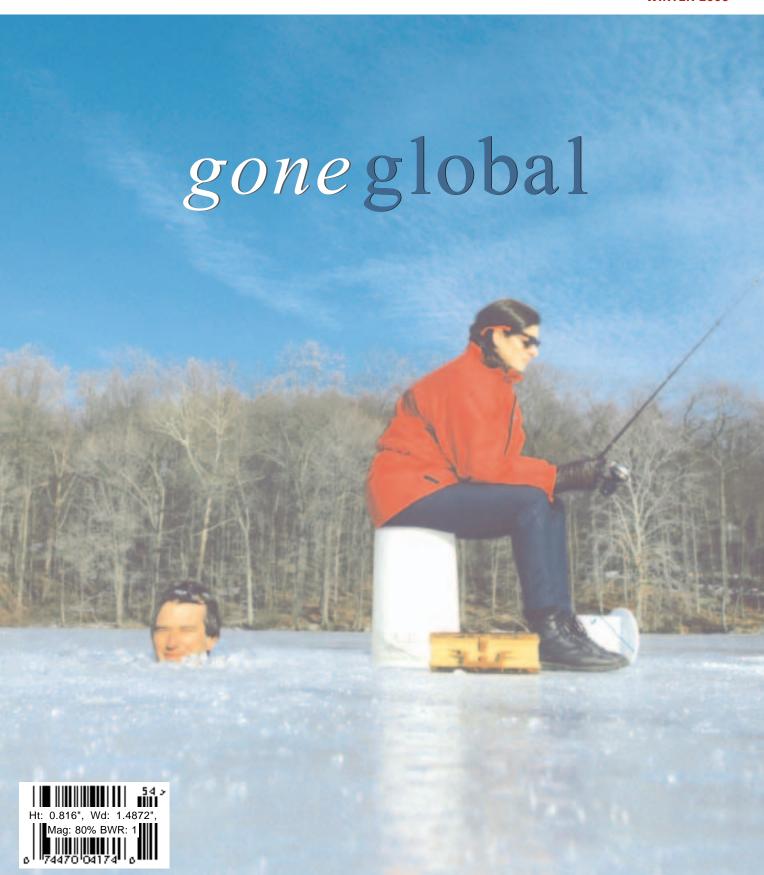
ROBERT F. KENNEDY, JR. • LEONARDO DICAPRIO • CATHERINE CRIER

WATERKEEPER

WINTER 200



William Abranowicz's work has been featured in Vogue, The New York Times Magazine, Martha Stewart Living and Le Monde d'Hermes. He is currently on the On The Water masthead of both Condé Nast Traveler and House and Garden and his work is included in public, corporate and private collections throughout the world. Abranowicz is an active member of Riverkeeper and is responsible for their annual photo auction, Reflected Light.



Photo/CP, Jeff McIntosh

Waterkeeper:

Time To Change the Paradigm

fter years of difficult and intense negotiations, the Global Climate Treaty took effect February 16 with the world's biggest polluter, the United States, conspicuously

absent from the 150 participating countries.

The solid scientific consensus that global warming caused by human excesses is already catastrophically altering our weather is confirmed beyond doubt by over 2,000 top climate experts from over 100 countries in the largest, most rigorous peer reviewed collaborative research project ever. But you don't need a weatherman to know which way the wind blows. The evidence of climate chaos is all around us.

History's ten hottest years have occurred since 1990. The Arctic Ice Cap has lost 40% of its volume in 20 years and will be gone within our generation. Forests are dying, permafrost and glaciers are melting worldwide. Within decades, there will be no glaciers in Glacier National Park, no snows on Kilimanjaro. Sea levels are rapidly rising, coral reefs disappearing, weather patterns are becoming increasingly chaotic, animals and plants are changing their behavior. Russian bears, suffering through that nation's warmest winter ever, are so confused that they have awoken a month early, throwing off their entire life cycle. A quarter of the earth's species will be extinct in 50 years, according to a new collaborative study by top biologists from eight nations published in Nature in January 2004. The frequency of catastrophic weather is increasing exponentially. Deadly storms made 2004 the most costly year ever for the insurance industry. England received a month's worth of rain in a single night. Two years ago a lethal European heat wave killed more than 15,000 people. U.N. Weapons Inspector Hans Blix warns that global warming is a greater threat to

global security than war or terror, a conclusion shared by Great Britain's top scientist Sir David King, and by a recent Pentagon study.

Responsible foreign oil companies like B.P. (which has changed its name to Beyond Petroleum) acknowledge the crisis and are aggressively investing in clean, efficient technologies and renewable energies that will help reduce carbon dioxide emissions globally by 70%. Similar investments by our nation would be a boon to America's air, our economy and our national security. After all, the steps we must take to comply with Kyoto are steps we should be taking to reduce our dependence on foreign oil, our vulnerability to price shocks on the international oil market and our balance of payment deficits.

Conservation and efficiency will make American industry more competitive and cleaner. Fuel efficiency will make every American richer; less money spent on gasoline means more money in our pockets. Efficient technology, like refrigerators, automobiles and air conditioners, will be key export items over the coming decades as third world nations strive to reduce their greenhouse gases. (China has already implemented one of the world's most aggressive programs for curbing dangerous emissions, including banning gas-guzzling automobiles.) The patents on and profits from these technologies will go to the nation with the toughest laws at home.

But rather than investing in a sustainable future, irre-American companies like Chevron, Exxon/Mobil, and Peabody Coal have poured hundreds of millions of dollars into a campaign intended to deny the science and delay reform.

Remember the successful anti-regulatory tactics of the tobacco industry which employed diabolical public relations geniuses, corrupt scientists, powerful lobbyists and rivers of money to derail, for sixty years, regulation of a product that was killing one in five of its consumers? With far greater profits at stake in poisoning the public than did Big Tobacco, King Coal and Big Oil, are now employing the same tactics on a grander scale. They've

put hundreds of millions of dollars into an aggressive campaign to distort science and deceive the public, the press and policy makers about the climate crisis. They've funded phony Washington think tanks like the Heritage Foundation and Competitive Enterprise Institute from which industry-paid scientists known as "biostitutes" grind out pronouncements that global warming is environmental henny pennyism. Exxon persuaded the White House to muzzle and fire America's top global warming scientist Dr. Robert Watson-former chairman of the U.N.'s Intergovernmental Panel on Climate Change (IPCC)—who had long been a thorn in the industry's side. At industry behest, the administration has suppressed or fraudulently altered a dozen major studies on climate change, including studies by EPA, NASA, NOAA and a 10-year study, commissioned by this president's father, in his own efforts to delay action on the issue. American energy industry thugs harass and intimidate Britain's top scientist Sir David King at public appearances and disrupt international climatological meetings. And now we can add pop-culture author Michael Crichton to the propaganda machine; his bestselling novel, State of Fear, takes the asinine position that environmentalists have made the whole thing up.

Seventy Eight million dollars spent on checkbook diplomacy between Detroit and Washington since 1990 has dimmed political enthusiasm for meaningful fuel efficiency standards and won automakers an astounding \$100,000 write-off for Hummers and the sixteen largest gas-guzzlers. Hundreds of millions more contributed by big oil and coal to indentured servants on Capitol Hill have brought industry the most compliant Congress and President in history. Corporate toadies in the White House invited the fossil fuel barons to secretly write the President's national energy policy, a collection of massive subsidies and tax breaks, which instead of reducing fossil fuel dependence, increases our wasteful addiction. Even the Wall Street Journal condemned the obscene plan as a "\$145 billion boondoggle."

All that money has bought the industry public officials willing to ignore the science. President Bush, who has received \$100 million in energy industry largesse, says "the jury's still out" on global warming. Powerful senate Environment and Public Works Committee chair James Inhoffe (who has received over \$1 million in energy industry cash in 10 years) calls global warming a "farce" and the senate Commerce Science and Transport chairman Senator Ted Stevens who has received \$560,000 from the energy and transportation industries, recently said that "global warming is the biggest hoax perpetuated on the American people." Meanwhile, Stevens' home state Alaska is currently heating up ten times faster than anywhere else, with frightening results already obvious to anyone with open eyes; warming weather is destroying villages, threatening polar bears, walruses and seals

with extinction and even impeding the North Slope oil industry as permafrost melting erodes vital roads. Stevens must be keeping his thick head very deep in the rapidly melting snow!

The extent to which this White House is willing to alter scientific "fact" to please the energy industry is documented in a February 2005 report by EPA's Inspector General describing how EPA scientists were ordered to invent a fraudulent scientific rationale for reducing controls of mercury emissions at industry's behest.

The Machiavellian manipulation of public opinion by Exxon/Mobil, Peabody Coal and their cronies helps erode our democracy and is certain to result, over time, in trillions of dollars in property damage, the loss of millions of human lives, the profound diminishment of our planet's natural wealth and ultimately of our dignity and humanity. Will someone explain to me why the energy barons who are guilty of this public deception and injury should be considered higher on the moral scale than the universally-condemned suicide terror bombers, for whom murder and mayhem, at least arguably, involve some self-sacrifice?

Now, don't start howling in indignation! I am not insensitive to the misery caused by terrorists. My father was murdered by an Arab terrorist, and I lost close friends (and my office) in the World Trade Center attack. But, the tragedy of our losses should not blind us to the larger threats to our democracy, our nation and our values. For over two years the American press and many political leaders have focused on the terrorist threat to the exclusion of almost all other important stories—missing altogether the war that this administration has declared on our environmental laws.

Not a single question was asked by a reporter about the environment or global warming during the presidential debates and many key newspapers and networks have lost, terminated or transferred key environmental reporters to other beats—including, most recently, USA Today, the Los Angeles Times, the Washington Post and CNN.

It's time to change the paradigm. As Hans Blix and Sir David King, and the Pentagon have recognized, global warming poses a far graver threat to America than terrorism. As we consider the relative culpability of corporate criminals who are putting the planet at risk and engineering a massive deception to defraud the public and our lawmakers, it's worth remembering Teddy Roosevelt's oft-repeated statement that our nation would never be destroyed by a foreign enemy and his warning that our democratic institution would be subverted by "malfactors of great wealth" who would erode them from within.

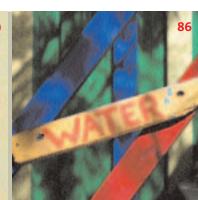
WATERKEEPER

Volume 1, Number 3, Winter 2005









CONTENTS

- 04 Letter From the President
- 10 News
- 20 Catherine Crier: Abusing the Law
- 22 US Rep. Wayne Gilchrist:
 The Time To Recover Our Waterways is Now
- 24 Terry Backer: The Line of Fire
- 28 Letter from Leonardo DiCaprio



Cover: Yes, it's real. Mary Richardson Kennedy and RFK, Jr. ice fishing near their home in New York. Photograph By: Chris Buck

International Feature

- 29 Clean Water Strong Communities:
 Introduction
- 30 Winning Back Canada
- 44 Morava Riverkeeper, Czech Republic
- 48 Australia: Land of Droughts and Floods
- 54 Water and Action in Latin America
- 58 Choqueyapu Riverkeeper, Bolivia
- 61 Cartagena Baykeeper, Colombia
- 64 Río Hondo Riverkeeper, Mexico
- 67 Baja Coastkeeper, Mexico
- **70 Bays of Angels:** Saving an ocean icon in Baja California and beyond
- 78 Navy Surrenders Vieques, Puerto Rico

WATERKEEPER

M A G A Z I N E



828 South Broadway Suite 100 Tarrytown, NY 10591

The official magazine of Waterkeeper Alliance

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

Jordan Wright Publisher

Eddie Scher Editor

Bülent Bingöl Art Director

Jennifer Hintze Production Director
Eric Hoffman Creative Director

William Abranowicz Photography Consultant

Melina Selverston-Scher Contributing Editor

Contributing Photographers

Chris Buck Terri Garland Mike Johnson

Terri Fensel Carlos Hoyos

Wright Publishing LLC

468 West Broadway New York, NY 10012 Tel:212-505-9422 • Fax:212-505-9423 jwright342@earthlink.net

Board of Directors

Robert F. Kennedy, Jr. (President)

Terry Backer (Vice President) - Soundkeeper, Inc. Bob Shavelson (Treasurer) - Cook Inletkeeper

Leo O'Brien (Secretary) - Waterkeepers Northern

California/San Francisco Baykeeper

Casi Callaway Mobile Baykeeper

Richard J. Dove Neuse Riverkeeper emeritus

Daniel LeBlanc Petitcodiac Riverkeeper

Alex Matthiessen Riverkeeper Inc.

Mark Mattson Lake Ontario Waterkeeper

Joe Payne Casco Baykeeper Bruce Reznik San Diego Baykeeper Maya van Rossum Delaware Riverkeeper Andy Willner NY/NJ Baykeeper

> Anne Brasie Grand Traverse Baykeeper Karl Coplan Pace University, Environmental

> > Litigation Clinic

Fernando Rey Cartagena Baykeeper Board

Murray Fisher Honorary member

Board of Trustees

Terry Tamminen Seema Boesky F. Daniel Gabel, Jr. Tom Gegax Jami & Klaus von Heidegger Laura & Rutherford Seydel John Paul DeJoria William B. Wachtel Glenn R. Rink Karen Lehner Gordon Brown Michael Budman

Paul Polizzotto Staff

Steve Fleischli Executive Director
Susan Sanderson Development Director
Eddie Scher Communications Director

Scott Edwards Legal Director Jeffrey Odefey Staff Attorney

Erin Fitzsimmons Chesapeake Regional Coordinator

Thomas Byrne Field Coordinator

Cate White Development and Communications

Associate

Janelle Hope Robbins Staff Scientist
Richard J. Dove Waterkeeper Liaison

Mary Beth Postman Assistant to the President Lauren Brown Staff Attorney

Sharon Kahn Economics Fellow

80 Working Across Borders

84 Environment, Empowerment, Human Rights

85 Visiting Professor:

The Environment & The Law of Nations

86 Corporate Take Over of Water

90 Making the Clean Water Act Work

91 Beating Around the Bush

92 Zookeeper, Waterkeeper – What's the difference?

94 Water Rites and the Public Be Dammed

96 On the Water with photographer William Abranowicz

98 Ad Index

LETTERS TO THE EDITOR

Is there anything you'd like to say? Submit your letter to the editor via email editor@waterkeeper.org or by mail to Waterkeeper Magazine, Suite 100, 828 S. Broadway, Tarrytown, NY 10591. Please include your full name.

Proud Sponsors of Waterkeeper Magazine







© 2004 Waterkeeper Alliance. Reproduction of editorial content only, is authorized with appropriate credit and acknowledgement. Waterkeeper, Channelkeeper and Lakekeeper are registered trademarks and service marks of Waterkeeper Alliance, Inc. Coastkeeper, Creekkeeper, Gulfkeeper and Inletkeeper are trademarks and service marks licensed by Waterkeeper, Alliance, Inc. Riverkeeper is a registered trademark and service mark of Riverkeeper, Inc. and is licensed for use herein. Baykeeper and Deltakeeper are registered trademarks and service marks of Waterkeepers Northern California and are licensed for use herein. Soundkeeper is a registered trademark and service mark of Soundkeeper, Inc. and is licensed for use herein.

Inside pages printed on Domtar Schooner paper with up to 20% post-consumer content, and at least 17.5% of the fiber used in the manufacturing process comes from well-managed forests in accordance to the rules of the Forest Stewardship Council.

Printed in USA • Cummings Printing

A single raindrop

Falls from the sky

To the polluted street

Down the storm drain

Andlinoyourcher

venevreini windzeiroV

Committed to Clean Water"

Most people don't think about stormwater, but we're obsessed with it. Even a single raindrop can pick up and carry pollution to our rivers, lakes and oceans. Removing harmful contaminants from urban runoff is our passion. Everything we do — including developing the best treatment products and conducting extensive research — is geared toward making our earth's most precious resource cleaner and safer for millions to enjoy.

Vortectinics helps communities, business owners, developers and municipalities take action. From protecting a watershed to preventing trash-induced beach closures, Vortectinics is the proven leader in stormwater solutions.



Learn more! www.vortechnics.com/waterkeeper or 877.907.8676



Shipyard Caught Red-Handed

he Puget Soundkeeper was looking for illegal pollutant discharges and found what she was looking for. A pipe, haphazardly jutting from Duwamish Shipyard's graving dock, was pouring foul-smelling water directly into the Duwamish River.

The Soundkeeper team went to work immediately. Skipper Paul Frederickson backed the Soundkeeper vessel into the discolored pool forming below the pipe. Puget Soundkeeper Sue Joerger got on her cell phone to the regional Department of Ecology inspector to report the water quality violation. Richard Woo, Executive Director of the Russell Family Foundation, who was on the boat for a tour with the Soundkeeper, took photos to document the incident. They filled over a dozen water bottles with samples of the discharge. Later, analysis at the King County Environmental Lab indicated high levels of copper, zinc, fecal coliform, and sediment.

A citizen had reported a similar event to the Soundkeeper's Pollution Hotline the previous week. Later, a third incident was documented by another Puget Soundkeeper patrol.

The Duwamish Shipyard is a ship repair facility that services tug boats, barges, fishing vessels, passenger ferries, and pleasure craft. The Duwamish River drains into Elliott Bay in Seattle, Washington. On October I, the Washington State Department of Ecology issued a Notice of Violation to the Duwamish Shipyard. On October 27 the Duwamish Shipyard denied two of the three events. The State is now assessing whether to issue a penalty. The Soundkeeper is continuing its patrols.



Reddish-orange discharge pours from the Duwamish Shipyard's graving dock Photo: Puget Soundkeeper

Terry Tamminen, Former Santa Monica Baykeeper,

Appointed California Cabinet Secretary

overnor Schwarzenegger has tapped Terry Tamminen to fill the position of Cabinet Secretary beginning December I, 2004. Tamminen founded Santa Monica Baykeeper in 1993, initiating the recently settled City of Los Angeles sewage case, and serves on the California Coastkeeper Alliance Board. Tamminen previously served as California's Secretary of the Environment. In his new position he will serve as a direct liaison between the governor and cabinet members, which includes all agency and department directors.



Tamminen with Governor Schwarzenegger

Chicken Parts Lawsuit Settles

his summer Columbia Riverkeeper discovered that the Point Adams chicken processing facility was illegally dumping hundreds of thousands of pounds of Foster Farm raw chicken parts waste into the Columbia River. After surveillance of the facility and an investigation, the Riverkeeper alerted the plant that they were preparing a lawsuit and alerted authorities at the U.S. EPA's criminal division. EPA raided the facility shortly thereafter, seizing documents and computers for possible criminal prosecution.

The processing facility ceased the illegal chicken discharges and agreed to pay \$200,000 to settle violation claims. Under the settlement, Columbia Riverkeeper will direct funds to groups working for river protection to restore and defend the Columbia River. Eighty Thousand dollars will go to support restoration on the Skipanon River, important salmon spawning habitat for Columbia River salmon. An additional \$40,000 will go to the Columbia Springs Environmental Education Center to purchase some of the last spawning habitat for chum salmon in the Columbia Basin. The settlement will go a long way to restore damage to the river and dissuade other polluters.

NEWS FLASH

Internal EPA

Investigation Slams Agency



Photo: Stephen Holt

nvironmental Protection Agency's own Office of the Inspector General issued a scathing report on Thursday, February 3, harshly criticizing the methodology and the content of its proposed mercury emissions rule.

Under the Clean Air Act, Congress instructed EPA to create a mercury reduction plan that reflected the mercury emission levels that top performing units are actually achieving in their day-to-day operation – a standard that is referred to under the Act as the Maximum Achievable Control Technology or MACT. Instead, the Inspector General's report found that "EPA senior management instructed EPA staff to develop a MACT

standard for mercury that would result in national emissions of 34 tons annually."

These EPA officials set a goal that would save industry money, instead of one that was truly achievable by the industry and protective of human health. Not coincidently, 34 tons is the same amount of mercury that would be emitted by the industry if they installed absolutely no mercury control technologies, but simply complied with other provisions of the Clean Air Act that require reductions in emissions of other dangerous gases from coal-fired power plants.

EPA's proposed rule is due to be finalized by March 15, 2005.

Oil Spill on the Delaware



and water quality. Dense slugs of tar (some five feet thick), small tar balls, and a slick oily sheen spread over 60 miles down the River to the Delaware Bay and into the ocean. A toxic, industrial stench hung heavy over riverside communities. After just two weeks, 119 miles of shoreline were contaminated.

Delaware Riverkeeper Maya van Rossum's first order of business was to help the community learn what had happened and how they could help. More than 95 Delaware Riverkeeper Network volunteers joined in to gather information on the environmental harm; identify areas in need of protective measures such as booms; spot where protective measures were failing and in need of repair; and locate and report injured wildlife. While oil continued to spread, tanker owners and operators looked for a way out, publicly blaming the Army Corps of Engineers, the federal agency responsible for dredging the Delaware River's main navigation channel.

But responsibility for an oil spill falls squarely on the shoulders of the tanker owners and operators. Navigating an oil tanker is always risky. It is also a privilege that comes with the responsibility to avoid and repair this kind of harm. The Riverkeeper, along with Delaware Riverkeeper Network members, volunteers, and the surrounding communities, will now work to ensure that those responsible pay natural resources damages to support scientific studies of the environmental impacts of the spill and projects that will help the River heal.

n the evening of November 26, as many were enjoying Thanksgiving leftovers, the Delaware River was suffering its worst oil spill in decades. As many as 473,000 gallons of Venezuelan crude spewed into the River from the Greek oil tanker Athos I.

The oil tanker was maneuvering to come in to dock when it hit a 15 foot curved hunk of rusting steel resting at the bottom of the Delaware. The impact tore two holes into the bottom of the single-hulled tanker. The thick crude oil spread quickly, covering more of the River and, with the tides, flowing up tributary streams contaminating sensitive habitats, wildlife,

12

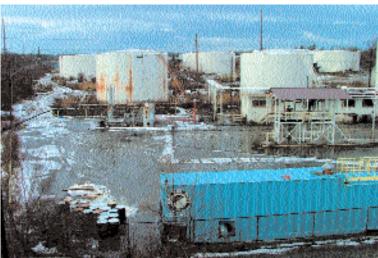
Ice and Delay Hampers Cleanup of Fuel Spill

hawn and John Lessord with the Erie Canalkeeper in Western New York have been busy this holiday season with a nearly 30,000-gallon fuel oil spill from a pipe owned by Buckeye Pipe Line Company. The spill was discovered December 15, several days after a 10-inch underground pipe was apparently ruptured by an excavator, spilling gasoline and diesel fuel. Unfortunately, the spill was not reported until alert citizens contacted officials about the strong smell of oil and oil visible in the Canal. About 700 barrels of fuel leaked into the ground around the underground pipeline, which then flowed 200 feet into the canal. Oil has contaminated 20 miles

along the Canal and is now feeding into local streams. Cleanup has been hampered by ice, which interferes with the booms and vacuum trucks designed to handle spills in free-moving water. Buckeye has signed a long-term cleanup plan, or "stipulation agreement," with the state Department of Environmental Conservation. Erie Canalkeeper commends the agency and Op-Tech Environmental spill response teams for their diligent efforts during subzero weather. Erie Canalkeeper will now work with state officials to set more stringent response procedures for future spills.



John Lessord, age 69, spent time on Christmas Eve replacing booms used in the fuel recovery process. These booms are designed to absorb petroleum and must be periodically removed from the water and wrung out. Ice has hampered clean-up operations which will resume in the spring Photos: Erie Canalkeeper



Area of spill and former fuel depot



Marylee Orr, the Lower Mississippi Riverkeeper, with colleague

Lower Miss. Riverkeeper

and Friends Brief Louisiana **Officials**

he Lower Mississippi Riverkeeper together with the Louisiana Environmental Action Network and the Bluff Swamp Wildlife Refuge and Botanical Gardens gave senior staff from the Louisiana Department of Environmental Quality a tour of fragile wetlands that are part of the historical Mississippi River basin. During the tour the agency staff were briefed about environmental problems along the "chemical corridor" (the stretch of the Mississippi River between Baton Rouge and New Orleans).

fter a powerful rainstorm it's thrilling to stand on a bridge and watch torrents of coffee-colored water rage through a creek bed. But stormwater isn't only dangerous for its fury and intent to uproot everything in its path. It's also hazardous waste. Stormwater runoff is a major source of pollution because it sweeps everything off streets and lawns—from engine oil to weed killer—and into storm drains. Louisiana State University civil engineering professor John Sansalone has found that 144 feet of highway can yield a large milk carton's worth of heavy metal—laden pollutants after a good rain. Too often stormwater flows into oceans and lakes untreated.

permeable pavement as a low-impact pollution-prevention measure. Gary Minton, Ph.D., with Resource Planning Associates of Seattle and author of Stormwater Treatment: Biological, Chemical, and Engineering Principles, and Andrew Reese a professional engineer with AMEC Earth and Environmental Inc. of Nashville and co-author of Municipal Stormwater Management, will discuss assessments of current practices. John Kosco, an engineer with Pasadena, California–based TetraTech, is a former EPA official and an expert on NPDES who will cover construction site runoff measures.

The environmental engineering and science expertise featured at StormCon show how Phase II is distributing the burden of environ-

The Growing Front of Water Pollution Prevention

In the past few years a quiet revolution has taken place in the management of stormwater. In 2003 the EPA's Phase II of the National Pollutant Discharge Elimination System (NPDES) permit program kicked in, requiring all communities of 50,000 or more, as well as construction sites, to develop stormwater programs and best management practices. Authorized by the Clean Water Act under section 402, this program came into being in the late 1980s, with Phase I targeting large industrial polluters and municipalities.

Phase II has already created an industry in response to municipalities' need to comply. Hundreds of manufacturers of stormwater treatment products have appeared as local governments scramble to implement stormwater programs. This summer, from July 18–21, over a thousand people on the leading edge of stormwater management will gather in Orlando, Florida, for the fourth annual StormCon, the North American Surface Water Quality Conference and Exposition.

StormCon supports Waterkeepers, who are the critical last line of defense in water quality, by focusing on the first line of defense—municipal public works departments. If you haven't planned your summer vacation yet, consider heading to Orlando in July—or call your local public works department and make sure someone is attending. StormCon offers detailed seminars on current hot-button issues such as bacterial contamination and beach closures; low-impact development techniques; field tests of manufactured stormwater systems; runoff specific to agricultural, highway, and construction sites; and even public relations techniques for garnering public involvement. By attending the conference you'll have the opportunity to impact this emerging national dialog.

Among the presenters are nationally recognized innovators in stormwater management. Professor Sansalone and Bruce Ferguson, professor and director of the University of Georgia's School of Environmental Design, will each present research on

mental stewardship more equitably. You don't need to have technical training, however, to affect your local area's water quality. Arthur McEvoy (the J. Willard Hurst Professor of Law at the University of Wisconsin, with joint appointments in the Department of History and in the Gaylord Nelson Institute for Environmental Studies, where he is Chair of the Land Resources Program) recently commented, "The NPDES system itself empowers citizens by requiring dischargers to file discharge monitoring reports ('DMR') that are public record and show on their face whether the discharger is in compliance or not." Whether or not you feel drawn to attend StormCon, it is important to let your local officials know that stormwater, and the government's required role in cleaning it, are both on your radar.

The Clean Water Act has taught us that environment laws are only as effective as their enforcement. Still, Phase II of the NPDES permit program is evidence that environmental stewardship continues to evolve. The implementation of Phase II illustrates how our laws are finally catching up with the water cycle. This new permit program is a lever of cultural change that can potentially extend the practices of environmental stewardship into business, government, society, law, medicine, art, education, and technology—if we continue to make sure it is taken seriously.

Related websites:

StormCon

www.stormcon.com

EPA – Stormwater Program Case Studies http://cfpub.epa.gov/npdes/stormwater/casestudies.cfm

North Carolina Division of Water Quality – NPDES Overview http://h2o.enr.state.nc.us/su/NPDES_Phase_II_Stormwater_Program.htm

When Is a Georgia Stream Not a Stream?



Georgia Riverkeepers: James Holland, Altamaha Riverkeeper, Sally Bethea, Upper Chattahoochee Riverkeeper, Chandra Brown, Canoochee Riverkeeper, and Gordon Rogers, Satilla Riverkeeper

Photo: Veronica Pitt

The Canoochee River runs through Candler County. After a long drought in 2002, the river channel dried up. A property owner illegally timbered all the way across the river with excavators and destroyed sensitive habitat. The new regulations passed in Georgia will eliminate protections from this kind of careless development. The regulations make it easier for developers to pipe, fill in, and remove the stream buffers along streams that dry up during periods of drought - a common occurrence in the sandy, coastal plain of Georgia.

