CLOSE DOWN INDIAN POINT

By Allegra Dengler
Co-Chair, Atlantic Chapter Indian Point Task Force

The Atlantic Chapter has long called for the immediate and permanent shutdown of the two Indian Point nuclear power plants on the Hudson River in Buchanan, New York, now operating with expired licenses. These plants pose a grave and unfair personal and economic risk to the people of New York City, and all of the 20 million people living or working within the 50-mile radius of the reactors.

The list of problems with Indian Point is a long one. In recent months the list of urgent problems grew longer and even more menacing. Some examples:

• Since 2005, owner Entergy has not been able to stop leaks of tritium into groundwater and the Hudson. Last February, tritium skyrocketed to the highest levels ever detected at Indian Point.
• Seven Nuclear Regulatory Commission engineers reported that all reactors in the U.S., including Indian Point, may have a design flaw that would render useless the emergency electricity system that provides cooling to the reactor core, which could lead to a meltdown.
• A December 2015 shutdown caused several control rods to lose power due to bird poop on outside wires.
• The Algonquin Incremental Market Pipeline was approved and work has begun on this huge, 42-inch pipeline for fracked gas that goes within 105 feet of critical safety equipment at the nuclear plant.

Continuing major issues at Indian Point include lack of an evacuation plan, numerous accidents and incidents, location at the convergence of two earthquake faults, permanent storage of 1,500 pounds (and growing) of radioactive waste onsite, risk of terrorism, and thermal contamination of the Hudson River killing billions of fish, eggs and larva annually.

Of the three reactors at the site, Indian Point 1 was closed in 1974, but

continued on page 3

FEBRUARY BREAKS GLOBAL TEMPERATURES BY “SHOCKING” AMOUNT

By M. K. Blechman and Don Hughes Co-Chairs, Climate Crisis Committee

A shocking new report from NASA’s Goddard Institute for Space Studies reveals that February 2016 was the warmest month ever measured globally: 1.35 degrees Celsius above the “longterm” (1951-1980) average. By itself, it might be considered a fluke - a blip of warmth. But it followed a January that also set a new record, at 1.13°C above the 1951-1980 baseline. This was on top of a 5-month run of record heat, as record-ed at hundreds of meteorological stations spread across the globe.

The increase, from +1.13°C in January to +1.35°C in February, is a giant leap. NASA has confirmed that its data is “showing a dramatic and ongoing surge in the planet’s temperature.”

Keep in mind that manmade climate change began well before 1951. Carbon dioxide emissions from burning fossil fuels began in earnest with the industrial revolution in the early 1800s. If the pre-industrial baseline from 1750 is used, the increase is more than 1.5°C globally. In northern regions of Russia, Eastern Europe, Scandinavia, Western Canada and Alaska, temperatures were 4°C or more degrees above former February averages.

This year, heavy rains poured and poured over frozen ground. The continual force of the water damaged the terrain, and then went straight to the Hudson River. There was little recharge to the aquifer.

The continual force of the water damaged the terrain, and then went straight to the Hudson River. It was T-shirt weather for some Alaskans in the depth of winter.

Comments from scientists tend to be understated. However, these latest numbers, which are measurements and not conjectures or probabilities, has changed their tone. Brad Ward, the policy director of the Grantham Research Institute on Climate Change at the London School of Economics said, "These results suggest that we may be even closer than we realized to breaching the 2°C limit. We have used up all our room for maneuver. If we delay any longer strong cuts in greenhouse emissions, it looks like global mean surface temperature is likely to exceed the level beyond which the impacts of climate change are likely to be very dangerous." Professor Stefan Rahmstorf of the Potsdam Institute for Climate Change Research in Germany stated, “We are in a kind of climate emergency now. This is really quite stunning... it’s completely unprecedented.” Many climate scientists from around the world joined in expressing astonishment.

Compare being at +1.35°C now with the temperature goals negotiated just last December in Paris. The IPCC was going to consider a revised temperature target of no more than +1.5°C 5 years from now!

continued on page 4
Message from the Chair
by Erin Riddle

DEMOCRACY AND CLEAN WATER

During a January 8 broadcast of Democracy Now!, