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DEAR FRIENDS,

In the wake of the I-35W Bridge disaster in Minneapolis in August, there may have been an impulse by anxious I-287 commuters to join calls for a new replacement bridge over the Tappan Zee. But building a new bridge would be a very expensive mistake that would likely degrade the quality of life for many Valley residents and disrupt the ecological integrity of one of the most productive stretches of the Hudson River.



The accident in Minneapolis forced federal and state transportation officials to acknowledge that most of the nation's bridges, tunnels, and roads are long overdue for inspection, maintenance or repair. The same is true for the sewage systems which typically were built decades ago and our drinking water supply systems, some of which are over a hundred years old.

New York, too, suffers from problems of aging infrastructure. The Delaware Aqueduct, which delivers to New York City over 50% of its daily water supply, has a significant leak and could collapse at any time. The City's antiquated combined sewage and stormwater treatment system, which dumps an average of 27 billion gallons of untreated waste and chemical pollution into New York Harbor each year, is badly in need of modernization. Up and down the Hudson Valley, private septic systems and public wastewater treatment facilities are failing.

The five power plants on the Hudson are at least 17 years overdue to update their cooling water technology which needlessly - and in direct contravention of the Clean Water Act - kills billions of fish each year. Nuclear facilities like Indian Point, which has one of the worst operations records in the country and is nearing the end of its original license term, cannot be rehabilitated and should be retired.

In the case of the Tappan Zee Bridge, which opened in 1955, studies show that while the bridge was designed to last for at least 50 years, it can remain - with proper maintenance and periodic rehabilitation - useable and safe for a long time to come.

The New York State Department of Transportation and the Thruway Authority under the Pataki administration deliberately misled the public as to the bridge's safety, presumably to justify spending a whopping \$14.5 billion to replace it. The Williamsburg Bridge that connects Manhattan to Brooklyn which at 104 is already twice as old as the Tappan Zee - recently underwent a rehabilitation to "prepare the bridge for another hundred years of service." Rehab projects on other century-old bridges around New York City - the Manhattan, the Queensboro and the Brooklyn - are currently underway.

A new bridge would not only cost taxpayers an additional \$12 billion (over the cost of simply rehabbing the bridge) but would induce more traffic, exacerbate an already serious air quality problem - Westchester and Rockland are two of the most polluted areas in the country - and extend sprawl development up the west side of the Hudson Valley into the Catskills.

Riverkeeper is leading a coalition of local residents, community groups and elected officials to persuade the Spitzer administration to take a hard look at the rehab option. While the governor came out in favor of a new bridge during his campaign, we are confident he will make the right decision once he and his team have a chance to examine the details.

As always, we are counting on you to help us make the case against yet another misguided development project. And as always, we are grateful for your sustained support and dedication to our work.

— Alex Matthiessen, Hudson Riverkeeper & President

Riverkeeper is the official publication of Riverkeeper, Inc., an independent, member-supported environmental organization. Founded in 1966 by fishermen and community members to confront polluters for control of the Hudson River, Riverkeeper has investigated and successfully prosecuted more than 300 environmental lawbreakers and has guided the establishment of 160 Waterkeeper programs across the nation and beyond. Riverkeeper is a registered trademark and service mark of Riverkeeper, Inc. All rights reserved.

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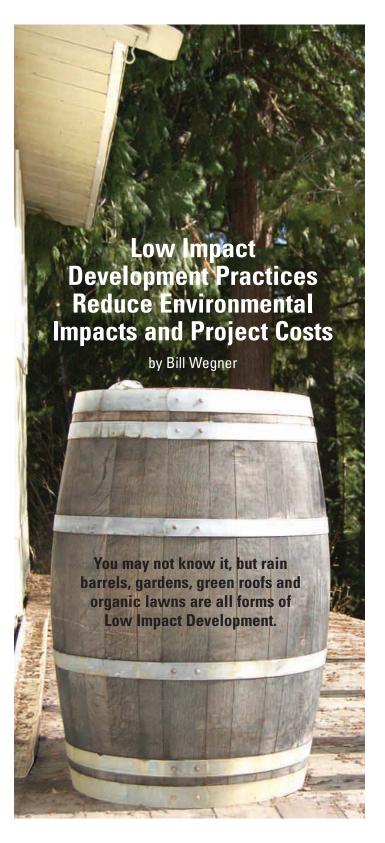
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Cover art: The Tappan Zee Bridge. Photography by Melissa Brown.



# watershed news

Watershed news is an update of Riverkeeper's efforts to protect New York City's drinking water supply.



Conventional use of impervious surfaces, such as rooftops, parking lots and paved roads, increase erosion and allow larger amounts of stormwater to carry pollutants

to receiving waters at faster speeds. When wetlands and buffers are disturbed, their natural ability to filter stormwater runoff is impaired. Ironically, conventional development designs frequently place manmade stormwater controls, such as detention basins, in wetland and buffer areas where they perform the same stormwater treatment functions, but with inferior results.

### **Low Impact Development (LID)**

In order to accommodate population growth and balance economic development with environmental protection, the U.S. Environmental Protection Agency encourages developers and other regulatory agencies to adopt Low Impact Development (LID) principles. LID principles can reduce the pollution generated from construction activities as well as treat additional pollutants, like road salt, pesticides and excess fertilizers, that are associated with developed landscapes.

LID principles are designed to reduce the impacts of development on water resources through land use planning and engineering practices that keep as much stormwater as possible on the development site. LID designs help to preserve the natural pre-development hydrological processes that allow stormwater to be absorbed into the soil and treated by wetlands and other vegetation.

LID principles can also provide economic benefits for developers. Conventional artificial stormwater controls are expensive; they are large and difficult to maintain, and they consume space that would otherwise be available for development or kept as open space. Use of the natural landscape or thoughtful placement of stormwater controls in accordance with LID

principles can be less costly and more sustainable.

### LID Practices: Nonstructural Principles

LID practices include both structural and nonstructural components. Nonstructural practices include policies or operational choices that prevent and reduce pollution. For example, nonstructural LID practices include conservation easements to protect environmentally sensitive areas and regulatory protections for wetlands and buffers. Operational LID practices include routine maintenance programs for stormwater systems to ensure optimum performance and environmentally sensitive landscaping. Organic or integrated pest management programs use non-chemical alternatives to control lawn, garden, and agricultural pests. Other strategies reduce or eliminate the amount of fertilizer and hazardous pesticides in runoff by timing the proper application, pre-testing soils for their nutrient content, and spot-treating landscaped areas instead of treating an entire site.

For commercial developments, parking lots can be maintained using "smart salting" strategies that employ infrared sensors to detect pavement temperature and thus reduce the need for road salt. (Utilizing infrared sensors can result in a 20-30% reduction in the amount of road salt applied, again providing a cost savings). More environmentallyfriendly chemical alternatives to road salt, such as calcium magnesium acetate and potassium acetate, can reduce or eliminate the need to apply road salts to icy roads, and

greatly reduce the amount of toxic salts entering surface waters.

### LID Practices: Structural Designs

Structural LID practices serve to promote the on-site infiltration of stormwater. While some practices, like green roofs, are more complex and require an initial investment, many others, like rain barrels and gardens, are simple solutions that any homeowner can use.

### Green roofs

Green roofs or rooftop gardens replace conventional impervious roofs with soil and plants that capture and hold water in the plant foliage, absorb water in the root zone, slow the velocity of direct runoff, and reduce thermal shock by cooling the roof and air. Green roofs improve stormwater management by absorbing up to 75% of the rain that falls on them and help to regulate runoff temperature, velocity and volume. Green roofs conserve energy because their vegetation provides natural insulation in winter and reduces temperature fluctuations in summer. A typical tar roof can fluctuate 90 degrees in seasonal extremes, whereas a green roof typically fluctuates only 18 degrees. This capacity to insulate can significantly reduce energy consumption and the costs of heating and air conditioning.

### Pervious pavement

Pervious pavement allows rainwater to infiltrate between tiles instead of running off onto soils. This process reduces the need for additional stormwater management practices to



This pervious highway shoulder in Somers, N.Y. intercepts runoff from the road to promote infiltration.

capture runoff and promotes infiltration that more closely replicates the natural hydrology of the developed site. In addition to replenishing groundwater, pervious paving materials reduce the volume of polluted runoff reaching surface waters, reduce the need for irrigation by channeling stormwater to plants' root systems, and reduce the thermal impacts associated with asphalt and other impervious pavements.

### Green parking lots

Limiting imperviousness and capturing stormwater runoff in parking lots can be enhanced using site-specific Best Management Practices (BMPs). These include limiting the number and dimensions of parking spaces, using pervious pavers in overflow parking areas, treating stormwater onsite with bioretention areas (see next column), and providing economic incentives to construct stacked parking garages.

### Grass swales

Grass or vegetated swales (shallow ditches that capture stormwater runoff) promote infiltration, capture suspended sediment, and reduce the velocity of stormwater runoff. Swales reduce peak flow rates and capital costs for stormwater management controls, but

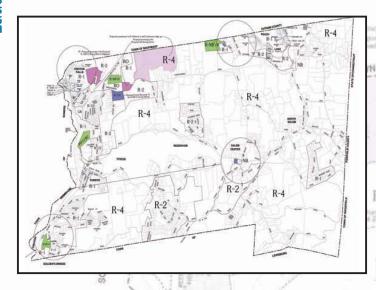
can be subject to erosion during severe storms and are therefore most effective when used along with detention ponds or other structural practices that reduce runoff velocity.

### Bioretention

Biorentention areas – shallow depressions that capture stormwater – incorporate soils and plants to absorb rainwater, retain pollutants, and process nutrients as food for plants. This practice can be used in parking lots and on or adjacent to other impervious structures. Bioretention areas also enhance aesthetics by providing natural habitat on developed sites.

In addition to the economic benefits of LID, sustainable low-impact site designs can increase developers' lot yields, reduce the length of paved street and drainage pipe, and reduce the cost of infrastructure for installation of stormwater drainage structures. A study of a 130-acre subdivision in Little Rock, Arkansas, showed that the benefits realized from one LID project also included increased lot value while lowering lot cost, and enhanced marketability, additional amenities, such as parks and open space, recognition by state and professional groups as well as an additional \$2.2 million in the developer's profits.

### WATERSHED DEVELOPMENT PROJECTS UPDATE



### ■ NORTH SALEM COMPREHENSIVE PLAN UPDATE

In addition to reviewing development proposals that pose an imminent threat to water quality, Riverkeeper encourages towns to engage in forward-thinking local and regional planning that guides smart development and curbs sprawl in the NYC Watershed. The purpose of a comprehensive plan (or master plan) is to provide guidance on growth and development within a town. Once adopted, local laws and zoning regulations should be designed to comply with the goals and policies laid out in the comprehensive plan.

The Town of North Salem has been in the process of updating the Town's Comprehensive Plan for many years. In 2005, Riverkeeper submitted comments strongly criticizing the inadequacy of the Draft Comprehensive Plan Update (Draft CPU) and Draft Generic Environmental Impact Statement (Draft GEIS), and urged the Town not to proceed with the State Environmental Quality Review Act (SEQRA) process until outdated baseline data were updated and studied, and significant defects in the Plan were corrected. In 2006, Riverkeeper submitted comments on the Final CPU, which made few changes, ignoring comments from Riverkeeper and other members of the public. The CPU did very little to improve planning and prevent sprawl, strengthen environmental laws, or improve protection of natural resources in North Salem. Instead, the final CPU proposed only a handful of individual zoning amendments to accommodate existing development proposals within the Town. This is an inappropriate use of the CPU process.

While North Salem is currently one of the less densely populated towns in the East-of-Hudson (EOH) Watershed, we do not want this extremely flawed process to go forward and set a troubling precedent for watershed planning. Thus, in

April 2007, Riverkeeper filed a lawsuit seeking annulment of the CPU. Similar lawsuits were filed by the Concerned Residents of North Salem and other private landowners. While these cases have not been formally consolidated, all three have been transferred to the same judge and will be briefed in the fall.

Fent Manor The Final Environmental Impact Statement (FEIS) for this project was completed in 1987, but due to changes in ownership and other complications, the project stalled until 2005. In this time, numerous regulations and other circumstances have changed, including the Watershed Rules and Regulations instituted as part of the 1997 Memorandum of Agreement, Total Maximum Daily Load determinations for phosphorus reduction in EOH reservoirs, and on-site conditions. In light of these changes, the New York City Department of Environmental Protection (DEP), acting as "lead agency," required preparation of a Supplemental Environmental Impact Statement (SEIS). A large crowd of opponents voiced concerns at a public hearing in winter 2006, and Riverkeeper submitted comments on the Draft SEIS in February 2007.

It is troubling that very few modifications have been made to the original proposal. The project as proposed continues to threaten water quality in the Croton Falls Reservoir basin by placing stormwater detention basins within designated wetlands and buffer areas, and using stormwater modeling data that underestimate phosphorus loading rates. In addition, we identified construction impacts associated with steep slopes, erodible soils, and proposed construction phasing, and we challenged the applicant's eligibility for participation in the Phosphorus Offset Pilot Program (POPP). Despite overwhelming public objection, DEP issued the Final SEIS and Finding Statement on April 30, 2007, one day before the expiration of the POPP. In August, Riverkeeper filed a lawsuit against the DEP seeking annulment of these approvals. Additional petitioners from the neighboring Hill and Dale community have joined us in this challenge.

■ MEADOWS AT DEANS CORNERS Riverkeeper continues to fight for appropriate environmental review of the Meadows project, which was first proposed more than 14 years ago. Having lost our case before the State Supreme Court, we were elated when the Appellate Division found in our favor on appeal, ruling that the Southeast Planning Board had failed to take a "hard look" at relevant environmental impacts during the SEQRA process and directing the Planning Board to prepare a SEIS. In 2006, requests by the developer and Planning Board to the Appellate Division for leave to appeal to New York's highest court were denied. However, direct requests to the Court of Appeals were granted. Briefing will be conducted in summer 2007 and oral arguments before the Court are scheduled for October 2007. Riverkeeper will continue to defend this hard-fought victory.

PHOTO COURTESY OF JIM JOHNSON, SUPERINTENDENT OF ROAD MAINTENANCE, WESTCHESTER COUNTY DEPARTMENT OF PUBLIC WORKS

GRANITE POINTE Riverkeeper submitted comments on the Draft SEIS in late 2006. The Town of Somers subsequently required the developer to do additional testing and resubmit the remediation plan to remove significant lead contamination from prior use of the site as a skeet shooting range. The Final SEIS is due in fall 2007. Currently, the Town is seeking partners to help fund acquisition of this critical parcel. Riverkeeper will continue to advocate for permanent preservation of the Granite Pointe site.

by Leila Goldmark

■ PATTERSON CROSSING In fall 2006, Riverkeeper submitted comments on the Draft Environmental Impact Statement (DEIS) opposing the scale and configuration of the proposed commercial retail project. We have subsequently met with the developer to discuss these ongoing concerns, and anticipate that there will be project modifications when the Final Environmental Impact Statement (FEIS) is released in fall 2007.

### **■ WESTCHESTER COUNTY AIRPORT**

PUTNAM COUNTY

In 2006, Riverkeeper submitted comments on the scoping document for a number of proposed safety, environmental, and security "improvements" at the airport. However, due to environmental concerns, the airport now wishes to proceed with plans regarding the deicing facilities more quickly than other portions of the project. Riverkeeper will review the new draft scope, which is anticipated in fall 2007.

