 98 approved thermal power plants in Odisha, 60 will take water from the Mahanadi basin by 2015. The river is destined to sustain close to 30 percent of India's power production and many other industrial activities.

A recent analysis revealed that the mean surface temperature in India has increased in recent centuries at a rate of about 0.4°C per century but the surface-air temperature over the Mahanadi River Basin is increasing at a rate of 1.1°C per century. The local communities are repeatedly battered by disastrous storms and flooding, which will only get worse. The basin is in desperate need of more careful attention.

As I focus my attention intensely on these issues, I hardly need to mention that I will need the close and constant support of my new colleagues in Waterkeeper Alliance. W

*HOLDER OF A MASTER'S degree in sociology from India's Samablapur University, Ranjan Panda has devoted his life to conservation of water. He started a campaign to save rivers and waterbodies in 1988 when he was a graduate student, and since has become a leading advocate for the protection of water resources in India. Variouslly known as "The Water Man of Odisha" – one of the country's eastern states – and as "Climate Crusader", Ranjan was recently appointed as the first Mahanadi River Waterkeeper.*

Photos by Ranjan Panda



# GOOD EARTH

CALIFORNIA WATERKEEPERS TAKE ON AGRICULTURAL POLLUTERS AND THE STATE.

# BAD DEEDS

BY: STEVE SHIMEK, MONTEREY COASTKEEPER; KIRA REDMOND, SANTA BARBARA CHANNELKEEPER; AND GORDON HENSLEY, SAN LUIS OBISPO COASTKEEPER

THE PATCHWORK QUILT FIELDS OF CALIFORNIA'S CENTRAL COAST MAY BE THE MOST PRODUCTIVE AND PROFITABLE AGRICULTURAL LAND IN THE WORLD, BUT THIS CORNUCOPIA HAS COME AT A HIGH COST: THE WATER QUALITY THERE IS LIKELY THE WORST IN CALIFORNIA AND AMONG THE FOULEST IN THE UNITED STATES. AND CONDITIONS ARE GETTING WORSE.

ALTHOUGH AGRICULTURAL POLLUTION OFTEN FLOWS FROM PIPES (CALLED TILE DRAINS) AND DITCHES, BELOW AND BOTTOM LEFT, AGRICULTURAL OPERATIONS ARE GIVEN A FREE PASS FROM POINT SOURCE DISCHARGE REGULATIONS UNDER THE CLEAN WATER ACT, THANKS TO THE POWER OF THE U.S. AGRICULTURAL LOBBY.



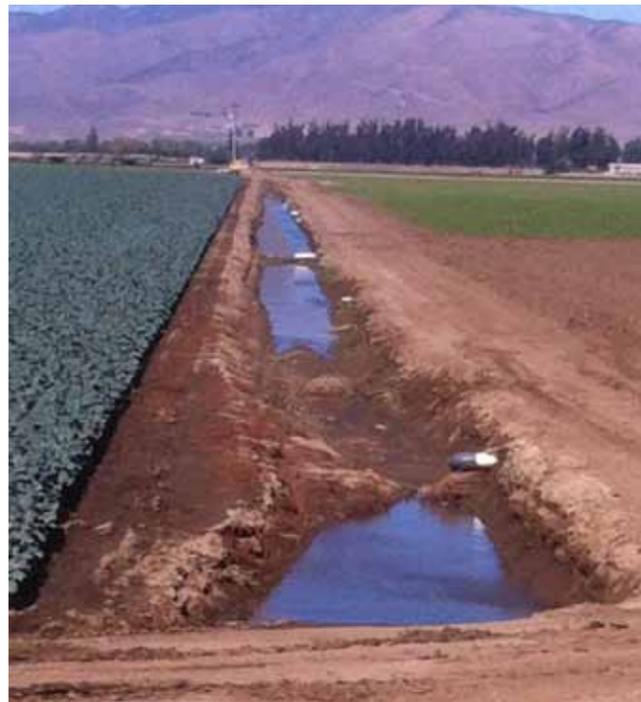
PHOTO BY MONTEREY COASTKEEPER

# C

## ALIFORNIA AGRICULTURE PUTS FOOD ON OUR TABLES, WINE IN OUR GLASSES, MONEY IN OUR WALLETS – AND A TOXIC BREW INTO OUR GROUNDWATER, RIVERS AND OCEAN.

Farming is deeply rooted in the American economy and culture. Thomas Jefferson ardently believed that farmers are “the most valuable citizens,” and proclaimed, “Those who labour in the earth are the chosen people of God.” Benjamin Franklin, another supporter of agrarian society, once said that agriculture is “the only honest way... for a nation to acquire wealth.”

The U.S. agricultural lobby has influenced politics and policy since the 1870s, when 70 to 80 percent of the population was directly employed in farming. Today, less than three percent of the population farms, but agriculture is a bright spot in a struggling economy. Nearly half of American land is agricultural, and our farms are extremely productive – farmers produce 262 percent more food than in 1950. According to the U.S. Department of Agriculture, net farm income has reached an historic high, increasing from \$85 billion in 2008 to more than \$114 billion in 2012. Exports are also greater than ever. Given these numbers and our political and economic heritage, it is no wonder that American agriculture is deeply funded, well represented legally and politically potent.