Photo: Canoochee Riverkeeper



This is a picture of the Canoochee River on December 6, 2004, just downstream of the area pictured above. Flow has returned to a stretch of the River that provides crucial habitat for a variety of fish including redbreast sunfish. largemouth bass, and rare mussel species. Stream buffers, areas of vegetation along the stream bank, play an important role in removing pollutants, preventing flooding downstream, and preserving habitat quality for fish, mussels and other wildlife.

Photo: Canoochee Riverkeeper

eorgia's rivers were recently dealt a vicious blow by the Board of the Georgia Department of Natural Resources. Despite strong public opposition, the Board voted 11-5 to remove protections for small streams. This decision demonstrates an insidious process at work within the political system.

At a recent meeting, a Board member, who is also a real estate developer, proposed ostensibly off-the-cuff revisions to regulations designed to protect water quality. Serendipitously, four Georgia Riverkeepers were scheduled to meet for an outing on the Canoochee River two days after the Board meeting. That outing turned into an on-the-water strategy session to save Georgia's rivers.

The Georgia Riverkeepers and other conservationists mounted extensive opposition to the proposed revisions. In response, the DNR Board replaced the legally questionable, hastily worded language of the previous meeting with a revised definition of "stream flow" which effectively removed protection for small streams. Of the nearly 1000 public comments submitted to the DNR Board, better than 50 to 1 were strongly against the change. In spite of this opposition, and the opposition expressed immediately before the final vote by landowners testifying about the property destruction downstream from developments, by bass and trout fishermen who talked about the impact of stream destruction on fishing, and by outfitters and business owners discussing the importance of clean, clear water to their economic interests, the Board still voted to remove protections for small streams.

But the fight for Georgia's streams is not over. "The Georgia Riverkeepers will continue the effort to protect these small streams until they are afforded the protection they deserve," said Sally Bethea, Upper Chattahoochee Riverkeeper. "We are not going to take this lying down."



58 Years

Too Long to Wait For Clean Water in Maryland

n December 10, the Potomac Riverkeeper, Assateague Coastkeeper, Chester Riverkeeper, and South Riverkeeper filed suit against U.S. EPA to compel the federal government to take responsibility away from Maryland for setting pollutant limits for state waterways. The federal Clean Water Act requires states to set "total maximum daily loads" (TMDLs) for pollution into waterways that are unsafe for their "designated uses" (including drinking, swimming, and boating). The initial deadline for setting TMDLs was 1979. The Maryland Department of the Environment did not submit its first TMDL to EPA until 1998, and currently is setting limits for an average of 19 impaired water bodies a year. At this rate, the state will not be finished until 2037, 58 years after the initial deadline to set these limits.

Waters throughout the state are impaired by pollutants such as bacteria, metals, nutrients, sediments, and toxic substances. The University of Maryland Environmental Law Clinic is representing the Chesapeake Waterkeeper programs.

Winter afternoon on the Chesapeake Bay Photo: Drew Koslow

Proposition O

For Clean Water Passes in Los Angeles

On November 2, 2004, voters in Los Angeles went to the polls and declared a historic mandate for clean water. Faced with increasingly stringent regulations, city officials have recently been struggling with how to pay for solutions to water pollution problems. Over several months, Santa Monica Baykeeper and other environmental organizations worked with the city to carefully craft Proposition O – a measure to increase funding for water improvement projects. These projects will benefit every L.A. neighborhood by upgrading storm drains, eliminating flooding, creating community parks, restoring wetlands, and improving water quality. Along

with environmentalists, neighborhood organizations, business groups, and dozens of city and state officials supported the measure, which had no formal opposition.

The \$500 million bond secured a 75 percent "yes" vote, easily surpassing the two-thirds margin necessary. Monies will be raised through property taxes, averaging about \$35 a year on a \$350,000 home for 24 years. The measure provides a strong accountability element, including the appointment of a citizens oversight committee that will review proposed projects to make sure they are responsible, cost-efficient, and result in real water quality improvements. Also notable about Proposition O is that it passed with such a high margin of victory. Several other spending measures on the local ballot failed, but the public clearly put the basic need for clean water as a top priority.

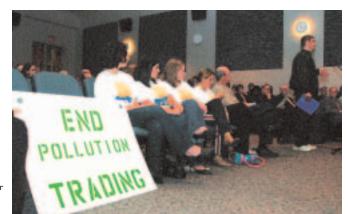
State Officials Back North Carolina Riverkeepers to Stop Sewage

he Upper Neuse Riverkeeper Dean Naujoks and Lower Neuse Riverkeeper Larry Baldwin successfully defeated a controversial proposal that, if approved, would have more than doubled nitrogen pollution into the drinking water supply for 380,000 people. In spring 2004 the town of Butner, North Carolina, purchased water pollution trading credits for 61,300 pounds of nitrogen per year from a downstream municipality. This permit, if allowed, would transfer the pollution more than 250 miles up the Neuse River into Falls Lake – headwaters of the River. Town officials claimed the expansion was necessary for needed plant expansion and economic growth.

But Falls Lake already suffers from too many nutrients. Neuse Riverkeepers argued that increased nitrogen loading would further degrade water quality in Falls Lake, imperiling the waterbody, and that the trade violates the federal Clean Water Act, which forbids expanding discharges that "contribute to a violation of water quality standards."

This fall, the North Carolina Division of Water Quality agreed to host a public hearing after the two Neuse Riverkeepers brought this issue to the attention of state officials, EPA, and the media. Public turnout exceeded the capacity of the room and a second hearing was scheduled so that all

speakers could be heard. A strong, coordinated grassroots campaign covering both ends of the Neuse river basin generated about 1000 comments asking the agency to deny the permit. The Riverkeepers also obtained support from municipalities and numerous state legislators throughout the river basin, including State Senate President Marc Basnight and State Attorney General Roy Cooper. The Attorney General's office went even further, questioning the merits of water pollution trading. City officials have withdrawn the proposed trade until a study of Falls Lake is completed and a new nutrient management plan is completed.



pecial NEWS CIA

Sweet Home

Turning Around Alabama's Department of Environmental Management.

By Casi Calloway



Casi Calloway, Mobile Baykeeper, with environmental lawyer Jan Schlichtmann, board member Edward Morris, and US Senator Jeff Sessions.

Photo: Mobile Baykeeper

hen I was growing up, I never thought that I would return to Alabama after college. Many of my friends felt the same way. We wanted to live and work in big, fast-paced cities in the north, until we realized the potential of the great state we had left behind.

Unfortunately, many things must change for this state to live up to the slogan we all used to sport on our license plates; "Alabama the Beautiful." Our state currently ranks 50th in the nation in spending on matters of environmental protection. Alabama was among the last states to create an environmental protection agency, and that only happened at the federal government's behest. Even then the Alabama Department of Environmental Management" (ADEM) seemed to be nothing more than a "one-stop" pollution permitting shop. ADEM's lax enforcement of permits and failure to collect fines from known violators made headlines and brought even more negative attention to Alabama.

In 2002, however, seven environmental organizations joined forces to form the ADEM Reform Coalition. The Coalition is guided and supported by Mobile Baykeeper, Black Warrior Riverkeeper, Hurricane Creekkeeper, and Choctawhatchee Riverkeeper. I am happy to report that we are making real

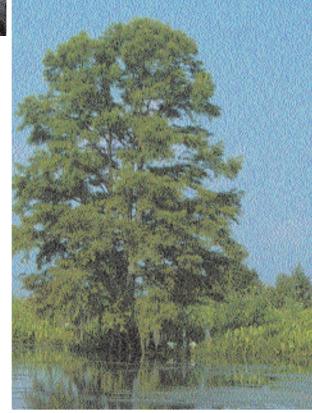
progress in our mission to make sure that ADEM works "for the people (and) by the people" as it claims to do. Our most recent achievement is the replacement of ADEM's long-time director Jim Warr. Mr. Warr's unwillingness to work toward environmental protection has long been a source of contention.

ADEM's Board of Directors finally acknowledged the problems with Mr.Warr's leadership on October 19, 2004 and elected to terminate his tenure as director. Now Mobile Baykeeper and coalition members will play a direct role in the selection of a new director by serving on the stakeholder committee charged with that task.

Alabama is at a crossroads. We can select a new director who will uphold ADEM's mission "to protect and

improve the quality of Alabama's environment and the health of all its citizens," or we can hire another industrialist fat-cat. We will fight for the appointment of a responsible director committed to the protection of Alabama's natural resources. We will do all we can to ensure that Alabama remains a place worth coming home to.

Delta Cyprus tree on Mobile Bay Photo: Mobile Baykeeper





misuse and politicization of scientific recommendations. Politically beholden to the administration, many government scientists issue "appropriate findings" that support the President's policies. This tactic has ratcheted up acceptable levels of arsenic in our drinking water and delayed our response to the very serious problem of global warming.

If that method is unsuccessful, then a gag order can be effective. EPA scientists found a component of rocket and missile fuel called percholate present in drinking water in twenty states. This substance causes thyroid dysfunction and possibly cancer. They were silenced and any federal

Abusing the Law

magine the many ways to undermine thirty years of environmental protections. The Bush administration is implementing all of them in its relentless march to dismantle these protections. Laws are not being enforced. Civil suits are down by 75% since President Clinton's second term prosecutions. Penalties have plummeted to a fifteen year low. Even worse, these laws are being gutted surreptitiously with little or no opportunity for public comment.

Often a single word change can alter the entire meaning of an environmental regulation. When coal-mining debris in West Virginia became "fill" instead of "waste," everything but literal garbage became acceptable material to dump into the nation's waterways. Alternatively, just change the classifications. Power plants are responsible for 40% of the county's mercury pollution, yet their mercury emissions are no longer listed as hazardous. This gives the industry an extra fifteen years in which to install pollution controls, although the EPA reports that over 15% of U.S. women of childbearing age now have unacceptable levels of mercury in their bodies. That increases harmful exposure to 600,000 babies born every year.

Manipulating science has become a trademark of the administration. Last summer more than 4,000 scientists, including 48 Nobel Prize winners, signed a statement chastising the White House's

regulation of the chemical has been postponed indefinitely. Just as efficient is a simple instruction to cease enforcement of certain provisions on the books. The popular Wetlands Reserve program has been stymied by the administration's instruction not to implement the Clean Water Act provisions regarding so-called "isolated waters." This may exclude up to twenty million acres of wetlands from federal protection, thus permitting abuse by industries such as mining and agribusiness.

Delay is an excellent method by which to avoid protection or compliance. The herbicide atrazine, banned this January by the EU, has been repeatedly shown to create hermaphroditic frogs at 1/30 the level permitted in U.S. drinking water, but no action has been taken because the government doesn't yet have an official "hormone disruption" test. In December, the EPA extended longstanding deadlines on harmful emission reductions for many oil refineries with no notice to interested parties.

If progress is still made despite these roadblocks, then just reduce or cease funding an agency's enforcement efforts altogether. Ronald Reagan was the first to cut EPA enforcement money to achieve this end, and the Bush administration has not forgotten those lessons. In addition, the Administration has cut the budgets for the National Institute of Health and the National Science Foundation to impede the research necessary to support arguments for improved regulation.

Scientific findings can become entirely irrelevant by simply allowing the affected industries to write their own legislation. In September, no less than twelve paragraphs from coal-fired power plant attorneys were inserted directly in the administration's mercury regulation proposals by Jeffrey Holmstead, a Bush-era EPA official who worked with those very lawyers before joining the government. He now oversees air pollution. Consider the case of David Laurisky, a former mining executive. He has revived his failed 1997 proposal to allow certain mines to increase acceptable levels of coaldust, the substance responsible for black lung disease. As the Bush-appointed head of the Mine Safety and Health Administration, he will likely succeed this

If that fails, just rename your proposals. This will usually pacify the uninformed, which often includes members of the media. The Clear Skies Initiative provided

the moniker for one such effort. Despite the attractive title, this bill failed in Congress, so the agency simply circumvented the legislators by going the regulatory route to ease restrictions on polluters. When the administration decided to manipulate mercury regulations, it did so under the guise of "Utility Mercury Reductions."

Then there is the "state's rights" argument. Send these problems back to state and local governments so citizens have more control over what happens in their own back yards. This is part of the administration's executive order to decentralize environmental management-but to what effect? Last month, in a move that derails significant portions of the National Forest and Endangered Species Acts, the administration delegated national forest planning to regional and local managers who will no longer need to consider the threat to park wildlife prior to implementing development plans. The policies are monitored by "independent" auditors and through voluntary environmental impact reviews...or not at all. They get to decide. If you think corporate pressure is effective on the national level, just imagine how powerful it is in a single community or district.

However, decentralization is a selective practice. The White House Task Force on Energy Project Streamlining stepped in when state and Forest Service officials forbade El Paso Corporation, a Texan oil company, from

exploring part of New Mexico's Carson National Forest. The federal government is there when the companies need it.

Finally, there is the "can't we all get along" tactic which consists of asking violators to play nice and regulate themselves. A recent example occurred when the White House let the factory farm industry, responsible for 500 million pounds of waste annually, manage disposal with no regular supervision by state or federal authorities. This will literally leave a bad taste in your mouth.

Public awareness and citizen activism is crucial as the White House makes increasingly brazen attempts to castrate our environmental laws. California residents have challenged the sweetheart deal the government

"When laws are promulgated with

wonderful titles like the Clear Skies

Initiative, few citizens decipher the

fine print to reach the actual truth."

made with Chevron Texaco

that will absolve the company of years' worth of environmental and public health liabilities once they estimate rather than prove that they have complied with state clean up ordered years ago. Thanks to continued efforts by The

Wilderness Society, the Bureau of Land Management must release all documents related to its 2003 decision to discontinue wilderness protection for public lands.

The Bush administration has consistently made a mockery of the transparency and accountability necessary for a healthy democracy. It ignores laws, delays implementation or simply changes inherent meanings at will. The powerful industries affected by such regulations buy their way into the editorial process. When laws are promulgated with wonderful titles like the Clear Skies Initiative, few citizens decipher the fine print to reach the actual truth-that the headline is often cover for permission to abuse rather than protect the subject of the legislation. While my comments deal with environmental problems, be clear that these practices are utilized in agencies throughout the government. It is time to retake our role as active, informed participants in our government to protect our health and environmental well-being. On a grander scale, we must shoulder this task if the very democracy we imagine is to remain a reality. WK

Catherine Crier is a former judge, Court TV host, and author of "The Case Against Lawyers."

www.criercommunications.com



Chesapeake Bay Blue Crabs Photo: Michael Dowgiallo, Coastal Ocean Program, NOAA

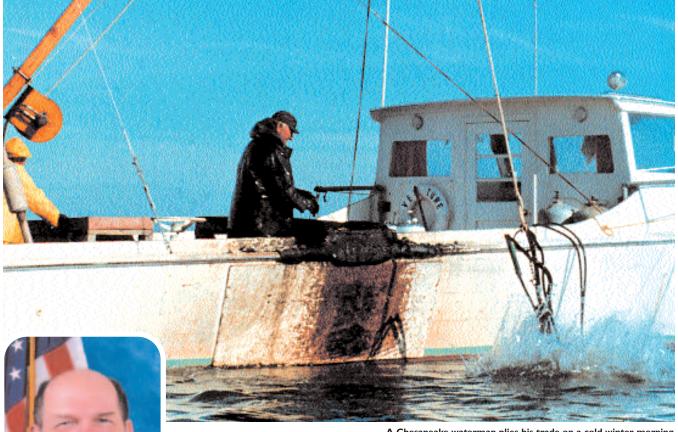
The Time To Recover Our Waterways is Now By US Representative Wayne Gilchrest

t is my great pleasure to be given an opportunity to share with you my vision for the Chesapeake Bay and for the importance of water quality to the aquatic ecosystems that Waterkeepers across the nation are working to protect and restore. To paraphrase the recent findings of the Chesapeake Bay Blue Ribbon Panel, "...there will never be another time when restored waterways are more achievable, or less expensive, than right now."

The declining health of the Chesapeake Bay is well-documented: "dead zones," where oxygen levels are too low to support

crabs and fish, are expanding, oyster populations are just two percent of historic numbers, and submerged aquatic vegetation continues to decline. The major culprit is water quality degradation due to excessive nutrients and sediments. Sources of these pollutants include municipal and industrial wastewater, runoff associated with certain agricultural practices and urban sprawl, and atmospheric deposition.

However, the root of the problem lies with our land use and population growth in the watershed. Each year 100,000



A Chesapeake waterman plies his trade on a cold winter morning Photo: Mary Hollinger, NODC biologist, NOAA

U.S. Rep. Wayne Gilchrest represents Maryland's Eastern Shore

additional people call the Bay watershed home and 100 acres of open space and forests are lost each day. The result is overburdened sewage treatment facilities and increased stormwater runoff from new housing

developments, shopping centers, and roads, with additional costs for mitigation and reversal of subsequent environmental damage.

In 1983 the Chesapeake Bay Program (CBP) was created to coordinate the Bay cleanup effort. It is a regional partnership that includes the states of Maryland, Virginia, and Pennsylvania; the District of Columbia; the Chesapeake Bay Commission (a tri-state legislative body); and the U.S. Environmental Protection Agency (EPA) for the federal government. The CBP has been hailed as a model for its coordination of local, state, and Federal stakeholders.

In 2000 the CBP set specific reductions of nutrients and sediment that must be met by 2010 for each major tributary. Although a great deal of progress has been made in reducing nutrient loads to the Bay, we still have a long way to go and only a few years to meet the 2010 goals.

Local governments are at the front lines of the cleanup effort, and are uniquely situated to implement actions that will restore the water quality in the Bay. There are over 1,650 local governments throughout the Bay watershed, and each has statutory authority over land use, stormwater management, and water and sewer management. Associated with these responsibilities are heavy burdens related to financing, technical expertise, and education.

I am working with local governments and other stakeholders in the Chesapeake Bay restoration effort to improve federal support for local Bay clean-up efforts for the immediate future and beyond the CBP 2010 deadline.

As chairman of the House Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans, I held a field hearing in December to learn more about the challenges local governments face and the opportunities they can bring to ultimate Bay restoration. The issues are complicated and varied and include the influence of land use and atmospheric deposition on nutrient loading; the consequences (both ecological and from a human health perspective) of introducing non-native oysters to the Bay; the role menhaden play in water quality; the status of developing and implementing Tributary Strategies; and the impediments local governments encounter in addressing all of these.

These challenges will only grow more complex and costly to address with time. However, with the help and enthusiasm of our Waterkeepers and other stakeholders, I feel confident about what we can achieve together to meet these challenges and to more effectively integrate growing human infrastructure needs with nature's infrastructure. WK

We can't afford the luxury of being advocates without figuring out how to fix the problem. It's time to put

the line of fire

By Long Island Soundkeeper Terry Backer CONNECTICUT STATE ASSEMBLY (Democrat, 121st District)

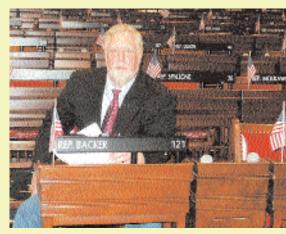
hat are the politics of water? Where is the greatest threat to the environment? And what will it take to stem the flood of regressive political actions in the increasingly complex battleground of courts, shifting laws, international trade agreements, executive orders, and state and local rulemaking?

Waterkeepers come from all different walks of life with different family and economic histories, political leanings, and regional conceptions of the world. There is, however, a common thread among Waterkeepers that sticks out like a bright red fiber on a gray flannel background. That commonality is a commitment to protect our life-sustaining environment and enhance the place where we all live. Waterkeepers also share the idea that their individual efforts will coalesce together into a blanket of protections across the nation and world. Waterkeepers share the methods and tools they deploy to achieve the goals of a clean, productive, and livable world. These long-standing tools, created by government, are threatened by polluters with an aggressive political agenda to shelve them away. In order to help stem the tide, environmentalists need to be more diverse in their approach to getting things done, or not done, as some cases may be. It is time for Waterkeepers and people of a similar ilk to take the plunge into being citizen legislators.

Waterkeepers can respond or act proactively to applications, proposals, and dramatic events that impact our waters with

creativity and the tools our laws provide. They now, however, have to fight the battle on many fronts including a changing political landscape at all levels of government. The political landscape is always in flux. Laws that provide protection for our natural life support system can be erased or weakened by legislative changes or executive orders that often go unnoticed by the public. The streams of bills on federal, state, and local levels are refreshed each session cycle; some are positive, some have possibilities, and others are hurtful. The Clean Water Act and other federal bodies of law are under constant attack from various interest groups. Executive orders can nullify the effects of protective measures and in many cases the citizens are none the wiser.

A Waterkeeper's greatest asset is the people's desire for a world with clean air and water. Most polls show that the public overwhelmingly supports strong environmental laws including provisions for citizens' empowerment, as in the citizen suit provision of the Clean Water Act. Enlightened laws like these make it possible for Waterkeepers to do their job. The public supports protection and enhancement of the environment. But in the daily toil of life, the public misses the cleverly veiled attacks on protections. In legislatures across the country, the climate that promotes the rolling back of protections is at an all time high. The environmental protections passed into law in the 1970s would not even get a reading in the Congress of today.



On the floor of the Connecticut State
Assembly Photo: Soundkeeper

Entering my seventh term as a State Legislator in Connecticut, and being Soundkeeper for Long Island Sound, I have some perspectives on the legislative process. In a word or two - it ain't easy. Anyone who has made the transition from either direction (coming from a policymaking wing of government to being a Waterkeeper, or from a Waterkeeper to government) will instantly recognize the different ground rules and responsibilities for the different roles. Performing both duties concurrently adds to the complexity. No longer afforded the luxury to say I love or hate any proposal, I am now compelled to ask deeper questions. Whatever I decide can't be singularly ideological; it must be functional. Producing legislation that will pass on the floor, be signed by the Governor, and work as law is both the burden and opportunity facing a citizen legislator.

This means stepping into a crossfire. It is a task and a challenge that would cause Solomon to pull his hair out.

When you're a public servant as well as a Waterkeeper, you do not fit in well with the "group-think" of your peers. In simple terms, you're neither in nor out. To the enviros, you have compromised too much; to industry and to government, you are a kook in a canoe. So why in the world would any Waterkeeper want to run for office? It's simple: when properly done you have more of the wheel in your hands to steer the ship where you know it needs to go.

Many years ago I came to understand

that as a Waterkeeper born and raised on Long Island Sound, the fate of the Sound was not crafted on my lobster boat or even in our Soundkeeper office, but one hundred miles north in the State Capitol. The Capitol is where laws are written in pencil, to be erased and redrafted at the will of those elected. I understood the threat that

faced our hard-earned environmental protection tools and laws. Waterkeepers fight pollution squarely based on the rule of law. And Waterkeepers can only use the laws that the government allows us to have. That is not to underestimate the power and value of citizens lobbying, but what can take years to do from the outside can often be accomplished in a matter of minutes from the inside. The ability to head off a bad idea on the elevator between the third and fifth floors is invaluable in terms of both recourse and objectives. I would venture to say that some of the best work I have done for the Sound is what never happened, was never seen – a battle that never needed to be fought.

During the last general election, many ballot propositions across the nation proposing spending on local parks or environmental infrastructure improvements were overwhelmingly successful. The Trust for Public Land calculates that nationwide this past November, voters approved seventy five percent of conservation ballot measures. The success of these measures is a clear indication that when the public knows what is needed, they respond favorably.

In some cases, however, these high profile ballot issues may mask the insidious gnawing away of the broader habitat and environmental protection that is taking place in Washington D.C. and in State Houses. Americans support well-reasoned and workable environmental protections, but often fail to track performance after they have cast their vote. None of us has the time to study in depth all the things that come from a legislature, so bills with

No longer afforded the luxury to say I love or hate any proposal, I am now compelled to ask deeper questions.

nice-sounding names can deceive many a voter. The best place to help kill these bills, or fight for good ones, is to be one of the people writing the policy and making the law. As with all things political, there are pluses and minuses, balances to be struck, and compromises to be made. If you choose this course, be willing to pay the price.

A Waterkeeper/Legislator has a balancing act to achieve that often leaves friends in the environmental movement perplexed. It doesn't take long before words like "coopted" are heard after your name. As a Legislator, you have a much larger picture to look at. Nothing can be taken on face value. As a legislator, you have to get fifty percent plus one vote to win anything, a requirement advocates are not bound to. To do that, you have to develop the necessary political skills of give and take. Like most things, politics are as much about personal relationships as they are about

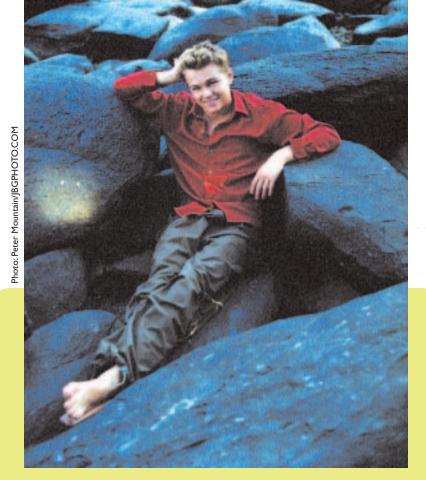
ideas. In essence, it's about being trusted by your colleagues - even those who don't share your vision. You'll find soon enough that John Muir was correct when, in a way of speaking, he said, that when we try to pick out anything by itself, we find it hitched to everything in the universe. This is true in the web of social, economic, and political issues that a legislator faces everyday. You can no longer look at things as singular, but rather as a component of a larger social fabric. However, if thoughtfully done, using facts, informed persuasion, and doing your homework, you can become the person in the legislature who is considered the "expert" by your peers. If you reach that status, the road can open

before you. Yes, it will take compromise. (I believe I used to call it "selling out.") Accomplishing goals may come in small increments, but after all, you can't swallow a watermelon whole - you have to cut it into small pieces.

All in all, I believe it is time for more Waterkeepers and citizens who share our vision to make this move. Just

remember, no one is one dimensional. You bring your opinions and ideas with you, even ones that may offend people who have supported you and your organization for years. You are going to tick someone off, but the outcome for our living planet is more important than your organization losing a member or two. I have had frustrations and headaches, victories and painful losses, made friends and lost friends, but I have been where I needed to be to protect the environment. My father, God rest his soul, always said the other half of life is being in the right place at the right time. Its time for more Waterkeepers and other thoughtful people to be seated in the decision-making bodies of our nation[s]. The time is right and critical. WK

26



ou may know me as an actor, but I am also extremely concerned about our environment. We are at a turning point in our country right now. Over the past four years we've witnessed the dismantling of the protections of our air and water by the Bush administration.

Robert F. Kennedy, Jr. describes this unprecedented situation in his book Crimes Against Nature – which I hope everyone will go out and get, and read, and understand. It is a call to action. Each of us must do what we can to speak up for the environment with our own words and deeds. Kennedy and the 129 local members of Waterkeeper Alliance are fighting to protect what we as Americans should have as a birthright - clean air, clean water, and healthy children. Waterkeepers are out patrolling their waterways, standing up to polluters and bringing lawsuits to protect precious waters across the nation. Waterkeepers are the champions of the people and the fish and wildlife whose lives depend on clean water.

It may be hard to focus on environmental issues at times like these. But we shouldn't let our guard down. We must not allow Congress and big oil companies do what they want with our national wilderness areas. They are part of our heritage. We can't let these corporate powerhouses fool us into thinking that our only energy resource is oil. We need our government to encourage innovation. Let's tell Congress we want to focus on clean energy solutions that will reduce our demand for oil – like new technology cars that use little or no gas. So let's do the real patriotic thing. Let's tell our Senators and our Representatives that drilling in the Arctic will never solve our country's energy problems.

We want to start an environmental revolution. We cannot remain silent.

-Leonardo DiCaprio

Everyone has the right to clean water. The Waterkeeper approach - local, community-driven activism, supported by the broader Alliance – is the best way to secure that right. There are now 129 local Waterkeeper programs working in North and South America, Europe, and Australia. In this issue, we asked our international Waterkeepers tell their stories.

Chacun a droit à des cours d'eaux en santé. L'approche du mouvement Waterkeeper – l'activisme communautaire local, soutenu par l'Alliance à une plus grande échelle – est la meilleure façon de protéger ce droit. On compte actuellement 129 programmes locaux des Waterkeepers en Amérique du Nord et du Sud, en Europe et en Australie. Dans ce numéro, nous avons demandé aux membres internationaux de la Waterkeeper Alliance de nous raconter leur histoire.

Cada uno tiene el derecho a agua limpia. El modelo Waterkeeper - activismo local, dirigido por la comunidad, apoyado por la alianza más amplia - es la mejor manera de asegurar este derecho. Ahora hay 129 programas locales de Waterkeeper que trabajan en América del norte y del sur, Europa, y Australia. En esta edición, pedimos nuestros Waterkeepers internacionales contarnos sus historias.