### **BREAKING NEWS!**

Agreement Reached for Belleayre Project For many years, Riverkeeper fought for an environmentally protective alternative to the proposed Belleayre Resort at Catskills Park. A significant victory for watershed protection was won on September 5, 2007 when an Agreement in Principle (AIP) was reached between the State, New York City, environmental groups and the project proponent, Crossroads Ventures LLC. Using Congressmen Hinchey's low-build alternative proposal to kick-start negotiations, the resulting AIP is a testament to collaboration that should serve as a model for future development within the NYC Watershed. Sale of nearly 1,200 acres for inclusion in the Catskills Forest Preserve removes development within the stressed Ashokan Reservoir Basin, reduces the project acreage by nearly two thirds, and expands passive recreational opportunities in the region. But this is just the start. To learn more about the AIP and revised Belleayre Resort project, go to: http://riverkeeper.org/campaign.php/watershed\_development/we\_are\_doing /1217. Along with Riverkeeper, the AIP is supported by the Catskill Center for Conservation and Development, Natural Resources Defense Council, New York Public Interest Research Group Inc., Theodore Gordon Flydishers, Trout Unlimited, and the Zen Environmental Studies Institute.

In Riverkeeper's fall 2006 newsletter, the Watershed Team reported on our partnership with East-of-Hudson municipalities to reduce road salt use in the New York City Watershed. Along with Northern Westchester Watershed Committee (NWWC) members, Westchester County, the New York State Department of Transportation, and New York Public Interest

Research Group (NYPIRG), we formed a Highway Deicing Task Force to structure uniform data collection practices and

identify strategies to decrease road salt application in the Croton Watershed. Since fall 2006, the Task Force has met monthly, investigating existing deicing practices and equipment used by Westchester municipalities, systems of data collection, and alternative deicing Best Management Practices.



WESTCHESTER COUNTY BRINE TRUCK

In summer 2007, the Task Force completed a draft report of its findings and recommendations. The final report will include information on the environmental impacts of road salt and chemical alternatives, recommendations regarding public safety, driver and community education, and potential strategies to reduce road salt use. It encourages development and use of written winter maintenance policies by highway departments and commercial operators. In addition, following Westchester County's comprehensive survey of current deicing practices among the municipalities, the Task Force developed a uniform data collection record that will provide standardized information on how much salt is applied under specific weather conditions. This information will help us track the amount of salt and other materials that are applied during various weather conditions and that use various operational strategies. Some of these strategies include pre-wetting roads with salt brine, using centerline spreaders to service two-lane roads in a single pass, and the use of infrared sensors that let the salt truck operators know when the pavement has reached the freezing point.

The final draft of the Task Force report is due to be released in fall 2007, after which the municipalities will prepare to collect data for the coming winter. Riverkeeper hopes that NWWC communities will follow the recommendations contained in the report and participate in ongoing research by providing data to assess the success of the recommended alternatives within the NYC Watershed. Backed by the technical expertise of the Task Force, Riverkeeper will expand our outreach and education efforts to Watershed communities in Putnam and Dutchess Counties. We will also support the highway departments' efforts by fostering the environmental and driver safety awareness of the public at large. Ensuring safe roads and clean water can be achieved.

### What We Do and How You Can Help

Founded in 1966 by fishermen and community members to confront polluters for control of the Hudson River, Riverkeeper has investigated and successfully prosecuted more than three hundred environmental lawbreakers and is credited with leading the battle to restore the Hudson River and to protect New York City's drinking water supply. Today, the Hudson River is the only major estuary on the Atlantic coast of the United States that still retains spawning stocks of all its native fish species. Riverkeeper has helped to establish globally recognized standards for waterway and watershed protection and serves as model and mentor for the growing Waterkeeper movement that includes 160 Keeper programs across the country. Please visit our website at www.riverkeeper.org.

### **How We Operate**

Through citizen complaints and our own investigations, we root out polluters and other threats to the Hudson and New York City watershed. We rely on Pace University Law School's Environmental Litigation Clinic to help bring these environmental lawbreakers to justice. With Robert F. Kennedy, Jr. and Karl S. Coplan at the clinic's helm, 10 students work as attorneys each semester bringing lawsuits against polluters. The students receive special permission from New York State to practice and provide Riverkeeper with the equivalent of as much as \$1 million in legal services each year.

### **Ways to Contribute**

By joining Riverkeeper you become part of a community of people fighting to protect the Hudson River from pollution and harmful development. Membership benefits are offered at various levels. Donors under \$500 receive a Riverkeeper bumper sticker, a subscription to the Riverkeeper semiannual newsletter and invitations to select member events. In addition to the above, Atlantic Sturgeon members (\$500-\$999) receive name recognition in the Riverkeeper newsletter and a DVD copy of Swim for the River, the 2006 documentary chronicling the first swim of the entire length of the Hudson River. Hudson River Stewards (\$1,000-\$4,999) receive a Riverkeeper picnic blanket. Hudson River Falcons (\$5,000-\$9,999) receive a copy of Hudson River Journey, Images from Lake Tear of the Clouds to New York Harbor, with the introduction written by Alex Matthiessen, Hudson Riverkeeper and President.

When making cash contributions, check to see if your company matches charitable contributions by employees. It could double your gift to Riverkeeper. For more information about contributing to Riverkeeper, please contact Allison Chamberlain in the Development Office at 914-478-4501, ext. 232.

### Gifts of Stock

Gifts of appreciated securities are an effective way to help Riverkeeper and realize significant tax advantages at the same time. To find out more about contributing stock, contact Riverkeeper's Director of Development, Karen Tumelty, at 914-478-4501, ext. 238.

### **Charitable Estate Planning**

If you wish to ensure the protection of the Hudson for future generations, consider remembering Riverkeeper in your will. The proper designation is:

"To Riverkeeper, Inc., a not-for-profit, tax-exempt organization incorporated by the laws of the state of New York in 1983, having as its address 828 South Broadway, Tarrytown, New York 10591-6602. I hereby give and bequeath \_\_\_\_\_\_\_\_ to be used for Riverkeeper's general purposes."

For additional information about planned giving opportunities, contact Riverkeeper's Director of Development, Karen Tumelty, at 914-478-4501, ext. 238.

### **How to Join**

To join Riverkeeper, simply fill out the form below and mail it along with your contribution to: Riverkeeper, 828 South Broadway, Tarrytown, NY 10591-6602. Please check the appropriate box and fill in the amount below or log on to our website at www.riverkeeper.org.

			under \$100	
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			\$250 – 499	Riverkeeper's Activist Listserv. I want to be notified by e-mail
Atlantic Sturgeon			\$500 – 999	about public hearings, letter
<ul><li>Hudson River Steward</li></ul>	d		\$1,000 – 4,999	writing campaigns, fundraising
Hudson River Falcon		<u>.</u>	\$5,000 – 9,999	appeals and other activist events. My e-mail addresses
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# Toward a Permanently Protected River

### **Riverkeeper Sets Out to Influence Environmental Policy**

### By Alex Matthiessen

n July, Riverkeeper launched its new policy department in recognition of the important role public policy must play in our efforts to bring about the permanent protection of the Hudson River and the New York City drinking water supply. Given the Spitzer administration's commitment to environmental protection, the time is right to seek more stringent enforcement and legislation that will create incentives for businesses to invest in protecting our environment.

For forty-plus years, Riverkeeper has been the Hudson Valley's chief law enforcer when it comes to safeguarding our water resources. Our success here on the Hudson spawned an international movement of waterkeepers that today numbers 160 groups worldwide. And make no mistake — Riverkeeper will continue to be the Hudson Valley's number one environmental law enforcer for years to come.

If done strategically, enforcing our environmental laws not only prevents ongoing discharges from polluters large and small, but creates a deterrent for would-be polluters. Because a small group like ours can only be in so many places at once, we have mobilized a network of citizen activists to help us identify and prosecute violators when simple cease and desist requests fail.

But despite Riverkeeper's singularly effective model of advocacy, we need to supplement our litigation strategies with a more far-reaching and lasting approach. I often liken our work to playing the "whack-a-mole" game at the fair: every time you bop one polluter, another three — or ten — pop up somewhere else. In the end, you may win many a battle but lose the overall war against rampant pollution and sprawl, and spend an enormous amount of time and scarce resources doing it.

Instead, we need to make *not polluting* pay. That means providing financial incentives and disincentives to polluters to do right by our environment without groups like Riverkeeper ever having to come after them. Companies would have the opportunity to save money by eliminating or minimizing their waste and avoid having to tangle with advocacy groups and regulatory agencies. In theory, this system would put groups like Riverkeeper out of business, or at least allow us to pursue strategies more "productive" than just busting polluters.

To that end, Riverkeeper's Board of Directors has approved the idea of establishing a new arm of the staff to focus on pursuing legislative and regulatory initiatives. Sometimes this will mean working to strengthen our laws and regulations and the enforcement capacity of City and State

environmental agencies. In other cases, we will push for the enactment of laws and use of various subsidies, tax credits or other financial instruments to induce positive behavior from businesses that might otherwise choose to pollute our environment.

To head up this new effort, I have tapped Lisa Rainwater who, for the past three years, has done an outstanding job directing Riverkeeper's Indian Point campaign. Working closely with our Hudson River and Watershed staff, Lisa and her team of policy analysts will identify and promote legislative initiatives that support Riverkeeper's legal work and advance our mission. Lisa will also use her skills as a strategist to help direct a number of Riverkeeper's larger campaigns.

Below is a preview of what the policy department will focus on in its inaugural year.

### **Legislative Initiatives**

The Policy Team will work with statewide coalition partners and sister environmental organizations on crucial environmental issues facing New York: water pollution, clean energy, and watershed preservation, to name a few.

### **Indian Point Campaign**

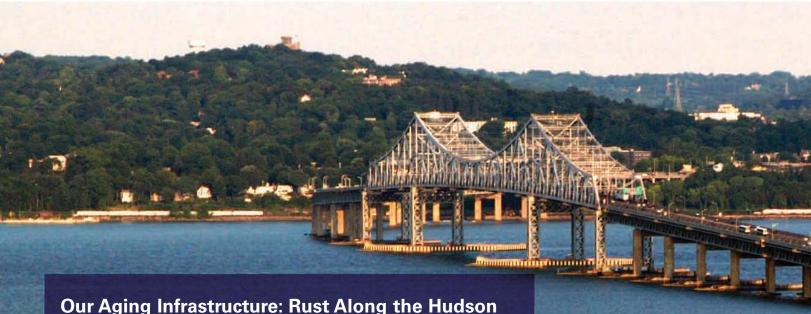
Over the next two years, we will focus on waging a legal battle to prevent a twenty-year license extension of Indian Point's two nuclear reactors. In addition, we will continue to promote our *Reenergize New York* initiative and efforts to force the Nuclear Regulatory Commission (NRC) to undertake an Independent Safety Assessment of Indian Point.

### **Tappan Zee Bridge Campaign**

As the first environmental group to oppose a new Tappan Zee Bridge, Riverkeeper will actively work to educate the public on why rehabilitation of the bridge is our best bet.

### **Smart Growth Campaign**

Riverkeeper's Watershed Team is gearing up to release the second installment of its Sprawl Report, which will include strategies for controlling sprawl and protecting the watershed areas that provide New York City, Westchester County and other municipalities with their drinking water.



The state of our infrastructure is no simple matter. First, responding to this crisis is extraordinarily expensive. Repairing or rehabilitating an aging bridge or tunnel, for instance, will likely cost far more than the structure's original price tag. Choices will need to be made, and priorities set; and alternatives to the many existing facilities will have to be identified and constructed.

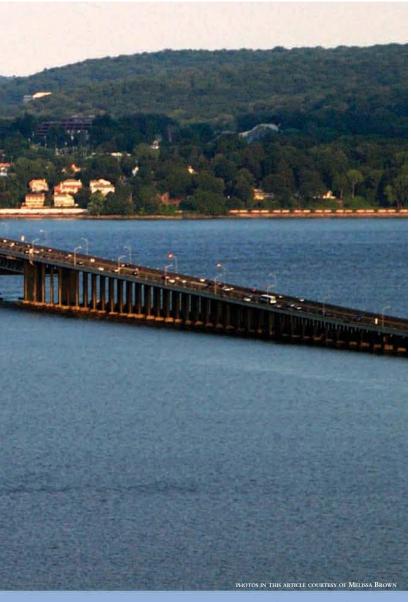
Green technology can obviate many of our infrastructure problems. Sewage systems, for instance, can be separated from stormwater drainage; and natural systems, such as wetlands, can be preserved and restored to take advantage of their natural ameliorative functions. Urban areas can be reconfigured to provide similar advantages by capturing stormwater before it hits the ground and picks up contaminants, thus viewing it as a valuable resource rather than as pollution.

And not every facility needs replacement. Many, such as the Tappan Zee Bridge, can be safely rehabilitated and remain serviceable for many years to come.

# A Bridge To a More Sustainable



The bridge is not falling down. It started with a rumor. The Tappan Zee Bridge, which spans the Hudson River from Rockland to Westchester, was approaching its 50th anniversary and had allegedly reached the end of its natural life. The iconic span was said to be designed to last only for a half-century. Disaster was imminent! People rerouted trips to avoid the inevitable collapse of the Tappan Zee Bridge. To the dreamers among us there was talk of replacing the bridge with an icon for the 21st Century - a bigger, better, and more beautiful bridge than any other in the world. Tunnel proponents dusted off plans for a Nelson Rockefeller-era link from Rockland County to Long Island's north shore. Mass transit advocates devised rail lines crisscrossing Westchester County. The buzz about the Bridge's safety gained momentum, reaching its crescendo with the collapse of the I-35W Bridge in Minneapolis.



Cover Story
By Robert Goldstein

# Hudson Valley

Much of the misconception about the condition of the Tappan Zee Bridge began as the result of the secrecy that surrounded an inspection report conducted in 2005. Claiming national security secrets, the New York State Thruway Authority initially refused to release the full 2,929 page report, fueling the fledgling sub-

urban legend that the bridge was unsafe. Despite the subsequent issuance of the report, which concluded that the bridge was in generally good condition but needed some attention, the notion that the bridge may be unsafe has proven to be a difficult rumor to kill. The collapse of the I-35W Bridge only stoked such fears.

The root cause of traffic on the Bridge is the number of cars that travel across it each day. And study after study demonstrate that adding more lanes to a bridge or highway just invites more cars and never solves traffic problems.

### All the justifications have been replaced with rationalizations

With safety theoretically off the table as an issue, other reasons for a new bridge were presented to fill the void. Traffic, for instance. If there is one issue that unites public opinion, it is traffic. A new bridge would purportedly alleviate the rush hour traffic over I-287. Or so they claimed.

There is certainly traffic on the Tappan Zee Bridge. And sometimes there are severe accidents and fatalities, some of which cause serious delays across the span. But the root cause of traffic on the Bridge is the number of cars that travel across it each day. And study after study demonstrate that adding more lanes to a bridge or highway just invites more cars and never solves traffic problems. It's the "if you build it they will come" principle.

There is another issue that should theoretically kill any hopes for a new bridge. Vehicles coming off a bridge need someplace to go. I-287 in Westchester will not be widened under the current proposals for a replacement bridge. Yet, there are already chronic delays, not on the Bridge, but after you get over the Bridge. As morning rush hour traffic leaves the toll

plaza, traffic builds on I-287 in Westchester. As westbound evening rush hour traffic approaches the steep grade in Nyack, traffic builds into Rockland. The 10 to 12 lanes proposed for a new span will still have to be funneled into three. Is this the end of the story? Well, no. Proponents of a new bridge claim that their vision is for people to get out of their cars and take mass transit. No cars, no traffic. Really?

As a general rule, mass transit is good public policy, which makes a project being touted as having a mass transit component more difficult to oppose. But in the case of a new bridge across the Tappan Zee, the proposed rail options will neither reduce traffic nor get commuters out of their cars.

That is because a rail system won't address the needs of the two types of commuters who must travel daily to New York City and Westchester County. Commuters to the City will opt for the one-seat ride being offered by the building of a new tunnel between New Jersey and Manhattan that will deliver riders on the Pascack and Port Jervis lines to Penn Station, and possibly to Grand Central. While the Hudson tunnel project has not yet

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### RIVERKEEPER PURSUES REHABILITATION

Riverkeeper has publicly called for the option of rehabilitating the current Tappan Zee Bridge. A rehabilitation could address any safety issues including earthquake protection, as well as potentially offer shoulders (break down lanes), a bicycle/pedestrian path, an environmentally protective drainage system, and a state-of-the-art bus rapid transit system. The price tag? About \$2.5 billion or about \$12 billion less than the most conservative estimates for a new bridge with all its touted bells and whistles.

Rehabilitation of an existing bridge is a commonplace solution for an aging span. In 1991 the New York City Department of Transportation began rehabilitating the Williamsburg Bridge (opened in 1903) "to undo the effects of age, weather, increased traffic volumes and deferred maintenance and prepare the bridge for another 100 years of service to the City of New York." The Manhattan Bridge (opened in 1909) is also undergoing a major rehabilitation, as are the Brooklyn Bridge (opened in 1883) and the Queensboro (opened in 1909).

begun, it has received a significant federal funding commitment and is light-years ahead of a possible Tappan Zee Bridge replacement. So North-South commuters are taken care of. That leaves East-West commuters.

The reason that the North-South commuters have long balked at mass transit options in favor of their cars was the lack of the one-seat-ride. It is axiomatic in the transit field that the chief hurdle preventing people from choosing mass transit over their personal vehicles is when the commute requires changing trains (or buses). The proposal for an East-West rail line on the newly proposed bridge involves not a one-seat ride, not even a twoseater, but a three-seat odyssey. The commuter would have to drive her car to the park-andride in Rockland along I-287 (seat one), board the train bound for Westchester (seat two), and then get off the train along the I-287 corridor in Westchester and board a bus or van (seat three) that will shuttle her to a limited number of offices and commercial centers in the county. And since there may not be anywhere within walking distance to pick up food, our commuter will have to bring her own lunch. Otherwise she'd have to borrow a car, or hike to the nearest deli

simply to get a sandwich.

To justify its expense, mass transit is heavily reliant on population density and demographics. Notably, neither county has the requisite density along the I-287 corridor. This is typical of what urban planners call "non-radial" mass transit. Radial mass transit, like the existing Metro-North system, is a hub-and-spoke system. It encourages the commercial development of an urban core like Manhattan. What does "non-radial" mass transit encourage? Sprawl development. Think Los Angeles.

### The devil is in the details

The plans to build the infrastructure to support a mass transit system on a replacement for the Tappan Zee Bridge were unveiled by the New York State Department of Transportation (DOT) in February of this year. Those plans were released to the public and to a newly formed citizens' advisory group as part of the extensive environmental impact review that will support the ultimate choice of one of the six alternatives under consideration.

Of those six alternatives, four require the building of a replacement bridge, one would simply repair the existing span, and one would rehabilitate it.

While the details of the plan







reflect a Herculean effort by the agency, those very details confirm our worst fear – that a new replacement bridge would profoundly alter the region, and not for the better.

The level of complexity in these plans is apparent when zooming in on the neighborhood by neighborhood impacts of construction on this grand a scale, with every added parking space and every threatened intersection detailed. It is clear that a new bridge will have an impact on the quality of life of area residents, not only in Nyack and Tarrytown, but in every adjacent community from Suffern to Port Chester.

A widened bridge, with or without mass transit, will spur the migration of large numbers of New York City and Westchester workers to now rural communities in Orange and Ulster Counties. The added traffic will snarl already congested roads, require hundreds - if not thousands - of new parking spaces, and severely restrict movement corridorwide. Increased noise levels and air pollution will follow apace. Commuters will populate suburbs further from New York City, including places like Sullivan County, causing further sprawl growth north into the heart of the Catskills and mid-Hudson Valley. The movement of additional vehicles

jostling for parking spaces will further congest local roads and increase smog. Property owners along the corridor whose land is not condemned for these "improvements" will be dramatically impacted, with parking becoming scarcer for businesses and residents alike.

One can only wonder what other dramatic changes to the landscape are in store if we build a new larger bridge. What will a magnified study of environmental impacts show? What about the impacts on development in the wider region? As the bounds of the metropolitan area are stretched by commuters seeking lower priced housing, they will be followed by shopping malls and office parks. This is clearly what happened on Long Island where both Nassau and Suffolk Counties are choked with shopping malls, sprawl development, and traffic throughout its 118-mile length.

Rockland and Westchester will, no doubt, bear the brunt of a new larger bridge.

Rockland might be the most vulnerable to sprawl-type development as commuters from afar converge in the county to either cross the bridge or gain access to the mass transit links that will emanate from there. How much more can Rockland County be developed given the purported need for a desalina-

### One can only wonder what other dramatic changes to the landscape are in store if we build a new larger bridge.

tion plant to meet future water needs? What will the consequences be of drawing more commuters (in cars) from Northern New Jersey and Orange County (and points further north) to the streets of Rockland in search of a parkand-ride?

It is evident from the DOT's plan and presentations on the new bridge option that there is no easy way to superimpose this much infrastructure on the corridor without profoundly affecting the lives of all the residents of the region for decades to come.

# Bus rapid transit is the best option and will fit on the current bridge

If adding more car lanes on a new bridge proves infeasible because of the limited capacity of the interstate coming off the bridge in either direction, then the rationale for a replacement bridge must be its mass transit potential. But, as we established before, a rail link to Manhattan on the west side of the Hudson via the Pascack and Port Jervis lines aided by a new tunnel into Penn and possibly Grand

Central Stations is a more sensible solution. And the eastwest link by rail is so inflexible and cumbersome that it won't inspire commuters to leave their cars. Thus only one option remains: a Bus-Rapid Transit (BRT) system on the existing seven-lane bridge which could be rehabilitated for a fraction of the cost of building a new one. Here's how it could work: assign the seventh lane of the existing bridge as a dedicated bus lane. Additionally, on a rehabilitated bridge it would be possible to cantilever break down lanes on the long approach causeway in each direction which would greatly reduce the impacts of accidents. The BRT buses would use the dedicated bus lane while traveling with rush hour traffic in the mornings and evenings; otherwise the buses would use the regular car lanes.

### And what about the River?

As to the potential impacts to the Hudson, all you need to know is that bridge construction is a long and very involved process, much of which must

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occur in the River itself. The first test borings for the Tappan Zee Bridge were sunk in June 1951, and the bridge was opened on December 15, 1955. Construction lasted four and a half years. The removal of the existing Bridge also could take quite a while. Bridge demolition is a highly technical art, and is generally performed with explosives. Notwithstanding the distinct possibility that the existing span would be left in place due to the high cost and significant environmental impacts of bridge demolition, we are talking about in-river construction that will last many years.

That alone will have significant impacts on the biota in the River. For 50 years, the bottom of the Hudson River near the Tappan Zee has been shaped by the tides and currents around the stanchions of the existing span. The nowrich habitats for the River's biota that formed over that period would be eradicated by significant and precipitous changes in the underwater topography. Sediments long protected in the eddies created by the existing bridge towers/ stanchions/caissons would be released to settle on sub-aquatic vegetation, killing it and endangering the fish and other biota that depend on it.

And what of the sediments? Unlike the remediation of polluted sediments where extra care and expense are focused on preventing the resuspension of toxic chemicals that have been deposited over the years, no such protections will likely be afforded a construction project like the building of a bridge. Think of stirring up a highly toxic soup.

The rehabilitation of the Tappan Zee Bridge, on the other hand, can cure several of the environmental woes that plague the existing span including the double-edged problem of drainage. The Bridge's current condition is severely impacted by its poor (actually non-existent) drainage system. Water from the roadway that drains into the River rusts the Bridge's metal and causes the disintegration of its concrete (through a freeze-andthaw cycle). While this destructive force is actively gnawing away at the Bridge, the "system" is constantly spouting the untreated runoff into the River. Along with water flow oils, salt from deicing operations, and just about anything else that vehicles might discharge. A rehabilitation could address these problems with a 21st century solution.

### WHO WILL DECIDE?

While Governor Eliot Spitzer will ultimately decide on the future of the Tappan Zee Bridge, that decision will likely be based on the recommendation of the New York State Department of Transportation and its new Commissioner Astrid C. Glynn.

During his campaign, then-State Attorney General Spitzer had called for replacement of the Tappan Zee Bridge, though it is unclear whether he had been fully informed about the rehabilitation option. The DOT has made it quite clear that rehabilitation is still on the table, and that they will be taking a hard look at this alternative going forward.



A \$147 million deck replacement project began in September.

### A tale of two legacies

Current estimates for a new bridge with all the bells and whistles is \$14.5 billion dollars. While no one has cited the potential sources of these funds, it is not unreasonable to assume that much of the cost will be borne by New York taxpayers.

The second legacy is more troubling.

In considering a new bridge, it is useful to look at past experience as a guide. The George Washington Bridge was opened in 1933 with only one deck to hold its six lanes, to which two additional lanes were added in 1946. The New York Times noted in a January 17, 1955 article that "[t]he George Washington Bridge was designed originally to support a second deck for either rail or vehicular traffic." That same article recommended "that a six lane lower deck be added to the George Washington Bridge to add 75 percent to the present hourly capacity." The second deck was added in 1962, and the span now accommodates a total of 14 lanes of vehicular traffic between New Jersey and New York City. Fourteen lanes, incidentally, that are always congested. The rail system was never built.

If plans for mass transit on a new Tappan Zee Bridge never materialize and the extra capacity is used for cars, the results for Westchester and Rockland and counties beyond will be similarly disastrous.

In connecting the George Washington Bridge to the regions' highways, Robert Moses, the "master builder," paid little heed to the consequences of running an expressway through the heart of the Bronx. That taught a lesson to urban planners everywhere. Neighborhoods were torn apart, and the South Bronx was isolated and abandoned to languish as a slum for decades. The expressway became, and still is, packed with soot-spewing trucks traversing the megalopolis. It remains a symbol of the avarice that has tainted Moses' legacy.

The Tappan Zee Bridge issue is one that reaches far beyond mere transportation. It will affect every aspect of life in the Hudson Valley, arguably in the same way that the George Washington Bridge and the Cross Bronx Expressway destroyed much of the Bronx.

*That* is no legacy to leave our children.

# What could Life Be Like?

How Climate Change Might Affect the Hudson Valley and New York City

By Renee Cho. A tornado hits Brooklyn. 1,359 buildings in Queens are damaged by storms and flooding. The death toll climbs to 12 as heavy rain and flooding covers a large part of the Midwest. The California heat wave ends with a death toll near 25. Hurricane Felix, a rare Category 5 storm, slams Central America, killing one hundred.

**Predictions for Our Region** 

These are not theoretical scenarios of what could happen in 50 years as the climate heats up. These are actual news stories from this past summer. In other words, our lives are already being profoundly affected by climate change. What we are experiencing and will experience over the next several decades is being determined by greenhouse gas emissions that we have already produced. The average temperature for 2006 in the contiguous United States was the warmest ever recorded and January 2007 was the hottest January on record. Most experts agree that by 2100, winters in our area could be between 8°F and 12°F warmer, and summer temperatures could be 6°F to 14°F higher. There is evidence across the globe of an increase in extreme

weather, including more intense hurricanes and longer droughts. The most recent analysis predicts a possible sea level rise of two to four and a half feet due to melting glaciers and ice caps. And if the ice sheets under Greenland and West Antarctica collapse, global sea levels could swell to 12 to 20 feet over the next century with catastrophic consequences. Some scientists predict that the equivalent of today's 100-year flood will occur once every decade in New York City. Given these projections, what could the future be like for residents in our region?

### Impacts on Our Well-being

New York City residents will be hit hardest by higher temperatures given the urban heat island effect – caused by the absorption of sunlight by buildings and pavement by day and the radiation of heat at night. Heat-related death rates rise when temperatures exceed 90°F, disproportionately affecting our growing elderly population, children and people with respiratory problems. By the end of the century, our area could see between 40 and 70 days over 100°F every year, as compared to a historical average of 13 days over 90° each year. Higher temperatures can also cause increases in ozone (the main component of smog) and particle pollution from dust or fires, both of which can have serious effects on people's respiratory systems.

Milder winters will enable more deer and mice, and thus more ticks that transmit Lyme disease, to survive. Warmer and wetter conditions will also produce more mosquitoes which will likely mean an increase in

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This article reflects an amalgam of findings from a collection of recent studies on climate change (listed below). We generally offer a range of scenarios dicting consequences precisely, and the fact that the ultimate impact of climate change depends on what we do in the next decade to slow greenhouse gas emissions. In some instances, we highlight the more dire scenarios to help drive home the urgency of the problem. Experts agree that the actual effects of climate change could turn out to be cast here. The "precautionary principle" suggests that we should assume the worst and act decisively and aggressively

### Sources:

- Confronting Climate Change in the U.S. Northeast: Science, Impacts, and Solutions. July 2007 (Union of Concerned Scientists and a team of independent experts)
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- Hot Nights in the City: Global Warming, Sea-Level Rise and the New York Metropolitan Region by Janine Bloomfield, Ph.D. (Environmental Defense Fund)
- Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change (National Assessment Synthesis Team U.S. Global Change Research Program)
- Climate Change in the Hudson Valley Conference, December 2006 (Hudson River Environmental Society)
- Center for Climate Systems Research, Climate Impacts Group, Metro East Coast Assessment

### **WESTCHESTER COUNTY TASK FORCE ON GLOBAL WARMING**

As Chair of the Energy Committee for the Westchester County Task Force on Global Warming, Riverkeeper is an active force behind the County's pledge to reduce its CO<sub>2</sub> emissions. With leaders from the government, business, education, and environmental communities, we are working to research, develop, and deploy a series of Action Steps to help the County introduce a comprehensive Climate Action plan. These measures, both practical and legislative, will be announced at a kickoff event, October 10, at the Westchester County Center. We will need every resident's involvement to make this initiative a county-wide success.

mosquito-transmitted diseases like West Nile Virus, equine encephalitis and malaria. Rising levels of carbon dioxide (CO<sub>2</sub>), the main greenhouse gas, act like a fertilizer and are being held responsible for more virulent strains of poison ivy, and hay fever- and asthmaproducing pollens in our area.