But all is not well. In May, National Geographic magazine warned that agriculture is a “mixed blessing,” and, “If we don’t watch out, agriculture could destroy our planet.” The article chronicled global overuse of nitrogen fertilizers. America’s “breadbasket” in the Midwest has created a dead zone in the Gulf of Mexico. The same thing is happening in America’s “salad bowl” on California’s Central Coast where endangered sea otters are being killed: excess nutrients cause toxic algae to bloom in both fresh and salt water.

On that Central Coast, amid a gaggle of agriculture industry lawyers and lobbyists, Monterey Coastkeeper, Santa Barbara Channelkeeper and San Luis Obispo Coastkeeper are fighting to protect their waterways against rampant polluting practices.

For decades, the agriculture industry’s lobbyists here have worked overtime to avoid water quality regulation. Although agricultural pollution often flows from pipes (called tile drains) and ditches, agricultural operations are specifically excluded from point source discharge regulations under the Clean Water Act (33 USC § 1362(14)). Part of the Act’s treatment of the term point source states: “Does not include agricultural stormwater discharges and return flows from irrigated agriculture.” California’s 1969 Porter-Cologne Water Quality Control Act does require all dischargers, including farmers, to obtain permits, but these laws have been largely unenforced against the agriculture industry. In 2004, California’s Central Coast Regional Water Quality Control Board took the first small steps toward reducing agricultural pollution by passing new rules called the “conditional ag order” (short for Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Agriculture). The conditional ag order is a permit tool that allows many similar dischargers to come under a single order, as long as each individual discharger complies with certain “conditions.” The Central Coast Water Board had started down a potholed road, inevitably colliding with agricultural interests.

The Central Coast, although not as extensive as California’s Central Valley, claims to be the most productive and profitable agricultural land in the state, and, some say, the world. The lower Salinas Valley alone – a sliver three miles wide and 40 miles long – produces 60 percent of the lettuce and 40 percent of the strawberries grown in the U.S. The smaller Pajaro and Santa Maria Valleys are equally productive. Over 100 varieties of vegetables and berries are grown on the Central Coast. McDonald’s supplies its lettuce for Big Macs and Wal-Mart stocks its vegetable aisles from the bounty of the region.

This cornucopia has been filled at a high cost. Water quality on the

Central Coast is likely the worst in California and among the foulest in the nation. While residents and tourists fawn over the green links at Pebble Beach, the rugged Big Sur Coast and the laid back fashion of Santa Barbara, inland residents and farm workers suffer. Fifty-five percent of the region’s inland waters are toxic, including 22 percent categorized as highly toxic. And conditions are getting worse.

“We have seen a 30-to-100-fold increase in domoic acid [an algal toxin] in water samples in the last decade or so,” reports Clarissa Anderson, a biological oceanographer at the University of California at Santa Cruz. “We think that the toxicity of these blooms is related to agricultural runoff.”

Among many sources of toxic pollution, testing has found toxic levels of chlorpyrifos and diazinon in the vast majority of samples. Both chemicals are only registered for agricultural use.

Extremely high levels of agricultural nitrates (farm fertilizers), which can cause cancer and be fatal to infants, have been found in rural drinking-water supplies. When residents of the small farming community of San Jerardo, outside Salinas, complained of sickness, hair-loss, stomach problems, sores and rashes, their drinking water was tested and found to have ten times the standard level for nitrates. Their symptoms disappeared when an alternative water source was provided. Nitrate pollution is so pervasive in these agricultural areas that many communities must abandon shallow wells or drill deeper ones to avoid polluted aquifers. A 2012 report to the California legislature found that in California’s Tulare Lake Basin and Salinas Valley, “Roughly 254,000 people are currently at risk for nitrate contamination of their drinking water,” and “Over 1.3 million people are financially susceptible because nitrate in raw source water exceeds the MCL [maximum contaminant level].”

In 2008 Monterey Coastkeeper, San Luis Obispo Coastkeeper, Santa Barbara Channelkeeper and Environmental Defense Center began advocating for a strong, enforceable “conditional ag waiver” that discloses all data on agricultural discharges to the public and to water boards – in opposition to growers, who wanted a peer-enforced system that would have reported only aggregated data. After 18 months of delays, in February 2010 the Regional Water Board staff released a bold draft proposing regulation of toxic and nutrient discharges to both surface and ground waters, enforcement of riparian buffers between agricultural activities and streams, and regulation of sediment-discharges during storms. Some Regional Water Board members and agriculture advocates proclaimed the draft to be the most aggressive regulation of agricultural pollution in the United States. The prospect of such forceful regulation was greeted as appropriate and necessary by water-quality advocates, conservation organizations and environmental-justice groups, but agriculture portrayed the draft as overly zealous government intrusion

**“WE HAVE SEEN A 30-TO-100-FOLD INCREASE IN DOMOIC ACID [AN ALGAL TOXIN] IN WATER SAMPLES IN THE LAST DECADE OR SO. WE THINK THAT THE TOXICITY OF THESE BLOOMS IS RELATED TO AGRICULTURAL RUNOFF.”**

and over-regulation. From across the state, agricultural money and industry lawyers flooded into the Central Coast.

Most regional and state politicians have aligned themselves with the powerful agricultural interests, and industry trade groups have vigorously sought their assistance. When Western Growers Association sponsored legislation to abolish the Central Coast Regional Water Board, Monterey Coastkeeper and the California Coastkeeper Alliance, the voice for 12 Waterkeeper organizations, appeared before the all-powerful California Senate Environmental Quality Committee and killed the legislation. But one of the most powerful agricultural trade associations in the nation got its way when two Regional Water

Board members were not re-appointed by the Governor – and Board membership fell below a quorum.