Clean Water • Strong Communities

مجتمعات قوبة • مباه نقبة

清洁的水环境•生机盎然的社区

De L'eau Pure • Des Collectivités Fortes

Sauberes Wasser • Starke Gemeinschaften

מים נקיים • קהילות חזקות

स्वच्छ जल•मजब्त समुदाय

Acqua Pura • Comunità Forti

きれいな水・強いコミュニティー

Chuyak Yaku • Jatun Llaktakuna

Engare Sidai • Olosho Ogol

Água Pura • Comunidades Fortes

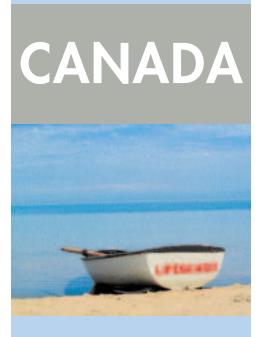
Чистая вода • крепкое общество

Agua Limpia • Comunidades Fuertes

Maji Masafi • Jamii Imara

น้ำใส • ความสามัคคีในสังคม

Temiz Su • Güçlü Toplum



Winning Back Canadian Waters

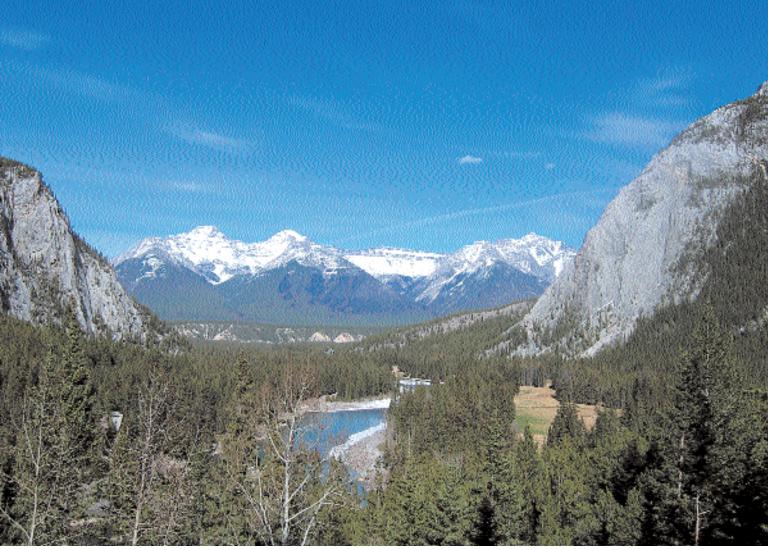
Reconquérir les eaux canadiennes

By Krystyn Tully

"A low spit of land covered with wood forms the Bay & breaks the horizon of the lake ... The water in the Bay is beautifully clear & transparent."

« La baie est formée par une bande de terres basses recouvertes de forêt, qui bloque l'horizon du lac [...]. L'eau de la baie est magnifiquement claire et transparente. »





From its headwaters in the Canadian Rockies, the Bow River winds its way past breathtaking mountain terrain, and emerges on the Alberta prairie. Depuis sa source dans les Rocheuses canadiennes, la rivière Bow serpente à travers des terrains montagneux à couper le souffle et débouche dans la pairie albertaine.

House lights go down. Stage lights come up in a renovated waterfront warehouse nightclub. Inscribed on the wall, just visible in the now-darkened room, is a centuries-old description of this location. It is clear that Lake Ontario bears little resemblance to what Elizabeth Simcoe saw when she penned these words shortly after arriving from England in 1791.

It is Toronto Bay, Lake Ontario, June 21, 2003.

Tonight the audience is a collection of some of the most powerful clean water advocates in the world. Robert F. Kennedy, Jr. takes the stage and tells the audience, "This lake is the forgotten lake. It was taken over by government agencies and by industry, and stolen from the public." It is now time to take our lake back.

It is the last night of Waterkeeper Alliance's Annual Conference, the first time such a gathering has been held outside the United States. One hundred fifteen Waterkeepers from the US, Canada, and Latin America are joined by dozens of Canadian activists, drinking in Kennedy's words, and soaking up the inspiring presence of so many grassroots leaders.

Les lumières de la salle diminuent. Celles de la scène s'allument dans une boîte de nuit située dans un entrepôt rénové du secteur riverain. Une description de cet endroit, vieille de plusieurs siècles, est inscrite sur le mur, maintenant visible dans la salle obscure. Manifestement, le lac Ontario ne ressemble plus guère à ce qu'Elizabeth Simcoe a vu lorsqu'elle écrivit ces mots peu après être arrivée d'Angleterre en 1791.

Nous sommes sur le bord de la baie de Toronto, dans le lac Ontario, le 21 juin 2003.

L'assistance se compose ce soir d'une brochette de certains des défenseurs de la qualité de l'eau les plus puissants du monde. Robert F. Kennedy fils monte sur scène et déclare à l'auditoire : « Ce lac est le lac oublié. Les organismes gouvernementaux et l'industrie s'en sont emparés et l'ont volé au public. » L'heure est maintenant venue de reprendre notre lac.

C'est la dernière soirée de la conférence annuelle de la Waterkeeper Alliance, premier rassemblement du genre à se tenir à l'extérieur des États-Unis. Cent quinze Waterkeepers des



Photo: Jim Hebert

The Detroit River flows through a metropolitan region with 5 million people. The Canadian Detroit Riverkeeper (in Ontario) and Detroit Riverkeeper (in Michigan) share responsibility for protecting the watershed.

La rivière Détroit traverse une région métropolitaine de 5 millions d'habitants. Le chapitre Canadian Detroit Riverkeeper (en Ontario) et le Detroit Riverkeeper (au Michigan) se partagent la responsabilité de la protection du bassin versant.

This river is scattered over, from one lake to another both on the mainland and the islands with large clusters of trees surrounded by charming meadows. Game is very common, as are geese, and all kinds of wild ducks. There are swans everywhere, there are quails, woodcocks, pheasants and rabbits, turkeys, partridges, hazelhens and a stupendous amount of turtledoves. This country is so temperate, so fertile and so beautiful that it may justly be called "The Earthly Paradise of North America."

Antoine de la Mothe Cadillac, French explorer and founder of Detroit, of the Detroit River in 1702.

Tout le long de la rivière, d'un lac à l'autre, sur la terre ferme comme sur les îles, se trouvent de grands bosquets entourés de prés charmants. Le gibier est fort commun, tout comme les oies, et toutes sortes de canards sauvages. Il y a des cygnes partout, des cailles, des bécasses, des faisans et des lapins, dindes, perdrix, gélinottes des bois, ainsi qu'un nombre incroyable de tourterelles des bois. Le pays est si tempéré, si fertile et si beau, qu'il mériterait d'être appelé le "paradis terrestre de l'Amérique du Nord".

Antoine de la Mothe Cadillac, explorateur français et fondateur de la ville de Détroit, sur la rivière Détroit, en 1702.



"Treated" water flowing into the Grand River with bacteria levels 20 times the legal limit.

Les eaux « traitées » qui se déversent dans la Grand River contiennent des taux de bactéries 20 fois plus élevés que la limite légale.

Photo: Lake Ontario Waterkeeper

États-Unis, du Canada et de l'Amérique latine, auxquels se sont joints des douzaines d'activistes canadiens, boivent les paroles de Kennedy et s'imprègnent de la présence inspiratrice d'un si grand nombre de leaders populaires.

Les paroles qui ont été prononcées ce soir vont résonner pendant des années. Un membre de l'assistance apportera le message en faveur de la restauration du secteur riverain à un candidat à la mairie, qui en fera la pièce maîtresse de sa plateforme électorale victorieuse. Un autre membre, pionnier de l'industrie de la télédiffusion, deviendra l'un des plus influents partisans du mouvement au Canada.

Tandis que les mots de Kennedy retentissent au-dessus du tintement des verres de bière et des acclamations répétées, un concert-bénéfice a lieu de l'autre côté de la rue en soutien à la ville ravagée par le virus mortel du SRAS. En l'espace de deux ans, les têtes d'affiche de ce spectacle, The Tragically Hip, auront fait entendre l'appel du mouvement Waterkeeper à 100 000 fans lors d'une tournée pancanadienne.

En cette soirée d'été, un tournant vient d'être franchi. La Waterkeeper Alliance est venue au Canada.

Le Canada a toujours été un pays d'eau. Il possède le plus long littoral du monde (200 000 kilomètres). L'eau douce dans ce pays couvre une plus grande superficie que dans tout autre pays (755 000 kilomètres carrés, ou près de 300 000 milles carrés). Le Canada abrite le deuxième plus long réseau fluvial de l'Amérique du Nord et la plus vaste baie du monde. En outre, il borde le plus grand réseau d'eau douce de la planète. C'est l'eau qui explique que le Canada est le pays que nous connaissons aujourd'hui. Elle a fourni aux Premières nations et, beaucoup plus tard, aux colons européens un moyen de se déplacer, de commercer et de s'établir en permanence. L'eau relie les trois côtes canadiennes, alimente les récoltes et, même dans les extrémités nordiques les plus froides, elle procure de la nourriture à la population.



The mighty Fraser has the largest salmon runs of any river in North America.

Le majestueux fleuve Fraser accueille les plus importantes montaisons de saumons de toutes les rivières d'Amérique du Nord.

Words spoken this night will resonate for years to come. One member of the audience will bring the message of waterfront renewal to a mayoral candidate who will make it the centerpiece of his winning platform. Another, a pioneer in television broadcasting, will become one of the movement's most influential supporters in Canada.

As Kennedy's words ring out over the sounds of clinking beer glasses and periodic cheers, a benefit concert across the street bolsters support for a city ravaged by the deadly SARS virus. In just two years' time, the headliners of that show, The Tragically Hip, will bring the cry of the Waterkeeper movement to one hundred thousand fans on a cross-country tour.

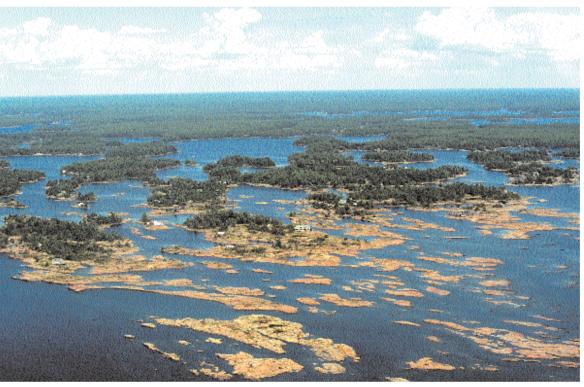
On this summer night, a corner is being turned. Waterkeeper Alliance has come to Canada.

Canada has always been a country of water. It has the longest shoreline in the world (200,000 kilometres). More of this country is covered by freshwater than any other country (755,000 square kilometers or nearly 300,000 square miles). Canada is home to North America's second longest river system and the world's largest bay. It also borders the largest freshwater system on the planet. Water is the reason that Canada is the country it is today. It provided the First Nations and, much later, European colonizers means for travel, trade, and permanent settlement. Water links Canada's three coasts, nurtures crops, and, even in the coldest northern extremes, provides nourishment for people.

Toutefois, cette richesse n'est pas absolue. Si l'on juge de la qualité de nos cours d'eau d'après notre capacité d'y nager, d'y pêcher et d'en boire en toute sécurité, nous constatons que le Canada s'appauvrit de plus en plus. Dans de nombreuses localités canadiennes, il est essentiel pour la santé de la communauté que l'on puisse se rendre sur le rivage et aller se baigner; pourtant, nous assistons à une épidémie de pollution dans chacune des provinces. Tous les jours, des milliards de litres d'eaux usées se déversent dans nos eaux. Des villes importantes comme Halifax et Victoria rejettent dans l'océan des eaux d'égout brutes sans aucune forme de traitement. L'été, toutes les plages du lac Ontario sont contaminées par des bactéries. Ces quatre dernières années seulement, 20 000 personnes sont tombées malades parce que des eaux d'égout s'étaient infiltrées dans leur eau potable.

Toutefois, notre eau potable contient des choses pires encore que des eaux usées. En août 2003, une panne d'électricité a frappé la majeure partie de l'est de l'Amérique du Nord. L'une des régions les plus touchées fut Sarnia, en Ontario, capitale pétrochimique du Canada. Située sur les rives de la rivière St. Clair, la ville de Sarnia compte plus d'une vingtaine de grands fabricants de produits pétrochimiques et de raffineries de pétrole. Quand l'interruption de courant se produisit, les ensembles industriels tombèrent en panne. Une entreprise, Royal Polymers, déversa environ 650 livres de chlorure de vinyle dans les eaux de la rivière St. Clair.

Près de deux semaines s'écoulèrent avant que l'on ne rapporte



UNESCO has named part of the eastern shore of Georgian Bay as a World Biosphere Reserve. Une partie de la côte est de la baie Georgienne a été désignée réserve de la biosphère mondiale par l'UNESCO.

Photo: Georgian Baykeeper



North Head Fishing Fleet, Bay of Fundy. La flotte de pêche de North Head, dans la baie de Fundy. Photo: David Coon

But this wealth is not absolute. If we judge the health of our waterways by our ability to safely swim, drink, and fish, then we see that Canada is increasingly impoverished. The ability to walk down to the shore and swim is central to the health of many Canadian communities; yet, there is an epidemic of pollution in every province. Billions of litres of sewage flow into our waters every single day. Major cities such as Halifax and Victoria dump raw sewage into the ocean without any treatment whatsoever. In summer, every beach on Lake Ontario is polluted with bacteria. In the last four years alone, twenty thousand people became ill because of sewage contamination in their drinking water.

le déversement de chlorure de vinyle. Les services de santé communautaire émirent alors un avis de faire bouillir l'eau, recommandant que l'on y ajoute de l'eau de Javel domestique afin de « la rendre propre à la consommation ». « On devrait pouvoir sentir une faible odeur de chlore après avoir désinfecté l'eau adéquatement. » C'est là une stratégie efficace pour tuer les agents pathogènes, mais qui demeure complètement sans effet dans le cas des produits chimiques industriels toxiques. Les résidents et les résidentes de Stag Island, en aval de Sarnia, souffrirent de nausées, de désorientation et de léthargie. Ils doivent maintenant composer avec le fait que le chlorure de vinyle est un carcinogène



The Ottawa River flows through the nation's capital La rivière des Outaouais sillonne la capitale nationale Photo: Ottawa Riverkeeper / Sentinelles de la rivière des Outaouais

Still, there are things worse than sewage in our drinking water. In August 2003, a power blackout rolled across most of eastern North America. One of the worst hit areas was the petrochemical capital of Canada: Sarnia, Ontario. Located on the banks of the St. Clair River, Sarnia is home to more than twenty major petrochemical manufacturers and petroleum refineries. When the blackout hit, industrial systems failed. One company, Royal Polymers, discharged about 650 pounds of vinyl chloride into the St. Clair River.

The vinyl chloride spill went unreported for nearly two weeks, at which time the Community Health Services Department issued a boil-water advisory recommending that "water can be rendered safe" by adding household bleach to their water. "A faint chlorine smell should be noticeable after proper disinfection." This is an effective strategy for killing pathogens, but utterly useless for toxic industrial chemicals. Residents of Stag Island, downstream from Sarnia, suffered nausea, disorientation, and lethargy. They now must come to grips with the fact that vinyl chloride is a potent carcinogen. No one, it seems, had planned what to do in the event of a blackout. Where were the safety measures to protect against a spill, why did the spill go unreported for so long, and why was the response so inappropriate?

Across the country, the fisheries are also suffering. On the Great Lakes, more than eighty percent of fish habitat has been destroyed in the last century. In New Brunswick, the Moncton causeway wiped out the Petitcodiac's renowned fishery one generation ago. In British Columbia, some two million Fraser River sockeye salmon were supposed to return to spawn this year; only half a million showed up.

The fish that do survive are frequently contaminated and only safe to eat in limited quantities. On the Great Lakes, The Guide to Eating Ontario Sport Fish cautions adult males to eat no more than eight meals of fish each month; women of childbearing age and children under fifteen are restricted to four meals. Health Canada also

potentiel. Personne, semble-t-il, n'avait prévu ce qu'il fallait faire en cas de panne de courant. Où étaient les mesures de sécurité destinées à protéger contre un déversement, pourquoi a-t-on tardé si longtemps à rapporter le déversement et pourquoi la réponse a-t-elle été si inadéquate?

Partout au pays, les pêches aussi sont affligées. Dans les Grands Lacs, plus de 80 % de l'habitat des poissons a été détruit au cours du siècle dernier. Au Nouveau-Brunswick, le pont-chaussée de Moncton a réduit à néant les pêcheries de la rivière Petitcodiac, réputées il y a une génération. En Colombie-Britannique, quelque deux millions de saumons sockeye du fleuve Fraser étaient censés retourner y frayer cette année; seulement un demi-million étaient au rendez-vous.

Souvent, les poissons qui réussissent à survivre sont contaminés et ne peuvent être consommés en toute sécurité qu'en quantités limitées. Dans les Grands Lacs, le Guide de consommation du poisson gibier de l'Ontario recommande aux hommes adultes de ne manger pas plus de huit repas de poisson par mois; chez les femmes en âge de procréer et les enfants de moins de quinze ans, la consommation est limitée à quatre repas. Santé Canada publie également des avis nationaux de sécurité suggérant que les femmes et les enfants ne s'accordent qu'un repas par mois de poissons tels que le requin, l'espadon et le thon.

Ces avis de sécurité sont rendus nécessaires à cause de la pollution. Les émissions industrielles, les rejets illégaux et l'élimination inadéquate des déchets introduisent des contaminants tels que le mercure et les BPC dans les cours d'eau. Une fois qu'ils sont présents dans nos eaux, ces contaminants s'accumulent dans les poissons et les oiseaux et constituent une menace pour les humains qui en consomment et l'écosystème.

Fait ironique, les lois canadiennes en matière de protection des poissons et de leur habitat sont peut-être les plus sévères du monde. Il est illégal de polluer l'océan avec des eaux d'égout. Il est illégal d'empoisonner les sources d'approvisionnement en eau avec des produits chimiques. Et pourtant, les Canadiens et les Canadiennes ne peuvent plus ni nager, ni pêcher dans les eaux de cette nation ou en boire en toute sécurité, ici, dans le pays de l'eau.

Entrent en scène les Waterkeepers. Les Waterkeepers sont ici pour que nous puissions reconquérir nos lacs, nos rivières et nos côtes. Ils mettent en application les lois que le gouvernement n'observe pas. Ils veillent à ce que l'industrie soit rappelée à l'ordre lorsqu'elle ne s'y conforme pas. Les Waterkeepers sont en train de restaurer la richesse historique de ce pays un cours d'eau à la fois, une communauté à la fois.

Daniel LeBlanc, de Sentinelles Petitcodiac Riverkeeper, a été le premier membre de la Waterkeeper Alliance au Canada. Son programme, lancé en 1999, a rapidement été suivi par d'autres programmes en Ontario, en Alberta et en Colombie-Britannique. Actuellement, on compte huit programmes Waterkeeper établis au Canada, et de nombreux autres sont en préparation.

Les Waterkeepers constituent une force puissante au Canada en



Chemical plants and refineries in Sarnia react to blackout in August, 2003 Des usines de produits chimiques et des raffineries de Sarnia réagissent à la panne d'électricité en août 2003 Photo: Lou van Delft, www.digitalartist.ca

publishes national advisories, suggesting that women and children indulge in fish such as shark, swordfish, and tuna just once a month.

Pollution creates the need for these advisories. Industrial emissions, illegal dumping, and improper waste disposal introduce contaminants such as mercury and PCBs into waterways. Once in our waters, these contaminants build up in fish and birds, posing a threat to the ecosystem and the humans who consume them.

Ironically, Canada has perhaps the world's strongest laws protecting fish and habitat. Polluting the ocean with sewage is illegal. Poisoning water supplies with chemicals is illegal. Contaminating fish and destroying their habitat is illegal. Yet, Canadians can no longer safely swim, drink, or fish the waters of this nation; here, in the country of water.

Enter the Waterkeepers. Waterkeepers are here to win back our lakes, rivers, and coasts. They enforce the laws that government ignores. They ensure compliance when industry does not. Waterkeepers are restoring this country's historic wealth one waterway, one community at a time.

Daniel LeBlanc, Petitcodiac Riverkeeper, was Canada's first member of Waterkeeper Alliance. He launched his program in 1999 and was quickly followed by programs in Ontario, Alberta, and British Columbia. Today, there are eight established Canadian Waterkeeper programs and many more in development.

tant que mouvement populaire. Dans le cadre du premier partenariat entre des citoyens et Environnement Canada, les Waterkeepers ont réalisé des enquêtes sur des fuites dans des dépotoirs, qui ont conduit à des condamnations et à la restauration d'un site où l'on avait jeté des déchets du projet Manhattan. Ils ont lutté pour l'amélioration des processus de prise de décision et contesté les lois canadiennes sur l'évaluation environnementale pour leur mangue de vision. La remise en question des politiques du gouvernement fédéral par les Waterkeepers a reçu l'appui du Bureau du vérificateur général et s'est traduite par la protection améliorée des Grands Lacs.

En octobre 2004, ces Canadiens et ces Canadiennes se sont à nouveau réunis dans l'entrepôt où la Waterkeeper Alliance s'était rassemblée en 2003. Alors que l'écho de la première conférence internationale des Waterkeepers tenue dix-huit mois plus tôt résonnait encore, les Waterkeepers du Canada ont élaboré une stratégie pour reconquérir les cours d'eau du pays. Un mois plus tard, ils lançaient www.waterkeepers.ca – un site Web qui présente leurs programmes locaux aux Canadiens et aux Canadiennes et qui décrit les fondements du mouvement.

Deux semaines plus tard, Waterkeepers Canada a pris la route en compagnie des Tragically Hip, le célèbre groupe de musique rock. La tournée, qui s'est rendue de Vancouver à Halifax, a

As a grassroots movement, Waterkeepers in Canada are a powerful force. Waterkeepers have conducted investigations into leaking landfills, leading to convictions through the first citizen-Environment Canada partnership in Atlantic Canada and the remediation of a site where Manhattan Project wastes were dumped. They have fought for improved decision-making processes and challenged Canada's short-sighted environmental assessment laws. Waterkeepers' questioning of federal government policy was supported by the Office of the Auditor General, bringing about improved protections for the Great Lakes.

In October 2004, these Canadians met again in the same warehouse where Waterkeeper Alliance gathered in 2003. With echoes of the first international Waterkeeper conference eighteen months before still in the air, the Canadian Waterkeepers charted a strategy to win back Canada's waterways. One month later, the Canadian Waterkeepers launched www.waterkeepers.ca – a website that introduces Canadians to their local programs and describes the foundations of the movement.

Two weeks later, Waterkeepers Canada hit the road with famed rock 'n roll band, The Tragically Hip. Traveling from Vancouver to Halifax, the tour was a resounding success. On tour, the Canadian Waterkeepers introduced themselves and their message. Night after night they set up their booth at the concert hall, met new members and spoke with local media. Fans heard Gord Downie, lead singer of The Tragically Hip, encourage them to stop by the Waterkeeper booth and "help win back your lakes and rivers!" Thousands did. Canadians know that clean water is central to their communities. They're ready to fight for it. And they want Waterkeepers.

The explosion of the Waterkeeper movement is not by chance. It has been building for generations. Its seeds were Nous sommes composés d'eau à 80%, et 70% de notre planète est recouverte d'eau. À tous les points de vue, l'eau est donc l'un des éléments les plus fondamentaux dont nous dépendons pour vivre – l'eau et l'air – et nous nous employons allègrement à les souiller tous les deux depuis trop longtemps.

Le vent commence maintenant à tourner, et les Waterkeepers se trouvent au premier plan à cet égard. Ils ont recours à la loi et aux médias (agissant selon les règles et grâce au pouvoir que leur confère la participation du public) pour obtenir des changements de comportement miraculeux et des revirements de situation spectaculaires en matière d'environnement. Je ne suis pas très porté à me joindre à des groupes, mais je me suis joint à Bobby Kennedy et à sa bande d'idéalistes canadiens, dirigée par Mark Mattson, du Lake Ontario Waterkeeper, et les sept autres programmes Waterkeeper d'un bout à l'autre du Canada.

Moses Znaimer, maître de cérémonie lors de la conférence annuelle d'ideaCITY à Toronto.



We are 80% water and 70% of our planet is covered in water, so in every way it's one of the most fundamental of all the elements on which we depend for life - Water and Air - and we've been blithely despoiling both for too long.

Now the tide is beginning to turn and Waterkeepers are at the forefront, using the Law and the Media (playing by the rules and through the power of public involvement) to achieve miraculous changes in behaviour and spectacular turnarounds in the environment. I'm not much of a "joiner," but I've joined Bobby Kennedy and his Canadian band of idealists, led by Mark Mattson at Lake Ontario Waterkeeper and the seven other Waterkeeper programs across Canada.

Moses Znaimer hosts the annual idea City Conference in Toronto. remporté un succès retentissant. Lors de la tournée, les Waterkeepers canadiens se sont présentés et ont livré leur message. Soir après soir, ils ont monté leur stand dans la salle de concert, ils ont rencontré de nouveaux membres et ils se sont adressés aux médias locaux. Les amateurs ont entendu Gord Downie, chanteur principal des Tragically Hip, les encourager à s'arrêter au stand des Waterkeepers et à « aider à reconquérir nos lacs et nos rivières ». Des milliers de spectateurs ont répondu à l'appel. Les Canadiens savent que la propreté de l'eau est cruciale pour leur communauté. Ils sont prêts à se battre pour la défendre. Et ils sont favorables aux Waterkeepers.

L'explosion du mouvement Waterkeeper n'est pas le fruit du hasard. Le mouvement s'est construit depuis des générations. Ses germes ont été semés lorsque le premier pont-chaussée a étouffé une rivière et que la première aciérie a vomi des caillots chimiques. L'impulsion s'est accentuée quand, pour la première fois, un organisme gouvernemental a fermé les yeux. Partout au pays, c'est la qualité de l'eau qui souffrait alors qu'on négociait les ressources publiques. Par conséquent, lorsque Robert F. Kennedy fils est monté sur cette scène de Toronto en 2003 et qu'il a qualifié le lac Ontario de « lac oublié », son message a porté. Les gens comprenaient qu'il aurait tout aussi bien pu parler d'une multitude de cours d'eau du Canada.

Deux ans plus tard, une nouvelle voix se fait entendre au nom des cours d'eau et des communautés du Canada, et l'on assiste à un engagement renouvelé envers l'application des lois environnementales et la participation populaire.

Vous vous souvenez de l'entreprise qui avait déversé du chlorure de vinyle dans la rivière St. Clair? Elle a été accusée de quatre infractions à la loi ontarienne et fait face à des amendes pouvant atteindre 12,5 millions de dollars. Le déversement de produits chimiques a fait l'objet d'une

I can see communities a hundred years from now, our children's children standing on the banks of their sparkling heritage, beholding the masterpieces Waterkeepers helped them win

J'imagine les communautés dans un siècle d'ici, les enfants des enfants de nos enfants debout sur les rives de leur héritage scintillant, regardant les chefs-d'œuvre qu'ils auront reconquis avec l'aide des Waterkeepers.

Gord Downie

Gord Downie, The Tragically Hip, performing for an audience of four million at the 2004 Grey Cup, the Canadian Football League Championship.

Gord Downie, des Tragically Hip, se produisant devant un auditoire de guatre millions de spectateurs lors de la Coupe Grey 2004. le championnat de la Ligue canadienne de football.

sewn when the first causeway choked a river and the first steel plant spewed out chemical blobs. Momentum intensified when the first government agency turned a blind eye. Across the country, water quality was suffering as public resources were bargained away. So, when Robert Kennedy, Jr. stood on that Toronto stage in 2002 and called Lake Ontario a "forgotten lake," his message resonated. People understood that he could have been speaking about any number of waterways in Canada.

Two years later, there is a new voice for waterways and communities in Canada, and a renewed commitment to environmental law enforcement and grassroots participation.

Remember the company that dumped the vinyl chloride into the St. Clair River? They've been charged with four separate violations of Ontario law and are facing fines of up to \$12.5 million. A binational collaboration between Canadian Detroit Riverkeeper, St. Clair Channelkeeper, Lake Ontario Waterkeeper, and the University of Windsor Law School investigated the chemical spill in 2003-2004 and issued a report recommending that those charges be laid. Further, the provincial government continues to cite the support of Waterkeepers as it defends its tough new anti-spills legislation against corporate interests.