Heavy rainfall and ensuing floods could contaminate water supplies with waterborne diseases caused by rotovirus, salmonella, giardia and cryptosporidium.

### **Societal Impacts**

### Fires and Drought

Higher temperatures will increase the number of droughts and fires in our suburbs and in New York City. In April 2006, the *New York Times* reported, "global warming is bringing drier weather and increasing winds to the Northeast... the smallest brush fire can become a city-devouring inferno." Last spring, there were more than 90 brush fires in parts of New York City.

By 2100, droughts which

now last one to three months and occur every two to three years, could occur yearly.

### Water Supplies

In hot weather, lakes and reservoirs lose more water to evaporation and people consume more water, so higher temperatures will stress our water supplies. There will be more demand for air conditioning and water-based recreational opportunities such as swimming, boating and fishing. Water management officials may be forced to choose between releasing fresh water from the reservoirs into streams to maintain fish habitats and reserving the water for drinking.

Yearly droughts could have serious repercussions in the Catskills watershed from where New York City and parts of Westchester draw their drinking water. Drought and rising sea levels could also push saltwater from the ocean further up the Hudson River, interfering with the Chelsea Pumping Station, an emergency water facility south of Poughkeepsie that draws fresh water from the Hudson to supply drinking water to New York City during droughts.

### Flooding

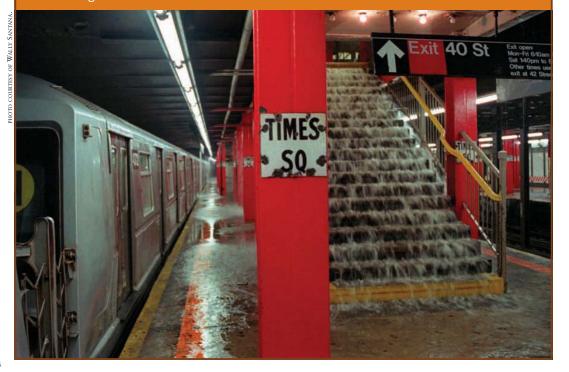
As little as 1/20 of an inch of rain can already overload New York City's sewer lines and fourteen sewage treatment plants. When this happens, 27 billion gallons of sewage and contaminated stormwater flow into the harbor at combined sewage overflow sites, discharging pathogens such as cryptosporidium and toxic substances such as polychlorinated biphenyls (PCBs), dioxin and mercury, into the river. Given our aging infrastructure, more extreme storms could also cause damage to or the complete loss of certain sewage facilities.

Because New York City has 600 miles of coast line, much of lower Manhattan will be at risk for flooding by the end of the century. Most of New York City's transportation infrastructure is at or below sea level, making tunnel and subway station entrances particularly vulnerable to flooding. The area's airports are also located close to the sea and just above sea level. Rising seas and coastal flooding will also wreak havoc on New York area beaches and coastal communities.

### **Economic and Lifestyle Impacts**

Summer drought and warmer autumns are associated with muted fall foliage colors.
Winters will be milder with less

>> Most of New York City's transportation infrastructure is at or below sea level, making tunnel and subway station entrances particularly vulnerable to flooding.





Photos left to right: Artist Eve Mosher draws attention to the impacts of sea level rise on Manhattan by drawing chalk lines where flood levels will reach. Crossing Battery Park near the entrance to the Battery Tunnel. On Pearl Street in Lower Manhattan. For more information, visit www.highwaterline.org. Photos courtesy of Jose Cedeno.

snow fall, but more precipitation in the form of rain. Many recreational activities will be forced to migrate north, such as fall foliage tourism and skiing. By 2100, summer is expected to arrive nine to 21 days earlier and last up to three weeks longer than it does today. To escape the heat, residents will likely flock to our area's lakes, rivers, beaches and estuaries, putting added stress on these resources.

By 2050, our area's small farmers may benefit from a growing season two to four weeks longer than today's with opportunities to grow new crops since higher levels of CO2 act as a fertilizer. But heavy rains in spring could delay planting, and increased drought and ozone levels may reduce crop yields. Invasive insects and weeds could also flourish with higher CO2 levels. Growers of apples, grapes and berries, which require extended winter chilling periods, will face difficulties, as will the dairy industry, which depends on cool temperatures, because heat stress causes cows to produce less milk.

### **Environmental Impacts** Wetlands and Forests

The wetlands of the Hudson River Estuary and New York Harbor help filter pollution from the water, protect the coastline from storm surges, and provide habitat for many species. Sea level rise could cause wetlands to migrate or disappear altogether which would change or destroy existing spawning habitats for fish and leave shoreline communities more vulnerable to flooding.

Changes in temperature and precipitation will affect our forests, resulting in the migration of familiar tree species and new combinations of species. Droughts will increase the risk of forest fires, different species combinations could leave forests more vulnerable to insects and invasive species, and changes in tree growth may affect the ability of trees to store carbon, which helps remove CO<sub>2</sub> from the atmosphere.

The loss of wetland and forest areas, coupled with the extensive development and paving over of permeable surfaces in the Hudson Valley means that less water will be absorbed by the land and thus create more runoff and flooding. During a storm, increased

runoff – including stormwater containing untreated sewage and fertilizer nutrients from lawns – could result in increased algal blooms in the Hudson River estuary. When bacteria feed on algal blooms, they use up the oxygen in the water as they reproduce, creating an oxygen-less dead zone where little marine life can survive.

### **Ecosystems Disrupted**

Normally as snow melts gradually in spring, the meltwater replenishes the groundwater and produces high spring stream flow which helps maintain stream flow through summer months. Warmer winters and earlier springs, however,

will trigger earlier snow melt and more precipitation, which could saturate the ground and lead to more runoff. This would inhibit groundwater replenishment which could result in reduced stream flow in summer and fall. Higher temperatures, increased evaporation and drought would also reduce stream flows. Less water could affect aquatic plants and animal species sensitive to stream flow such as the trout that spawn in Esopus Creek, the renowned Catskills trout stream.

The loss of habitat and the introduction of invasive species could change predator-prey relationships and patterns of

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### DON'T BE GREENWASHED; OFFSETS OFF THE MARK

Next time you encounter a company that promises to "turn lives carbon neutral," don't mistake this great hoax for the great hope. Some claim we can atone for our energy-lustful ways if we purchase their carbon "offsets," often in the form of planting new trees. While trees are undeniably carbon sinks, a sapling planted today won't absorb the given "offset" amount of CO2 for decades. Furthermore, some of this CO2 is released again after the tree dies and decomposes. Worse, a significant amount of any "offset" transaction is chalked up to administrative costs. If wisely managed, tree plantations can help remediate the effects of climate change, but ultimately, there are no substitutes for true action against global warming, only complements. We cannot buy our way out of our own carbon-producing actions. Rather, we must tread more lightly on the environment at the source.

dominance and survival, perhaps resulting in some instances of increased local biodiversity, but more likely resulting in an overall loss of biodiversity. A study published in *Nature* in 2004 predicted that 15 to 37% of species worldwide will be extinct by 2050 due to climate change.

While scientists can predict that certain changes will occur, no one really knows the gestalt these changes will create or how it will affect our lives. Over millions of years, the life cycles of plants and animals of every region have been precisely calibrated and synchronized to work together as parts of highly sophisticated ecological systems. Disrupting these interdependent relationships among plants and animals will no doubt have profound and unforeseeable effects on our environment and on human life.

### What Can We Do?

The decisions we make today will determine the quality of life on our planet from midcentury on. The United States accounts for only 5 percent of

the world's population, yet is responsible for 25 percent of the world's greenhouse gas emissions. The Northeast is the seventh largest source of CO<sub>2</sub> emissions from energy use in the world. The report Confronting Climate Change in the U.S. Northeast stressed that we need to reduce our emissions in the Northeast to 80 percent below 2000 levels by 2050 if we hope to avoid the less severe consequences of global warming.

There are many things each of us can do as individuals to reduce our carbon footprint. (See sidebar). But our best hope for averting the disastrous effects of global warming is to put pressure on our policy makers and elected officials to institute energy policies that will spur a transformation of our economy from one powered by fossil fuels and other unsustainable energy sources to one driven by renewable clean energy and require energy efficiency standards across the board.

We must push our leaders to adopt a carbon tax, which

### **INDIAN POINT AND CLIMATE CHANGE**

Entergy has applied for 20-year license renewals for Indian Point's two nuclear reactors, but how will the effects of global warming impact Indian Point over the next two decades? With its "once through" cooling system, Indian Point sucks in 2.4 billion gallons of Hudson River water every day to keep its reactors operating at safe temperatures. It expels the water back into the river at temperatures up to 110° F, an increase of 34°. But what will happen when the river water is too hot to effectively cool the reactors or if water levels drop due to droughts? In 2003, a heat wave in France forced 17 nuclear reactors to operate at reduced capacity or shut down. The French government was forced to break its environmental laws and allow nuclear plants to discharge overheated water into the rivers or cut the power. This caused extensive damage to the rivers' ecosystems. Stephane Lhomme, coordinator of Sortir du Nucléaire (Phase Out Nuclear Power), was quoted as saying, "Global warming is showing the limits of nuclear power plants, and nuclear power is destroying our environment." Given the effects global warming will have on our region, can we afford another 20 years of Indian Point?

would curb wasteful fossil fuel consumption by establishing prices for dirty fuels that fully reflect the costs they impose on society. Congress should direct the auto industry to reduce its greenhouse gas emissions and institute CAFE (corporate average fuel economy) standards of at least 50 mpg by 2020. Government should provide tax incentives to encourage businesses to install energyefficient systems and support intensive research, development and implementation of renewable energy sources. Tax incentives and subsidies for the oil, gas, coal and nuclear industries should be abolished. Mayor Bloomberg's PlaNYC, a plan to make New York City sustainable; Westchester County's Global Warming Task Force that promotes energy efficiency, green energy, and green buildings; and Governor Spitzer's 15 by 15 Plan to cut energy use 15 percent by 2015, are

initiatives moving in the right direction.

When we New Yorkers experience asthma attacks, blackouts, or extreme heat, and see news reports about fires, hurricanes and floods across the United States, we must make the connection between these phenomena and the way we live our every day lives. Which cars do we choose to drive? How cool do we keep our homes? Are we putting enough pressure on our leaders to bring about far-reaching energy policies to reduce global warming? No one can afford to sit on the sidelines anymore. Not if we hope to preserve our way of life for our children and grandchildren. Not if we want to maintain our role as a leader among nations. Not if we care about the sanctity of life—all life—on this fragile planet. We have the resources and policy prescriptions at our disposal. We just need to take action. ■

### A DOZENTHINGS WE CAN DO

For more tips, visit www.climatecrisis.org

- Use compact fluorescent light bulbs instead of incandescent ones.
   Each one saves 300 pounds of CO<sub>2</sub> per year.
- 2. Turn off electric devices and lights when not needed. This saves thousands of pounds of CO<sub>2</sub> per year.
- 3. Drive less and take mass transit. Avoiding 10 miles of driving each week saves 500 pounds of CO<sub>2</sub> each year.
- 4. Properly inflate your tires. This ensures good gas mileage which saves 20 pounds of  $CO_2$  for each gallon of gas saved.
- 5. Don't buy products that are overly packaged. Reducing your garbage 10% saves 1200 pounds of  $CO_2$ .
- Recycle your household waste and buy products with recycled content. Recycling even half your waste saves 2,400 pounds of CO<sub>2</sub> yearly.
- 7. Use less hot water. Doing laundry with cold water saves 500 pounds of  $\text{CO}_2$  per year.
- 8. Only run your dishwasher with a full load to save 100 pounds of  $CO_2$ .
- 9. Keep your thermostat 2 degrees higher in summer and lower in winter. This saves 2,000 pounds of CO<sub>2</sub> per year.
- 10. Opt to purchase your electricity from renewable energy sources. If the utility company does not offer "green power", you can purchase renewable energy certificates that fund renewable energy projects in other parts of the world.
- 11. Encourage your friends, neighbors, schools, churches, businesses, and industries to "go green."
- Contact your elected officials and let them know you want them to institute smart and sustainable energy policies. (http://www.visi.com/juan/congress/)

# campaign

# Unpeeling the Layers: Understanding Entergy's Latest Media Tactics

By Lisa Rainwater ince purchasing Indian Point in 2001, Entergy has invested vast amounts of money in glossy ad campaigns in an attempt to sway public opinion in favor of its problem-plagued nuclear plants. Crafted by the high-powered public relations firm Burson-Marsteller, Entergy ads appearing shortly after September 11, 2001 insisted that Indian Point (IP) was safe, secure, and vital. Yet when Entergy realized that the public didn't necessarily buy into its claims of safe and secured operations, the multibillion dollar corporation homed in on the one issue that had the potential to displace the very real fear of serious malfunctions at the plant or the threat of a terrorist attack: closing Indian Point would threaten energy reliability. Initially, it seemed to work. Public opinion appeared, for a time, to shift in Entergy's direction. The tides turned in the summer of 2006, however, when the National Academy of Sciences issued a report concluding that replacing Indian Point's power was more a matter of political will and state regulatory mechanisms than a lack of viable alternatives. Suddenly, this authoritative study negated years of Entergy's false claims about the inability to replace 2000 megawatts, forcing the corporation to shift its media tactics yet again to play upon another fear that had recently become a household term across America: global warming.

Entergy's latest media approach is directed toward securing public support not necessarily for Indian Point's current operations but for extending its current licenses until 2035. Entergy's media fantasy is, however, negated by decades of safety problems, radioactive leaks, emergency planning debacles, and questionable management tactics. For this reason, the public is questioning the rationale of granting such a problem-plagued plant a two-decade extension.

From elected officials to the general public, the battle to prevent a twenty-year license extension for Indian Point has reached virtually everyone in the region. The emerging stubborn, homegrown opposition to relicensing has shaken Entergy's confidence, and with a shaken confidence comes, unfortunately, a New York media market saturated with an even greater distortion of Indian Point's record. Entergy's anxiety has forced the corporation to take ever greater liberties with the facts.

In this article, we unpeel the layers of Entergy's latest media tactics and offer tangible actions that could be taken by New York State officials to address the false assertions being thrust upon the public.

### Layer 1: Indian Point: Clean and Green?

While most of us were busy preparing Thanksgiving dinner last November, Entergy seized the moment to announce its intentions to seek twenty-year license extensions for both nuclear reactors. Flanked by former NYC mayor Rudy Giuliani and former Greenpeace activist – and now paid nuclear power public relations guru Patrick Moore – Entergy president Michael Kansler launched the corporation's new "Right for New York" ad campaign. According to the ads, running in newspapers, magazines, on the internet, television, and radio, nuclear power plants "produce no greenhouse gas emissions."

Dream on. Nuclear power is neither clean nor green. And that is not just an indictment by environmental organizations. In 1998, when the Natural Resources Defense Council (NRDC) brought charges of false advertising against the Nuclear Energy Institute (NEI), the lobbying arm of the nuclear industry, the Council of Better Business Bureaus agreed with NRDC's charges. The National Advertising Division (NAD) of the Better Business Bureau ruled

that NEI should no longer run "unqualified" claims touting nuclear energy as environmentally clean because consumers would likely believe that nuclear power does not have a negative effect on the environment. NAD noted, "The record, however, does not support this interpretation of the claim." NAD also found that "any claim that nuclear power is non-polluting is unsupportable" because uraniumenriched fuels needed by nuclear plants are produced using electricity from dirty coalburning plants and there is still no permanent disposal system for radioactive waste generated by nuclear plants. The life-cycle analysis of nuclear fuels reveals vast fossil fuel consumption, CO2 emissions, and mining hazards.