Over the next year, the Regional Water Board held hearings, with hundreds of people giving testimony. The agriculture industry advocated for weaker regulations and against individual monitoring and reporting, and the Board, without a quorum to approve anything, revised the conditional ag order five times, each time further weakening its staff proposal. One Board member revealed that the Board had been directed by the Governor’s office to “listen” to agriculture.

The previous and ineffective 2004 order was extended four times to accommodate further “listening” while the Board, without a quorum, discussed the new draft; after the first extension, each Regional Board extension was appealed by the three Central Coast Waterkeepers and its allies to the State Board. The first appeal was summarily denied by the state and was immediately crafted into a lawsuit by the three Waterkeepers. The State Board has yet to take action on the other two appeals.

The three Central Coast Waterkeepers formed a coalition including the Environmental Justice Coalition for Water, San Jerardo Community and Clean Water Action. Hundreds of farm workers signed petitions supporting effective regulation, and many of them took valuable time off to offer testimony at hearings.

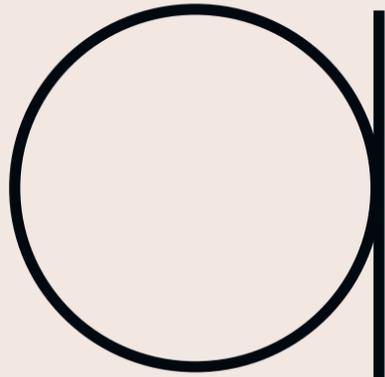
After nearly three years, in March of 2012, Governor Brown reappointed the two contested Board members, but the Board nonetheless adopted a severely weakened order. Even so, agriculture appealed the decision to the State Water Board, arguing for weaker regulation and a complete revocation of the order. The Waterkeepers also appealed, seeking to make the regulation stronger. They were abetted by Sierra Club California, Planning and Conservation League, Clean Water Action, Environmental Working Group, California Rural Legal Assistance, San Jerardo Cooperative, Environmental Justice Coalition for Water, and Ocean Conservancy, all of whom testified in their support. After a partial stay was granted in September 2012, the Waterkeepers sued the State Board, contending that the State had stayed provisions that demonstrate the efficacy of the order, which is required by law. That lawsuit has yet to come before the court.

The give and take that occurred over the next year was baffling. After the State issued draft revisions in June 2013 that further weakened the Central Coast Conditional Ag Order, the Waterkeepers and allies showed up through the summer at workshops and hearings on the draft revisions, pushing hard for a stronger draft. Then, on the eve of a September 10th adoption hearing, the State released a new draft that completely reversed all progress by allowing growers to entirely avoid meeting water-quality standards or complying with the schedule in the order. The State Water Board appeared to be “listening” to agriculture. On September 24th it approved a weakened and deeply flawed conditional ag order. Agriculture had trumped the champions of public health and the environment yet again. Deeply disappointed Waterkeepers, their

allies and the Stanford University Environmental Law Clinic were left to evaluate their options and consider their next steps.

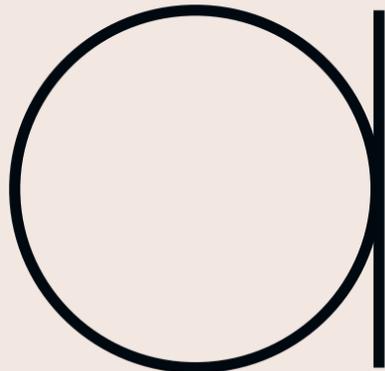
There is, at least, a glimmer of light emanating from the industry. Farmers have begun organizing to clean up their effluent in anticipation of more restrictive ag orders to come. And this year the California Department of Food and Agriculture announced its support of research to guide growers on curbing pollution.

But the three Central Coast Waterkeepers continue to fight a stinging, bruising, politically scarring battle for the earth, water and people of the region. Immediate and substantial remedies, not gradual change, are needed.



Q+A:

J. B. MACKINNON,  
AUTHOR OF



*The Once and Future World, a Deep Search into Natural History and a Call of the Wild for Our Time*



J.B. MACKINNON IS AN INDEPENDENT JOURNALIST AND AUTHOR WHOSE WORKS INCLUDE *THE 100-MILE DIET*, A BESTSELLER THAT HELPED CATALYZE THE LOCAL-FOODS MOVEMENT. PHOTO COURTESY OF J.B. MACKINNON

J. B. MACKINNON is a writer and editor living in Vancouver, British Columbia. His 2005 book *Dead Man in Paradise*, the story of the search for his uncle's killer in the Dominican Republic, won Canada's Charles Taylor Prize for Literary Nonfiction. *The 100-Mile Diet* (2007), written with his partner, Alisa Smith, chronicled a year of local eating and helped catalyze the "locavore" movement in North America and beyond. A recent essay, "False Idyll," appears in the *Best American Science and Nature Writing 2013*.

In this interview, Tyege Bridge, Fraser Riverkeeper in British Columbia, asks MacKinnon some fundamental questions about his newly published book *The Once and Future World*. In the book MacKinnon turns over stones and fossils to reveal the

alternately shocking and inspiring story of the lost worlds known to our ancestors — and some future possibilities for the much smaller natural world we now live in.

MacKinnon is also an accomplished rock-climber and an out-of-the-closet birdwatcher.