Remember the causeway that choked the Petitcodiac River and wiped out its fishery? The Petitcodiac Riverkeeper led the charge for one of the most comprehensive environmental impact assessments in Canadian history. Experts have just recommended restoring free flow to the river and the legacy of the land bridge will soon be over.

Meanwhile, the Great Lakes Waterkeepers are monitoring and investigating the sewage systems that are poisoning their beaches. In 2004, Lake Ontario Waterkeeper triggered a legal review of Ontario's beach policy after a three-year investigation revealed that every municipality investigated had broken the law, but had never been charged.

Bringing Waterkeeper Alliance to Canada in 2003 rallied support for clean water in a way the country had never seen before. The Waterkeepers are dedicated. Canadians are passionate. After a century of neglect and disregard, one thing is clear: Canada's waters are forgotten no more. WK

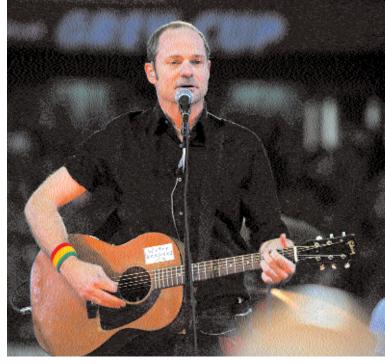


Photo: CP/JONATHAN HAYWARD

enquête en 2003-2004 dans le cadre d'une collaboration binationale entre le Canadian Detroit Riverkeeper, le St. Clair Channelkeeper, le Lake Ontario Waterkeeper et l'École de droit de l'University of Windsor, dont le rapport a recommandé que ces accusations soient portées. De plus, le gouvernement provincial continue d'évoquer l'appui des Waterkeepers en défendant auprès des grandes entreprises ses nouvelles lois vigoureuses contre les déversements.

Vous vous souvenez du pont-chaussée qui a causé l'envasement de la rivière Petitcodiac et l'effondrement de ses pêcheries? Les Sentinelles de la Petitcodiac ont été à l'origine de l'une des évaluations des impacts environnementaux les plus exhaustives de l'histoire du Canada. Les experts viennent de recommander de restaurer le libre écoulement de la rivière, et l'héritage du pont-chaussée sera bientôt chose du passé.

Pendant ce temps, les Waterkeepers des Grands Lacs exercent une surveillance et font enquête sur les réseaux d'égout qui empoisonnent leurs plages. En 2004, le Lake Ontario Waterkeeper a amené le gouvernement de l'Ontario à effectuer un examen juridique de sa politique à l'égard des plages, après qu'une enquête menée sur trois ans eut révélé que chacune des municipalités visées par l'enquête avait enfreint la loi sans qu'aucune accusation ne soit portée.

La venue de la Waterkeeper Alliance au Canada en 2003 a rallié un appui en faveur de la qualité de l'eau tel qu'on n'en avait jamais vu auparavant. Les Waterkeepers sont dévoués. Les Canadiens et les Canadiennes sont passionnés. Après un siècle de négligence et de manque de respect, une chose est claire : les eaux du Canada sont sorties de l'oubli. WK



This aerial photo shows the causeway choking the tidal portion of the Petitcodiac River. Ninety percent of the tidal river downstream is now filled with sediment. The river will return to its natural state once the causeway is removed. Photo: New Brunswick Department of Natural Resources

Cette photo aérienne montre le pont-chaussée qui étouffe l'estuaire de la rivière Petitcodiac. En aval, 90% de la rivière à marées est maintenant remplie de sédiments, mais elle retrouvera son état naturel lorsqu'on aura retiré le pont-chaussée.

Restoring the Free Flowing Petitcodiac River

I do not know much about gods, but I think that the river Is a strong brown god – sullen, untamed and intractable. –T.S. Eliot

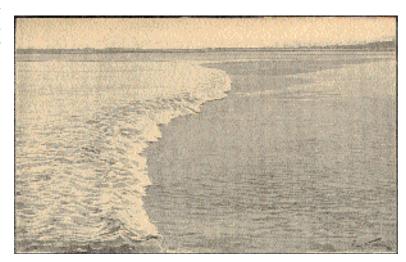
The mighty Petitcodiac River, with its signature chocolaty brown flow, once teemed with fish and migrating shorebirds. Prior to the 1960's, the powerful tides of the Bay of Fundy flowed up the river twice a day, bringing a tidal bore as high as 2 metres and as fast as 13 km/hour. The tide reached the headwaters of the Petitcodiac River system then receded back to the ocean, leaving nutrient-rich mudflats behind.

But in 1968, a causeway built across the river in downtown Moncton cut the tidal river in half, choked the entire ecosystem and changed everything. For the last three and a half decades, the saltwater tide no longer flows upstream of the causeway and fish from the ocean can no longer reach the headwater streams where they spawn.

Since launched in 1999 as Canada's first Waterkeeper program, the Petitcodiac Riverkeeper has rallied the communities of his watershed towards the goal of restoring this once majestic tidal river and initiated a series of environmental law enforcement measures that promise to win back this historic waterway for the enjoyment of future generations.

Through the tireless efforts of the Petitcodiac Riverkeeper, an end to the 40 year battle to save the Petitcodiac River is now in sight. Experts leading a comprehensive environmental impact assessment on the future of the river recently recommended either the permanent opening of the causeway gates or the replacement of the causeway with a partial bridge. A final decision on the river's fate will be taken sometime in 2005.

Either option will be a giant leap forward towards restoring the free flow of water and is great news for the fish – experts estimate that nine of the ten species of fish that historically called the Petitcodiac River home will immediately return to their natural spawning grounds, and the tenth, Atlantic salmon, will return after stocking programs.



A remarkable photo of the Petitcodiac Tidal Bore appeared in the front page of the Illustrated London News in 1910.

Une photo remarquable du mascaret de la Petitcodiac a paru en première page de l'Illustrated London News le 10 décembre 1910.

Photo: Petitcodiac Riverkeeper / Sentinelles Petitcodiac



Fishing boats rest on mudflats at low tide. The Petitcodiac River is influenced by the phenomenal Bay of Fundy tides, which range between 9 and 14 metres. Des bateaux de pêche reposent sur des vasières à marée basse. La rivière Petitcodiac subit les effets des marées phénoménales de la baie de Fundy, aui varient entre 9 et 14 mètres Photo: Petitcodiac Riverkeeper / Sentinelles Petitcodiac

Restaurer le libre écoulement de la rivière **Petitcodiac**

J'ignore presque tout des dieux, mais je crois que la rivière Est un dieu brun puissant, renfrogné, sauvage, intraitable. – T.S. Eliot

Autrefois, la majestueuse rivière Petitcodiac, avec ses eaux d'un brun chocolat caractéristique, fourmillait de poissons et d'oiseaux de rivage migrateurs. Avant les années 1960, les puissantes marées de la baie de Fundy remontaient la rivière deux fois par jour, apportant un mascaret qui pouvait mesurer une hauteur de 2 mètres et se déplacer à une vitesse de 13 km/h. La marée atteignait le haut du réseau de la rivière Petitcodiac, puis se retirait vers l'océan, laissant derrière elle des vasières riches en éléments nutritifs.

Cependant, en 1968, on a construit un pont-chaussée sur la rivière au centre-ville de Moncton, qui a coupé la rivière à marées en deux, étouffé l'ensemble de l'écosystème et complètement changé la situation. Depuis les trois dernières décennies et demie, l'eau salée poussée par les marées ne remonte plus en amont du pont-chaussée et les poissons de l'océan ne peuvent plus se rendre dans les ruisseaux d'amont pour y frayer.

Depuis leur création en 1999 en tant que premier programme Waterkeeper au Canada, les Sentinelles de la rivière Petitcodiac ont rallié les communautés de ce bassin versant dans le but de restaurer cette rivière à marées autrefois majestueuse et d'instaurer un train de mesures en faveur de l'application des lois environnementales, qui permettront de reconquérir ce cours d'eau historique pour que les générations futures puissent en profiter.

Grâce aux efforts inlassables des Sentinelles de la rivière Petitcodiac, on voit maintenant se profiler la fin de la bataille amorcée il y a 40 ans pour sauver la rivière Petitcodiac. Des experts qui ont dirigé une évaluation en profondeur des impacts environnementaux sur l'avenir de la rivière ont récemment recommandé soit l'ouverture permanente des vannes du pont-chaussée, soit le remplacement du pont-chaussée par un pont partiel. Une décision finale sur le sort de la rivière sera prise quelque part en 2005.

N'importe quelle de ces options marquera un pas de géant dans la lutte pour restaurer le libre écoulement de la rivière et signifie une bonne nouvelle pour les poissons. Selon les experts, 9 des 10 espèces de poissons qui vivaient jadis dans les eaux de la rivière Petitcodiac reviendront immédiatement dans leurs zones de frai naturelles, tandis que la 10e espèce, le saumon de l'Atlantique, reviendra après avoir fait l'objet de programmes d'ensemencement. WK

CZECH REPUBLIC



MORAVA RIVERKEEPER

My name is Helena Králová, and I am your Morava Riverkeeper. The Morava is about 330 kilometers long, running south through the eastern part of the Czech Republic – the country where Martina Navratilova, some of the world's best hockey players, and real Budweiser beer come from.



Riverkeeper Helena Králová on the Svratka River, a tributary of the Morava River, in the city of Brno. Photos: Morava Riverkeeper

Our work to protect the Morava started more than ten years ago when thirty individuals and organizations – nature conservation groups, fishermen associations, and others – came together to found The Union for the Morava River. The Union for the Morava River was volunteer run, and our projects were supported by various foundations. It was the first nonprofit citizens' organization focused on protection of a river and its watershed in our country. As secretary, I participated in all of our projects. Our main priority was and still is floodplain protection, which includes river and wetland restoration.

In 1997, the Czech Republic was hit with a devastating flood – larger than the expected "100-year flood" during an extreme period of rainfall that reached 234 millimeters of rainfall per day (that is 9.2 inches in one day). Almost the entire floodplain was underwater. 25 people perished, 70,000 inhabitants from 70 villages were forced to evacuate, flooding damaged 30 towns and more than 200 villages.

Since that time, water management specialists have focused on flood-control. Unfortunately, they have focused primarily on engineered solutions only, mainly new dams. What they don't understand is that solutions that do not consider the impact on the environment will not only fail to solve the flooding problem, but lead to even more serious environmental damage in the future.

I've always had a love of water and rivers, and I studied water management at university. Later, as an environmental educator at the conservation group Veronica, I gave courses on water for students of all ages. I started school-based water-quality monitoring in Brno. It was fun to work with the school kids and their teachers, using portable laboratories, sampling the brooks, rivers, and wells of



The Morava River passes through a concrete canal in the city of Olomouc



A natural reach of the Morava River

the city and its surrounding. To make the mapping and sampling more efficient and interesting, we designed questionnaires - my daughter Helenka did the illustrations for them. Later, the project was expanded internationally to schools in eastern Slovakia and Hungary. When working with conservation organizations in other European countries, I learned about new ways to protect the rivers, such as Adopt a River and River Contract – projects that use voluntary agreements between concerned citizens, companies, public officials, conservation groups and others to improve conditions on the river.

About five years ago, I had the opportunity to teach at the University of Technology in Brno, teaching river and landscape restoration and hydrology. Still interested in working to protect my river, I learned from friends in Portland, Oregon about Waterkeeper Alliance and was impressed by their activities and achievements. I then attended the Waterkeeper Annual Conference in Long Island, New York in June 1999. After coming home, I wrote a few articles and presented Waterkeeper ideas to the Union for the Morava River.

In June 2000, in collaboration with my friends at the Union for the Morava River and with the support of my husband Bill, we launched the Morava Riverkeeper program. I work with students, communicate with water authorities, participate on flood control projects, monitor water quality, and educate the public on water and river



Opava River flows through the city of Krnov

issues. As Riverkeeper, I push for flood control measures that incorporate river and landscape restoration.

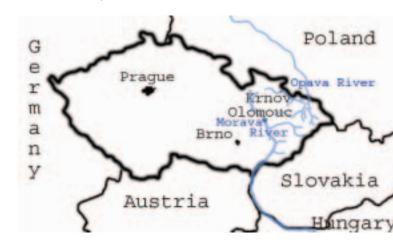
There are signs that we are making progress. I worked with my colleagues from Union for the Morava River to develop alternative flood control measures for the Morava and Becva Rivers. We recently brought our argument for incorporating environmental considerations to river management authorities and government officials and, amazingly, it was accepted! We also presented an ecological alternative of flood control for the city of Olomouc. Some of our ideas were accepted by water management authorities there as well.

The lack of communication between the civil engineers working in river management and natural scientists, however, remains a huge problem. Successful river restoration requires the collaboration of specialists in both groups. We need to overcome the arrogance of some water management authorities who don't see the need to reach beyond their own expertise to make sure that any flood control measures we implement will truly protect the river and its vital habitats.

Here's an example: A new dam was being planned for flood control for the town of Krnov. The dam was to be built on the location of a small but prospering village called Nove Herminovy, where 253 people lived. This ancient village would be sacrificed to save the larger town downstream from the next big flood. We were asked by the village mayor to help investigate alternative projects for controlling flooding on the Opava River, a tributary to the Morava, without a dam. Our biggest obstacle was the unwillingness and reluctance of other officials to cooperate.

In order to complete our evaluation we needed elevation data of the river, which the authorities had collected, but refused to provide us. After three months of writing, phoning, explaining, and waiting, we gave up. I took leave from work, enlisted my son John and Vaclav (an experienced water management specialist and member of the Union for the Morava River) to help. We spent almost a week in the town of Krnov collecting the information ourselves. We did a basic leveling survey, walked along the river, waded in the water, measured all the bridges and river channels in the town, and got the necessary data to design our alternative plan.

Our calculations proved that Nove Herminovy would not have to be sacrificed. With the riverbed enlarged at strategic points, the riverbanks in town restored to a natural condition, and some of the bridges raised to accommodate more flow, the river would harmlessly transport higher floodwaters right through town. This fall we presented our solution at a round table discussion with city officials and the media. Now we'll have to convince officials to go forward with our plan.



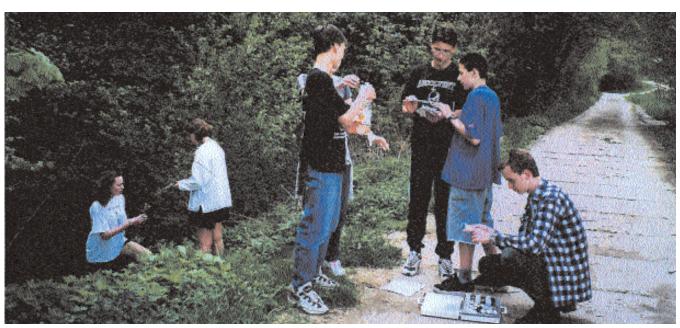
I-KVALITA VODY
→ZAKALENOST □ čistá □ průhledná □ poloprůhledná □ neprůhledná □ □ vy.
→TEPLOTA VODY → pH VODY
→ ROZPUSTNOST Q WY
NO_2 VV .
PO4
→ případná PĚNA □ případný ZÁPACH □ případné ZAJÍMAVÉ NÁLEZY □
POZ NA NY:

Working on the projects of the Union for the Morava River and being a lecturer of water management, I see the river from many points of view. Water management practices over the last fifty years have done a lot of harm to the rivers - not only in our country. We engineers have to admit to our part in this. Some consider it a personal attack, but we have to learn from our mistakes and try to avoid them in the future.

There is hope for our rivers in the new legislative document mandated by the European Union called the "Water Framework Directive." The directive stipulates that rivers of the European Union, including Czech rivers, have to be protected and their conditions preserved or improved.

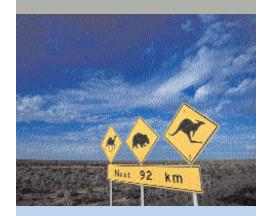
Change is hard. It is difficult to challenge the opinions of engineers and politicians and to push for change. In spite of that, we have to explain, listen, and exchange opinions. Without communication, there is no hope for progress. There's too much work to do and too many problems to worry about. I know that my life would be easier without the constant struggle, but fighting for our river is a part of who I am. And I am afraid I am too old to change. WK

Water quality questionnaires used by students



Students use portable laboratories to monitor rivers and wells in Brno

AUSTRALIA



Land of droughts & flooding rains

By Greg Hunt



"There is nowhere in the world that vaguely compares with the long stretches, the beauty and the mystery of

Australia. We have many things we can be proud of, but we must all be conscious of the immense damage which has been done to our rivers and other waterways.

Indeed, the magnitude of the effects of pollution, salinity and other degradation upon our waterways is belatedly being recognised, by all sections of our community and all sides of politics, as among the most important of the contemporary challenges facing our nation."

-Sir William Deane, Former Governor-General of Australia and Waterkeepers Australia's Honorary Patron speaking on the banks of the rejuvenated Alphington Wetlands





83 pound cod, circa 1925 Photo: Museum Victoria



A flooded forest - flood plains can be miles wide for weeks on end. This is when cod breed. Photo: William Abranowicz

Australia is described in Dorothea McKellar's poem "My Country" as "a land of droughts and flooding rains." And it is! If ever a country needed Waterkeepers, it is Australia. There are times when we have precious little water at all, and then there are times when we have too much. So if there is any chance of keeping it when we have it, we take it.

Australia is a very old, very flat place. It is also a very big place, almost as large as the continental U.S. It is 2500 miles from the forested east to the parched west and 1500 miles from the monsoonal north to the snow-clad mountains of the south. The centre is all desert – millions of acres of desert. There are five-year-old Australian kids living there who have never seen rain. Maybe that's why 85 percent of our population lives within 50 kilometers of the coast.

Australia has an abundance of strange animals, from 50 different kinds of kangaroos to over 200 snakes, including eight of the top ten deadliest in the world. The leaves on our gum trees hang down to avoid the sun - they lose less water that way. You wouldn't call our trees shady. This is just one of the adaptations of our flora and fauna to arid conditions. There are more. Desert mice never drink. There's nothing to drink anyway, and they metabolise (that's metabolize for our American friends) all the water they need from their food. As long as there are good seasons and plenty of grass, kangaroos can be continuously pregnant, turning out joey after joey. If there is a chance to reproduce, kangaroos take it.

Australia's water problems arose with the arrival of the English and other European settlers. The Aboriginal people, the marsupials and other animals, and the plants were adapted to the arid environment, including the erratic rainfall. Europeans brought different animals and plants, and they had very different ways of making a living from the land. The bush was cleared, crops were planted, and rivers were dammed. Plants and animals that relied on infrequent, but heavy rains, and the flooding that then surged across the land suffered mightily. The gum trees that needed regular inundation suffered stress and died, and the giant freshwater Murray Cod that breed in the flooded billabongs which flank the rivers were unable to reproduce.

The hard-hooved stock animals – the sheep and cattle – trampled the soft soil of the river banks and gave erosion a foothold, so riverbanks crumbled away and the riverside vegetation disappeared. The frogs, reptiles, birds, and mammals that relied on this habitat also suffered. The importation of traditional farming practices, extensive single-species crops, and flood irrigation also exacted a toll on the land. Deep-rooted trees were cleared so the groundwater, which contained the salt accumulated in the soils over millions and millions of years, rose to the surface. Without the trees to pump the groundwater up into the atmosphere, large tracts of agricultural land were taken from production as salt poisoned the soil.

The crops that settler farmers brought with them were often ill matched to the Australian environment. Why should a dry country such as Australia produce cotton or rice, both extremely reliant on huge volumes of water? These crops are just not viable, and other countries can grow them without the same environmental cost.

Most Australians have yet to come to terms with the nature of the continent upon which we live – we've only been here a little over two hundred years. We still don't know how to live here; we are not yet possessed of understanding.

So when some environmentalists who were starting to understand began looking for better ways to protect our water and our waterways, they were delighted to learn about Waterkeeper Alliance. Australians profess a great love for our rivers, and an even greater love for our coasts. After all, we reckon we have the best beaches in the world! If we could look after our rivers and coasts better than we had been, we wanted to join up.

Waterkeepers Australia started in late 2003. Derwent Riverkeeper: Our first member, "Derwent" Dave Turner hails from Tasmania, an island-state off the southeast coast of Australia. Derwent Dave has been looking after the Derwent River and its estuary for many years. He can tell you how introduced sea stars have



A billabong on the river flats beside Melbourne's Yarra River Photo: Waterkeepers Australia

been taking over the seabed, and how the waste from the yachts in the annual Blue Water Ocean Classic, the Sydney to Hobart Yacht Race, was being dumped in the river. The newspaper article describing his success with the port authorities, who now require the yachts to pump their bilges into a sewer for proper treatment, was titled "No to Poop Decks." Derwent Dave is indeed a successful Riverkeeper.

The Lang Lang Riverkeeper is involved in a battle to stop six chicken broiler sheds from being built on the flood plain seventy five yards from the bank of the Lang Lang River. They had been involved for some time in planting trees and grasses to create the habitat that brings back wildlife. And their efforts have paid off: even platypus have returned to the river. Now *there* is a weird animal – an egg-laying, fur-covered, duck-billed, beaver-like creature that finds food with its eyes closed, diving to the riverbed to find small invertebrates by touch.

The platypus is the only egg-layer that Peter Row, the Lang Lang Riverkeeper, wants in abundance around his river. With the



Robin Merrick, Yarra Riverkeeper, receives the certificate of membership in Waterkeepers Australia from Sir William Deane; Greg Hunt looks on Photo: Waterkeepers Australia

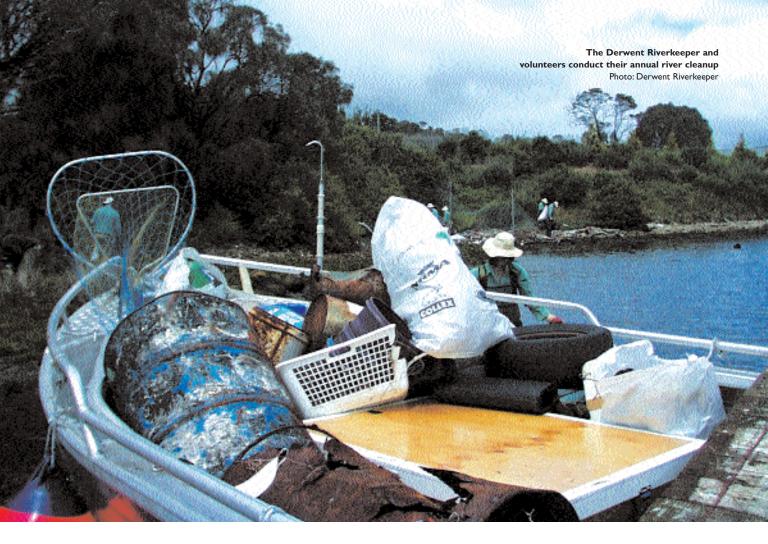


Primary school students singing the Julian Lennon song "Saltwater" before the speeches get underway at the launch of the Waterkeepers Australia

Photo: Waterkeepers Australia



Paul Sinclair, Waterkeepers Australia Director, with students
Photo: Waterkeepers Australia



support of Waterkeepers Australia and lawyers from the Environment Defenders Office who work for free on such cases, Peter is organizing efforts to stop the sheds.

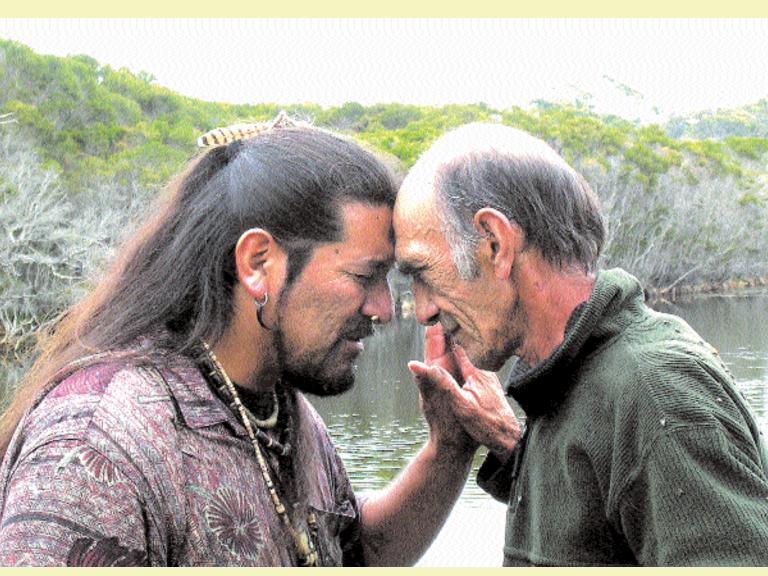
Another member is Rob Caune, the Snowy Estuarykeeper from the south-east corner of the mainland of Australia. Rob is an active fisherman in the lakes at the mouth of the Snowy River. A proposal to build a gas plant on the shores of one of these lakes galvanized his angling club into action. They have been running a highly successful campaign to put the plant on hold until they find a better place to build it. Rob is not opposed to the gas plant - he just wants a good one. As he says, "I want a worldclass development. What they are proposing insults our common sense."

And this is what Waterkeepers Australia is all about - common sense. Water is fundamentally important to us all, to all life. There are no alternatives to water. That it comes to us in creeks, rivers, lakes, and bays means that it is just plain sensible to look after them too. In a country like Australia, where the availability of water cannot be taken for granted, who wouldn't want to be a Waterkeeper? wk

Grey kangaroo and gum tree - dry grass is better than none Photo: William Abranowicz

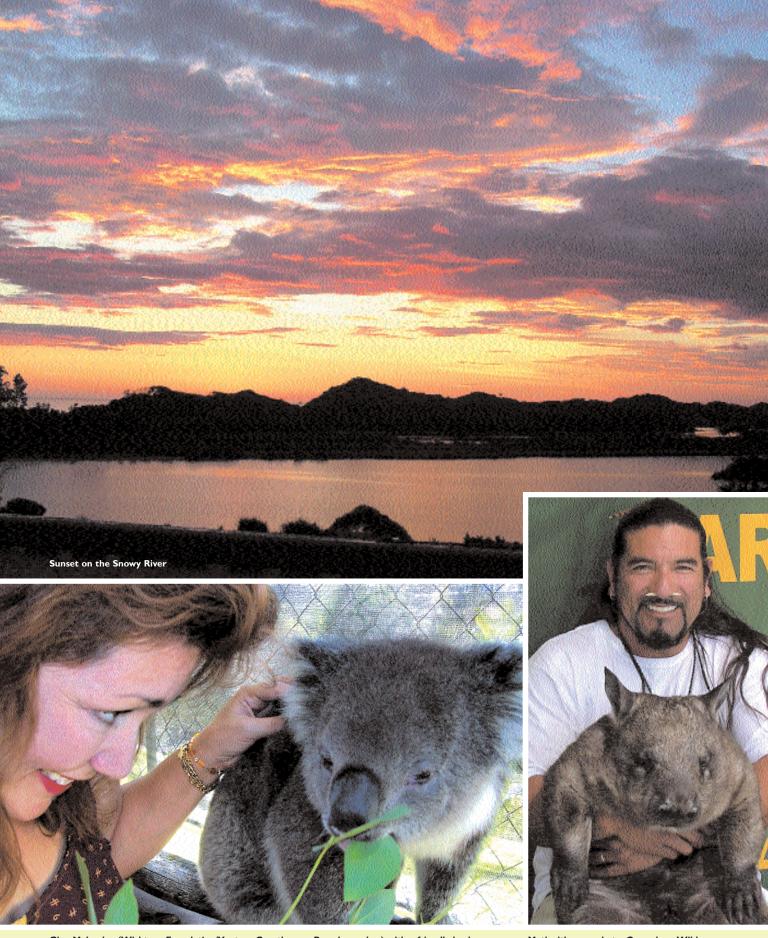
A Meeting of the Minds

This December, Mati Waiya, Ventura Coastkeeper and Chumash ceremonial leader from Ventura County in California, visited Australia. Waiya was invited to share his vision for preserving the culture, language and history of his people. Waiya met with students, Aboriginal leaders, and local Waterkeepers. He also met with government officials and executives from the petroleum company BHP Billiton to discuss plans to bring Australian liquefied natural gas to California through the Ventura Coast.



After a meeting with the Moogji Aboriginal Council to discuss their experiences managing the local environment, Mati and Uncle Albert Mullet, Gunnai/Kurnai Aboriginal Elder, visited the banks of the Snowy River.