For more information on why nuclear power is not green, see "Debunking the Myth—Indian Point's Nuclear Power Fails the 'Green' Test" http://riverkeeper.org/campaign.php/indianpoint\_reenergize/the\_facts/1313.

### Layer 2: Indian Point: Rescuing Us From Foreign Energy Dependence?

U.S. dependence on foreign energy sources is a hot button issue being discussed on Capitol Hill, at the gas pump, in boardrooms, and at diners across America. While most everyone agrees that the United States should rely on its own energy resources in order to bolster national security and provide jobs to Americans, viable solutions to our current dependency on foreign oil have yet to be implemented by the federal government. This glaring gap in our national energy policy has opened the door for reckless and indefensible assertions by the nuclear industry that nuclear power -Indian Point's power – weans us from our foreign energy dependence. Nothing can be farther from the truth.

(Continued on page 20)

# campaign

90% of the United States' uranium is imported from foreign sources, while 66% of the nation's oil is imported. In a June 11, 2007 New York Times article, Jack Edlow, a uranium businessman, told New York Times reporter Matt Wald, "I can't say 'energy independence' with a straight face." Uranium, required to operate nuclear power plants, is not a homegrown source of energy and does little to secure our energy independent future. Yet, in its "Right for New York" campaign, Entergy plays on the public's deep fears of terrorism, never-ending wars in the Middle East and an unstable foreign oil market by asserting that Indian Point frees us from dependence on foreign energy sources.

Increasing America's dependence on nuclear fuels will only perpetuate our dependence on hostile, unstable regions of the world.

### Layer 3: Indian Point: Safe and Reliable?

Entergy's ads assert that the plant is safe, reliable, and has a "safety culture that... encourages openness." Yet, Indian Point has a long history of safety and reliability issues as well as a documented work environment that discourages workers and security guards from raising problems with Entergy management.

Indian Point 2 is the only plant to have received the worst safety rating from the Nuclear Regulatory Commission (NRC). A transformer fire at Indian Point 3 this spring resulted in Indian Point's safety rating being lowered. The reactor remained off-line for three weeks. In the last year, Indian Point has had nine emergency shutdowns – five to six times the national average. Indian Point's old emergency siren system has failed numerous times in recent years, forcing Congress to pass legislation requiring backup power to improve reliability. Entergy failed to meet the deadline and was granted a 45day extension. In April and August, Entergy again failed to finish the job.

As the relicensing battle is fought out over the next several years, New Yorkers will continue to be bombarded by Entergy's media tactics – many of which are outright misleading; many of which merely walk a fine ethical line. Unless, of course, the public and elected officials demand truth in advertising.

In addition to safety problems, Entergy's management practices are questionable when it comes to safety. In December 2006, an NRC report revealed a "potential chilling effect" among workers who identified safety issues at Indian Point. The NRC noted, "workers perceived that individuals were treated negatively by management for raising issues. As a result of these incidents, some workers expressed reluctance to raise issues under certain circumstances." This was not the first occurrence. A 2002 report found that 59 percent of the guards felt that a "chilled environment" existed and 12 percent said that they had been retaliated against for reporting safety issues.

### **Layer 4: Celebrity Testimonials**

Losing battleground, Entergy appears to have fully embraced one of the oldest tricks in the PR handbook: celebrity testimonials. It began when former NYC Mayor Rudi Giuliani's consulting firm was hired to assess Indian Point security measures. Belatedly exploiting the post-9/11 stature of "America's Mayor" to flog the corporation's agenda seemed like a clever maneuver, but the firm had no expertise in nuclear security and the former mayor was (and still is) coming under heavy fire for failing to upgrade first responder communication technologies after the 1993 World Trade Center bombing.

Entergy's next celeb came in the form of a long discredited 1970's environmental activist who has begun making the rounds in the Hudson Valley, declaring Indian Point a solution to global warming. Dubbed an 'eco-traitor' by *Wired Magazine*, Patrick Moore's financial backing by the nuclear industry has been criticized by environmentalists and highly-respected journalists alike.

When these two celebrities' endorsements became ineffectual, Entergy shifted their sights to Hollywood. This spring, actor Paul Newman visited Indian Point and released a press statement, noting "All of the spent fuel rods at Indian Point from more than 30 years of generating electricity are stored in a pool that, in my younger days, I could jump across." While Newman's involvement attracted some media attention, Entergy's desperate attempt appears to have backfired. Newman's statements and motivations were called into question, even drawing the ire of the Times-Herald Record editorial board, who wrote, "What was he thinking when he let himself be lured into endorsing the safety of Indian Point... nuclear safety is much too important to be part of a celebrity endorsement competition, and he should have given the issue the respect it deserves."

### **Layer 5: Sponsoring Green Programming**

In recent months, RNN, a regional television news station for the Hudson Valley, launched a new weekly segment entitled *i on the Environment*. Entergy is the corporate sponsor for the 'green' segment, showcasing Patrick Moore and his assertions that Indian Point is a green energy source in a thirty-second advertisement. As the financial backer for this program, Entergy is able to leverage viewers' interest in very real 'green' issues, while attempting to persuade them through association that Indian Point is part of the 'greening' of the Hudson Valley. In addition, Entergy's numerous advertising websites are linked

to the program's website, encouraging internet users to become consumers of the corporation's disinformation message.

### **Layer 6: Buying Public Support**

This spring, Entergy and other New York State nuclear operators lobbied successfully to thwart Governor Spitzer's efforts to transfer from the taxpayer to the nuclear power plant operators the high costs of protecting the state's nuclear plants from terrorism. The State's budget would have relieved New York taxpayers of \$13 million, but in the end the budget item was stricken from the budget during negotiations with the two chambers. Meanwhile, as taxpayers continue to pay out-of-pocket for the National Guard to be stationed at the State's nuclear plants, Entergy has spent oodles of money trying to buy public support in the form of small donations to regional not-for-profits such as the Westchester Philharmonic, the Westchester Arts Council, and the YMCA, and the sponsoring of public events, including "Books For Keeps," a project organized by the Pajama Program.

### **The Whole Rotten Onion**

As the relicensing battle is fought out over the next several years, New Yorkers will continue to be bombarded by Entergy's media tactics – many of which are outright misleading; many of which merely walk a fine ethical line.

Unless, of course, the public and elected officials demand truth in advertising.

While Entergy's use of celebrities and corporate sponsorship of regional news programs may not be in violation of New York State law, Entergy's direct advertising does violate several statutes under consumer protection entities and guidelines set forth by the Federal Trade Commission. There are, however, courses of action elected officials, and particularly the Attorney General, could take by filing suit on behalf of the public. Members of the public can also voice their

complaints with several key agencies.

The Better Business Bureau (BBB) of New York asserts that "an advertisement as a whole may be misleading although every sentence separately considered is literally true. Misrepresentation may result not only from direct statements but by omitting or obscuring a material fact." The BBB also advises that "claims as to energy savings, performance, safety, efficacy, results, etc. which will be obtained by or realized from a particular product or service should be based on recent and competent scientific, engineering or other objective data." Any citizen may contact the BBB to file a complaint, and once a problem has been identified, the BBB will try to get the company to change its

The New York State Consumer Protection Board (CPB) declares that "an advertisement is considered misleading if it fails to disclose facts which are important in light of what is stated in the advertisement..." Clearly Entergy is not disclosing all the facts about nuclear energy production when its ads imply that Indian Point's nuclear power is not responsible for producing any greenhouse gases. According to CPB, consumers who have suffered damages from a business's use of false advertising are entitled to file a civil suit for recovery. The Attorney General could sue Entergy on the basis of false advertisement on behalf of the State of New York.

The Federal Trade Commission's (FTC) Guides for the Use of Environmental Marketing Claims state that "an environmental marketing claim should not be presented in a manner that overstates the environmental attribute or benefit expressly or by implication." And "unqualified

general claims of environmental benefit... must be substantiated." If the FTC finds that a company's advertising is out of compliance with guidelines established in its *Guides for the use of Environmental Marketing Claims*, it can initiate an "enforcement action" which may result in an injunction and/or civil penalties. *Riverkeeper believes that the FTC should be strongly urged to initiate such an action*.

While other corporations create ads to sell a product, Entergy's ads sell the concept of fear: fear of blackouts, fear of higher electricity prices, fear of global warming, and fear of ongoing wars over oil. And while New Yorkers can't necessarily choose whether to buy Indian Point's energy, they can choose whether to buy into these concepts of fear. New Yorkers are smart and skeptical. Ultimately, we can decide what's right for New York, but our elected officials and agencies need to be there with us, peeling the layers off the onion and upholding the rule of law.

Imagine listening to the Yankees game on WCBS without being bombarded with Entergy propaganda. Imagine opening the paper over a bagel and a steaming cup of coffee without being insulted with misleading facts about Indian Point's environmental record. Imagine watching your favorite television program without seeing an environmental quisling telling you that Indian Point will solve our global warming issues. Imagining is just the beginning. Fighting back is what follows.

Go to <a href="www.riverkeeper.org">www.riverkeeper.org</a> for specific actions you can take to help stop Entergy's fearmongering distortions and media manipulations.

Renee Cho contributed to this piece.

New Yorkers are smart and skeptical. Ultimately, we can decide what's right for New York, but our elected officials and agencies need to be there with us, peeling the layers off the onion and upholding the rule of law.

### INDIAN POINT • <u>campaign</u>

### Reenergizing New York with Governor Spitzer Leading the Way

By Lisa Rainwater

WITH OUR REENERGIZE NEW YORK INITIATIVE, RIVERKEEPER CONTINUES TO BE AT THE FOREFRONT OF POLICY INITIATIVES THAT HAVE POSITIVE IMPACTS ON THE HUDSON RIVER AND EXPONENTIALLY INCREASE THE OPPORTUNITIES TO REPLACE INDIAN POINT'S POWER WITH SMART ENERGY USE AND PRODUCTION. IN APRIL, GOVERNOR SPITZER UNVEILED HIS CLEAN ENERGY PLAN FOR NEW YORK. AND WE ARE HAPPY TO REPORT THAT ALL OF OUR POLICY INITIATIVES AND PROPOSALS WERE CAPTURED.

Replacing Indian Point's 2000 megawatts, according to the 2006 National Academy of Sciences report, is feasible – with leadership in Albany and the right laws and regulations in place to promote clean energy production and energy efficiency and conservation. With a definitive – and positive – solution to the former Achilles' heel of our Indian Point Campaign, Riverkeeper set to work to ensure that our policy recommendations for Indian Point replacement power would be at the forefront of the next New York governor's environmental agenda. Last fall we launched our Reenergize New York initiative, calling for a reauthorization of Article X, a lapsed siting and permitting law for power plants that expired in 2003, the repowering of older plants with clean technologies, long-term contracts to encourage investment in new construction, and extensive statewide energy efficiency and

### **GOVERNOR SPITZER'S 15 BY15 PLAN**

### **KEY POINTS**

- Reduce Electric Energy Use by 15% by 2015
- **Increase Efficiency of Buildings and Appliances**
- 21 New Contracts for 800 MWs of Renewable Energy Power Generation by 2008
- Article X Siting Law to Speed Construction of Clean Energy **Plants**
- Long-Term Contracts between Power Plants and Energy **Providers to Increase Investments in New Plant Construction**
- Implement Decoupling Measures to Ensure Energy Providers **Maintain Profit While Provoking Conservation Measures**

### **BENEFITS TO NEW YORKERS**

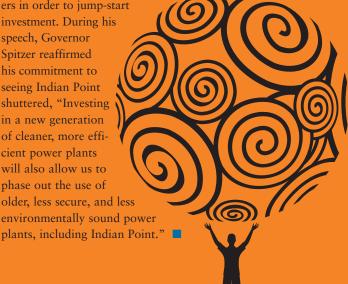
- **Reduces Energy Bills**
- **Creates New Job Market**
- **Reduces Our Contributions to Global Warming**

conservation incentives. In addition, we set about educating New Yorkers on Smart Energy use, distributing 30,000 brochures in English, Spanish, and Chinese to New York City neighborhoods (For Riverkeeper's Smart Energy Checklist, visit www.riverkeeper.org)

Since Eliot Spitzer, who has long supported the closure of Indian Point with the assurance of replacement power, was elected governor in November 2006, Riverkeeper has taken a proactive role in ensuring that our policy goals are considered. Hudson Riverkeeper and President Alex Matthiessen was appointed to the Governor's energy and environmental transition team that worked on developing energy policies for the new administration. Riverkeeper's staff also developed policy memos outlining our Reenergize New York initiative and submitted them to the Governor in early January.

Months later, our hard work paid off, as we've moved one step closer to closing Indian Point. On April 19, to a business crowd in New York City Governor Spitzer unveiled his much anticipated clean energy plan. Dubbed "15 by 15" for its goal of reducing New York's current energy demand by 15% by 2015 (coincidentally, the end of Indian Point's operating license) through efficiency programs, the Governor's energy plan will be one of the most aggressive in the country. Through legislation and regulatory changes, the Governor's plans to bring 800 MWs of new, clean power to New York by 2008, implement siting regulations that encourage clean energy technologies, encourage repowering of dirty power plants, and reinstitute long-term contracts between power producers and power sell-

ers in order to jump-start investment. During his speech, Governor Spitzer reaffirmed his commitment to seeing Indian Point shuttered, "Investing in a new generation of cleaner, more efficient power plants will also allow us to phase out the use of older, less secure, and less environmentally sound power



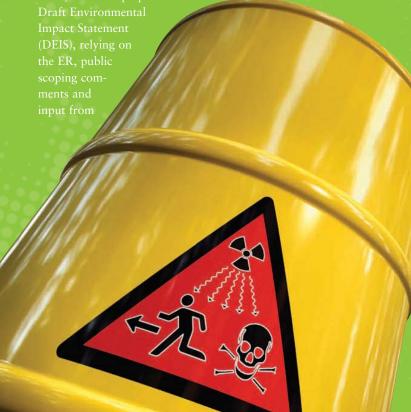
# campaign

### **Environmental Review, Terrorism and Indian Point**

BY PHILLIP MUSEGAAS

Now that Entergy's application to renew Indian Point's license has been accepted for review by the Nuclear Regulatory Commission (NRC), the agency's formal relicensing review begins. A critical piece of this process is the environmental review mandated by the National Environmental Policy Act (NEPA), the landmark federal legislation that requires all federal agencies to assess the future environmental impacts of their actions. For the NRC, renewing a nuclear power plant's operating license is an "agency action" requiring the preparation of an Environmental Impact Statement (EIS). The agency must assess the environmental impacts of the proposed action, reasonable alternatives that may be more environmentally friendly and mitigation measures that would lessen the impacts if the project were to go forward. However, the agency is not obligated to choose the less harmful alternative, nor is it forced to refuse a project even if certain impacts are unavoidable. NEPA's strength lies in its requirement that the agency and the public are fully informed about the range of environmental impacts that would result before a decision is made.

Indian Point's NEPA review begins with the preparation of an Environmental Report (ER) by Entergy intended to form the foundation of the EIS prepared by the NRC. This is followed by the "scoping" process, designed to give the public the chance to tell the NRC what kinds of impacts should be assessed in the EIS.



THE NRC HAS GONE TO GREAT LENGTHS TO SEVERELY RESTRICT THE NEPA REVIEW IN AN EFFORT TO STREAM-LINE THE REVIEW PROCESS FOR RELICENSING EXISTING PLANTS — IN EFFECT, FOREGOING COMPREHENSIVE REVIEW IN FAVOR OF PROTECTING INDUSTRY PROFITS.

other federal agencies. A second opportunity for public comment follows the release of the DEIS. The process concludes with the preparation and release of a final EIS (FEIS) by the NRC. The FEIS must fully consider and incorporate public comments solicited during the process, and it must contain an initial recommendation as to the "environmental acceptability" of the renewal. In order to renew the license, the Commission must decide "whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision makers would be unreasonable."

Ideally, the EIS for Indian Point would assess all potential impacts, and would present a scientifically accurate analysis of alternatives and mitigation measures. For example, an alternative to Indian Point may be a combined cycle natural gas power plant in the same location. One way of mitigating Indian Point's impacts on the Hudson would be the installation of cooling towers to eliminate the use of river water to cool the plant

The goal of NEPA, after all, is to force the "decision maker," in this case the NRC, to fully consider how Indian Point will affect the natural environment in the future. NRC practice, however, is far from ideal. In reality the process is more informed by political expediency and regulatory efficiency than common sense. The NRC has gone to great lengths to severely restrict the NEPA review for relicensing – in effect, foregoing comprehensive review in favor of continuing the status quo.

The NRC cleverly narrowed the scope of NEPA review in 1996 by amending its regulations to include a Generic Environmental Impact Statement (GEIS) for license renewal. The GEIS concluded that the majority of environmental impacts would be the same for all nuclear plants, regardless of their site-specific differences. These were classified as Category 1 impacts which did not have to be reexamined in the EIS for relicensing due to their "insignificant" effects. The few remaining were categorized as Category 2 and were required to be assessed for each plant on a site-specific basis.

Criticism of the NRC's approach centered on two types of impacts that were either relegated to Category 1 status and effectively exempted from review or ignored completely.

First, the impacts of long-term storage of spent fuel at nuclear plants were classified as Category 1, due to the NRC's mistaken

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# campaign

belief that the permanent waste repository at Yucca Mountain, Nevada would begin storing waste within a couple of years. While this conclusion may have been defensible in 1996, it certainly no longer is. The last eleven years have seen internal government scandals, bad science and stalwart resistance from the Nevada state government and Congressional delegation that have left the project dead in the water, with the most optimistic opening date now 2020.

Yet the fiasco of Yucca Mountain and the federal government's failed nuclear waste policy would not be resolved even if the waste repository opened in 2020. Yucca Mountain's storage capacity is only 70,000 tons. Even the NRC admits that the national stockpile of nuclear waste currently stored at operating plants will exceed Yucca's capacity by 2010. As a result, all spent fuel created after that time will have nowhere to go, even if Yucca Mountain opens. If Indian Point is relicensed, this means the creation of another thousand tons of radioactive waste that will remain at the plant for the foreseeable future. Not to mention the fact that Unit 2 and Unit 1's spent fuel pools continue to leak toxic strontium-90 and cesium-137 into the site's groundwater and the Hudson River.

Despite the looming waste crisis, the NRC continues to insist that spent fuel can be stored at all plants without significant environmental effects for thirty years beyond the end of the license term, including a renewal term. For Indian Point, this would allow nuclear waste to remain on-site until 2065. This ignores the fact that the predicted life span of the dry casks ranges is forty years, and that the nuclear waste sealed inside will remain highly radioactive for hundreds of thousands of years. It is also unclear who will be responsible for securing and monitoring both the dry cask and spent fuel storage once Indian Point is finally shut down and decommissioned.

The NRC also refuses to consider the potential environmental impacts of a terrorist attack on a nuclear power plant, deeming it too "remote and speculative" to require a formal assessment, despite a 2005 study by the National Academy of Sciences that found the spent fuel pools at nuclear power plants are vulnerable to terrorism.

The NRC used its power as an independent agency to craft regulations supporting this narrow view and insulating it from review. In fact, it took a challenge in federal court by a small anti-nuclear citizens' group in 2006 to expose a chink in the NRC's armor and reinvigorate groups across the country opposed to the NRC's weak-minded policies.

In 2002, Pacific Gas and Electric applied to NRC for a license to construct a dry cask storage facility at the Diablo Canyon nuclear power plant in California. San Luis Obispo Mothers for Peace (MFP), a local citizens' group, filed a petition opposing the facility and demanded the NRC assess the potential environmental impacts of a terrorist attack on Diablo Canyon as part of the

NEPA review. MFP's argument relied on the fact that NEPA requires an assessment of any impacts that are "reasonably foresee-able." The NRC refused, finding the agency's duty to implement NEPA did not extend to assessing the consequences of a terrorist attack that was "too remote and speculative." MFP appealed the NRC decision to the 9th Circuit Court of Appeals, and in a historic decision, the court rejected the NRC's argument and required it to assess the impacts requested by MFP.

The 9th Circuit chastised the agency for relying on an essentially contradictory position; on one hand, the NRC claimed that the chances of a terrorist attack were too remote and speculative to quantify, therefore the potential impacts should not have to be assessed. On the other hand, the NRC had been actively issuing new security orders to all nuclear plant operators in response to 9/11, reflecting the real threat of a terrorist attack. In classic NRC doublespeak, the agency was discounting terrorism on one hand while actively preparing to prevent it on the other.

In response to this rebuke, the NRC quickly sought to limit the reach of the 9th Circuit's ruling, stating in subsequent proceedings that they would only apply it within the court's jurisdiction. Petitions by citizens' groups opposing the Oyster Creek (New Jersey) and Vermont Yankee plants' relicensing were rejected by the NRC, which openly challenged the legitimacy of the court ruling and invited further federal litigation.

In other contexts, NEPA has proven to be a powerful tool for determining how a proposed project will affect the environment in the future. However, an effective NEPA review relies on the willingness of the agency implementing it to incorporate new information into its process. In the case of Indian Point, the conundrum over disposal of nuclear waste and the heightened risk of terrorist attack since 9/11 should be carefully considered and evaluated before a decision to relicense the plant is even considered. If such a review were undertaken, it's doubtful Indian Point would be relicensed. The NRC's refusal to consider either of these critical issues at this critical juncture in Indian Point's history exemplifies an agency desperately trying to defend an increasingly indefensible position. Like an ostrich with its head in the sand, the NRC steadfastly refuses to accept that the world has changed, and both old and new problems with nuclear power remain unsolved. The 9th Circuit decision shows that, when subjected to independent scrutiny, the NRC's logic doesn't hold up.

Riverkeeper is committed to preventing the relicensing of Indian Point for a number of reasons. We will use the NEPA process to press our concerns over nuclear waste storage, the potential impacts of a terrorist attack and the continuing degradation of Hudson River fish populations from Indian Point's antiquated once-through cooling system. For more information on how you can support our relicensing battle, go to www.riverkeeper.org.

### **HUDSON RIVER**

# program

### What about the Wetlands?

7.5 Million Gallons of Raw Sewage and the Quest to Save the Wetlands that Help Protect the Hudson River

By KATIE GHILAIN

hen 7.5 million gallons of sewage spewed out of a ruptured sewer pipe in Yonkers by the Greystone train station in early May, local officials responded quickly to gain control of the leak. For six days after the spill, they warned everyone to avoid the area and disinfect anything that came into contact with the Hudson River.

Several weeks later, people were back on the Hudson and the pipe was being repaired. Questions began to arise regarding the site, its wetlands, and the resources required to ensure its complete restoration. Eventually, the sewage will dissipate and be absorbed; however, the stench of human disturbance will remain if the wetlands that slowed the flow towards the river and absorbed some of the sewage become a permanent casualty of the spill.

### The Value of Wetlands

Between the broken pipe and the Hudson River lies an area of wetlands. Wetlands perform many valuable functions for people and the environment. They help to stabilize water movement by slowing and absorbing water from rain and snow melt. They filter the water as it passes through by removing sediments and pollutants. They provide habitats for many rare and endangered species and afford opportunities for open space preservation and education. Wetlands are some of the most biologically productive areas on earth, serving as "centers of life" for many animal and plant species. The value of wetlands is a relatively recent discovery that unfortunately came too late for much of the United States and the Hudson River Valley. More than 220 million acres of the United States was wetlands when European settlers arrived; however, by 2004, only approximately 107.7 million acres of wetlands remained. In New York, millions of acres have been completely destroyed, mostly having been filled in for agriculture and urbanization-related construction projects like railroad tracks and housing developments. According to the New York State Department of Environmental Conservation (DEC), the Hudson Valley is the only ecological region in New York that lost wetlands between the mid-80's and mid-90's.

After the Yonkers pipe broke, the wetlands served as a buffer and helped to prevent unquantifiable amounts of raw sewage from entering the River – the same river that is a source of drinking water for towns like Poughkeepsie and a source of recreation and enjoyment for all.

### Complete Repair Includes Both the Pipe and the Wetlands

When county officials arrived at the spill site, they created a dirt road by filling in part of the wetlands so that the workers and their heavy equipment could gain access to the pipe. They began pumping excess sewage out of the marsh where it had collected and constructed a bypass around the broken section of the pipe until it could be replaced. These were essential measures in an emergency situation; however, now that the new pipe is in place, the temporary road must be removed in order to finish the job.

Riverkeeper has been actively pursuing the *complete* repair of the site, contending that the County is legally obligated to remove the temporary road and restore the wetlands. In addition to writing

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The wetlands that caught, slowed, and absorbed large amounts of the sewage spewing from the ruptured pipe lie beyond the pipes that bypassed the break.



Here is a view of the ongoing work from the hill where the sewage pumps are located, looking towards the Greystone train station and the adjacent residential development complex. A more extensive project is proposed for this location despite the site's demonstrated instability and the importance of the wetlands that remain.



The workers are preparing to install the replacement pipe. Note how steep the slope is – another landslide waiting to happen?

# program

letters to County legislators and other interested parties, Riverkeeper has attended meetings of the Westchester Board of Legislators and the Board's Committee on the Environment and Energy to express our concerns and encourage the allocation of sufficient resources to ensure that the site is restored to its original condition.

### Saving the Wetlands that Help Protect the Hudson

Removing the temporary access road is a necessary step in the quest to save the wetlands, but it will not ultimately be sufficient to protect them in the future. There is a large residential development project proposed for the site that will only contribute to the degradation of the area and the wetlands. While the project received the required approvals and permits to build several years ago, because construction was delayed, the developer is once again required to obtain approval from the City of Yonkers Planning Board.

There is significant opposition to the proposed development among members of the community and others concerned about the integrity of the site. Riverkeeper shares these concerns, especially given the increasing incidence of landslides which are likely due to an increase in development and impervious surfaces in the area. In fact, the aging sewage pipe ruptured as a result of a landslide that sent a tree barreling down the steep slope.

Beyond the structural integrity of the site and alarming number of recent landslides, the local residents are concerned about the increased traffic in the area since the project was last approved. The wetlands are another concern since the proposed development would require destroying and disturbing even more of the area. The degraded condition of the site will amplify the negative impact of another development on the remaining wetlands and the Hudson. Thus, Riverkeeper has requested that the Planning Board

require a new or Supplemental Environmental Impact Statement (SEIS) in recognition of the significant changes that have occurred at the site and in the surrounding area over the past few years.

Given the demonstrated importance of these particular wetlands, Riverkeeper is actively pursuing greater legal protection for the site. State regulations generally do not cover freshwater wetlands that are smaller than 12.4 acres. Riverkeeper contends that the wetlands at this site should be designated as being of "unusual local importance." It is small, freshwater wetlands like these that are one of the Hudson's only defenses against aging sewage infrastructure.

Riverkeeper has petitioned the DEC to have the wetlands designated and mapped. We also continue to attend meetings to encourage the City of Yonkers Planning Board to require full restoration of the wetlands at the site prior to new development. It is crucial that the site and the proposed project be thoroughly evaluated in order to ensure that vitally important natural resources are adequately protected.

### **Restoration and Preservation**

Like a scaffold built to repair a large building that must be taken down once the work is done, the road likewise must be removed and the wetlands restored now that pipe repairs are complete. Riverkeeper is working to ensure that the wetlands will continue to safeguard the Hudson and the interests of all who depend on the River for their needs and enjoyment, both now and in the future.

For more information about the value of wetlands and ways to conserve them, see the New York State Department of Environmental Conservation website: www.dec.ny.gov.

Katie Ghilain was a summer legal intern with Riverkeeper. She is a 2nd year law student at NYU.



The 48" replacement pipe is in the foreground. Beyond it are the bypass pipes on the temporary fill, the wetland, and the Hudson in the distance.

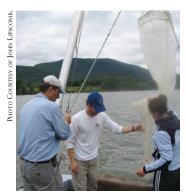


The temporary access road from the Greystone train station side. The remaining wetlands are on the left, and the broken pipe is at the bottom of the steep hill to the right.



# Datrol boat log

by John Lipscomb



### John Lipscomb, Santiago Salinas and Kestrel Perez near Iona Island.

SUNY Stony Brook researchers and Riverkeeper will be sampling between Bear Mountain and Haverstraw Bay once a month through November to count fish larvae.

The study will determine how many larvae are being sucked through the Entergy power plant and killed – Indian Point (IP) uses **two billion** gallons of river water each day for cooling.

Riverkeeper is trying to force Indian Point to install closed system cooling which would require only minimal river water and would effectively end fish kills. With most Hudson River fish stocks in decline, IP must stop killing spawning stock and larvae.



### Sampling for water quality and sewage microbes on the East River with Lamont-Doherty microbiologists.

Since September 2006, we've sampled three days a month between Stony Point and NY Harbor.

We're finding that water quality varies widely and that rain events cause major sewage contamination at many locations. This is due to combined sewer and sanitary sewer overflows as well as failures at treatment plants.

Our one-year data set will be presented this fall. We hope our findings will force county health departments to perform greatly increased testing programs.

Both Riverkeeper and Lamont-Doherty are seeking funding to continue and expand the study.



# On 4/27, John Lipscomb and Troy lock keeper were southbound from Waterford through the Federal Lock at Troy.

Below this last lock is the tidal estuary – 150 miles to the Battery.

This lock keeper is always interested to know what's happening on the River, so we held the lock to compare river notes. These are interesting men – like lighthouse keepers.





### Casper Creek runs through the Tilcon quarry at Poughkeepsie.

There is a large delta at the mouth of the creek composed of light gravel and crushed stone. Beneath this coarse layer, there are layers of ultra fine dust. We believe all this material is a by-product of the quarry. Gravel, sand and stone dust will cover and suffocate important river bottom habitat.

Riverkeeper and the Pace Environmental Litigation Clinic are negotiating with Tilcon.

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This sign is posted at the Ft. Edward Yacht Basin and riverfront park. Fish contain high levels of PCBs.

Thank you so much, General Electric!



### Two almost dead herring in a holding pen at a bait supplier's dock.

When they are almost dead their eyes fog up – like cataracts.

River herring (alewife and blueback) are taken during their spawning runs as bait for the recreational striped bass fishery. Populations of both species of herring (as well as shad, which is also a type of herring) have crashed in the region.

In Massachusetts, Rhode Island and Connecticut, all herring fisheries are closed.

It's illegal to **possess** a herring in those states, but in NYS the fishery continues.

In NY, the Department of Environmental Conservation (DEC) would like to have better science on the health of the river herring runs, but the Fisheries Unit hasn't received sufficient funding in the past. Without data, it's hard to institute management plans or closures.

Riverkeeper is asking that protection of the Hudson's signature species be fully funded and given the highest priority.



### This is a well-established nest near Coeymans in April.

Looks like mom or pop is standing watch.

In the past, Riverkeeper has told the DEC about tree cutting and land clearing activity near this nest. For almost 100 years, there were no nesting pairs on the Hudson River Estuary – now there are at least 18. Full credit goes to the DEC Endangered Species Unit. On 6/28 the US Dept. of the Interior removed the bald eagle from the endangered species list. The birds are still protected by the Bald Eagle Protection Act of 1940 and additional state laws.



# On 4/27 we checked a backwater tidal stream and marsh near the eagle nesting site.

The deck of the access bridge has been removed but people are crossing on the steel beams and there is a well-worn path heading off into the wooded/wild area next to the river. The "Road Closed" sign has a hundred or so bullet holes in it.

A guy with a gun can do a lot of damage to signs – and wildlife.

Riverkeeper is asking the State to set aside more land for wildlife protection in the upper Estuary.



### Amanda Higgs of the DEC Fisheries Unit in Haverstraw Bay in May.

We met her boat while we were sampling for water quality indicators with Lamont-Doherty.

She's holding a sonic tag that will be attached to an Atlantic sturgeon for tracking.



### This Atlantic sturgeon was caught in Haverstraw Bay on May 23rd.

He's 7'3" and weighs 200 lbs.

DEC Fisheries tells us that approximately 300 female and 700 male spawning age Atlantic sturgeon remain in the Hudson.

They were almost fished out for their meat and eggs (caviar) before the fishery was closed in 1996.

Recovery will be very slow because females don't spawn until they are around 20

The DEC attaches satellite and sonic tags so that the fish can be tracked over time.

We have to know their habits to protect them.

Riverkeeper's patrol boat assists by lifting the hydrophone moorings and buoys at Hastings and at Catskill twice a year to download data. We love this project.



### **NEW CASES**



**Monteverde (Cortlandt, NY):** Riverkeeper requested "interested party" status, informed the Department of Environmental Conservation (DEC) of the plans for a large hotel, inn, spa and marina complex at Monteverde, and requested that the DEC act as lead agency in the upcoming State Environmental Quality Review Act (SEQRA) review due to impacts anticipated both in and beyond the Town's jurisdiction. In response, the DEC notified the Town Planning Board that it would review the matter and would not agree at this time to the Town's statement of intent to act as lead agent. The town then voted to take "no action" on the request to rezone which underlies and is necessary for the developer's plans.



**Millens Scrapyard (Rondout Creek, Kingston, NY):** Riverkeeper began an investigation to review and evaluate the history of violations and failed remediations at this highly contaminated site. The DEC promptly issued a new Notice of Violation, while Riverkeeper continues to press for a prompt remediation and penalties.

### **UPDATED CASES**



Riverkeeper v. ExxonMobil: Riverkeeper's citizen suit against ExxonMobil for Clean Water Act and Resource Recovery and Conservation Act violations stemming from the 17-million-gallon oil spill in Greenpoint, Brooklyn is currently in the discovery phase. In January 2007, Riverkeeper filed a second notice of intent to sue based on additional Clean Water Act violations caused by Exxon's discharge of contaminated water into the creek as a side effect of its remediation efforts. In February 2007, New York State Attorney General Andrew Cuomo served notice of intent to sue ExxonMobil, alleging virtually the same violations that constitute the Riverkeeper suit. After receiving this and Riverkeeper's second notice of intent to sue, Exxon shut down most of its oil pumping operation at the spill site. The New York State Department of Environmental Conservation has stated that this shutdown reduced the oil recovery at the site from 1,110 gallons per day to 87 gallons per day, and also resulted in increased oil seeping into Newtown Creek, which flows into the East River. The DEC has called Exxon's shutdown of its oil recovery systems a "deliberate violation of state laws and a substantial failure by ExxonMobil to accept responsibility for prior contamination." At the direction of DEC, Exxon restarted the oil recovery system on June 28, 2007 and must apply for new permits for the discharge of treated groundwater into Newtown Creek. On July 17th, the Attorney General formally filed its suit, which will likely be consolidated with Riverkeeper's suit for the remainder of discovery. Riverkeeper anticipates that this lawsuit will bring about a comprehensive and expedient remediation of this massive underground oil spill, thereby cleaning up Newtown Creek and ensuring the safety of the Greenpoint community.



**Power Plant Federal Court Decision:** The Environmental Protection Agency (EPA) and several energy companies have requested rehearing of the recent decision by the U.S. Court of Appeals for the Second Circuit, which ruled that the EPA's regulations dealing with water impacts by existing power plants were not in compliance with the Clean Water Act Section 316 (b). The regulations were promulgated by the EPA in response to an earlier Riverkeeper litigation. The Second Circuit's decision remanded the case to the Agency for further consideration in light of the court's decision. EPA has "suspended" the rules in the meantime.



**Danskammer Power Plant (Newburgh, NY):** On March 26, 2007, the judge in the case dismissed procedural attacks to Riverkeeper's lawsuit and ordered that the proceeding be transferred to the Third Department Appellate Division, which will decide the merits of the case. This proceeding was filed on July 24, 2006 by the Pace Environmental Litigation Clinic. The lawsuit alleges that the DEC ignored the federal and state mandate that must use the "best technology available" to avoid environmental damage caused by power plants using river water for their cooling water systems.

(Continued on page 30)



### **UPDATED CASES** (continued)



Hudson River PCB Superfund Site: Pursuant to a settlement agreement, General Electric (GE) has finally agreed to begin taking measures to reduce the public's exposure to the Polychlorinated Biphenyl (PCB) contamination in four general areas of floodplain adjacent to the Upper Hudson River. Contamination of the floodplains resulted from periodic flooding of the Hudson River, which remains tainted by the 1.3 million pounds of PCBs, a cancer-causing pollutant which GE had illegally dumped from its plants in Fort Edward and Hudson Falls since 1947. The settlement, which the United States Environmental Protection Agency (EPA) announced on July 11, 2007, precedes a comprehensive investigation of floodplain areas and selection of a final floodplains remedy that will obligate GE to investigate the floodplain sites in anticipation of a final cleanup plan for the contaminated floodplains. Riverkeeper has been aggressively campaigning for cleanup of the floodplains, the GE plant sites and contaminated neighborhoods, in addition to the EPA-ordered dredging of the River. GE has also begun the construction of the facilities it will need to begin Phase 1 (the first year) of the dredging remedy ordered by the EPA to commence in the spring of 2009. Company officials continue to hint about their opting out of Phase 2 (the balance of the cleanup). Riverkeeper continues to appeal to government officials on behalf of residents of the Town of Fort Edward whose homes over the groundwater plume of PCBs and solvents from GE's Fort Edward plant have been rendered valueless, and whose health may be at risk from toxic soil gases.

### HOTLINE CALLS

Each month, Riverkeeper receives dozens of reports of possible environmental violations. Riverkeeper staff determines whether the matter should be dispatched to one of our Watchdogs or attorneys for further investigation, referred to federal, state or local authorities, or become the subject of citizen investigation and enforcement action by Riverkeeper. Riverkeeper staff can be reached at 914-478-4501 ext. 242 or by sending an email to watchdog@riverkeeper.org. The following are samples of reports received by our hotline:

- Cortlandt, NY A report was received about failing and inadequate septic systems along Furnace Brook, which caused leaching into the brook and a nearby lake, and a dispute on the proper interpretation of local zoning laws as applied to a planned expansion of the Seminary.
- Croton-on-Hudson, NY Reports have come in that the town of Croton has passed resolutions at Mayo's Landing which have authorized local officials to restrict public access to the Croton River.
- Middletown, NY A report was received that dumping was occurring behind the Mechanicstown School. The matter was referred to the Army Corps of Engineers for further investigation and enforcement.
- Newburgh, NY A citizen asked Riverkeeper to review the plans for the Driscoll Subdivision, a large development of over 100 new units in the process of environmental review. Because this subdivision may have detrimental impacts on the Quassaic Creek, it will be considered by Riverkeeper staff.
- Sleepy Hollow, NY Reports have been received about local authorities' disregard for wetlands protections and proper environmental stewardship.
- Pawling, NY A citizen contacted Riverkeeper for support in pursuing the cleanup of the second largest oil spill in Dutchess County. He had been frustrated by the Department of Environmental Conservation's response. Riverkeeper visited the site and will continue to monitor its progress.

# nember news

## Hearst Corporation Honored at 2007 Annual Dinner

earst Corporation was hon-ored at Riverkeeper's Annual Benefit on April 19th, 2007 at Chelsea Piers in New York City. The event raised over \$1.6 million to support Riverkeeper's programs. Riverkeeper Board Member Anne Hearst-McInerney and her husband Jay McInerney chaired the gala event.

In his welcoming remarks, Hudson Riverkeeper and President Alex Matthiessen said, "...more and more enlightened companies understand the link between a healthy environment and

healthy profits. The Hearst Corporation is one of those companies, which is exactly why Riverkeeper is honoring its leaders here tonight. The recently completed Hearst Tower is the first occupied gold LEED certified office building in New York City. And in addition to a new green bent in many of its publications, Hearst just launched 'The Daily Green,' a consumer web site dedicated to earth-friendly living."

New York Rangers legend Mike Richter hosted the evening and kept the energy high.

Riverkeeper also celebrated the 20th Anniversary of the Pace **Environmental Litigation** Clinic at the dinner and Robert F. Kennedy, Jr. shared the history and impact of the work done in the clinic. Bobby presented Anne Hearst with a one of a kind piece of jewelry created by Joan Hornig, and Anne and Bobby co-presented Victor Ganzi of Hearst Corporation with the 2007 honoree award.

The hilarious Robert Klein kept the over 650 guests in stitches and the evening concluded with a rockin' set by the multi-talented Lenny Kravitz.



**News about** Riverkeeper events, volunteers, staff and donors



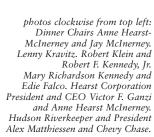












Thank you to all of our friends and supporters who came out for this year's 18th Annual Shad Fest! Please join us for next year's 19th Annual Shad Fest on Sunday, May 18th, 2008.



### Shad Fest 2007 Celebrates the 20th Anniversary of the Pace Environmental Litigation Clinic

With picture-perfect spring weather, good music and great food and drink, this year's Shad Fest celebrated with record numbers the revival of the Hudson River and the proud 20th anniversary of the Pace Law School's Environmental Litigation Clinic.

Over 1,500 guests gathered on the historic grounds of Boscobel Restoration and were treated to clear, breathtaking views of the Hudson while enjoying Shad Fest favorites from organic fare, children's arts and crafts provided by Whole Foods Market, Green Babies and the Chuckie Goodnight Foundation, to a majestic birds of prey show with Brian Bradley and Tom Cullen.

The 2007 Shad Fest celebrated the founding of the Pace Environmental Litigation Clinic. The program, established in 1987, offers ten students each semester (and in the summer) the opportunity to act as the lead attorneys on water pollution cases on behalf of Riverkeeper,

the clinic's primary client, and other environmental groups in the region. Co-Directors Robert F. Kennedy, Jr. and Karl Coplan were joined on stage by 20 years of Litigation Clinic alumni to celebrate two decades of success.

An enormous thank you to our event sponsors Joan and Joe DiMauro, the hard working crew at Mt. Kisco Seafood and The Fish Cellar led by Jon Everin, and Whole Foods. This event would not have been possible without the commitment, hard work and enthusiasm of these two wonderful groups! Other generous sponsors include Keeper Springs, Ben & Jerry's of Mt. Kisco, Robert's American Gourmet, IZZE, Wadda Juice, Captain Lawrence Brewing Company, Prospero Winery and Brooklyn Brewery.

Riverkeeper would also like to thank the following Shad Fest supporters and performers: Green Chimneys, Sav-A-Tree, Brooke Smokelin, Sundad and Gandalf Murphy and the Circus of Dreams.

### AND THE TROOPS MARCHED ON . . .

The 18th Annual Shad Fest was a tremendous success due to our stellar team of volunteers. This year, over 150 teens, men, women, and seniors helped make this the best Shad ever! Everyone who participated deserves a big "Thank You." The kids tent was scorching hot, but the volunteers worked without complaints! The parking team volunteers were a few bodies short, but they all pitched in and got the job done! The ice cream tent volunteers were, literally, up to their elbows in Chocolate Therapy Ben & Jerry's ice cream, but they kept at it! And as usual, the volunteers in the food tent bent over backwards to keep 1400 guests well fed! So, thank you, all of you, for a wonderful effort. We can only hope that we can count on you again next year!



















# Spotlight on... Kevin Chamberlain

BY RENEE CHO

iverkeeper is fortunate to have a host of enthusiastic volunteers who support our mission, but Kevin Chamberlain is someone special. Kevin, age 32, has been a volunteer at every Riverkeeper event since 2005, the year his wife Allison Chamberlain, our Donor Services Manager, began working at Riverkeeper. His enthusiasm, energy and willingness to pitch in wherever help is needed is unmatched. He always goes beyond the call of duty.

Kevin's first Riverkeeper event was the Heinken-sponsored AmsterJam on Randall's Island in the summer of 2005. He recalls teaching visitors how stormwater runoff upstate pollutes the New York City drinking water supply. At last year's benefit dinner, he was an auction runner and proudly garnered a \$5000 donation from a celebrity. At our first NY Water Fest, Kevin sold tee shirts; he registered guests at the Whole Foods Bowery store opening; and at Shad Fest in both 2006 and 2007, Kevin worked in the kids tent, painting little faces and teaching arts and crafts. He also created the crossword puzzle, sturgeon maze and wordfind for the kids section of this magazine. "I love working with kids, because we're exposing them to the river," he said, "We're helping to shape a future generation of people who care about the world we live in."



Allison & Kevin Chamberlain at the 2007 Shad Fest.

Kevin's passion to help protect the environment stems from a lifelong involvement with and love of the Hudson River. He has lived his entire life along the river in northwest Yonkers. As a child, he used to cross the aqueduct and wander along the shores of the Hudson. His parents did not want him to go there, however, because at that time, the banks were cluttered with broken glass and garbage and the water was polluted. They warned him never to go into the water. But for Kevin, "The river was an amazing place to be. As a kid, I'd walk up to this enormous body of water, look at the Palisades across the way, and it was like the ends of the earth."

In recent years, Kevin has seen many changes in his river community – new buildings, marina and boat launch, side-

walks and many new businesses moving in. "I am very pleased with the progress made in my lifetime, but am also apprehensive about the potential for mismanagement and corruption that has done unimaginable damage to the river in the past. Damage that,



Kevin at the Shad Fest kids table demonstrating to children how to make rainsticks.

to this day, we are still trying to undo." He cautioned, "We need to monitor all this new development and make sure it's being done right. Someone needs to be responsible and keep things in check." This is why Kevin feels so strongly about Riverkeeper. "Riverkeeper represents everything dear to me... because I feel I'm part of a group that gets things done... I get great satisfaction."

And Riverkeeper is very grateful to be the beneficiary of Kevin's myriad talents. As the circulation manager at a local publisher of medical journals, Kevin has an extensive understanding of databases, and is donating much of his time creating a database for Riverkeeper's legal department to keep track of our cases. Kevin is also an artist, a builder, a musician, a good cook and an eloquent writer. After Shad Fest 2007, Kevin wrote to the Riverkeeper staff, "Every day of my life, I have gazed at the mighty Hudson in awe and thought that there is no place in the world more beautiful. I feel proud to be able to contribute to 'the cause'... Riverkeeper is truly making an impact on the people who care about our environment." Alex Matthiessen, Hudson Riverkeeper and President, noted that the feeling is mutual. "Kevin awes all of us every time he comes out to help with our events. He is incredibly hardworking and diligent and applies himself to every task with wonderful spirit. I am very grateful that we have him on our team, fighting the good fight."

Kevin promises, "I'll be there at every event because I feel very strongly about what Riverkeeper is doing." We feel very strongly that Kevin is a volunteer extraordinaire!

# WELCOME TO OUR FIRST EVER KIDS SECTION!!!

With these brand new pages devoted exclusively to children, we hope to involve children of all ages with the work that Riverkeeper does. Each day, more and more children are becoming concerned about our natural world, so we want to give them tools to become active Riverkeeper members while they learn about the Hudson River and our environment. In this issue, we feature a crossword puzzle, wordfind, sturgeon maze, and fun facts about

water. Our article on the recent Mountaintop to Tap Trek highlights twelve teenagers who hiked and rowed their way from the Catskills to New York City as they traced the path of New York City's drinking water. Our kids introduction to stormwater pollution shows what kids can do to help prevent it and how they can help clean up our rivers. We look forward to expanding the kids section in the future with the hope that children will use it to learn about Riverkeeper and become inspired to help keep our Hudson River and environment beautiful, healthy and clean. ENJOY!

### FUN WATER FACTS

- 75% of the earth is covered with water.
- 97% of the earth's water is in the oceans. Only 3% of the earth's water can be used as drinking water. 75% of the world's fresh water is frozen in the polar ice caps.
- Although a person can live without food for more than a month, a person can only live without water for approximately one week.
- The average person in the United States uses 80 to 100 gallons of water each day. During medieval times a person used only 5 gallons a day.
- It takes 2 gallons of water to brush your teeth, 2 to 7 gallons to flush a toilet, and 25 to 50 gallons to take a shower.

WHEN THE WELL'S
PRY, WE KNOW THE
WORTH OF THE WATER

- BENJAMIN FRANKLIN

- The first United States water treatment plant with filters was built in 1872 in Poughkeepsie, New York.
- A jellyfish is 95% water.
- Approximately 2/3 of a person's body weight is water. Blood is 92% water.
   The brain is 75% water. Bones are 22% water and muscles are 75% water.
- It takes about 80 gallons of water to make the paper for one Sunday paper.
- A rat can go longer without water than a camel.
- Water regulates the Earth's temperature. It also regulates the temperature of the human body, carries nutrients to cells, cushions joints, removes waste, and protects organs and tissues.
- Water expands by 9% when it freezes. Frozen water (ice) is lighter than water, which is why ice floats in water.



С	W	Е	Q	Т	С	Е	Т	D	Н	U	J	Ι	Υ
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U	W	M	D	U	Ι	Q	S	Α	D	Р	χ	D	М



- 1. BRACKISH
- WATCHDOG
- 3. STURGEON
- 4. POLLUTION
- WATERSHED
- 6. SHAD
- 7. HUDSON
- **ESTUARY**

- 9. HABITAT
- 10. CONSERVATION
- 11. RIVERKEEPER
- 12. ENVIRONMENT
- 13. TIDE
- 14. ECOSYSTEM
- 15. ECOLOGY

I'M HOOKED ON WORD PUZZLES!







- 3. Substances that harm the environment such as spilled chemicals, litter,
- 5. The surroundings or conditions in which a person, animal, or plant lives.
- 8. The alternate rising and falling of the sea due to the pull of the moon
- is the study of relationships of organisms to one another and to their physical surroundings.
- 11. To convert (waste) into reusable material.
- 12. The tidal mouth of a large river where fresh and salt water mix and become brackish.

### DOWN

- are creatures, including crabs, lobsters and shrimps, which have hard shells and live on the ocean floor.
- 2. The careful use of resources to help preserve the natural environment.
- 4. The natural home or environment of an organism.
- 6. An organization that works to protect and preserve the Hudson River and New York City's drinking water supply.
- River runs through eastern New York State and is named after the explorer who sailed it in 1609.
- 9. Fresh water that is slightly salty, as in a river's estuary.

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### HOW KIDS CAN HELP

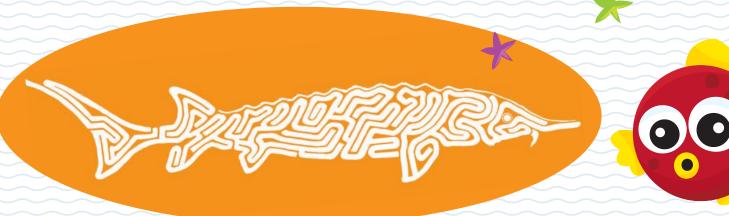




There are many ways you can help keep our waters and our environment healthy and clean. Here are some things you can do:

- Save energy by turning off the lights, computer, or T.V. when you leave a room or when you are not using them. Climb the stairs instead of using the elevator.
- Pick up litter that you see in your neighborhood and recycle whatever can be recycled.
- Turn off the water while you brush your teeth.
- Use less water by taking shorter showers instead of taking baths.

- Use both sides of a piece of paper when drawing, coloring or writing.
- Ride your bike or walk when you can, rather than ride in a car. This way you are conserving gas and decreasing air pollution.
- Use rechargeable batteries instead of disposable ones.
- Use rags or hand towels instead of paper towels or napkins.
- Hang your clothes out to dry whenever possible.
- Organize a beach, lake, river, stream, or creek cleanup.





## STORMWATER POLLLITION

Stormwater is water from rainfall or melting snow and ice that does not get absorbed by paved streets, parking lots or rooftops. As it flows, it picks up anything that is on the ground, such as oil from your car, litter, chemicals from fertilizers in your lawn, road salt and more, and becomes polluted. The polluted stormwater eventually reaches our rivers, lakes and streams, where it can affect the health of fish and other living creatures and prevent us from being able to enjoy water activities. Read below to discover 4 simple ways you can help prevent stormwater pollution. Everyone can make a difference!

Never wash your car in your driveway at home. If you do, harmful detergents can get into the storm drains and go into rivers, lakes, and creeks. Instead, take your car to a car wash where the water goes through the wastewater system and is treated and cleaned.

Dispose of household chemicals properly. Don't throw away household chemicals such as paint, bug spray and household cleaners. Instead, take them to an official collection site where they will be disposed of properly.

Dispose of automotive fluids like antifreeze and motor oil properly. Make sure that your family never pours automotive fluids down a storm drain or dumps them on the ground where they get into storm drains and the nearest river, lake or stream. Recycle these fluids by taking them to an official collection site.

Pick up pet waste - it's the law! Pet waste often contains bacteria, parasites and viruses, which can contaminate the water if they get into the storm drain system.

### CR055WORD PUZZLE ANSIVER KEY

Across: 3. Pollution

5. Environment 8 Tide

10. Ecology 11. Recycle 12. Estuary

Down: 1. Crustaceans

2. Conservation 4. Habitat 6 Riverkeener 7. Hudson 9. Brackish

### WORDFIND ANSWER KEY

С	W	Е	Q	T	С	E	7	D	Н	U	J	Ι	Υ
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# FROM MOUNTAINTOP TO TAP: INTREPID STUDENTS FOLLOW NYC WATER'S JOURNEY



PHOTO COURTESY OF GWENDOLYN CHAMBERS.

BY RENEE CHO

rom July 7 through 28,
twelve high school students hiked, rowed and
canoed their way from the
Catskills to New York City, tracing the journey of the city's
first-rate drinking water to their own taps. The Mountaintop to
Tap Trek commemorated the
tenth anniversary of the
Watershed Agreement, a land-

mark document that protects New York City's water supply and keeps it pure without the need for filtration.

Six students from New York Harbor School (NYHS) in Bushwick, Brooklyn and six from Sidney High School in Delaware County in the Catskills joined forces on the trek. They rowed 40 river miles from Kingston to Croton in two 12-foot surf-dories they built themselves, followed the Old Croton Aqueduct stopping at towns on the river, and ended up at the Central Park Reservoir. Along the way, they tested water quality in streams and reservoirs, talked to local officials, held press conferences and shared their experiences with community members.

Sara Scott, the 9th grade earth science teacher from NYHS who accompanied the students, explained that the Catskill region has had to make many sacrifices to protect New York City's water. She wanted her students to understand this and local communities to know that the kids "are keeping tabs of what's going on with the water."

During the trek, the students took photographs and posted their journal entries online, clearly moved by experiences unlike any they'd had before. Sean Soto, an NYHS sophomore from Puerto Rico, wrote, "When I woke up this morning, I could not stop thinking about the stars that I saw last night." Becca Miner, a senior from Sidney High School, explained how Ranger Ken Gierloff from the New York State Department of Environmental Conservation taught them "how to avoid the black bears in these woods and poison ivy and Chinese hogwood." Jerriel Stafford, a

NYHS sophomore from Grenada, described, "we had to climb a mountain of an elevation of about 4,200 feet and 5 miles to the top." From atop Wittenberg Mountain, Sara Pate, a junior from Sidney, wrote "If everyone gets a chance to come here and see nature's beauty, everyone would WANT to protect it."

Making the connection between firsthand experience and the motivation to protect the environment was one trek goal that matches NYHS's mission. NYHS was founded by Program Director Murray Fisher in 2003 to give urban students, especially low income minority students, the opportunity to be involved with the water through a curriculum centered around the New York City harbor environment.

Fisher, who worked with Robert F. Kennedy, Jr. at Riverkeeper and later helped organize Waterkeeper Alliance, the umbrella organization for other Riverkeeperstyle organizations, noted, "If these kids are willing to take three weeks out of their summer to learn about protecting the watershed, is it too much to ask every one of us to do the same?"

Riverkeeper President Alex Matthiessen agreed, "These students have used this extraordinary and first ever expedition to show that we can all work together to save a critical resource."

The trekkers' Photograph and Journal Exhibit will be on display at the South Street Seaport in New York City from October 27-November 25 and at NYHS in December, 2007.

The Mountaintop to Tap New York City Watershed Trek was organized by NYHS, Stroud Water Research Center, The Catskill Center for Conservation and Development, Riverkeeper and the New York City Department of Environmental Protection. Riverkeeper is grateful to the following organizations for their support of the trek: Ashokan Field Campus, Virginia Wellington Cabot Foundation, Catskill Watershed Corporation, Central Park Conservancy, Contech Stormwater Solutions, Fujifilm, Leo Model Foundation, the New York City Environmental Fund of the Hudson River Foundation, the New York State Department of Environmental Conservation, South Street Seaport Museum, the Hudson River Museum, and Upper Susquehanna Watershed Project

## UNSUNG TARA BERNARD HEROES

By Lisa Rainwater
In the halls of the Michaelian Building –
home to the Westchester County
Executive's chambers and the
Westchester County Board of Legislators –
there is one person who seems to know
everyone and whom everyone seems to
know: Tara Bernard, Legislative Aide to
County Legislator Michael Kaplowitz.
With a friendly grin or a joyous laugh,
Tara can make a person smile, even under
the worst situations.

Born in Yonkers, the Hudson River has always played an important role in Tara's life. "Being able to enjoy the pristine views and peace that come from sitting on the banks of the Hudson River," she explains, "is enough to make all the efforts worthwhile." It is because of her dedication to protecting the environment that Riverkeeper has chosen her as our Unsung Hero.

Tara joined the Board of Legislators in 2000 working in Public Relations, but quickly fell into a position that spoke to her on many levels – Legislative Aide to Westchester County Legislator Michael Kaplowitz. At the time, Kaplowitz was chairman of the Board's Environment Committee, and Tara quickly found that her passions lie in protecting the environment. "The realization of how important maintaining and protecting the environment not only today but for future generations became very apparent very quickly," Tara notes with a broad smile across her face.

Legislator Kaplowitz's work on Indian Point issues has been a focal point of Tara's work as well. As Legislative Aide to a County Legislator, she is responsible for a tremendous amount of research, gathering testimony, and drafting Resolutions. She is also the point person for intergovernmental relations, gathering support for regional measures, and working with local



groups on a variety of issues. While her job is challenging, she has risen to the occasion time and time again. Kaplowitz notes, "Tara has a great work ethic, a quick mind and has been an invaluable asset to me, the legislature, and the environmental communities at large."

For the last seven years, Tara has been a key figure in addressing ongoing concerns about the Indian Point nuclear power plant. Legislator Kaplowitz began investigating the safety culture at Indian Point after the 2000 steam tube generator rupture. After 9/11, Kaplowitz's work on Indian Point intensified, as the region began questioning the rationale in allowing the plant to operate. In her supportive role to the Legislator, Tara has focused much of her time on resolutions in opposition to IP's ongoing operations, radioactive leaks, replacement power, and relicensing.

While Indian Point has been a primary focus for Tara, she works on a variety of Riverkeeper issues. As County Board Chair Bill Ryan explained, "Between her five years coordinating the Environment Committee's agenda, which included major items like Indian Point, and her work on special committees dealing with stormwater management, PCB contamination and healthy air quality, Tara has shown a great commitment

to helping to resolve the important issues challenging our Hudson River Valley environment." She also supported Kaplowitz's efforts to endorse the Community Preservation Act and the Hudson Valley Community Preservation Act – state legislation that enables municipalities to create a fund dedicated to protecting natural areas and water resources.

In 2004, Legislator Kaplowitz became chairman of the Budget & Appropriations Committee, where he and Tara have given priority to environmentally friendly and energy efficent projects. Still a member of the Environment & Energy Committee, Kaplowitz, with Tara's help, has continued to work on environmental issues. Tara's breadth of knowledge, formidable research skills, and incredible attention to detail is sorely missed by those who work closely on environmental issues, but she leaves a trail of important environmental work behind her and her passion for the environment has now transferred into important work that Kaplowitz is doing on the Budget & Appropriations Committee.

Regardless of what committee she works with, Tara finds that "working for somebody like Michael Kaplowitz - who can affect change with his level of intelligence and commitment to the environment - was absolutely the most inspiring and key reason why I continue to work on environmental issues." Tara's work on Westchester environmental issues will continue, as she works closely with current Chair of the Environment and Energy Committee, Tom Abinanti. "Tom is a lifelong environmental advocate," Tara explains. "I will continue, in working with Michael and Tom, to preserve and protect Westchester's amazing natural resources and the Hudson River." Residents of Westchester County could only be so lucky.