**TB** You've written about trying to solve a murder in the Dominican Republic in *Dead Man in Paradise*, and you and your partner Alisa Smith helped kick-start the local food movement with *The Hundred-Mile Diet*. What inspired you to write this book? Was there some particular story or experience that started the whole project?

**JBM** I think this book has been in my mind a long time, but the real work began after

a typical modern experience: I went to visit my hometown, and found that a wild place I loved had been replaced by a housing development. It was a personal encounter with the way that the natural world disappears—bit by bit, not with a bang but a whimper—and it made me want to trace the history of that disappearance on my childhood landscape. So I hit the local archives and, a few days later, I had changed the way I see nature. What I found in the history books was that the place where I grew up was once home to animals like elk, caribou, wolves, grizzly bears, maybe even bison—and that not only was that richer version of nature gone, but it seemed to be totally forgotten. It was a pattern that turned out to be true of almost every place on earth.

**TB** In North America after the last ice age, there were not only mastodons and sabretooth tigers, you write, but also lesser-known, more fantastical fauna: armored glyptodonts, a bear-sized beaver, camels, three-ton ground sloths, and pampatheres that were like "armadillos the size of overturned rowboats." To me it was almost unreal. What happened to all these animals? Was it humans that killed them in every case, or some other catastrophe?

**JBM** After the Ice Age, there were huge animals all around the world — the "megafauna," as scientists say. There's a vigorous debate about whether the spread of human beings around the world caused the megafauna to go extinct, or whether rapid climate change was the culprit. The strongest case seems to blame a combination of the two, though I would say this still implicates human beings most of all—without us in the works, there's little reason to believe that climate change alone could have caused the mass extinction. In any case, the pattern is clear in more recent times: whenever human beings first arrive in a new place, the biggest animals start to disappear. Historical ecologists sum it up this way: "We eat the big ones first." But did we hunt and kill every one of them? Probably not. More likely hunting was just one of many human impacts.

**TB** Cosmologist Brian Swimme once said in an interview: "Modern culture is a human-centered echo-chamber. We only talk to each other, watch each other's films, read each other's books, and so forth. All we hear are echoes of our own voices. Very rarely do we encounter nonhuman species, except for our pets, and they are so domesticated they've become reflections of ourselves." Do you agree with that? And does this relate in some way to the continuing pattern of extirpations and extinctions we're wreaking upon other species?

**JBM** I agree with that wholeheartedly. It's a consistent practice in human history that we create myths that put humans at the center of all creation. In the book I write about the Christian scholars who once struggled to explain how everything on earth served human interests: lice are our incentive to cleanliness; horse turds smell sweeter than other turds because horses are made to live close to us. We see ourselves as too sophisticated for such beliefs now, but the way we live has the same effect. More than 50 percent of people worldwide now live in cities and towns, and we spend more and more time in virtual environments: we live in a world where human life is absolutely dominant, constantly at the center of our attention, and we have few opportunities to see ourselves as a part of a wider ecological community.

**TB** You talk about "rewilding" in the book. Can you give some background on rewilding, and maybe a successful or potentially successful

example of rewilding in North America?

**JBM** "Rewilding" has been a word in search of a definition. For a time, it referred only to the act of returning big, wild animals—especially carnivores—to areas where they had disappeared. For a time, ecologists used the term to argue for the creation of a network of core reserves, connected by protected corridors that would once again allow the movement of wildlife populations at a continental scale. But many people, myself included, now use rewilding to refer to any action that makes a place more wild, on any scale. Bringing wolves back to Yellowstone National Park after 60 years of absence was an act of rewilding, but so is restoring native mason-bee habitat in the heart of the city.

There are those who argue that all of this is "conservation," plain and simple. I disagree. Conservationism is traditionally understood as an effort to protect wild places or wildlife populations from destruction by human beings—it necessarily divides people and nature into separate units. Conservationism was and is critically important, but to create a truly whole ecological world and to rebuild anything like the natural abundance of the past, protection will not be enough. We will need to actually remake a wilder world, including on human landscapes. To me, that is the work of rewilding.

**TB** A few years ago I learned about the extinction of the basking shark from the Pacific, and British Columbia in particular—mainly thanks to government boats with special bladed prows that cut them in half—and it made me feel different about the place where I live. Less proud of what I'd thought of as our exemplary West Coast biodiversity, and more like I was living on the grounds of some forgotten crime. Does knowing about these vanished species make you see the landscape where you grew up, or where you live now, any differently?

**JBM** It makes me see the whole world differently. Stories like the extirpation of the basking sharks from the B.C. coast (and that is just one of many such stories about this coast) can be found almost everywhere—we just don't know it, because we don't talk about those histories. Obviously, I think we need to reverse this pattern of forgetting. It's pretty simple, really. If we don't know that basking sharks ever lived here, then their absence will seem perfectly normal. Once we do know that basking sharks were present in the past, we're able to ask meaningful questions, such as, "Where did they go?" and "Should we try to bring them back?"

**TB** Walrus at the mouth of the Thames, bison in Germany, lions in France and wolves in Japan— there are all these examples that seem so incongruous now. Beaver in England struck me as well, as they've always seemed such a "New World" Canadian icon. The

losses are horrific, but I have to admit I felt a kind of elation at discovering what the world was, and what it could be (as the book's subtitle has it). Is that a typical response you hear from readers, that learning about these natural wonders gives as much a sense of joy as loss?