Photos: Ventura Coastkeeper



Gina Melendez (Wishtoyo Foundation/Ventura Coastkeeper Board member) with a friendly koala

Mati with a wombat - Caversham Wild Animal Park, Whiteman's Park, Perth

Agua y Acción en América Latina



Latin American nations continue on their search for economic development, some with more success than others, but with a common burden of increasing poverty.

Las naciones Latinoamericanas continúan buscando el desarrollo económico, algunas con mayor grado de éxito que otras, aunque a todas les es común el flagelo de la creciente pobreza.

Water and Action in Latin America

By Fernando Rey

Mangrove forest Bosque manglar Photo:Terri Garland



species than the Atlantic Ocean.

América Latina contiene 40 por ciento de los

especies de animales y plantas del planeta – la

cuenca amazónica cuenta con 3.000 especies de peces, más que todo el océano Atlántico.

Fishermen in the Mamirau Reserve in the Amazon, Brazil. Pirarucu is an endangered fish that can grow up to ten feet long and weigh up to 400 pounds.

Pescadores en la reserva Mamirau en la cuenca Amazónica, Brasil. El Pirarucu es un pez en peligro de extinción, que puede llegar a diez pies de larga y 400 libras.

AP Photo/Paulo Santos

The countries in the region share many concerns with regard to the environment. Traditionally, Latin America has provided the raw materials required for industrialization to more developed countries. As a result, industrial development in Latin American lags far behind. While the resources - whether mined, cut from forests, or stripped from the sea – leave, the resulting environmental destruction remains. The impacts fall heavily on the most unprotected sectors of the population.

Water pollution in Latin America can be traced to a few main causes: untreated sewage, industrial waste, modern agriculture, petroleum and mineral mining, and giant coastal tourism complexes. In general, Latin American states do not monitor or control industrial polluters. Government agencies lack tools and capacity, while the affected populations lack access to government. The role of civil society organizations, such as Waterkeeper Alliance, is increasingly important in Latin America.

Despite many common elements, Latin America is a huge, diverse region made up of 21 countries. It is helpful to distinguish four eco-regions of Latin America: Mesoamerica, the Caribbean, the Andes and the Amazon.

Mesoamerica, also known as Central America, is known for its humid, tropical forests, its mountains and volcanoes, small rivers and lakes, mangroves, lagoons and coral reefs. Some of these ecosystems are well-preserved, but most experience advanced states of intervention.

East lie the Caribbean islands, the major and minor Antilles. They are a true paradise on earth, enjoying the fruits of a permanent tropical climate. At the same time they are exposed to the destructive storms and hurricanes that whip them every year.

The Andean region is known for its snow-capped volcanoes and rich cultural diversity. Drilling for oil and minerals (coal, nickel, copper, and gold) has contributed to the pollution of important ecosystems in the Andes. Still, one of the most serious environmental impacts is from global warming which is melting the snow-caps in the region and flooding the wetlands – sources of the rivers that feed into the Amazon basin.

The Amazon is perhaps the most critical, vulnerable, and leastunderstood eco-region in Latin America. This huge rainforest occupies a third of the subcontinent, and shelters the richest animal and plant biodiversity in the world. Together with the oceans, the Amazon plays one of the most important roles on the planet, not only as a regulator of the global climate, but as a producer of oxygen and as a carbon sink. Unfortunately, the Amazon basin also has oil. Drilling and extraction is devastating sensitive ecosystems and populations.

There are indigenous communities living in all of the eco-regions of Latin America. Many of these traditional societies conserve their ancestral practices of sustainable use of the natural resources. However, extractive industries and unsustainable agricultural activities have promoted waves of migration that displace these traditional people and replace their practices. Some migration is direct

The World Bank estimates that 125 million people in Latin America lack access to safe drinking water. In Latin America and the Caribbean 88 percent of collected sewage is dumped, untreated, directly into the water.

El Banco Mundial estima que 125 millones de personas en América Latina carecen de agua potable. En América Latina y el Caribe, 88 por vertidas directamente a los ecosistemas de aguas

En el tema ambiental los países tienen mucho en común. Tradicionalmente los países Latinoamericanos han sido proveedores de las materias primas (principalmente recursos naturales no renovables) requeridos para los procesos industriales de los países desarrollados. Por ello el grado de desarrollo industrial de Latinoamérica es aún incipiente. Mientras los recursos extraídos de la tierra, los bosques o los mares – salgan, la destrucción ambiental se queda. Los impactos ambientales generados afectan en mayor grado la salud de la población más desprotegida.

Los factores de impacto ambiental de los ecosistemas acuáticos de la región están ocasionados por algunas causas centrales: el vertimiento de aguas residuales y aguas industriales sin tratamiento; por el avance de la frontera agrícola; por la minería, y por el desarrollo de grandes complejos turísticos costeros. Los estados Latinoamericanos por lo general no realizan procesos de seguimiento y control a las industrias contaminadoras. La autoridad ambiental por lo general carece de instrumentos y capacidad de acción, al tiempo que la población más afectada carece de interlocutores ante las instancias gubernamentales. Por esta razón el papel importante de organizaciones de la sociedad civil como Waterkeeper Alliance esta aumentando en la región.

A pesar de los elementos comunes, América Latina es una región gigante y diversa de 21 países. Para un análisis ambiental se pueede distinguir cuatro grandes eco regiones: Mesoamérica, el Caribe, los Andes y la Amazonia.

Mesoamérica, también conocida como Centroamérica, se identifica por sus selvas húmedas tropicales, regiones montañosas con numerosos volcanes y ríos poco caudalosos, lagos, manglares, lagunas costeras y arrecifes coralinos. Algunos pocos de estos ecosistemas se encuentran en buen estado de conservación, mientras la mayoría experimentan avanzados procesos de intervención.

Sigamos con el gran Caribe, ese conjunto de islas Antillanas, las mayores y las menores; verdaderos paraísos terrenales que disfrutan al tiempo de las bondades de un clima tropical permanente, a la vez que están expuestos a las enormes fuerzas destructoras de las tormentas y huracanes que cada año las azotan.



Latin Americans, like this Costa Rican fisherman, depend on the health and productivity of their waterways

Los Latinoamericanos, como este pescador Costarricense, dependen en la salud y productividad de sus aguavías $\,$

Photo: Bruce Clarke

government-sponsored colonization. Other migration is the result of people leaving over-populated centers. But the so-called "settling" of natural areas has had a profound negative impact on the natural and human environment.

Latin American civil society lacks non-governmental organizations that can educate people about their rights and responsibilities regarding the environment. It needs more advocates to represent those rights and enforce the existing regulations. Waterkeeper programs in Latin America confront polluters and demand that government protect the right of citizens to clean water. This kind of advocacy is the best way to reverse environmental deterioration and improve the quality of life for all Latin Americans.

Fernando Rey is a board member for Cartagena Baykeeper and for Waterkeeper Alliance with more than twenty years of professional experience in water quality management.

Continuemos con la región Andina conocida por sus volcanes, nevados y rica diversidad cultural. La explotación agrícola irracional continúa deforestando el pié de monte para cultivar la montaña, provocando erosión de las zonas de ladera, y con ello la colmatación de cauces y ciénagas. En el transcurso de las últimas tres décadas, las industrias dedicadas a la explotación del petróleo y de los yacimientos minerales de carbón, cobre, níquel y oro, han contribuido con la contaminación de importantes ecosistemas acuáticos en la región Andina. Sin embargo, el mayor impacto ambiental esta siendo causado por el calentamiento global a nivel de los glaciares y casquetes de nieves perpetuas en la región, con el subsiguiente efecto en la zona de Páramos, en donde nacen los principales ríos que abastecen la región Amazónica.

La región Amazónica es tal vez la más crítica, la más vulnerable, la menos conocida, y a la vez las más consentida en América Latina. Esta inmensa selva húmeda ocupa más de un tercio de la superficie terrestre del subcontinente y alberga la mayor biodiversidad del mundo tanto en especies animales como en plantas. Al igual que los océanos, la Amazonia juega uno de los papeles ambientales más importantes de nuestro planeta, no sólo como regulador del clima mundial, sino como productor de oxígeno y fijador de dióxido de carbono. Desafortunadamente, la cuenca amazónica también posee petróleo. Las actividades extractivas están causando la devastación de los frágiles ecosistemas amazónicos y de muchas poblaciones de fauna silvestre.

En todas las eco regiones viven comunidades indígenas. Muchos de ellos aun conservan sus formas ancestrales de uso sostenible de los recursos naturales. Mientras las actividades extractivas y agrícolas que causan diversos impactos ambientales han sido promovidas por diferentes olas migratorias, algunas de ellas impulsadas con fines colonizadores por los propios gobiernos, y otras por el desplazamiento natural de numerosos pobladores, pero siempre en detrimento de los ecosistemas.

La sociedad civil Latinoamericana carece de organizaciones no gubernamentales que la informen acerca de sus deberes y derechos en materia ambiental. También carece de quienes representen sus derechos y hagan valer el cumplimiento de las normas y leyes vigentes.

Por ello el modelo de acción liderado por una organización ciudadana local es un paso firme y en la dirección correcta. Los programas Aguaguarda en Latinoamérica confrontan a los contaminadores y demandan que los gobiernos protejan el derecho de los ciudadanos a sus aguas limpias. Este modelo es la mejor forma de avanzar hacia el logro de resultados que pronto reversen el deterioro ambiental causado por la contaminación de los ecosistemas acuáticos, mejorando así las condiciones de vida de los habitantes más desprotegidos. WK

Fernando Rey es un miembro de la Guardabahia de Cartagena y de la Waterkeeper Alliance con más de veinte años de experiencia profesional con el manejo de calidad de agua.

BOLIVIA



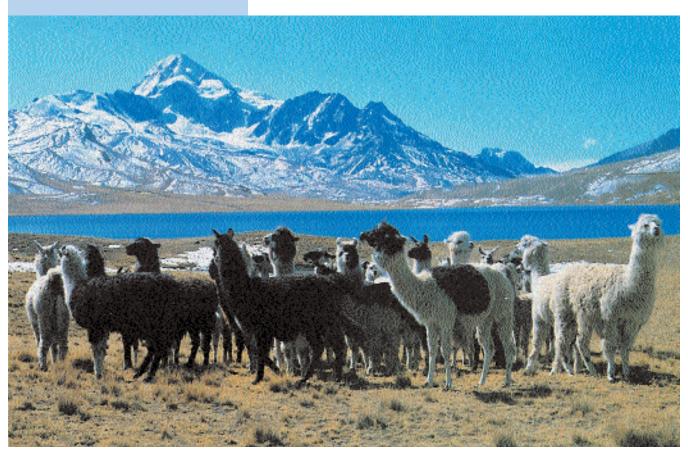
The Courage to Protect the River

El Valor Para Proteger El Río

By Danitza Defilippis Chavez

The water for the City of La Paz, Bolivia, comes from the melting snows of the high Andes. At its source high in the mountains water quality is excellent and the fish are safe to eat. But the purity of these waters does not last for long as it races down the mountains and through La Paz.

El agua para la ciudad de La Paz, Bolivia, proviene de los deshielos de los Andes. En sus orígenes en el altiplano el agua es de excelente calidad, existiendo lugares donde inclusive se puede pescar. Sin embargo, la alta pureza inicial no puede aguantar la contaminación que recibe en su trayectoria.



Choqueyapu River begins in the high Andes. El Río Choqueyapu empieza en las tierras altas andinas.

Photo: Choqueyapu Riverkeeper



Danitza Defilippis Chavez is an environmental lawyer whose commitment to environmental protection and sustainable development has guided her work on environmental legislation, community education, and as the Choqueyapu Riverkeeper

Danitza Defilippis Chavez, la Chaqueyapu Guardarío, es una abogada ambiental. Ha contribuido tanto en la legislación nacional ambiental como en la concientizacion de las comunidades afectadas. Está guiada por su convicción de la urgente necesidad de precautelar el medio ambiente y encontrar un desarrollo sostenible en el país

Photo: Alvaro Cortés Navarro

The Choqueyapu River, based on recent studies, has been pronounced biologically dead.

Wastewater from factories and sewage from drains, homes, hospitals, and the municipal slaughterhouse are dumped untreated into the river. Although La Paz is a city of about a million inhabitants, no measures are taken whatsoever to remove pathogens, heavy metals, chemicals, detergents, and other poisons from the water. At the same time, due to lack of education, garbage is commonly dumped indiscriminately on the river banks.

The Choqueyapu Riverkeeper program was launched to teach citizens of La Paz that they have the right and responsibility to protect their river. The first priority for the program was to educate the public about the problems of water contamination and to build support for our vision of clean, safe water. We promoted educational



Aymara communities living in the southern agricultural region below La Paz depend on the quality of the Choqueyapu River. Not only do they consume the sewage-laden river water, they use it to irrigate and wash crops that they sell back to city dwellers. This puts the entire population at risk of disease.

Los campesinos Aymaras habitando las zonas agrícolas del sur sufren los efectos de la contaminación del Rió Choqueyapu. Además de consumir las aguas residuales, estas aguas también son empleadas para regar y lavar los cultivos. Esto coloca a toda la población en riesgo de contraer diversas enfermedades.

Photo: David Mangurian, Inter-American Development Bank

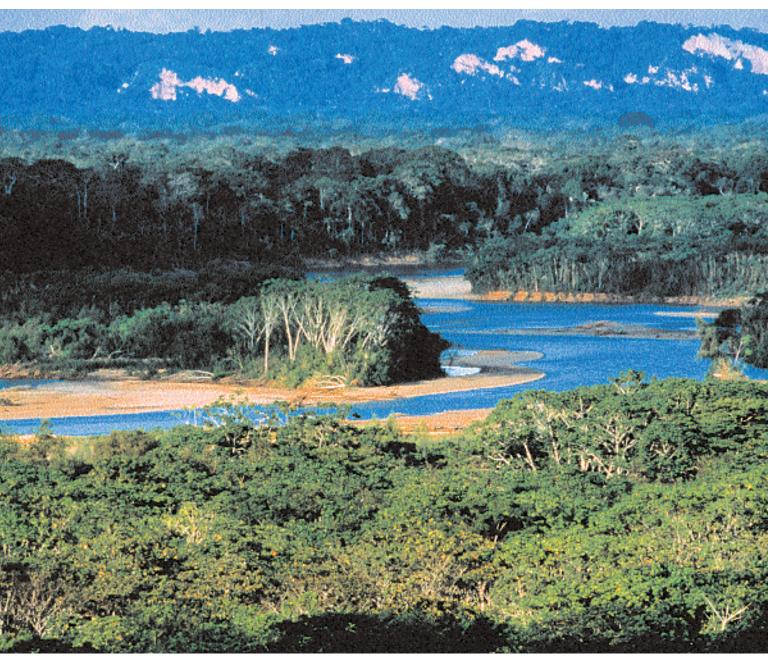
El Río Choqueyapu ha sido calificado como un río biológicamente muerto de acuerdo a los estudios realizados.

Este río recoge a su paso: las aguas vertidas por plantas industriales sin tratamiento, las aguas de las alcantarillas, domiciliarias, hospitalarias y hasta del matadero municipal, que se mezclan sin prevención alguna. Aunque La Paz tiene una población de alrededor de un millón de habitantes, no existen medidas para la eliminación de patógenos como metales pesados, compuestos químicos, detergentes y otros tóxicos en el agua. Además, la falta de educación ambiental hace que se echan deshechos a los cauces de los ríos indiscriminadamente.

El Guardarío Choqueyapu se dio inicio para informar la ciudadanía de La Paz que tiene el derecho y la responsabilidad de proteger el rió. En principio se consideró que era prioritario que la población tome conciencia de este problema que le afecta directamente, para que sea el principal protagonista del cambio. Para ello se realizaron varias acciones de difusión, de la problemática, considerando al agua como el elemento principal para la vida y para la salud.

En el ano 2000, se logro recolectar mas de diez mil firmas para una petición al Alcalde de la Ciudad de La Paz para asegurar de que las industrias traten sus aguas residuales, proteger la producción de alimento de los impactos de aguas contaminadas, y prevenir el vertido de basura y escombros.

Aunque Bolivia tiene una Ley del Medioambiente desde hace diez años, casi no se le hace cumplir en La Paz. El lenguaje de la lev es fuerte, pero se necesitaría una combinación de cabildeo efectivo con los oficiales del gobierno y apoyo popular masivo para que



The Choqueyapu River flows to Madidi Park in the Amazon Basin El Choqueyapu desemboca en el Parque Madidi en la Cuenca Amazónica

Photo: Adventure Life and Chalalan Lodge

campaigns with schools and universities. We held media events, organized public rallies, and hosted neighborhood workshops to report on the pollution of our rivers.

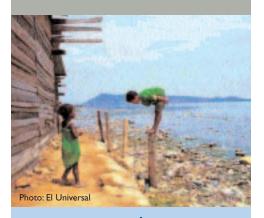
In 2000, this effort culminated in a petition, signed by more than 10,000 citizens, demanding that the Mayor of La Paz ensure that industries treat their sewage, protect the food supply from the impacts of water pollution, and prevent the dumping of garbage into our waterways.

While Bolivia has a ten year old Law of the Environment on the books, it is rarely enforced in La Paz. The language of the law is quite strong, but it will take a combination of effective advocacy with government officials and overwhelming public support before they have the courage to stop illegal pollution. The Riverkeeper program is actively working towards a time when the government and polluters will no longer be able to ignore public health or our environmental laws.

tengan el valor de parar la contaminación ilegal del Río. El programa Guardarío esta trabajando para un futuro en que el gobierno y las contaminadoras no podrán ignorar la salud pública ni la legislación am biental. WK

Waterkeeper Magazine Winter 2005 www.waterkeeper.org

COLOMBIA



Restoring The Water The Cartagena Baykeeper

Restaurando El Agua La Guardabajía de Cartagena

> By Mauricio Giraldo & **Fernando Rey**

Cartagena is a city surrounded by water. More than a million people with water on almost all sides - the Caribbean Sea in the north and west, Cartagena Bay in the south, and the Cienaga de la Virgen lagoon in the northeast. The city itself is traversed by interconnected channels and lakes

Cartagena es una ciudad rodeada por el agua. Más de un millón de personas están, casi por todos lados, rodeadas por agua - el Mar Caribeño al norte y al oeste, la Bahía de Cartagena al sur, y la laguna Ciénaga de la Virgen al noreste. A la ciudad misma la atraviesan canales y lagos interconectados.

Cartagena is Colombia's largest tourist area with an annual influx of 700,000 national and foreign visitors drawn by its tropical climate, natural beauty, and historical sites. In 1984 the United Nations declared the old city, fortresses, and monuments a Cultural Heritage Site of Humanity.

The city is economically dependent on the tourism industry, generating an estimated \$315 million each year. Cartagena also has petrochemical, beverage, and seafood processing industries, mostly located in the Mamonal Industrial Zone. In addition, Cartagena is the region's most important port city, moving more than 10 million tons of cargo per year.

The city and surrounding district is a complex area, particularly from the socio-economic and ecological perspective. Cartagena is a destination for rural Colombians displaced by violence in the countryside and looking for better economic opportunities. Cartagena's population has doubled in the past 20 years.

The city's water resources contribute significantly to the quality of life of its residents, who depend heavily on clean water for swimming and water sports, commercial and recreational fishing, tourism, and other commerce. Unfortunately, the water bodies surrounding Cartagena are severely befouled by wastewater. Water and sanitation infrastructure lag far behind the needs of this growing city. Where no sewage collection system exists, raw sewage flows on the streets. Even where it is collected, overflows from the overloaded sewage pipes are common.

In addition to the organic contamination of the Cartagena Bay, the waterways receive all types of untreated industrial waste from the Mamonal Industrial Zone. Agricultural pollutants, including highly toxic herbicides and pesticides, are another growing problem.



Residents and wildlife share the waters edge with trash. Residentes y la vida silvestre comparten la orilla con la basura. Photo: El Universal

This pollution is killing Cartagena Bay – several species of fish and crustacean are no longer present. The problems will only get worse if no effective action is taken against polluters of the bay and its surroundings.

Over the years, Colombian government's Environmental National Authority has studied the problem. But while unequivocal evidence piles up, little real progress has been made to solve the problem. The government has taken some steps. Since 1993, the Ministry of the Environment has created new local, regional, and state-level environmental agencies. But this huge new governmental bureaucracy has done nothing to stop polluters. With no full-time watchdog on the water, there is no one holding polluters to the existing environmental standards.

Cartagena Baykeeper formed to fill this void. We track down polluters ourselves, raise public awareness of the problems that face our waterways, and sue when necessary to stop pollution. One of our first actions was to create a detailed map showing the major sources of water pollution – industrial discharges and sewage outfalls affecting Cartagena Bay and the Cienaga de La Virgen. The map was published in Cartagena's newspaper "El Universal," indicating the name and location of each business known to discharge industrial effluents into the bay. Public scrutiny of these companies' wanton pollution is a strong incentive for managers to reconsider their practices. Using this we have raised awareness among local citizens and established a large environmental coalition to support legal actions against polluters.

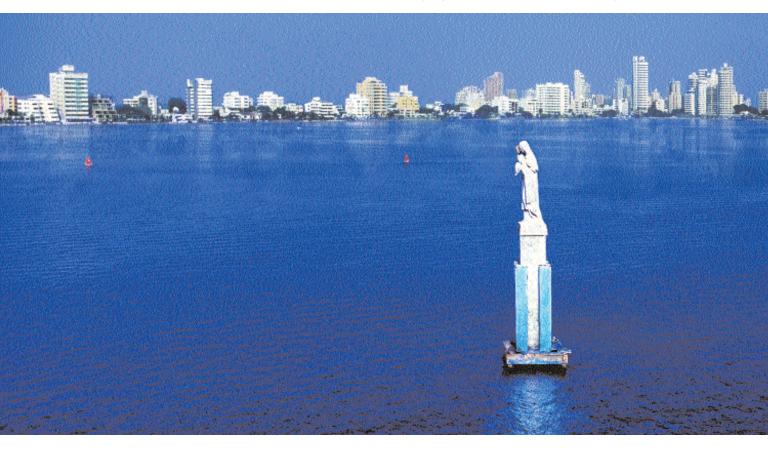
Cartagena es el área turística más grande de Colombia,

con una afluencia anual de alrededor de setecientos mil visitantes nacionales e internacionales, atraídos por el clima tropical, la belleza natural y los sitios históricos. En 1984, las Naciones Unidas declaró la antigua ciudad, las fortalezas y los monumentos como un Sitio de Patrimonio Cultural de la Humanidad.

La Ciudad depende económicamente del turismo, que genera alrededor de trescientos millones de dólares americanos cada año. También, Cartagena tiene industrias petroquímicas, de bebidas y de procesamiento de mariscos, casi todas ubicadas en la Zona Industrial Mamonal. Además, Cartagena es la ciudad con el puerto más importante de la región, porque mueve más de diez millones de toneladas de carga cada año.

La ciudad y el distrito alrededor de ella es un área compleja, especialmente desde la perspectiva económica y ecológica. Cartagena es un destino de los colombianos de áreas rurales desplazados por la violencia en el campo, que buscan mayores oportunidades económicas. La población de Cartagena se ha duplicado en los últimos veinte años.

Los recursos de agua de la ciudad contribuyen significativamente a la calidad de vida de los residentes, quienes dependen mucho del agua limpia para nadar, los deportes, la pesca comercial y recreativa, el turismo, y otras actividades del comercio. Desafortunadamente, las masas de agua que rodean Cartagena son severamente contaminadas por las aguas negras. La infraestructura del agua y los servicios sanitarios van a la zaga de las necesidades



Waterkeeper Magazine Winter 2005 www.waterkeeper.org

Cartagena Baykeeper educates and motivates the public by bringing current local issues on water pollution and environmental conservation directly to the media, to the public, to public officials, and to polluters. The Baykeeper program faces many challenges - we still require a vessel with an outboard engine and funds to acquire evidence before we can pursue litigation. But the fight to restore Cartagena Bay has begun. wk

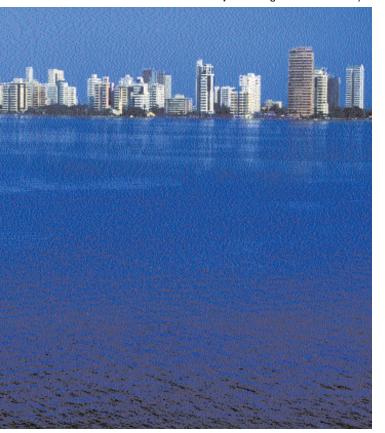


Fruit vendor on the beach Vendedor de frutas en la blava Photo: Luke Mastin

Mauricio Giraldo is the Cartagena Baykeeper & Fernando Rey is a board member for Cartagena Baykeeper and for Waterkeeper Alliance.

Mauricio Giraldo es el Guardabahia de Cartagena y Fernando Rey es un miembro de la junta directiva para el Guardabahia de Cartagena y para la Allianza Waterkeeper.

El Reflejo de la Virgen Photo: Carlos Hoyos



de esta ciudad creciente. Donde no hay un sistema de recolección de aguas negras, éstas fluyen en las calles. Aún donde se recogen, son comunes los desagües porque las tuberías del alcantarillado están sobresaturadas.

Además de la contaminación orgánica de la Bahía de Cartagena, las vías fluviales reciben todo tipo de desechos industriales no tratados de la Zona Industrial Mamonal. Los contaminantes agrícolas, entre ellos herbicidas y pesticidas altamente tóxicos, son otro problema creciente.

Esta contaminación está matando a la Bahía de Cartagena. Varias especies de peces y mariscos ya no existen. Los problemas empeorarán si no se toman acciones efectivas en contra de los que están contaminando la bahía y sus alrededores.

En el transcurso de los años, la Autoridad Ambiental Nacional de Colombia ha estudiado el problema. Mientras se acumulan pruebas inequívocas, son pocos los avances que se han realizado para resolver el problema. El gobierno ha dado algunos pasos. Desde 1993, el Ministerio del Medio Ambiente ha creado nuevas agencias ambientales locales, regionales y estatales. Sin embargo, esta nueva burocracia gubernamental no ha hecho nada para detener a los que están contaminando. Sin un guardián de tiempo completo que vigile el agua, nadie asegura que los que están contaminando al agua cumplan con las normas existentes sobre el medio ambiente.

Se formó el Guardián de la Bahía de Cartagena en el 2003 para llenar este vacío. Nosotros mismos buscamos a los que están contaminando al agua, concientizamos al público sobre los problemas que enfrentamos con las vías fluviales, cuando es necesario llevamos demandas para parar la contaminación. Una de nuestras primeras acciones fue la de crear un mapa detallado que muestra las fuentes principales de la contaminación del agua - emisiones industriales y desagües de aguas negras afectando a la Bahía de Cartagena y la Ciénaga de La Virgen. El mapa fue publicado en el 2001 por el periódico de Cartagena, "El Universal", indicando el nombre y la ubicación de cada negocio que estaba emitiendo efluentes industriales en la bahía. Un examen público de la inexcusable contaminación realizada por estos negocios ofrece un incentivo fuerte que hace que los gerentes reconsideren sus prácticas. Utilizando este método, hemos concientizado a los ciudadanos locales y hemos establecido una coalición ambiental grande para apoyar las acciones judiciales en contra de los que están contaminando el agua.

El Guardián de la Bahía de Cartagena educa y motiva al público, llevando temas locales actuales sobre la contaminación del agua y la conservación del medio ambiente directamente a los medios de comunicación, al público, a los oficiales públicos y a los que contaminan el agua. El programa de Guardianes de la Bahía enfrenta muchos desafíos - todavía necesitamos una embarcación con un motor fuera de borda, y financiamiento para adquirir las pruebas necesarias para el litigio. Sin embargo, ya se ha emprendido la lucha para restaurar la Bahía de Cartagena. WK

MEXICO



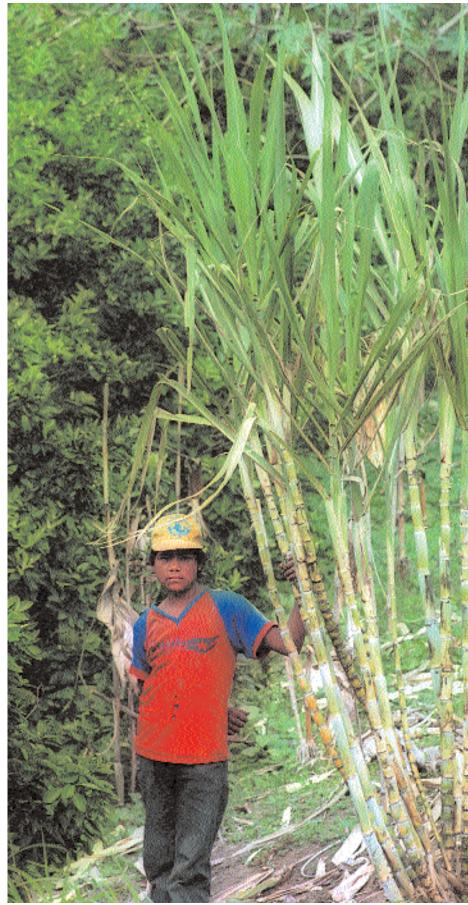
Río Hondo Riverkeeper Guardians of Mexico's last natural frontier

Guardarío de Río Hondo Guardianas de la última frontera natural de México

By Maria L. Villarreal-Sonora

Aerial photograph of upstream protected areas. Thanks to Light Hawk for flight support for aerial photos.