**JBM** Most readers tell me that they feel the pain of the losses, but also feel hungry for the wilder world that those losses reveal. You can't really get to the inspirational side without first

animals to me as I wrote this book. I kept encountering them, both in my research and in the places I visited, and began to think of them as the ultimate test of our capacity to live alongside other species. On the one hand, they seem almost outdated in our high-speed, live-large culture. Some tortoises spend almost their entire lives inside or within a few meters of their burrows, and their slow movements and tendency to hide in plain sight has made them vulnerable to

and I wrote a book called *The 100-Mile Diet*, which resulted in the revolutionary overthrow of my own cynicism. We saw how a simple shift in the way people saw the world could result in truly significant changes in a surprisingly short time. Did the empire of global agribusiness collapse like a house of cards? Of course not. But real change did take place – it took place in a matter of years, and it is continuing to deepen. Rewilding will not play out in exactly the same way, but it

**“Conservationism is traditionally understood as an effort to protect wild places or wildlife populations from destruction by human beings—it necessarily divides people and nature into separate units. Conservationism was and is critically important, but to create a truly whole ecological world and to rebuild anything like the natural abundance of the past, protection will not be enough. We will need to actually remake a wilder world, including on human landscapes.”**

walking through the shadows—the one gives meaning to the other. You can't write about what the natural world of the past can teach us today without explaining why today is no longer like the past.

**TB** How much of this world can we bring back? Should we try?

**JBM** Toward the end of the book I raise a simple question: “What is the wildest world we can live in?” To me, this is a challenge. We certainly won't turn North America into a post-Pleistocene wilderness in my lifetime, but we will, for example, see wild bison reintroduced to Banff National Park within a year or two—we will see those huge shaggy animals roaming beneath great mountains. Every single such act brings wonder back into the world, which is also my response to the question, “Should we try?” Yes, we should. The other option is to knowingly settle for a world that is less fascinating, less exciting, and far less beautiful than it could be; a world in which it really will be more compelling to sit in our basements playing video games than to go camping in the wilderness. If we allow the natural world to become ever more distant and uninteresting, we really will wake up one day to realize that we have traded in the genius of a resilient living earth for a technological life-support system held together with baling wire and chewing gum.

**JB** One of the stories from the book that lingers with me most was the extinction of the bison. It's a popular story but it was that detail about the now-vanished bison-wallows, millions of little ponds singing with spadefoot toads and western chorus frogs, that made the bell toll more poignantly. Are there any stories or ghosts in the book that particularly haunt you?

**JBM** Tortoises became something like totem

every human impact from ancient hunting-parties to driverless Google cars. On the other hand, they have survived on this planet for 200 million years longer than human beings. Perhaps they have something to teach us about restraint.

**JB** Children who have the good fortune of being allowed to run wild in rural or semi-rural areas sometimes have glancing encounters with wild creatures, even if not glamorous megafauna. In my case it was frogs, painted turtles, garter snakes, and some saltwater creatures, crabs and dogfish. There's a certain awe for kids in those small brushes with the world beyond the driveway. Is offering more wilderness experiences for young people, along the lines of *The Last Child in the Woods* [a book by Richard Louv], part of a cultural solution that would halt our disastrous impacts on other species?

**JBM** It's absolutely critical. Given that we now know that children get their idea of the “normal” state of nature from the environments they grow up in, we need to make sure they have the opportunity to see what nature can be. A little time in some parks is a good start, but I would suggest we go further, taking our children out—well guarded, of course—into true wilderness, where safety demands that we extend our senses beyond ourselves. This extension of our consciousness into the living world is the fastest way to understand ourselves as members of an ecological community.

**JB** There are many lost histories in the book that give one pause—if not make one want to reach for a drink— but there's also much that is hopeful and inspiring. These days, what gives you hope?

**JBM** A few years ago, my partner Alisa Smith

will begin the same way: with a subtle shift in the way that many people see the world.

**JB** Waterkeeper groups, like so many other solo activists and NGOs, are on the front lines of what often seems like a war between industrial civilization and wild biodiversity. Besides the ban on whaling, are you aware of any lesser-known and perhaps instructive examples from history where humans consciously stopped exploiting a wild population and brought it back from the brink?

**JBM** In the book, I look closely at the example of Hawaii. When Polynesian sailors first settled the Hawaiian Islands, the usual thing happened: a bunch of large and remarkable animals, mostly flightless birds, began to disappear. Then something interesting happened: for several hundred years, the Native Hawaiian culture developed in total isolation from the rest of the world. It was, in many ways, a microcosm of the planet as a whole—the Hawaiians were totally dependent on a living world surrounded by an apparently endless ocean, in the same way that all of us depend on this one planet in outer space. Yet somehow they slowed the ecological decline that began with their arrival, and began not only to sustain their ecological wealth, but even, perhaps, to restore it. Why did this happen? One credible guess is that their ecological world was so small that mistakes in stewardship kicked back with serious consequences on a short timeline. What we do know is that Native Hawaiians developed a culture with an unusually strong appreciation for biodiversity—for all living things, great and small. There is a lot we might learn from such examples, but the greatest single lesson is this: We are capable of living with a wilder world. All it takes is a wilder way of being human.

DIKES BUILT BY THE MINISTRY OF TRANSPORT ON THE BEACH OF EL LAGUITO, IN CARTAGENA DE INDIAS. IN THE BACKGROUND, THE MOUTH OF EL LAGUITO, OR “LITTLE LAKE”.



# BIG [GRANDES]

## PROBLEMS FOR THE [PROBLEMAS POR EL]

“LITTLE LAKE” [LAGUITO]

**IN CARTAGENA, COLOMBIA, “SWIMMABLE WATER WEEKEND” BRINGS ATTENTION TO THE URGENCY OF SAVING “EL LAGUITO”**

BY ELIZABETH RAMÍREZ LLERENA, BAYKEEPER AND EXECUTIVE DIRECTOR, CARTAGENA BAYKEEPER; TEÓFILO OMAR BOYANO FRAM, FORMER CARTAGENA BAYKEEPER BOARD OF DIRECTORS PRESIDENT, GONZALO SUESCÚN, EXECUTIVE DIRECTOR, DEMOCRATIC ACTION FOUNDATION, IPPOLITA DI PAOLA, LATIN AMERICA REGIONAL COORDINATOR, WATERKEEPER ALLIANCE.

Waterkeeper Alliance's worldwide “Swimmable Water Weekend,” July 25th through 28th, was welcome nowhere more enthusiastically than in Cartagena, Colombia. Swimmable Water Weekend was conceived as a global event to connect communities and their local waterways with Waterkeeper Alliance and its member organizations around the world, through social networks such as Facebook, Twitter, Flickr and Swim Guide, the web and mobile application for public information and citizen reporting on where it is safe to swim. The event was created to remind

**CARTAGENA, COLOMBIA, EL “FIN DE SEMANA DE AGUA APTA PARA NADAR” LLAMA LA ATENCIÓN SOBRE LA URGENCIA DE SALVAR EL LAGUITO**

POR: ELIZABETH RAMÍREZ LLERENA, BAYKEEPER Y DIRECTORA EJECUTIVA DE CARTAGENA BAYKEEPER (CENTRO), TEÓFILO OMAR BOYANO FRAM, EX PRESIDENTE DE LA JUNTA DIRECTIVA DE CARTAGENA BAYKEEPER (IZQUIERDA), GONZALO SUESCÚN DIRECTOR EJECUTIVO DE LA FUNDACIÓN ACCIÓN DEMOCRATA (DERECHA) E IPPOLITA DI PAOLA, COORDINADORA REGIONAL DE LATINOAMÉRICA EN LA WATERKEEPER ALLIANCE.

El fin de semana internacional de agua apta para nadar de Waterkeeper Alliance, el 25-28 de julio, fue bienvenido con mucho entusiasmo en Cartagena, Colombia. El fin de semana fue concebido como un evento mundial, para conectar a las comunidades y sus canales locales con Waterkeeper Alliance y sus miembros en todo el mundo, a través de las redes sociales Facebook, Twitter, Flickr, Instagram, y [www.theswimguide.org](http://www.theswimguide.org), la aplicación web y móvil para información pública y reportes ciudadanos de donde es seguro para nadar. El evento fue

people that they have a right to swimmable water. “Waterkeepers around the world and thousands of supporters from more than 20 countries celebrated and advocated for the right to clean water for swimming and the importance of protecting our local waterways,” said Marc Yaggi, executive director of Waterkeeper Alliance.

Cartagena Baykeeper used the occasion as an opportunity to join forces with several local groups, including the Democratic Action Foundation, the Association of Condominium Managers of Cartagena and concerned citizens, to demand restoration of “el Laguito,” or “Little Lake,” the slip of water that lines the tourist district of Cartagena de Indias. The occasion, an extension of the Baykeepers “Save el Laguito campaign,” was organized to demonstrate that this once popular body of water was no longer safe for swimming because of runaway hotel development and poorly planned public works projects.

“We brought together families who have lost their public space, as well as boaters, passengers and tourists who miss having a suitable harbor to sail to the islands of Rosario and Tierrabomba,” said Elizabeth Ramírez Llerena, Cartagena Baykeeper.

This body of water has faced grave environmental problems since 1997, and has seriously threatened the health of the local community and tourists. It has been greatly harmed by pollution generated by the International Hilton Hotel Cartagena, which has appropriated the beaches of el Laguito, and by the dikes constructed by the Colombian public-works ministry, which made the erection of the hotel possible. Before these were built, the waters of el Laguito were calm and easily accessible for bathers and boaters.

After the dikes were installed, the sea withdrew from the beach and sedimentary sand formed a barrier to the shore. Marine life there is now extinct; only algae remain. The water in the inner lagoon, fed only by rainfall, has lost salinity, which has led to plagues of mosquitoes and rodents, transforming this beautiful site into a “dead sea” – and, what’s more, a smelly cesspool of human waste – in the tourist heart of Cartagena.

Norberto Gary García, a lawyer trained at the University of Cartagena, can trace misappropriation of public land and water back to his student days, in 1983, when he found that a wall built by Hilton had blocked him from walking freely on the beach and also prevented the passage of swimmers. After years of research, he realized that a construction company used a statute called “Recovery” that enabled it to expand 8,000 square meters of land in the area to 26,000 square meters. Twelve years of struggle and delay elapsed before the Council of the State, the highest

administrative court in Colombia, took action against the hotel’s owner, Cartagena de Indias Hotel Company, for illegal appropriation of about three hectares of beach and sea, violating public rights to the use and enjoyment of public space and beaches.

García had shown admirable courage, for to confront multinational interests in Colombia is a risky undertaking, and many who have done so have paid with their lives. Now he has brought his resolve to the aid of Cartagena Baykeeper and the community, to explore the possibility of suing hotel ownership for misappropriating el Laguito’s land and polluting its water.

As part of the Save el Laguito campaign, Cartagena Baykeeper has enlisted 10 student volunteers from the environmental-law program at the Universidad Libre Sede Cartagena, who are working to introduce new legal actions regarding water pollution and landscape damage around the Hilton Hotel. They are aware that the environmental problems el Laguito residents face today may well re-appear tomorrow as other developers and land-grabbers attempt to replicate Hilton’s maneuvers to make way for housing projects and five-star hotels.

Charges have already been brought in the administrative courts of Cartagena and the State Council to secure the conviction of the Colombian State, the Ministry of Public Works, the Mayor’s Office of the District of Cartagena de Indias and the Hilton Hotel Cartagena to hold them accountable for removing the sand blocking the mouth of el Laguito. Baykeeper is also pressing the Ministry of Public Works to shorten the dike-extensions to enable sea water to enter, oxygenate and decontaminate the “Little Lake,” and Baykeeper is preparing to present a legal case to the Inter-American Court of Human Rights in San José, Costa Rica, based on the United Nations General Assembly’s resolution recognizing safe drinking-water and basic sanitation as universal human rights.

Petitions by local citizens for restoration have not received responses, so Cartagena Baykeeper is appealing to the Waterkeeper network for global collaboration, and gathering signatures for support around the world. The issue is urgent not only to protect the health of citizens and tourists, but also to protect the local economy – and to enforce the fundamental right of people here and everywhere to enjoy their public spaces and the gifts that nature has bestowed on them.

In support of swimmable, drinkable, fishable water, we ask for your support of our fight to protect our water resources from the Hilton Hotel. For support of swimmable water and sustainable tourism, join us in our campaign Save el Laguito! W

creado para recordar a la gente que tienen un derecho a agua apta para nadar. “Waterkeepers de todo el mundo y miles de partidarios de más de 20 países celebraron y abogaron por el derecho de aguas limpias para nadar y la importancia de proteger nuestras vías fluviales locales” dijo Marc Yaggi, director ejecutivo de Waterkeeper Alliance.

Cartagena Baykeeper aprovechó esta fin de semana global de acción como una oportunidad para unir fuerzas con varios grupos locales como la fundación Acción Demócrata dirigida por el Ingeniero Civil Gonzalo Suescún y la Asociación de Administradores de Copropiedades y Condominios de Cartagena para demandar restauración del Laguito, el cuerpo de agua que bordea el distrito turístico en Cartagena de Indias. La ocasión, una extensión de la campaña de Cartagena Baykeeper, Salvemos El Laguito, se organizó para demostrar que este cuerpo de agua una vez popular ya no era seguro para nadar debido al desarrollo mal planificado de hoteles y proyectos de obras públicas.

“Reunimos con familias quienes han perdido este espacio público, también se nos unieron los lancheros, junto con los pasajeros y turistas que perdieron una rada digna y segura para embarcarse hacia las Islas del Rosario y Tierrabomba,” dijo Elizaeth Ramírez Llerena, Cartagena Baykeeper.

Desde 1997, este cuerpo de agua viene luchando contra un grave problema de contaminación ambiental, que puede llevar a que la comunidad que habita este sector y los turistas, sufran de problemas de salud. Se ha perjudicado en gran medida por la contaminación generada por el Hotel Cartagena Hilton Internacional y su apropiación de las playas del Laguito, y por los espolones construidos por el Ministerio de Obras de la República de Colombia, lo que hizo que la construcción del hotel fue posible. Antes de estos fueron construidos, las aguas de El Laguito eran tranquilas y de fácil acceso para los bañistas y las pequeñas embarcaciones.

La Vida marina se encuentra extinguida, solo se encuentran algas producto de la descomposición del agua. Las aguas retenidas en esta laguna interna, solo alimentadas por la lluvia, bajan su salinidad, permitiendo plagas de los mosquitos y roedores, transformando este bello sitio en un “mar muerto” – una cloaca maloliente de desechos humanos–en pleno corazón turístico de Cartagena.

Norberto Gary García, abogado egresado de la Universidad de Cartagena, puede rastrear la apropiación indebida de tierra y agua pública a sus días de estudiante, en 1983, cuando se encontró con un muro construido por Hilton que le bloqueó de caminar libremente en la



CABRERO LAGOON IN CARTAGENA DE INDIAS.

judiciales sobre la contaminación del cuerpo de agua y daño del paisaje que rodea el Hilton Hotel. Son conscientes que los problemas ambientales que enfrentan los vecinos del barrio el Laguito hoy pueden reaparecer mañana como los otros desarrolladores y usurpadores de tierra intentan de reproducir las maniobras de Hilton para dar paso a conjuntos habitacionales y hoteles de cinco estrellas.

Esperamos ante la justicia administrativa y ante el Consejo de Estado en segunda, lograr la condena del Estado colombiano junto al Ministerio de Obras Públicas, la Alcaldía del Distrito de Cartagena de Indias y el Hotel Cartagena Hilton, para que cumplan con el retiro de la arena que es un taponamiento de la boca del Laguito. También, Cartagena Baykeeper está presionando el Ministerio de Obras Públicas a recortar las extensiones de los espolones para que el agua del mar entre y oxigene el cuerpo de agua interno, además de descontaminar El Laguito, y está preparando una demanda ante la Corte Interamericana de Derechos Humanos en San José de Costa Rica, ya que la Asamblea General de Naciones Unidas (ONU) aprobó una resolución que reconoce al agua

**“WE BROUGHT TOGETHER FAMILIES WHO HAVE LOST THEIR PUBLIC SPACE, AS WELL AS BOATERS, PASSENGERS AND TOURISTS WHO MISS HAVING A SUITABLE HARBOR TO SAIL TO THE ISLANDS OF ROSARIO AND TIERRABOMBA.” “REUNIMOS CON FAMILIAS QUIENES HAN PERDIDO ESTE ESPACIO PÚBLICO, TAMBIÉN SE NOS UNIERON LOS LANCHEROS, JUNTO CON LOS PASAJEROS Y TURISTAS QUE PERDIERON UNA RADA DIGNA Y SEGURA PARA EMBARCARSE HACIA LAS ISLAS DEL ROSARIO Y TIERRABOMBA.”**

playa y también impidió el paso de los nadadores.. Después de varios años de investigación, se dio cuenta de que la compañía de construcción usó la figura llamada “recuperación” para anexar 26 mil metros cuadrados al terreno que inicialmente fue de 8 mil metros cuadrados. Fueron 12 años de lucha esperando se hiciera justicia, pero por fin llegó cuando el Consejo de Estado, máximo tribunal administrativo en Colombia tomó medidas contra el propietario del hotel, Compañía Hotelera Cartagena de Indias, por la apropiación ilegal de playa y mar en una extensión aproximada a 3 hectáreas, violando derechos colectivos como el uso y disfrute del espacio público y de las Playas.

García había demostrado coraje admirable, para enfrentar a multinacionales o a “clanes familiares poderosos” en Colombia es misión de alto riesgo, y muchos han pagado con sus vidas. Ahora, García ha juntado con Cartagena Baykeeper y la comunidad de El Laguito para ver si es posible demandar el Hilton para la apropiación indebida de la tierra y la contaminación de nuestro agua.

Como parte del la campaña Salvar El Laguito, Cartagena Baykeeper trabaja con 10 estudiantes como voluntarios en la Clínica investigativa legal ambiental del programa de Derecho de la Universidad Libre Sede Cartagena. Ellos están trabajando para presentar nuevas acciones

potable y al saneamiento básico como derechos humanos universales.

Peticiones de los ciudadanos locales no han recibido respuestas, entonces Cartagena Baykeeper está apelando a la red Waterkeeper para colaboración global, y la recolección de firmas de apoyo de todo el mundo. El asunto es urgente no sólo para proteger la salud de los ciudadanos y los turistas, sino también para proteger la economía local - y para imponer el cumplimiento de los derechos fundamentales de la gente aquí y en todos lados para disfrutar sus espacios públicos y los regalos que la naturaleza ha otorgado sobre nosotros.

Este es un sector turístico muy importante de la bahía de Cartagena, se requiere la recuperación urgente de este cuerpo de agua, para el turismo, se necesita construir marinas para que los turistas que van a las islas del Rosario y Tierrabomba tengan un lugar seguro en el muelle para la economía local y para cumplir con el derecho al espacios públicos.

Por agua apta para nadar, tomar y pescar, necesitamos que nos ayuden en nuestra lucha de proteger nuestros recursos hídricos de la apropiación indebida del Hilton Hotel.

Playa del Laguito en la bahía externa de Cartagena.

Por agua apta para nadar y un turismo sostenible, juntar con nuestra campaña, Salvemos el Laguito. W

COLONIAL HISTORIC CENTER OF CARTAGENA, BUILT BY THE SPANISH.



PHOTO COURTESY OF CARTAGENA BAYKEEPER

# On The Water

Staff and volunteers of Magdalena Baykeeper (Vigilantes de Bahía Magdalena) in Baja California Sur, Mexico pulling in the Baykeeper boat after an overnight sea-turtle monitoring trip in Magdalena Bay.

Magdalena Baykeeper started their endangered sea-turtle monitoring project in 2001. Every month they set nets for 24 hours, checking them hourly for sea turtles. In the last 12 years they have captured, measured, registered and returned almost 400 sea turtles to the sea.



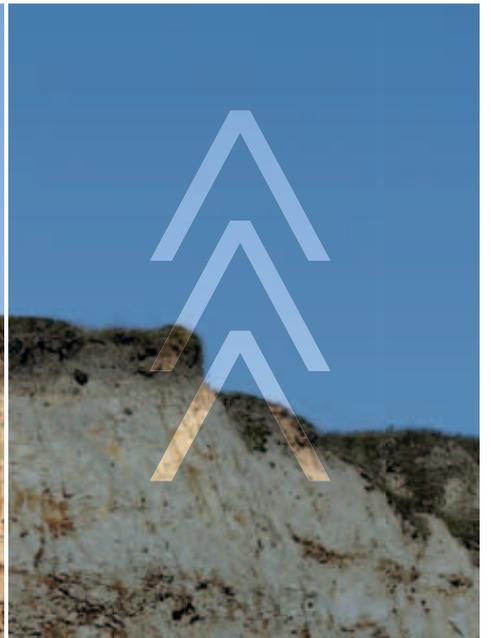
Photo by Eliza Smith Steinmeier



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