Foto aéreo de las áreas protegidas, río arriba. Gracias a Light Hawk por su apoyo con la fotografía aérea. Photo: Luis Mora



Río Hondo is the natural border between Belize, Guatemala, and Mexico, running 169 kilometers from its birth place in the Maya Biosphere Reserve in Guatemala to its delta in the Chetumal Bay, Mexico.

El Río Hondo, que funciona como frontera natural de México con los vecinos países de Belice y Guatemala, corre a lo largo de 169 kilómetros desde su nacimiento en la Reserva de la Biosfera Maya, en Guatemala hasta su desembocadura en la Bahía de Chetumal, México.

The Río Hondo Riverkeeper program monitors the river's 16,000 square kilometer watershed. This place is astonishingly beautiful, with a wide range of ecosystems from mountaintops to coastal mangrove forests on the Caribbean Sea.

Most of the people of the Río Hondo watershed are artisans – subsistence farmers, fishermen, and craftsmen whose livelihood is directly linked to the health of their river. Sustainable development of the Río Hondo watershed is central to the long-term health of the communities that surround the river. The Riverkeeper program is working in a coalition with other groups and two universities to develop coastal management plans to ensure that eco-tourism and other uses of the coast are appropriate and sustainable. We are also working on international issues such as trans-boundary parks to preserve endangered species because the manatee, sea turtles, and other species don't know or respect political boundaries.

Río Hondo is a paradise, but in this paradise we are facing a serious threat from chemical-dependant corporate agriculture. For more than four decades sugar cane plantations have used vast quantities of agrochemicals to produce their crops. These chemicals spill over land and water damaging the health of communities living on the river and impacting tropical forest ecosystems and riparian habitat. Health impacts have never been quantified, and much of the time they are not even recognized. Local medical personnel lack even basic technical knowledge about these chemical products. But sugar cane workers and their families are exposed to these chemicals every day of their lives. Lack of awareness of the risks to communities by medical professionals, and lack of oversight of the practices of these large industrial farms by the government

El programa Guardarío de Río Hondo trabaja en un área de aproximadamente 16,000 kilómetros. Este lugar posee áreas de fantástica belleza, y una gama muy amplia de ecosistemas que van desde las montañas hasta los manglares costeros del mar Caribe.

La mayoría de los habitantes del ecosistema, Río Hondo son campesinos, pescadores, y artesanos quienes sustento está directamente relacionado al bienestar del río. Desarrollo sustentable de la cuenca de Rio Hondo es central para el bienestar de las comunidades alrededores. El programa Guardarío está trabajando en una coalición con otros grupos y dos universidades para desarrollar planes de manejo para las zonas costeras y para asegurar que los usos, como es el ecoturismo, son sustentables y apropiados para la zona. Trabajamos también en temas internacionales para la región, parques transfronterizos y especies en riesgo - porque los manatíes, tortugas y algunas otras especies no saben de fronteras.

Rio Hondo es un paraíso en verdad, pero en este paraíso hay problemas. Por más de cuatro décadas el cultivo de caña ha utilizado enormes cantidades de agroquímicos que se han vertido sin control sobre suelos y aguas, dañando la salud de los habitantes de la ribera, impactando fuertemente a las selvas tropicales y en general todo el entorno ecológico que rodea a este importante hábitat y sus pobladores humanos. El impacto sobre la salud que estas actividades están generando no ha sido cuantificado, y la mayor parte del tiempo no es reconocido. La carencia de conocimientos técnicos básicos sobre el manejo de los productos químicos, la falta de conciencia sobre el riesgo al que se someten los trabajadores de la caña de azúcar y sus familias cada día



Leydi Muñoz and Martin Balam, Riverkeeper staff, sampling riparian habitat to document the impacts of pesticides on wildlife Guarda Río miembros tomando ejemplares del hábitat para documentar los impactos de las pesticidas en la vida silvestre Photos: Luis Mora



Aerial photograph of part of the 40,000 hectares (100,000 acres) of sugar crops in the Río Hondo watershed Foto aéreo de parte de los 40 mil hectáreas de cultivos de caña en la cuenca Río Hondo

has blended into a silenced environment of complicity and apathy.

As a biologist and community activist in Southeastern Mexico, I saw the need for my community to break the silence and take action to protect ourselves. In 2001, I started the Río Hondo Riverkeeper program as a program of COBIOTEC, a Mexican community organization based in the northern portion of the watershed. Our watershed needed a vigilant organization to look out for the health of the community and the river – that's why I became the Río Hondo Riverkeeper.

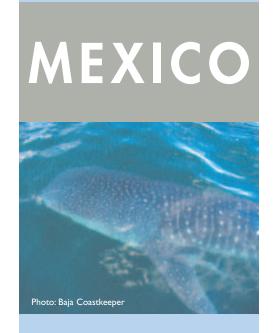
We began by walking house to house in effected communities, interviewing people about their family's health and their handling of toxic chemicals while working on the sugar plantations. With our preliminary report we approached the local Citizen Council for Marine Pollution and Research, chaired by the Mexican Navy, and presented our action plan to address this growing problem.

We are establishing a specialized medical center to attend to those suffering the effects of exposure to these chemicals; a support and rehabilitation program for the more than three thousand men, woman, and children whose lives have already been affected; an education program on the handling and management of chemicals, residuals, and containers; and a waste handling and confinement program. Additionally we will work with the farmers to evaluate and test alternative sugar cane plague management, because, after all, that is the same sugar we take to our family and our dinner table every day. WK

de sus vidas, más aún, la falta de experiencia sobre el manejo de este tipo de casos por parte de personal de emergencias y médico, han llegado a crear un ambiente de silenciosa complicidad y pasmo.

Como una bióloga y activista comunitaria en el sureste de México vio la necesidad para la comunidad de romper el silencio y tomar acción para protegernos. En 2001 empecé el programa Rio Hondo Guardarío bajo el cobijo de una ONG mexicana, COBIOTEC, en la porción norte de la cuenca hidrológica del Río, la porción mexicana. Nuestra eco-región hacia falta una organización vigilante para fijarse en el bienestar de la comunidad tanto como del rió – por esta razón llegue a ser la Rio Hondo Guardarío.

Inicialmente recorrimos las casas de cónico comunidades encuestando y recopilando información sobre los procedimientos de manejo y los efectos de los químicos sobre la gente y los ecosistemas. Con el reporte de observaciones acudimos al Consejo Ciudadano de Contaminación e Investigación del medio marino, presidido por la Marina Armada de México, y presentó nuestro plan de acción frente este problema creciente. Estamos trabajando para establecer un centro de atención especializada en intoxicaciones; un programa de apoyo y rehabilitación para personas afectadas (que sobrepasa los 3,000, hombres, mujeres y niños); un programa de educación y manejo de químicos, residuos o envases; y un programa de manejo y confinamiento de residuos. Adicionalmente se buscará trabajar con los grupos de agricultores para evaluar y probar alternativas de manejo de plagas para la caña de azúcar, porque después de todo, es la misma azúcar que llevamos a nuestras familias y a nuestras mesas cada día. wk



Charting the Course
The Baja California Coastkeeper

Mapiando el Derrotero Guardacosta de Baja California

By Serge Dedina

The rock walls that protrude into the Pacific shoreline of Santa Rosalillita, a tiny fishing village of fewer than 100 residents on the Pacific coast of the Baja California peninsula in Mexico, are more mirage than marina.

Las murallas rocosas que sobresalen a lo largo de la playa del Pacífico de Santa Rosalillita, una pequeña aldea pescador de menos de cien residentes en la costa del Pacífico de la península de Baja California en México, parecen más un espejismo que una marina.

Abandoned marina at Santa Rosalillita – the same type proposed for Bahia de los Angeles. Marina abandonada en Santa Rosalillita – la misma que se ha planificado para la Bahía de los Angeles.

Photo: Baja Coastkeeper





Bahia de los Angeles Photo: Baja Coastkeeper

Serge Dedina stands on the road-to-nowhere, an unused, illegally built highway to the deserted marina in Santa Rosalillita

Serge Dedina parado en la camino-hacia-nada una autopista ilegal y no usada, que va hasta la marina desertada en Santa Rosalillita

Photo: Los Angeles Times

The Santa Rosalillita jetties were once destined to be the centerpiece of Mexican President Vincente Fox's ambitious \$1.7 billion Escalera Nautica or Nautical Ladder, a plan to develop 27 yacht marinas, golf courses, hotels, new highways, new cities, and a land bridge for hauling yachts that would span the Peninsula from the Pacific at Santa Rosalillita to Bahia de Los Angeles, 70 miles eastward on the Sea of Cortez.

Today, salty fishermen in Santa Rosalillita shake their heads in disgust while watching waves break over the top of the now abandoned marina that has become a multi-million dollar sandbox. A lawsuit filed by Baja California Coastkeeper and the Grupo de los Cien resulted in an \$80,000 fine against the marina developer by the Mexican Environmental Protection Agency for failing to obtain required project permits.

Apparently the Mexican government learned little from the Santa Rosalillita marina disaster. Last year President Fox approved a 500 slip marina for Bahia de Los Angeles. The proposed marina project is just one of many shady projects that threaten the last coastal wildlands in the rugged and sparsely populated Baja California peninsula.

As the Baja California Coastkeeper, it is my job to assist a team of activists, community leaders, and passionate environmental attorneys to preserve areas that are home to gray whales, sea turtles, bottlenose dolphins, whale sharks, and fishermen and their families. It is not an easy task. Their livelihoods are under assault by the most powerful corporations on the planet, shady developers and

En algún tiempo los malecones de Santa Rosalillita se destinaron para ser el eje de la Escalera Náutica, un plan ambicioso de siete millones de dólares del Presidente Fox de México, que incluía el desarrollo de veintisiete marinas para yates, campos de golf, hoteles, carreteras nuevas, ciudades nuevas y un puente terrestre para sacar yates que abarcaría la Península desde el Pacífico en Santa Rosalillita hasta la Bahía de Los Angeles, setenta millas al este del Mar de Cortés.

Hoy, los pescadores de Santa Rosalillita muestran su disgusto mientras ven las olas romperse encima de la marina abandonada que se ha convertido en una caja de arena que vale millones de dólares. Una demanda presentada por Baja California Guardacosta y el Grupo de los Cien resultó en una multa de ochenta mil dólares impuesta por la Agencia Mexicana para la Protección del Medio Ambiente, en contra del promotor de la marina, porque no obtuvo los permisos requeridos para el proyecto.

Aparentemente, el gobierno mexicano aprendió poco del desastre de la marina de Santa Rosalillita. El año pasado, el Presidente mexicano Vicente Fox aprobó una marina, con capacidad para quinientas embarcaciones, para la Bahía de los Angeles. La marina propuesta es solamente uno de los muchos proyectos dudosos que amenazan las últimas tierras silvestres costeras de la península de Baja California que es escabrosa y poca poblada.

Como el Guardián de la Costa, es mi trabajo ayudar a un equipo de activistas, dirigentes comunitarios y abogados ambientales apasionados a que preserven las áreas donde viven ballenas grises, tortugas de mar, delfín con nariz en forma de botella, tiburones ballenas, y pescadores y sus familias. No es una tarea fácil. Su subsistencia se ve atacada por las corporaciones más poderosas del planeta, por promotores dudosos y por los cazadores que no temen utilizar la violencia para proteger su presa ilegal.

Fernando Ochoa y Fermín Smith ejemplifican muy bien el dinámico equipo apoyado por el Guardacosta Baja California. Fernando se trasladó a Baja California desde el Distrito Federal de México hace dos años, decidido a utilizar su licenciatura en derecho para apoyar a los pobres que viven en áreas rurales de México, defendiendo a sus familias y a sus comunidades en contra de los invasores de corporaciones, de las agencias corruptas del gobierno, y de una mafia de urbanizadores bien conectados.

poachers unafraid to use violence to protect their illegal catch.

Fernando Ochoa and Fermin Smith best exemplify the dynamic team that Baja California Coastkeeper supports. Fernando moved to Baja California from Mexico City two years ago determined to put his law degree to work to assist Mexico's rural poor defend their families and communities against corporate raiders, corrupt government agencies, and a mafia of well-connected developers.



Fermin Smith of Bahia de los Angeles, a leader in the fight to stop the proposed marina. Fermin Smith de la Bahía de los Angeles, un dirigente en la lucha para parar la marina propuesta. Photo: Baja Coastkeeper

With the assistance of Baja California Coastkeeper and the Global Green Grant Fund, he started the Northwest Environmental Law Center (DAN) - the only environmental law institute outside of Mexico City in the country. Within months he had joined forces with Pronatura, a conservation organization, and Fermin, a lifelong fishermen and former mayor of his isolated hometown of Bahia de los Angeles (who now works with Pronatura.)

Two weeks after learning of Fox's decision to approve the marina, Fernando and DAN assisted Fermin and the Ejido (a communal landowner cooperative) of Bahia de los Angeles to file an injunction in federal court to stop the marina. The inhabitants of the town, who make their living from eco-tourism and sport-fishing, claim the marina will destroy one of the most important whale shark feeding sites in the entire Eastern Pacific. The Mexican government never notified the community of their plan to give private developers an exclusive concession to a salt marsh wetland and beachfront the town's impoverished residents use for their livelihoods.

Fernando is confident that the injunction will be successful because the project does not, "comply with any law that regulates development."

By taking legal action against the Mexican government for approving a marina that could destroy their way of life, the courageous fishermen and their families of Bahia de los Angeles are inspired by the image of the abandoned marina in Santa Rosalillita. The two jetties that make up that marina are now the favored recreational spots for the sons and daughters of local fishermen. They are the marina's only users, patiently hand-lining for halibut and corvina off the boulders of its abandoned breakwater.

Fermin and the inhabitants of Bahia de los Angeles have run out of patience. Their children's future lies in their ability to chart their own course. As Fermin tells me one day while we look out over the Sea of Cortez community he calls home, "We have to stand up for our town and our way of life. Protecting this place is the only way we will have a future." wk

Serge Dedina is the Baja California Coastkeeper and the Executive Director of Wildcoast. He is the author of Saving the Gray Whale.

Con la ayuda del Guardacosta Baja California y el Fondo de Financiamiento Global Green, él lanzó la Defensa Ambiental del Noreste (DAN), el único instituto de Derecho Ambiental fuera del Distrito Federal en todo el país. En unos meses, él había unido fuerzas con Pronatura, una organización conservacionista, y con Fermín, un pescador de toda la vida y el antiguo alcalde de su aislado pueblo de la Bahía de los Angeles (ahora él trabaja con Pronatura.)

Dos semanas después de conocer la decisión de Fox de aprobar la marina, Fernando y DAN ayudaron a Fermín y al Ejido (una cooperativa de tenencia comunal de la tierra) de la Bahía de los Angeles a presentar un requerimiento judicial en los tribunales federales para parar la marina. Los habitantes del pueblo, quienes se ganan la vida del ecoturismo y de la pesca deportiva dicen que la marina destruirá uno de los sitios más importantes que alimenta a los tiburones ballenas en todo el Pacífico del Este. El gobierno mexicano nunca notificó a la comunidad sobre el plan de otorgar a un promotor privado una concesión exclusiva de una ciénaga pantanosa salada y de propiedad junto a la playa que los residentes empobrecidos del pueblo utilizan para sostenerse.

Fernando tiene plena confianza que el requerimiento judicial tendrá éxito porque el proyecto "no cumple con ninguna ley que regule el desarrollo."

Al tomar una acción legal en contra del gobierno mexicano por haber aprobado una marina que podría destruir su estilo de vida, los valientes pescadores y sus familias de la Bahía de los Angeles son inspirados por la imagen de la marina abandonada en Santa Rosalillita. Los dos malecones que forman parte de la marina son el lugar preferido de recreación para los hijos y las hijas de los pescadores locales. Son los únicos que utilizan la marina, y pacientemente pescan hipoglosos y corvinas desde las rocas de los rompeolas abandonados.

Se ha acabado la paciencia de Fermín y los habitantes de la Bahía de los Angeles. El futuro de sus hijos depende de su capacidad para marcar su propio camino. Como me decía Fermín un día mientras mirábamos hacia el Mar de Cortés y desde la comunidad que es su hogar, "Tenemos que defender nuestro pueblo y nuestro estilo de vida. Proteger este lugar es la única manera en que tendremos un futuro." WK

Serge Dedina es el Guardián de la Costa en Baja California y el Director Ejecutivo de Wildcoast. Es el autor de Saving the Gray Whale.

MEXICO

Bays of Angels
Saving an ocean icon in
Baja California and beyond

Bahía de los Ángeles La salvación de un icono del océano en Baja California y más allá

By W.J Nichols

Isidro Arce is a tall, quiet man. He speaks with the authority of one who knows he is right and who has his feet set firmly on the earth.

His friend, Javier Villavicencio, is not quiet. His words come at you fast, complement Isidro's punctuated wisdom, and fill the air with passionate pleas and clear arguments on why we should have mercy for the animals, deep respect for the seas, and more care for our coastal waters.

Together, these men are the Punta Abreojos
Coastkeeper. These men tend the waters surrounding
their native Baja California village and prevent the
extinction of the creatures inhabiting it.

Water equals life. It covers most of our planet. It governs our climate. It feeds us. It makes our bodies. We breathe because there is water. Water is most certainly our Holiness.

Those who keep the water. Watch over it. Protect it. Guard it. They are our Holy Men.



Isidro Arce es un hombre alto y callado. Habla con la autoridad de los que saben que tienen razón y de los que tienen los pies firmes sobre la tierra.

Su amigo, Javier Villavicencio, no es callado. Sus palabras surgen con rapidez, complementan la sabiduría interrumpida de Isidro y llenan el aire con peticiones apasionadas y argumentos evidentes que explican las razones por las cuales debemos ser misericordiosos con los animales, respetar profundamente los mares y cuidar más las aguas costeras.

Huntos, estos hombres son el Gurdacosta del Punta Abreojos. Estos hombres cuidan las aguas que rodean su tierra nativa de Baja California y previenen la extinción de las criaturas que las habitan.

El agua es vida. Cubre la mayor parte del planeta. Determina el clima. Nos alimenta. Constituye nuestros cuerpos. Podemos respirar porque hay agua. Con la mayor de las certezas podemos afirmar que el agua es nuestra Santidad.

Las personas que cuidan el agua. La vigilan. La protegen. La custodian. Esas personas son nuestros Santos.



Twelve kilometers offshore of Punta Abreojos there is an underwater ridge at 40 fathoms. Isidro and I are in his panga floating above it. From here we drop a dozen traps baited with mackerel. When we've set the last trap, we return to the first and begin to pull the traps up. The traps are already filled with verdillo, a medium-sized sea bass. Everything that is not verdillo or is under-sized is thrown back. We repeat the circuit several times. Pull the trap. Add bait. Drop the trap.

We've had a good morning and reached our quota quickly.

Isidro says, "This area is very productive. We come out here to fish, to supplement our lobstering and abalone. It's easy to catch fish, but we also take care of this reef."

"Taking care" is part of Isidro's nature. And by extension, it's the nature of his community. This means taking only the day's limit of verdillo, lobster or abalone. Throwing back small fish and gravid female lobsters, or leaving undersized abalone to grow on the rocks.

"If we do this now, we'll always have something for the future. Our kids can live the way we live. And so can their kids."

Isidro starts the motor and turns the boat towards a nearby comrade. We pull our pangas alongside one another.

"Qué ondas, compa?"

"Nada, nada. Más o menos," comes the reply.

Isidro begins tossing our extra verdillo into the panga of his "compa". So that his friend can go home to his family earlier too.

It's this camaraderie and community cohesiveness that allows these waters to continue to produce. This past year the fishing cooperative that Punta Abreojos belongs to was certified "sustainable" by the Marine Stewardship Council – the first fishery in Latin America to achieve this sought after eco-label.

Small fish, small lobster, small abalone—and the waters they live in—are tended, guarded, and defended so that the animals will reproduce. So that the cold Pacific currents will run clean. So that there are fish, lobster, and abalone for people. So that there always will be.

Estero Coyote

I've arrived to the edge of Estero Coyote. It's midnight or one. There's not a light on the water and when my headlights flick off, there's only the starlight.

My VHF radio crackles and I've raised Isidro on the other end. He's with Javier and Miguel Valenzuela, the fishing cooperative biologist, out at their tent camp several miles across shallow water, beds of seagrass, and mangrove mazes. They've set their net for turtles and will swing my way.

The estero is a small bay – one of eight official sea turtle monitoring sites along the Baja Peninsula. Fishermen and scientists work together to catch, tag, measure, and release turtles once a month. Over the years this will yield valuable data about population trends. It also provides information on these endangered, culturally important, animals that the fishermen and their families trust.

A 40 brazas de profundidad, a doce kilómetros frente a la costa de Punta Abreojos se encuentra un arrecife submarino. Isidro y yo estamos en su panga flotando sobre el arrecife. Desde aquí arrojamos una docena de trampas con carnada de caballa. Cuando colocamos la última trampa, regresamos a la primera y comenzamos a subirlas. Las trampas ya están llenas de verdillo, una lubina de tamaño medio. Todo lo que no sea verdillo o no tenga el tamaño suficiente es arrojado al mar. Repetimos el circuito varias veces. Retirar la trampa. Agregar carnada. Arrojar la trampa.

Hemos tenido una buena mañana y hemos alcanzado nuestra cuota rápidamente.

Isidro dice: "Esta zona es muy productiva. Venimos a pescar aquí para complementar nuestra pesca de langostas y abulones. Es fácil pescar, pero también cuidamos el arrecife."

"El cuidado" forma parte de la naturaleza de Isidro. Y por extensión, es la naturaleza de su comunidad. Eso quiere decir que sólo se pesca el límite diario de verdillo, langosta o abulón. Regresar al agua peces pequeños y langostas hembra grávidas o dejar que los abulones de poco tamaño crezcan sobre las rocas.

"Si hacemos esto hoy, siempre tendremos algo para el futuro. Nuestros hijos podrán vivir de la misma manera en que la que vivimos nosotros. Y sus hijos también."

Isidro enciende el motor y gira la lancha hacia un camarada cercano. Ponemos nuestras pangas una junto a la otra.

"¿Qué ondas, compa?"

"Nada, nada. Más o menos", responde.

Isidro comienza a arrojar el verdillo que nos sobra en la panga de su "compa". Así su amigo también puede regresar a casa y a su familia más temprano.

Son esta camaradería y unión de la comunidad las que hacen que este agua continúe produciendo. El año pasado la cooperativa pesquera a la que pertenece Punta Abreojos fue declarada "sustentable" por el Marine Stewardship Council – la primera pesquería de América Latina que logra esta deseada calificación ecológica.

Pequeños peces, langostas, abulones – y las aguas que habitan – son cuidadas, protegidas y defendidas para que los animales puedan reproducirse. Para que las frías corrientes del Pacífico corran limpias. Para que la gente tenga pescado, langostas y abulones. Para que siempre haya.

Estero Coyote

He llegado a la orilla del Estero Coyote. Es medianoche o la una de la mañana. No hay ni una luz sobre el agua y cuando apago los faros queda sólo la luz de las estrellas.

Mi radio VHF crepita y capto a Isidro del otro lado. Está con Javier y Miguel Valenzuela, el biólogo de la cooperativa pesquera, en una tienda de campamento a varias millas de distancia a través de agua poco profunda, lechos de zosteras marinas y laberintos de manglares. Han preparado la red para pescar tortugas de mar y están por arrojarla.

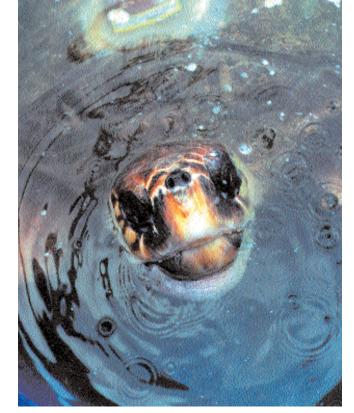


Photo: Terri Garland

First across the dark water comes the high hum of the panga, growing louder and joined by a signaling headlamp from the bow. I wade through the mudflat shallows, hop into the bow and we're moving back out.

It's cold and there's no food in my truck. It's good to see these guys.

Before we reach the camp we stop to fully inspect the turtle net. It's exactly the same net used by scores of turtle hunters up and down the coast. Light lead lines allow the turtles to surface. The top line floats between 2 large orange buoys. A pair of inescapable twelve-inch mesh nets of black-tarred nylon twine hang like curtains across the channel, perpendicular to the tidal current.

At other turtle monitoring sites it can take from 12 hours to three days to catch a single sea turtle in these nets. But Estero Coyote is rich and productive. In the time it took to swing around the bay to pick me up, four more turtles are tangled in the nets.

We work quickly, quietly, but with the tension of anticipation and action. The record here at the Punta Abreojos sea turtle monitoring site is 40 turtles in 24 hours. We're on pace to break that record. We clamp numbered tags on the rear flippers.

Javier measures the lengths of the carapaces, barks the numbers from both tags and caliper. Miguel repeats the numbers and writes on the forms. We all lift the suspended turtle to get a weight. The largest is nearly 150 lbs.

The four turtles are back into the dark warm night and they glide away, bioluminescent coils in their wake. Angels of the bay.

But the point isn't breaking records, it's much bigger than that. Isidro, Javier and Miguel take great pride that their sea turtles are coming back. They pin the nascent recovery to the same newfound



School children are learning the value of protecting their natural resources. Colegiales aprenden el valor que implica la protección de sus recursos naturales. Photo: WI Nichols

El estero es una bahía pequeña – uno de los ocho sitios oficiales de control de tortugas marítimas ubicados a lo largo de la Península de Baja. Pescadores y científicos trabajan codo a codo para atrapar, marcar y liberar tortugas una vez por mes. Con el paso de los años esta actividad aportará información valiosa sobre las tendencias poblacionales. También brinda información sobre estos animales en peligro de extinción y culturalmente importantes en los que confían los pescadores y sus familias.

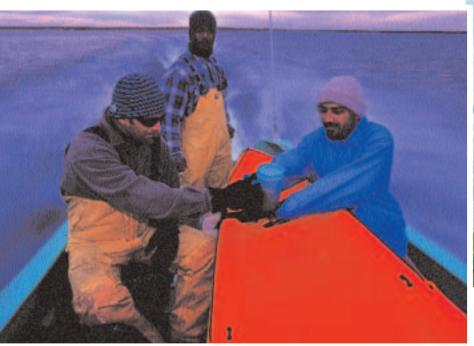
A través del agua oscura llega primero el sonoro zumbido de la lancha panga, que se hace más fuerte y es acompañado por un faro intermitente en la proa. Me meto en los bajíos de marisma, salto a la proa y navegamos.

Hace frío y en mi camión no hay comida. Es bueno ver a estos muchachos.

Antes de llegar al campamento nos detenemos a inspeccionar en detalle la red para tortugas. Es exactamente la misma red utilizada por cientos de cazadores de tortugas a lo largo de la costa. Los plomos livianos permiten a las tortugas salir a la superficie. La línea superior flota entre dos grandes boyas anaranjadas. Un par de ineludibles redes con huecos de doce pulgadas de nylon entretejido y alquitranado cuelgan como cortinas a través del canal, perpendicular a la marea entrante.

En otros sitios de control de tortugas puede tomar de 12 horas a tres días atrapar una sola tortuga marina en estas redes. Sin embargo, Estero Coyote es rico y productivo. En el tiempo que llevó atravesar la bahía para recogerme, cuatro tortugas más quedaron atrapadas en las redes.

Trabajamos rápidamente, en silencio, aunque con la tensión de la anticipación y la acción. El récord del sitio de control de tortugas marinas de Punta Abreojos es cuarenta tortugas en 24 horas. Llevamos un ritmo que puede romper ese récord. Les colocamos etiquetas numeradas en las aletas traseras. Javier mide la longitud de los caparazones, grita el nombre de ambas etiquetas y el calibre. Miguel repite los números y escribe en los formularios. Todos levantamos la tortuga suspendida para pesarla. La más grande pesa casi 150 libras.





Javier Villavicencio unloads his catch Javier Villavicencio descarga su pe capture Photo: Terri Garland

WJ Nichols, Julio Solis, and Rodrigo Rangel share a cup of tea on the way to check turtle nets on Bahia Magdalena.

WJ Nichols, Julio Solís, y Rodrigo Rangel comparten una taza de té en camino a revisar las redes para tortugas en Bahía Magdalena.

Photo: Jeffrey Lamont Brown

spirit that guides their fishing — take what you need, protect what should be protected, self-enforce within the community, and teach the children well.

Punta Abreojos Elementary School

It's "sea turtle day" at the Punta Abreojos Elementary School. Every white-uniformed kid in town is packed into the auditorium. Isidro is beaming like a lighthouse. Tall and instructive.

"We must teach the children," he explains to me, pumping his fist in the air. Of course, he's right.

When he's not fishing, or enforcing fisheries regulations in the community, Isidro is dreaming up new ways to "teach the children."

"I was thinking that the kids use pencils, right? They hold pencils ALL DAY!" He's going somewhere with the story, I'm certain.

"So I made 1,000 pencils with the message SAVE THE SEA TURTLES...DON'T EAT SEA TURTLES!"

He shows me one of the thousand, a perfect, unsharpened bright red sea turtle conservation tool. He got them for pennies each. I look around. All of the kids have one.

"These kids are thinking about saving sea turtles every day, ALL day."

Isidro stands to the back of the room as a line of students one-byone make their well-rehearsed presentations on sea turtle conservation, biology, anatomy, biodiversity and habitats. He beams. It's a beautiful, beautiful thing. Volvemos a depositar las cuatro tortugas en la cálida agua nocturna y se marchan con fluidez, dejando una estela de remolinos bioluminiscentes. Ángeles de la bahía.

No obstante, el objetivo no es romper récords, es algo mucho más importante. Isidro, Javier y Miguel se enorgullecen mucho de que sus tortugas regresen. Atribuyen la recuperación incipiente al mismo espíritu nuevo que guía su pesca – tomar lo necesario, proteger lo que se debe proteger, respetarse dentro de la comunidad y educar a los niños adecuadamente.

Escuela Primaria de Punta Abreojos

Es el "día de la tortuga marina" en la Escuela Primaria Punta Abreojos. Todo niño con uniforme blanco en el pueblo está sentado en el auditorio. Isidro brilla como un faro. Alto e instructivo.

"Debemos educar a los niños," me explica, moviendo su puño en el aire. Por supuesto, tiene razón.

Cuando no está pescando, o haciendo cumplir las regulaciones pesqueras en la comunidad, Isidro está soñando nuevas maneras de como "educar a los niños."

"Estaba pensando que los niños usan lápices, ¿verdad? iUsan lápices TODO EL DÍA!" Quiere llegar a algún lado con la historia, estoy seguro.

"iPor eso hice 1.000 lápices con el mensaje SALVE A LAS TORTUGAS MARINAS...NO COMA TORTUGAS MARINAS!"

Me muestra uno de los mil, una perfecta herramienta de



"Eating Turtle Makes You Slow" Isidro and Javier asked the Pope to intervene to stop the eating of turtles during Lent and even enlisted the President of the United States to help save the endangered sea turtle.

Isidro y Javier le pidieron al Papa que intervenga para detener el consumo de tortugas durante la Cuaresma e inclusive consiguieron el apoyo del presidente de los Estados Unidos para ayudar a salvar a la tortuga marina que se encuentra en peligro de extinción.

Photo: Grupo Tortuguero www.grupotortuguero.org

COMER CAGUAMA TE HACE LENTO

El Cereso Prison

I've never seen the business side of a Mexican prison. My imagination suggests it's a foul concrete and metal situation, surrounding a tightly wound aberration of humanity. I did take this into account when we suggested to Javier that he visit Francisco "Gordo" Fischer in the El Cereso Prison in La Paz.

On the inside, Javier met with his childhood friend. A man who had made a career and a bundle of cash out of lifting lobster, abalone and sea turtles - legally and illegally - from the waters surrounding Punta Abreojos.

Gordo had six months in el bote to think about his personal history. What he might do when he regained his freedom. His miscalculation in taking the ill-fated shortcut through the desert that took him past Punta Abreojos with seven live sea turtles in his vehicle. Those turtles - a meager fraction of the thousands of animals he had trafficked over the years – wound him up in jail.

If he could get out, he would change. Yes, he'd help. He'd give back to the oceans. Gordo agreed then to tell his story of corrupt officials, politicians feasting on endangered species, his back roads and bribes. The details would throw a bright shadowless light on the matter.

Mexico City Televisa studio

Months later in Mexico City Javier, Gordo and I sat on the set of the nation's highest rated morning news program: Televisa's Hechos de la Manana. As the team scientist, I set up the biological context and the conservation imperative. Javier drilled the interviewer with the back-story and his personal charisma. Gordo, wearing a black sea turtle conservation t-shirt, leaned back in his chair, then stole the show.

conservación de las tortugas marinas: rojo, brillante y sin punta. Los fabricó por centavos cada uno. Observo a mi alrededor. Todos los niños tienen uno.

"Estos niños están pensando en salvar a las tortugas marinas todos los días, TODO el día."

Isidro se queda de pie al final del aula mientras una fila de estudiantes uno a uno presentan sus bien ensayadas lecciones sobre conservación de tortugas marinas, biología, anatomía, biodiversidad y hábitats. Isidro sonríe. Es algo hermoso, muy hermoso.

La Prisión de Cereso

Nunca he visto el aspecto comercial de una prisión mexicana. Mi imaginación sugiere una horrorosa situación de concreto y metal, que rodea una aberración de humanidad fuertemente asegurada. Lo tomé en cuenta cuando le sugerimos a lavier que se visite a Francisco "Gordo" Fischer en la Prisión de Cereso en La Paz.

En su interior, Javier se reunió con su amigo de la infancia. Un hombre que hizo carrera y una gran cantidad de dinero pescando langostas, abulones y tortugas marinas – legal e ilegalmente – en las aguas de Punta Abreojos.

Gordo tuvo seis meses en el bote para pensar sobre su historia personal. Lo que podría hacer cuando recupere la libertad. Su error de cálculo al tomar el desafortunado atajo a través del desierto que lo llevó más allá de Punta Abreojos con siete tortugas marinas vivas en su vehículo. Esas tortugas - una escasa fracción de los miles de animales que había traficado durante los años - lo hicieron terminar en prisión.

Si pudiera salir, cambiaría. Sí, brindaría su ayuda. Contribuiría a los océanos. Gordo aceptó entonces contar su historia de funcionarios y políticos corruptos que se dan festines con especies en



Angel of the sea – a loggerhead turtle swimming with young mackerel. Ángel del mar – una tortuga tonta nadando junto a una caballa joven. Photo: Mike Johnson

He kept millions of viewers from Chihuahua to Chiapas riveted to their TVs for twenty minutes, over as many cups of coffee and plates of huevos rancheros.

He told uncensored stories that no one in their right mind would dare tell on live national Mexican television. And the producer gave the cameraman the "keep rolling" signal four times.

Something shifted in the air, on the airwaves, across the geography of the country as he spoke without fear, as if confessing a lifetime of sins to the Pope himself. The convicted turtle thief faced the Channel 2 interviewer and the cold, merciless camera lens. In this public confessional box, a former poacher found reconciliation and spoke up to save sea turtles from extinction.

In the afternoon Gordo visited La Basilica de Guadalupe. To pray, he said.

That night at dinner, Gordo leaned toward Javier with a napkin.

"You still have some of that crappy TV makeup on you." He wiped it off. We laughed. We laughed until it hurt.

Jose Ortega y Gasset, Spain's most famous philosopher wrote "Living is a constant process of deciding what we are going to do."

There really are no useful blueprints that ensure compassionate friendships. That steer humans to protect nature. That guide the building of true communities. Or that tell us how to raise our children.

And when these streams of humanity cross, braid, and mix as they do—we are on our own to find our way through these holy waters, together. \mbox{WK}

Dr. Wallace J. Nichols is Director of the Pacific Ocean Region at the Blue Ocean Institute and Research Associate at the California Academy of Sciences.





Turtle hunter Francisco "Gordo" Fischer went public with his story El cazador de tortugas Francisco "Gordo" Fischer hizo pública su historia Photo: Terri Garland

peligro, sus atajos y sobornos. Los detalles esclarecerían el asunto.

Estudio de Televisa en la Ciudad de México

Meses después en la Ciudad de México Javier, Gordo y vo nos sentamos en el plató del noticiero matutino de más audiencia de la nación: Hechos de la Mañana de Televisa. Como el científico del equipo, describí el contexto biológico y el mandato de conservación. Javier cautivó al entrevistador con la historia previa y su carisma personal. Gordo, que vestía una camiseta negra de conservación de las tortugas marinas, apoyó la espalda contra la silla y luego se robó el programa.

Mantuvo a millones de espectadores desde Chihuahua a Chiapas pegados a la pantalla durante veinte minutos, durante casi la misma cantidad de tazas de café y platos de huevos rancheros.

Relató historias no censuradas que nadie en su sano juicio se atrevería a contar en la televisión mexicana en directo. Además, el productor le dio al camarógrafo la señal de "seguir filmando" cuatro veces.

Algo cambió en el aire, en las ondas de transmisión, en toda la geografía del país mientras hablaba sin temor, como si estuviera confesando los pecados de su vida al mismísimo Papa. El ladrón de tortugas convicto enfrentó al periodista del Canal 2 y a las frías y despiadadas lentes de la cámara. En este confesionario público un ex cazador furtivo encontró la reconciliación y habló de salvar a las tortugas marinas de la extinción.

Por la tarde Gordo visitó la Basílica de Guadalupe. Para orar, según dijo.

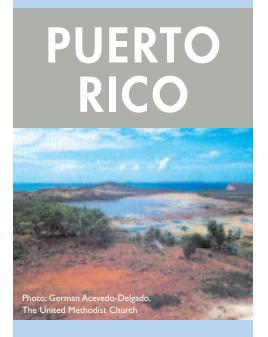
Durante la cena esa noche, Gordo se inclinó hacia Javier con una servilleta en la mano. "Aún tienes algo de ese horrible maquillaje de TV en la cara". Se lo quitó. Nos reímos. Nos morimos de

José Ortega y Gasset, el filósofo más famoso de España escribió: "vivir es un proceso constante de decidir lo que vamos a hacer."

En verdad no hay planos útiles que garanticen amistades compasivas. Que guíen a los humanos a proteger a la naturaleza. Que orienten la construcción de comunidades verdaderas. O que nos indiquen cómo educar a nuestros hijos.

Y cuando estos arroyos de humanidad confluyen, se trenzan y se mezclan como suelen hacerlo - nos encontramos solos para descubrir el camino correcto a través de estas aguas sagradas, juntos. WK

El Dr. Wallace J. Nichols es Director de la Región del Océano Pacífico del Instituto Blue Ocean y investigador adjunto de la Academia de Ciencias de California.



Navy Surrenders Vieques

La Armada Entrega Vieques

By Scott Edwards

Vieques, a small, fifty-two square mile island off the southeast coast of Puerto Rico is, in many ways, a typical Caribbean island, with some of the world's most beautiful beaches, eleven species of endangered and threatened animals and plants, and one of Earth's last remaining, abundantly healthy bioluminescent bays.

Vieques, una isla pequeña que mide cincuenta y dos millas cuadradas, cerca de la costa de Puerto Rico, es, en muchas maneras, una isla caribeña típica, con algunas de las playas más bonitas de todo el mundo, con once especies de animales y plantas amenazadas y en peligro, y con una de las últimas bahías bioluminiscentes y abundantemente sanas en la Tierra.

Robert Kennedy Jr., left, labor leader Dennis Rivera, right front, and actor Edward James Olmos, right background, head towards the eastern end of Vieques with local fisherman in 2001. There the three were arrested for trespassing after entering the U.S. Navy firing range in an effort to halt bombing exercises.

Robert Kennedy Jr., izquierda, dirigente sindical Dennis Rivera, derecho adelante, con el actor Edward James Olmos, derecho atrás, van asta el punto este de Vieques juntos con pescadores locales en 2001. Los tres fueron arrestados allá por haber entrado ilegalmente en el pelotón de fusilamiento de la armada estadounidense, en un atento de parar los ejercicios de bombardeo.

AP Photo/Lynne Sladky





One example of the dangerous legacy of US military activities in Vieques. Un ejemplo del legado peligroso de las actividades militares de los EEUU en Vieques. Photo: Kyle Kajihiro, American Friends Service Committee

It is also home to almost 10,000 men, women, and children who go to school and work and play, fish, hike, and grow fruits, crops, and livestock.

Viegues is a tropical paradise – except for one problem. For over six decades the United States Navy dropped every conceivable type of weapon on the eastern end of the island - including explosives containing cancer-causing chemicals like RDX and HMX, Agent Orange, and depleted uranium. More munitions were dropped on Vieques than at all other US military testing ranges combined. And when the Navy got tired of dropping bombs themselves, they rented out Viegues to foreign governments to test their own explosive and chemical weapons. Sadly, this was done with little regard for the island's residents.

In the early 1970's the island's ground water tested positive for RDX contamination. Wells were closed and now drinking water is brought over from the main island through an underwater pipeline. EPA has confirmed heavy metal soil contamination across the east end of the island and the Puerto Rican Department of Health has documented increased cancer rates and other ailments among the island's inhabitants.

Waterkeeper Alliance was invited to the island and filed a suit in federal court in 2000 against the Department of Defense to end the Navy's abuse of the island and its residents. In May, 2003 the Navy finally packed its bags and left Vieques, turning the eastern half of the island over to the U.S. Fish and Wildlife Service to maintain as the Caribbean's largest nature reserve. Unfortunately, it left its contamination behind.

Today, the island is on the verge of being officially declared a Superfund site. The Navy would finally be forced to conduct a thorough cleanup of the island, its soils, and groundwater and restore full use of the island's natural resources to the people of Viegues. Waterkeeper Alliance is working closely with the residents of Viegues and the University of Puerto Rico Environmental Law Clinic to ensure that the Superfund process is adhered to and the Navy lives up to its legal and moral responsibility to the people of Vieques and Puerto Rico. wk

Además, ahí residen alrededor de once mil hombres, mujeres y niños, quienes asisten a la escuela, trabajan y juegan, pescan, van de caminata y producen fruta y otros cultivos y tienen ganado para su consumo.

Vieques es un paraíso tropical - salvo por un problema. Por más de seis décadas, la Armada de los Estados Unidas lanzó todo tipo de armamentos sobre la punta oriental de la isla, entre ellos explosivos que contienen químicos que causen cáncer, por ejemplo RDX y HMS, El Agente Naranja [Agent Orange], y el uranio reducido. Se lanzaron más municiones sobre Vieques que las lanzadas en todos los otros lugares de pruebas militares combinados. Y cuando la Armada se cansó de lanzar bombas, alquilaron Vieques a gobiernos extranjeros para que probaran sus propias armas explosivas y químicas. Tristemente, todo esto se hizo sin tomar en cuenta a los residentes

A principios de los años 70, el agua subterránea fue examinada y resulto que estaba contaminada por RDX. Se cerraron los pozos y ahora se trae el agua potable desde la isla principal a través de un conducto subacuático. El EPA ha confirmado que hay contaminación del suelo por metales pesados en todas partes de la punta oriental de la isla, y el Departamento de Salud en Puerto Rico ha documentado un aumento en la incidencia de cáncer y otras enfermedades en los habitantes de la isla.

Waterkeeper Alliance fue invitada a visitar la isla y presentó una demanda en los tribunales federales en el 2000 en contra del US Departamento de la Defensa para poner fin a los abusos de parte de la Armada en contra de la isla y sus residentes. En el mes de mayo del 2003, la Armada por fin hizo las maletas y salió de Vieques. Entregó esa mitad de la isla al Servicio de Pesca y Animales de los EEUU, para que ellos la mantuvieran como la reserva natural más grande del Caribe. Desafortunadamente dejó atrás la contaminación.

Hoy, la isla está a punto de ser declarada oficialmente como un sitio "Superfund." Por fin, la Armada se verá obligada a realizar una limpieza completa de la isla, del suelo y las aguas y a restaurar el uso pleno de los recursos naturales de la isla a la gente de Vieques. Waterkeeper Alliance está trabajando de cerca con los residentes de Vieques y con la Clínica de Derecho de Universidad de Puerto Rico para asegurar que se cumpla con el proceso "Superfund" y que la Armada cumpla con su responsabilidad legal y moral con la gente de Viegues y de Puerto Rico. WK

he environmental impacts of development in Latin America, and around the world, are most intense for citizens living near massive projects. But decisions on the largest, most damaging projects almost always have an international component. The best way to stop these projects is through strong local activism, supported by national and international alliances. Here is one example of a global campaign to challenge a flawed project.

Working Across Borders: Global Challenges Need Local Solutions and Strong Alliances

By Kay Treakle

n 1992, I stood beside the Paraná River in Paraguay with friends from the Paraguayan environmental group Sobrevivencia, looking out on what is arguably South America's largest boondoggle – the Yacyretá dam. Paraguay and Argentina, with the financial backing of the World Bank, were building the 67 kilometer dam for flood control and electricity generation. The benefits of this \$19 billion project were highly dubious given the extreme levels of ecolog-

ical, economic, and social damage that construction had already wrought. At 85 percent complete, the dam was called a "monument to corruption" by then-President Carlos Menem of Argentina, even some World Bank staff called it an ecological disaster. That day in 1992 marked the beginning of a north/south advocacy partnership to stop further destruction from the Yacyretá dam.

Citizen activism in Paraguay at that time was just emerging. The 35year reign of Paraguay's



os impactos ambientales del desarrollo en América Latina, y alrededor del mundo, son más extenuantes para los ciudadanos que viven en lugares cercanos a los proyectos a gran escala. Sin embargo las decisiones tomadas en los proyectos más grandes y perjudiciales casi siempre tienen un componente internacional. La mejor manera de parar estos proyectos es a través de un enérgico activismo local, con apoyo de alianzas nacionales e internacionales. A continuación se provee un ejemplo de una campaña universal para cuestionar un proyecto deficiente.

Trabajar más allá de las fronteras:

Los desafíos globales necesitan soluciones locales y alianzas firmes

n 1992, parada junto al Río Paraná en el Paraguay con amigos del grupo paraguayo medioambiental, Sobrevivencia, observé lo que es casi indiscutiblemente el despilfarro más grande de América del Sur, la represa Yacyretá. El Paraguay y la Argentina, con el respaldo financiero del Banco Mundial, estuvieron construyendo la represa de 67 kilómetros para el control de las inundaciones y la generación de electricidad. Los beneficios de este

ARGENTINA

ARGENTINA

ARGENTINA

PARAGUAY

ISLA APPR
GRANCE

G

proyecto de \$19 mil millones fueron muy dudosos niveles dados los extremos de daño social, económico, ecológico que la construcción había ocasionado. Cuando se había completado el 85 por ciento de la obra, en aquel entonces, el Presidente Carlos Menem de la Argentina, denominó a la represa como "un monumento a la corrupción", hasta algún funcionario jerárquico del Banco Mundial lo llamó un desastre ecológico. Ese día en 1992 marcó el comienzo de una sociedad

Satellite images of the Yacyretá project area before and after the reservoir was filled in 1994.

Imágenes satelitales del área del proyecto de Yacyretá antes y después de que se llenara el embalse en 1994.



Unique sand dunes on Yacyreta Island remain just above the present reservoir level. Dunas de arena únicas en la isla de Yacyretá permanecen apenas encima del nivel actual del embalse.

dictator, General Alfredo Stroessner, ended in 1989. Opposition to the government had been so suppressed by the long years of tyranny that local communities near Yacyretá would not even consider publicly opposing the project. The dam-building authority, Entidad Binacional Yacyretá (EBY), was a product of a brutal dictatorship. Standing up to the EBY required carving out a new role for citizen action, based on the newly won, but largely untested freedom of Paraguayan people. It took Sobrevivencia more than three years to build trust, confidence, and a critical mass of community support before they were confident enough to publicly challenge the dam and to demand accountability from their own government and the World Bank.

In 1994, the dam's gates were closed and the reservoir filled to 75 meters deep, permanently changing the ecosystem, hydrology, and economy of the second largest river system in Latin America. Below the dam, on the Paraná River between Argentina and Paraguay, massive fish kills decimated the population of surubi and dorado, fish species vital to river communities. Above the dam more than 50,000 mostly poor people were displaced and thousands more were affected. Many people, including an indigenous community, now lived in conditions vastly worse than before the dam was built. The Bank's resettlement plan was based on an old, inaccurate census done by the bi-national government agency created to build and manage Yacyretá. Their plan left thousands without compensation for their lost homes or livelihoods on the river.

As the governments turned to completing the second phase of the plan - raising the reservoir water level another seven meters we were finally beginning to gain a foothold in the national and international political process to challenge the project. The next phase of the plan would drown a total of 1650 square miles, including the last remnants of a unique old-growth gallery forest, and threaten the spectacular Ybera wetlands. Sobrevivencia was determined to stop any new loans that would expand the reservoir and

Lost ecosystems include this wet savanna, home to the nandu. a large flightless bird.

Los ecosistemas perdidos incluyen esta sabana húmeda, paraie del ñandú, un ave grande incapaz de volar.

Photos: Sobrevivencia



defensora de norte a sur para detener la ulterior destrucción de la represa de Yacyretá.

El activismo ciudadano en el Paraguay en ese momento estaba apenas tomando auge. El reinado de 35 años del dictador paraguayo, General Alfredo Stroessner, finalizó en 1989. La oposición al gobierno había sido tan reprimida por los largos años de tiranía, que las comunidades locales cercanas a Yacyretá ni siquiera consideraron oponerse públicamente al proyecto. La autoridad constructora de la represa, la Entidad Binacional Yacyretá (EBY), era el producto de una dictadura cruenta. Enfrentarse a la EBY exigía forjarse un nuevo papel para la acción ciudadana, cimentada en la recientemente ganada, pero largamente no comprobada libertad del pueblo paraguayo. Más de tres años le llevó a Sobrevivencia generar confianza, certidumbre, y una masa crítica de apoyo de la comunidad, antes de que estuvieran convencidos para desafiar públicamente a la represa y exigir responsabilidad en la gestión tanto de su propio gobierno, como del Banco Mundial.

En 1994, las puertas de la represa se cerraron y el embalse se llenó hasta 75 metros de profundidad, cambiando de manera permanente el ecosistema, la hidrología, y la economía del segundo sistema de ríos más grande de América Latina. Abajo de la represa, en el Río Paraná entre la Argentina y el Paraguay, la extinción masiva de peces diezmó la población del surubí y el dorado, especies vitales para las comunidades que habitan cerca del río. Por encima make the World Bank compensate all those whose homes and livelihoods had disappeared underwater.

A cadre of professionals at Sobrevivencia worked for years collecting evidence. My principal contact was Elías Díaz Peña, a UStrained hydrologist who had worked on scientific studies used in the original planning for Yacyretá. His colleagues included biologists, anthropologists, doctors, architects, and engineers. They knew their river and its inhabitants inside and out: every creek, pond, and wetland; every species and their ecological relationships; and every community, mayor, and political official. Their analysis shot holes through the Bank's justification for raising the reservoir, and documented how the Bank had violated its own policies on environmental assessment, resettlement, indigenous peoples, and habitat protection. In 1996 Sobrevivencia and local community leaders (with the assistance of Center for International Environmental Law) brought a claim to the World Bank's Independent Inspection Panel asking for compensation for those displaced and environmental safeguards to minimize further damage.

The most effective collaborations are those where organizations are equal partners, working towards shared or complimentary goals. In this case, Sobrevivencia wanted to change the project on the ground, and the Bank Information Center wanted to change the World Bank. Over time, BIC became committed to saving that river; and Sobrevivencia became a regional leader in the campaign to change the World Bank.

Since the dam was paid for with international public funds, the campaign to stop the project required an international effort as well. As director of the Latin America Program at the Bank Information Center (BIC) in Washington, DC, I was a watchdog, monitoring the environmental and social impacts of projects financed by the World Bank. While developing country governments devise and execute many projects that destroy natural resources and local communities on their own, the World Bank often provides the funding needed for huge unsustainable projects like Yacyretá. We knew that we would need to fight the dam not only on the ground in Paraguay, but in Washington, DC, at the World Bank's headquarters.

Working in Washington, I assisted Sobrevivencia secure funds for the campaign and helped them navigate the Byzantine workings of the Bank's internal processes and culture. In many ways, BIC's role was to decode how Bank policies should apply in the Yacyretá project and to help Sobrevivencia bring the views of those affected by the project to World Bank officials in Washington. The investigation carried out by World Bank's Inspection Panel confirmed many of Sobrevivencia's allegations, and started an avalanche of consequences that are still being felt today.

International attention exposed the corruption of public officials in Paraguay and Argentina and helped to create a network of organizations willing to defend the Paraná River from other wrongheaded

de la represa la gente más pobre, alrededor de 50.000 personas, fue desplazada y miles más fueron afectados. Mucha gente, incluyendo la comunidad indígena, vivía ahora en condiciones en gran medida peor que antes que se construyera la represa. El nuevo plan de reasentamiento del Banco se basó en un censo antiguo y poco preciso, realizado por un organismo gubernamental binacional creado para construir y manejar Yacyretá. Este plan dejó a miles de personas sin compensación alguna por la pérdida de sus hogares o medios de vida en el río.

Cuando los gobiernos comenzaron a completar la segunda fase del plan, elevando el nivel del agua otros siete metros, estábamos finalmente empezando a obtener un punto de apoyo en el proceso político internacional para desafiar el proyecto. La fase siguiente del plan anegaría un total de 4.273 Km2 (1650 millas cuadradas) incluyendo los últimos remanentes de una galería de bosques añosos única, y amenazar las zonas pantanosas del Yberá. Sobrevivencia estaba decidida a detener cualquier nuevo préstamo que expandiera el embalse y a obligar al Banco Mundial a indem-

Las colaboraciones más eficaces son aquellas donde las organizaciones son partícipes iguales, que trabajan hacia objetivos compartidos o complementarios. En este caso, Sobrevivencia quería cambiar el proyecto sobre el terreno, y el Bank Information Center quería cambiar el Banco Mundial. Con el transcurrir del tiempo, el BIC se comprometió en salvar ese río, y Sobrevivencia se convirtió en el líder regional en la campaña para cambiar el Banco Mundial.

nizar a todos aquellos cuyos hogares y medios de vida habían desaparecido bajo las aguas.

Un grupo de expertos en Sobrevivencia trabajó durante años recabando pruebas. Mi contacto principal era Elías Díaz Peña, un hidrólogo capacitado en EE.UU. que había trabajado en estudios científicos en la planificación original de Yacyretá. Sus colegas incluían biólogos, antropólogos, médicos, arquitectos e ingenieros. Conocían a su río y a sus habitantes por dentro y por fuera: cada riachuelo, laguna, y zona pantanosa; cada especie y su filiación ecológica; y cada funcionario, comunidad, alcalde municipal y político. El análisis que efectuaron abrió una brecha a través de la justificación del Banco para elevar el embalse, y documentó cómo el Banco había violado su propia política sobre evaluación del medio ambiente, del reasentamiento, de la población indígena y de la protección del hábitat. En 1996, Sobrevivencia y los líderes de la comunidad local (con la asistencia del Centro para la Ley Internacional del Medio Ambiente) presentaron un reclamo al Panel de Inspección Independiente del Banco Mundial requiriendo una compensación para aquellas personas desplazadas y controles de seguridad del medio ambiente para minimizar daños ulteriores.

Ya que la represa fue costeada con fondos públicos internacionales, la campaña para detener el proyecto requirió también un projects. The international campaign against Yacyretá also contributed to a groundbreaking review by the World Commission on Dams in 2000 that exposed the irreversible environmental and social impacts, and heavy economic costs that often accom-

Over the years, the collaboration of local Paraguayan and US activists has prevented the reservoir height at Yacyretá from being raised to its final operating height. But the struggle continues - the governments of Argentina and Paraguay remain committed to completing the project.

> tices for the better. There is still a long way to go. Protecting rivers and basic human rights requires citizen participation in decision-making – in other words, democracy. Strong citizen activism and stronger international alliances are how we will get there. WK

pany large dam projects. One of the report's most critical recommendations opens the door for citizens to have a say in future decisions on dam projects: No dam should be built without "demonstrable acceptance" of affected people, and without free, prior and informed consent of affected indigenous and tribal peoples.

In campaigning for justice at Yacyretá, Sobrevivencia created new spaces for advocacy groups in Paraguayan politics. They reached beyond their borders, and together we learned how to work across

Kay Treakle is the former Executive Director of the Bank Information Center, where she monitored World Bank and International Development Bank projects with local non-governmental organizations.

esfuerzo internacional. Como director del Programa para América Latina en el Bank Information Center (BIC) en Washington, DC, yo era el defensor de los derechos del ciudadano, supervisando el impacto social y el medioambiental de los proyectos financiados

A lo largo de los años, la colaboración de los activistas locales paraguayos y de EE.UU. ha evitado que la altura del embalse de Yacyretá se elevara a su altura programada de funcionamiento. Sin embargo, la lucha continúa, los gobiernos de la Argentina y del Paraguay permanecen comprometidos a que el proyecto se complete.

por el Banco Mundial. Mientras los gobiernos de los países en desarrollo urden y ejecutan muchos proyectos que destruyen los recursos naturales y las comunidades locales a su voluntad, el Banco Mundial provee con frecuencia los fondos necesarios para desmesurados proyectos no sustentables como lo es Yacyretá. Sabíamos que íbamos a tener que pelear la represa no solamente sobre el terreno paraguayo, sino en Washington, DC, en la sede del Banco Mundial.

Mientras trabajaba en Washington, ayudé a Sobrevivencia a obtener fondos para la campaña y los ayudé a andar con cuidado debido a la dificultad existente, en el funcionamiento bizantino de los procesos internos y culturales del Banco. De muchas maneras, el rol del BIC era decodificar como deberían aplicarse las políticas del Banco en el proyecto Yacyretá y ayudar a Sobrevivencia y hacer que los funcionarios del Banco Mundial en Washington supieran de los puntos de vista de aquellas personas afectadas por el proyecto. La investigación llevada a cabo por el Panel de Inspección del Banco Mundial confirmó muchos de los alegatos de Sobrevivencia, y comenzó una avalancha de consecuencias que todavía hoy se observan.

Se expuso a la atención internacional la corrupción de los funcionarios públicos en el Paraguay y en la Argentina y ayudaron a crear una red de organizaciones deseosas de defender el Río Paraná de otros proyectos perversos. La campaña internacional contra

Yacyretá contribuyó también a una revisión innovadora por la Comisión Mundial de Represas en el año 2000, que dejó al descubierto el impacto social irreversible en el medio ambiente, y los onerosos costos económicos que a menudo acompañan proyectos de represas tan

cultures and continents. Along

with thousands of other

activists around the world, we

fundamentally challenged the

way the World Bank does busi-

ness, and changed some signif-

icant Bank policies and prac-

grandes. Una de las recomendaciones más críticas del informe abre la puerta para que los ciudadanos expresen su punto de vista en las decisiones futuras de proyectos de represas.

No se construirá represa alguna sin la "aprobación demostrable" de las personas afectadas, y sin consentimiento previo, libre e informado de las poblaciones tribales e indígenas.

Al luchar por la justicia en Yacyretá, Sobrevivencia creó nuevos espacios para los grupos de presión en la política paraguaya. Llegaron más allá de sus fronteras, y juntos aprendimos como trabajar a través de las culturas y de los continentes. Junto con miles de otros activistas alrededor del mundo, fundamentalmente cuestionamos la manera de negociar del Banco Mundial, y cambiamos algunas políticas y prácticas importantes del Banco para bien. Hay todavía mucho camino por recorrer. La protección de los ríos y de los derechos humanos básicos exige la participación ciudadana en la toma de decisiones, en otras palabras, democracia. El enérgico activismo ciudadano y las alianzas internacionales más firmes son el camino que nos conducirán allí. WK

Kay Treakle es la anterior Directora Ejecutiva del Bank Information Center, donde ella controlaba los proyectos del Banco Mundial y del Banco de Desarrollo Internacional con organizaciones locales no gubernamentales.



Environment, Empowerment, Human Rights

he environmental movement is strongest when it supports the empowerment of local communities to improve their environment. In many parts of the world this is tantamount to revolution: it presents a direct challenge to the wealthy elite's control of the development process.

Too often, the environmental movement has isolated itself from the broader goals of social justice and democracy. In the name of conservation, people are relocated from their ancestral homelands, and traditional sustainable fishing or hunting practices are outlawed.

Indeed, a recent article in World Watch magazine specifically challenged the practices of the world's four largest conservation organizations. It argued that they exclude local communities from decision-making about their own ecosystems, often assuming control over protected areas themselves rather than letting local people choose their destiny. This often serves to create a refugee population at odds with conservation efforts.

Indigenous communities often find themselves, willingly or not, at the center of this controversy. Much of the world's natural resources are in territories inhabited by indigenous peoples, but they are often powerless to protect their land from global demand for those resources.

Building local capacity to conserve resources is complicated, but it is the only viable long-term solution. In the long run, democracy and equality are the most important resources for saving the environment.

The Yacyretá project included moving more than 50,000 people from their homes to "resettlement" areas like this one in Arroyo Pora, Paraguay.

El proyecto Yacyretá incluía el traslado de más de 50.000 personas desde sus hogares hasta zonas de "reasentamiento" como ésta en Arroyo Porá, Paraguay.

Photo: Sobrevivencia

Medio Ambiente, Empoderamiento, Derechos Humanos

l movimiento del medio ambiente es más poderoso cuando éste integra a las comunidades locales para mejorar su propio medio ambiente. En muchas partes del mundo esto es equivalente a una revolución: presenta un reto directo a la clase privilegiada en control del proceso de desarrollo.

Con demasiada frecuencia, el movimiento por el medio ambiente se ha aislado a sí mismo de los amplios objetivos de justicia social y democracia. En nombre de la conservación, se ha trasladado a la gente de las tierras de sus antepasados a otros sitios, y ahora, sus costumbres de caza y pesca que los sustentaba están penadas por la ley.

De hecho, un artículo reciente de la revista World Watch desafiaba específicamente las prácticas de las cuatro organizaciones conservacionistas más grandes. Alegaba que excluían a las comunidades locales de hacer y tomar decisiones acerca de sus propios ecosistemas, a menudo haciéndose cargo ellos mismos de áreas sobreprotegidas, en lugar de permitir a la gente local escoger su destino. Con frecuencia, esto a menudo crea una población de refugiados que está en desacuerdo con los esfuerzos de conservación.

Las comunidades indígenas a menudo se encuentran a sí mismas, por su voluntad o no, en el centro de esta controversia. Muchos de los recursos naturales del mundo están en territorios habitados por poblaciones indígenas, pero éstos frecuentemente carecen de la fuerza necesaria para proteger sus tierras de la exigencia global de esos recursos.

Es complicado crear y establecer una capacidad local para conservar esos recursos, pero es la única solución viable de largo alcance. En última instancia, la democracia y la igualdad son los recursos más importantes para salvar el medioambiente.

Waterkeeper Magazine Winter 2005

The Environment & The Law of Nations

Jeffrey G. Miller Pace Law School

ollution and other environmental problems don't recognize political borders: depletion of ocean fisheries, mercury from coalburning power plants, and global warming, are a few. No country can solve such problems by itself. It takes an international effort grounded in international law. Understanding international environmental law is therefore the key to understanding whether and how these transnational problems can be addressed.

Treaties are agreements that bind only nations that adopt and ratify them. Treaties may be between two nations (bilateral) or multi-national, such as the United Nations Charter. The Boundary Waters Treaty of

1909 between the United States and Canada has proved useful in managing many trans-boundary disputes. Indeed, before the enactment of pollution control laws in the United States, the United States and Canada agreed to international arbitration regarding pollution from a lead smelter in British Columbia that damaged apple orchards in Washington State, the Trial Smelter Case. Scholars have counted over 35,000 treaties of all kinds and over 1,000 treaties involving environ-

Non-governmental organizations play significant roles in formulating international environmental law at environmental summits, such as the Stockholm, Rio, and Kyoto conferences that produced treaties and focus international attention.



mental matters. Treaties may establish secretariats to administer the treaty and oversee dispute resolution mechanisms. In general, however, treaties rely on their signatories to take necessary actions to implement treaty obligations domestically. Several US federal statutes (including the Ocean Dumping Act, the Endangered Species Act, and the Migratory Bird Treaty Act) implement treaty obligations undertaken by the United States

International law differs from domestic law in that there is no international legislature and no international executive. There is an International Court of Justice, but it has jurisdiction over a dispute only if the parties agree to submit their dispute to it. Once the IJC decides a dispute, it has no means to enforce its judgment. Some treaties create quasi-legislative, quasi-executive, and quasijudicial institutions to implement their provisions. But only rarely can they force a nation to act when it refuses to do so.

Because public international law is the law of nations, it provides few opportunities for Waterkeepers and other public interest advocates to enforce. They can not, for instance, bring a suit to the International Justice Court. The public does, however, have a role in forcing domestic legislation to enact treaty obligations. The United States' Constitution then makes treaty obligations "the supreme law of the land," presenting other opportunities for NGOs in domestic litigation.

Although international environmental law could be effective in addressing global environmental problems, the biggest barrier for its doing so is the United States government. The Bush administration is as reluctant to submit to international law as it is reluctant to seriously address environmental problems at home or abroad. Our refusal to agree to the Kyoto Protocol (a treaty to reduce greenhouse gas emissions to ease climate change) or the International Criminal Court are two recent examples of the administration's unwillingness to lead environmentally or internationally. Without the agreement of the world's largest economic and military power, international efforts are unlikely to be effective. WK

CORDORATE By Scott Edwards

Global trade financiers

The International Monetary Fund (IMF) and World Bank are at the center of forcing water privatization in third world countries. The World Bank typically requires countries to privatize water services as a condition of receiving development loans and it has launched a carefully orchestrated public relations effort to promote the idea that water is a commodity, not a human right.

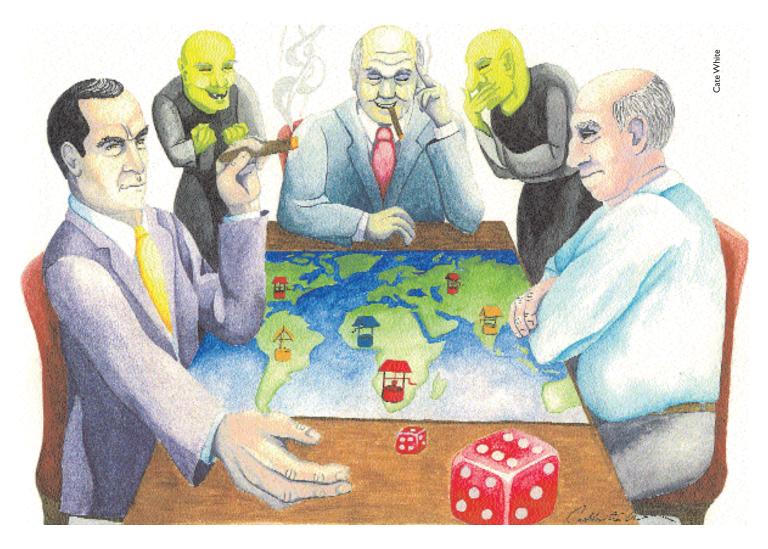
Take Over

The price per barrel began to drop from its all-time high in early spring as production flourished and supplies became more readily available. Members of producing nations and their corporate partners began to worry - profits were decreasing as the basic free market principle of supply and demand kicked in. And with the peak use summer season fast approaching for the United States and much of Europe, where large industrial nations were so completely dependant on foreign sources, it was the worst possible timing for any price reduction. Drastic measures would have to be taken if the Cartel member nations were to maintain their profit margins.

The Cartel ministers huddled together in the luxury hotel's richly decorated and dimly lit conference room, coming together from a handful of nations at an emergency session to settle this pressing issue. Behind closed doors, decisions were made swiftly. Production would have to be cut immediately to increase demand and maintain profits. The free market would once again need to be artificially manipulated to influence the price of the world's most precious liquid resource; price fixing and collusion were the measure of the day. And the beauty of it all was that no one could do anything about it. After all, unlike oil, there was no chance of the development of alternate renewable sources for this commodity - fresh drinking water is irreplaceable.



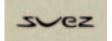
According to Fortune magazine, fresh water represents, "one of the world's great business opportunities. It promises to be to the 21st century what oil was to the 20th."



ur planet is quickly approaching a global crisis. At our current rate of usage, with 12 percent of the world's population using 85 percent of the planet's water resources, the World Bank predicts that two-thirds of the planet's population will run short of fresh drinking water by 2025. Communities and whole water-poor nations will soon be left scrambling to find

fresh water resources for drinking, washing, agriculture and industrial uses. Unfortunately, rather than taking the action necessary to protect precious water resources and maintain water delivery infrastructures, governments around the world are shirking their responsibilities and entering into corporate partnerships — selling our water rights to a handful of giant transna-



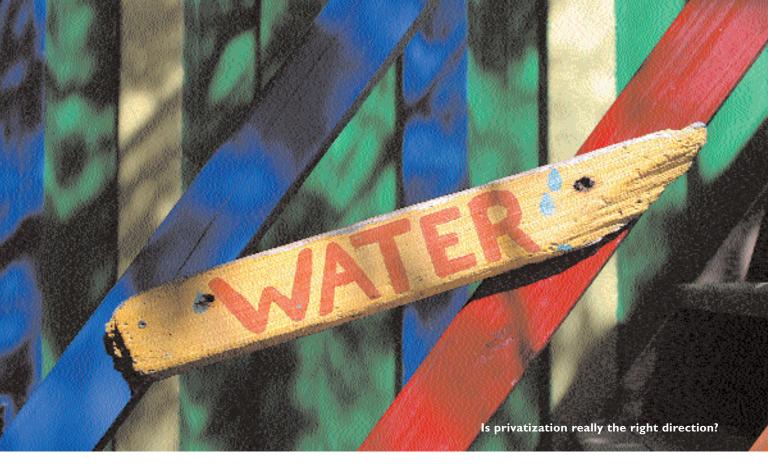




The big three

Giant transnational corporations

There are now a handful of major corporations delivering fresh water services and generating huge profits, mainly in poor, third world countries that can ill afford the cost. The three biggest - Suez and Vivendi [recently renamed Veolia Environment] of France and RWE-AG of Germany – control the water supplies of 300 million people in more than 100 countries. Their control is growing at a frightening rate – ten years ago, they serviced around 50 million people in 12 countries. And, although less than ten percent of the world's water systems are currently under private control, at the rate they are expanding, the top three alone will control 75 percent of the water systems in Europe and North America in a decade.



tional corporations that are poised to profit handsomely from the impending shortage of fresh drinking water. With dwindling supplies, increasing demands and billions of dollars in the balance, our most vital natural resource is quietly being privatized by corporate entities with the support of global trade financiers and through the corporate welfare of government subsidies and contracts.

As you read this, multinational water, energy, food, and shipping conglomerates are actively acquiring water rights, privatizing publicly owned water systems, promoting bottled water, and selling bulk water by transporting it from water rich areas to markets desperate for more water. At the same time, to ensure maximum profits, these companies are lobbying to weaken water quality standards, and pushing for international trade agreements that hand over the global water resources to private corporations. These water giants believe that fresh water is simply another commodity - no different from oil or widgets - and that markets need to be established, corporate control exercised and water policy created on the basis of sheer market profits. In arguing that people should have to pay for access to clean water, Vivendi's managing director has stated, free water "is not so good an idea."

Waterkeeper Alliance believes that global access to free, clean water is a very good idea, indeed. Access to fresh water is a fundamental human right. Water is not just

another commodity, but a public trust resource that governments have a legal and moral obligation to protect for present and future generations. WK

To learn more about water privatization and what to do to fight this alarming trend, please visit us online at waterkeeper.org

Billions of dollars

In 2002 Vivendi generated over \$12 billion in water-related revenues. All three water giants are presently among the top one hundred corporations in the world; together their annual revenues in 2001 were almost \$160 billion and growing at ten percent a year - outpacing the economies of many of the countries in which they operate. Room for growth is tremendous. The water market in the United States alone is worth \$82 billion, while the world-wide bottled water industry is worth \$35 billion. Worldwide potential water revenue is estimated to be anywhere between \$400 billion and \$3 trillion. Waterworks infrastructure maintenance and upgrade in U.S. cities alone is estimated to total between \$150 billion and \$1 trillion over the next three decades.



Making the Clean Water Act Work

SP Newsprint: Negotiations Underway

This is the second installment in our series on the Citizen Suit provision of the Clean Water Act. In our first installment, we introduced the Altamaha Riverkeeper, a Waterkeeper program in Georgia, who had just filed a 60-day notice of intent to sue a local paper mill alleging illegal discharges into the Oconee River. In subsequent installments we will be following this case to provide our readers with insights into how the Clean Water Act and its citizen suit provisions work to keep our waterways clean.

After filing a 6o-day notice of intent to sue under the Clean Water Act against SP Newsprint, Altamaha Riverkeeper, our attorneys from the Georgia Center for Law in the Public Interest, and our technical expert met with officials at the plant.

We agreed to engage in settlement negotiations with the goal of resolving the case without filing a Clean Water Act complaint in federal court. Through our attorneys, Riverkeeper communicated a number of steps that SP Newsprint needed to take in order to clean up the river and avoid a lawsuit. SP Newsprint's response, however, was inadequate.

Without assurances that the discharge would be cleaned up, Riverkeeper's attorneys prepared to file suit. With all the paperwork in order and the filing fee check in hand, our attorneys followed common legal etiquette and let SP Newsprint's attorney know of their intent to file a lawsuit the following day. When Riverkeeper informed SP's attorneys of its plans to file suit, SP Newsprint requested an additional opportunity to make a meaningful offer to resolve the matter without litigation. These negotiations are proceeding at press time.

Often, with the filing of a 60-day letter of intent to sue, alleged polluters will reach out in an attempt to resolve the issues. These discussions can be long and drawn out, and frequently Plaintiffs will agree to withhold the filing of a complaint in court while negotiations are continuing. Fortunately, negotiations often do result in some kind of resolution because everyone involved realizes that courtroom battles are complex, time consuming and costly for all. Other times, discussions break down and Plaintiffs are forced to turn to the courts for relief by filing the complaint.

Stay tuned to the next edition to see how the case is proceeding. You can find the first installment of this case on page 40 of the fall issue of Waterkeeper at www.waterkeeper.org

Waterkeeper MagazineWinter 2005 www.waterkeeper.org

Beating Around the BUSH



he Bush administration has made some significant inroads since the president launched a concentrated effort to dismantle the nation's environmental protection safeguards four years ago. Since taking office in 2000, George W. Bush has promoted the most damaging environmental policies ever espoused by

With this issue, Waterkeeper introduces this new feature to highlight some of the more egregious environmental policies proposed by the Bush administration. With your help, Waterkeeper will continue to do the job that the Bush administration and EPA is failing to do fight for clean water and take action to protect human health and the

What if this mixture do not work at all?

Instead of working to reduce the amount of raw sewage entering our rivers, lakes and coastal waters, the Bush administration wants to allow more untreated sewage in our nation's waters. Raw sewage is supposed to be carried by pipes from our homes and buildings to wastewater treatment plants where water and waste are separated. But the pipes that carry this wastewater, and the treatment plants themselves, can be overwhelmed when rainwater seeps into cracked, outdated, and corroded pipes. When this happens, raw sewage spills out onto the streets and directly into the environment. Unfortunately, the administration has a plan.

Instead of fixing the pipes and expanding treatment plants, EPA's proposed "blending rule" would allow sewer operators to dump raw sewage directly into our waterways as long as they first mix it with partially treated wastewater. This plan threatens the health of millions of Americans and violates the Clean Water Act. Public health officials, state environmental officials, fishermen, marina operators, and thousands of citizens have urged EPA not to adopt this change we need you to join this effort!

...that which we call a rose, by any other name would smell as sweet

Each year in the United States, 1,100 coal-fired power plants spew almost 50 tons of mercury into the air, poisoning our nation's lakes, rivers, and streams, fouling our water and food supply, and endangering human health. But the Bush administration doesn't want to inconvenience their friends. They're asking coal-burning polluters to cut mercury by only 29 percent over the coming years when readily available and affordable technologies could reduce mercury emissions by 90 percent. Sadly, the administration's plan does not require a single new piece of mercury control technology. Even worse, EPA wants to make a bureaucratic change so coal-burning power plants are no longer recognized, or regulated, by the federal government as a source of mercury contamination.

At whose expense 'tis done?

Current federal wetland rules allow a developer to build on a wetland if they restore an equal or greater amount of the same type of wetland nearby. The idea is to allow development if new wetlands in the same watershed are built to substitute the wetlands that are lost.

But the Bush administration is more concerned with the inconvenience that mitigation causes developers than they are about ecological integrity, water quality, or flooding. That's why EPA and the Army Corps of Engineers are pushing through changes so developers are no longer required to replace destroyed wetlands with new ones in the same watershed. And the replacement wetlands can be a different type than the one destroyed. This means that high-value wetlands can be replaced with low-value wetlands that support fewer plants and animals, and purify less water. This change vastly reduces the costs for developers at the expense of our environment and anyone who lives downstream. WK

Visit www.waterkeeper.org for more information and to take action to oppose these policy changes that degrade our waterways and threaten our communities.

Zookeeper, What's the difference?

Greg Hunt, Waterkeepers Australia

used to be a zookeeper. Now I'm a Waterkeeper and I'm not sure if the jobs are all that different. The zoo industry talks of the four pillars of the modern zoo: conservation, education, research, and recreation. How else can you justify locking up the innocent if not to help conserve their still free brethren? Many zoos are active in farflung corners of the globe working with communities to protect habitat for animals, or perhaps conduct research on and breed rare and threatened species. They also have many outstanding education programs.

At Melbourne Zoo in Australia's south, we have a zoo school based around encounters with live animals. This is no farmyard ani-

mal petting zoo. We were keepers for a wide range of animals - reptiles, frogs, birds and marsupials. We had a three-metre carpet python, as thick as your forearm. When I wanted to explain the preycatching behaviour of a constrictor, I didn't have to do any talking — the animal wrapped around a student's arm to demonstrate. Students would simultaneously show every emotion from sheer horror to wild elation. If I wanted to talk about the insulating properties of a possum's fur coat, or the moist skin of a tree frog that helps it take in oxygen, again, the animals taught the lesson far better than my words.



Bearded Dragon



An intensely personal experience, with more than a little joy

Photo: Julian Bentley



Sometimes however, I wish I had confined myself to words. A tree frog can exhibit stress by ejecting urine, and... you guessed it. I was bringing a fat green tree frog close to students so that they could touch its skin with their moistened fingers to feel how delicate it is, when a talking student was abruptly silenced with a well-aimed squirt to the face. My description of the sterility of urine fell on most unap-

preciative ears, and I suspect that student will never look at a frog the same way again.

I also recall the time a red-eared turtle sank its stubby but powerful jaws into my palm, and I withdrew from the aquarium with the cantankerous beast hanging from my hand. This is not recommended if one wishes to foster a positive attitude to biodiversity. Fortunately, there were many more moments of great joy, as thousands of students had intensely personal experiences with animals that led them to understand and care for living things. Watching the expressions of wonderment and reverence on a daily basis was indeed a privilege.

Members of the public had opportunities for direct animal contact also. Never get too close to an exhaling seal or you'll sniff something to make dog breath smell sweet! But some of the best education occurs when the public gets to know the animals through the zookeeper's eyes. Talking with a keeper is a window into a deeper understanding of the animal that you can't get looking through the

I wrote a chapter in an environmental education textbook where I talked about the indescribable expressions on a kid's face when he or she felt a smooth and slippery python's skin or ran their fingers over a Bearded dragon's rasping scales. We reckoned that if we could touch their hearts, their heads were more likely to follow. - Greg Hunt, once a Zookeeper now a

Waterkeeper

bars of a cage. You might be introduced by one keeper to Mzuri the gorilla, or by another to Wattle the wombat. Zookeepers can tell you about their animals' personalities and foibles. Having captivated you, they then move seamlessly to the plight of gorillas in the wild or the high wombat mortality rate of wombats from careless drivers. The bond between the keeper and their charge can be spectacular.

The love of the animal, and the absolute hunger to ensure that its kind remains on this earth is extremely similar to that connection between a Waterkeeper and their waterway. The river or creek flows through the veins of each Waterkeeper, and it would be difficult to measure the breadth and depth of their drive to look after it. Their programs bring people to natural experiences, whether fishing, a walk and gawk with a river expert, canoe trips, river trips, bird watching, or perhaps just visiting a waterfall. The bond between the Waterkeeper and their river, lake, or stream drives them and is the doorway for others to understand and appreciate the waterway.

And a good thing indeed that there are Waterkeepers. If there were not those with the commitment to work for our waterways, we would all be the poorer. So next time you see a Waterkeeper activity advertised, go and sign on. Get out there with someone who can introduce you directly to the personality and idiosyncrasies of your waterway, and join the fight for clean water. WK



www.waterkeeper.org



Platypus Photo: Julian Bentley, Australian Conservation Foundation



Yellow-footed Rock Wallaby Photo: Julian Bentley

Greg with Snake Photo: Waterkeepers Australia



HAND SKIMMED FACT FROM FICTION DOUGLAS MICHAEL © 2005 fishbein@juna.com

AND BE DAMNED

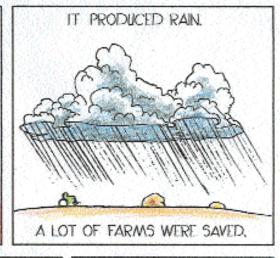








AND IN SOME PLACES THESE CONTRAILS BEGAN TO CONVERGE AND WHEN THEY DID, THEY FORMED WEATHER SYSTEMS. AND THEN, THIS ONE 50-CALLED IMPROVISED WEATHER SYSTEM DID EXACTLY WHAT WEATHER SYSTEMS ARE SUPPOSED TO DO-





THEN THIS WEATHER GIRL WENT AND MADE IT INTO A BIG DEAL

LOOKS LIKE WE'RE IN FOR ANOTHER OF THOSE FREAK CONTRAIL SHOWERS.



SO THEN THIS BIG DEAL WEATHER GUY GOT ON THE TV AND SAID. "CONTRAILS HAVE BEEN IMPACTING THE WEATHER FOR YEARS. GET USED TO IT.



MEANWHILE. IN PHOENIX, THESE TWO CONSULTANTS HAD BEEN HIRED TO DREAM UP NEW REVENUE STREAMS FOR THE AILING AIRLINE INDUSTRY. AND THEY HIT ON A REALLY

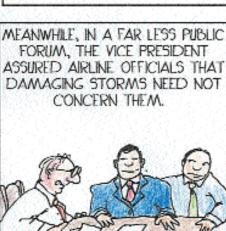
NOVEL IDEA.











HAVEN'T YOU BOYS

EVER HEARD OF FEMA?





BUT THE AIR-LINES WERE QUICK TO **RESPOND** WITH AN OFFER OF FREE MILES FOR THEIR PREFERRED CUSTOMERS.





FAX CARD BACK TODAY !!! • 914-674-4560

Join Waterkeeper Alliance Now and get Waterkeeper Alliance magazine for one year. Waterkeeper Alliance believes that every person has the right to clean water. It is the actions of the supporting members everywhere that will ensure our future. Join Waterkeeper Alliance to receive our quarterly publication and become part of an effective network committed to protecting the world's most precious resource - water.

Name		
	State	
	Signature	
(check appropriate boxes)	and Waterkeeper Alliance, and I would like a member on on upcoming Waterkeeper Alliance events	Sillp to waterkeeper magazine
Membership with subscriptions (Check Appropri		
US \$50.00	Canada/Mexico \$60.00	☐ International \$90.00
Check or Money order enclosed	☐ Bill my Credit Card	
☐ Visa	☐ MasterCard	☐ American Express
Card #	Expiration date	Signature

Waterkeeper Alliance is a 501(c)(3) non-profit organization. Your \$50 contribution entitles you to receive a one year subscription to Waterkeeper Magazine, which has an annual subscription value of \$12. The balance of your contribution is tax deductible to the extent allowed by law.

Make checks payable to Waterkeeper Alliance and mail to: Waterkeeper Alliance Membership, 828 South Broadway, Suite 100, Tarrytown, NY 10591

Ad Index

AbTech Industries7
Citigroup Private Bank27
EBSCO Information Services35
Ford Motor Company Cover 3
Forester Communications/StormCon15
Longo & Longo
Newman's Own Organics33
Organic Valley Cover 4
Paul Mitchell Systems57
Philips Lighting CO
Ralph Lauren Advertising Cover 2, pg 3
Vortechnics

Want to be heard?

If you feel strongly about the issues raised in Waterkeeper Magazine, make your voice heard. Visit

www.waterkeeper.org

to take action or to get involved with your local Waterkeeper program.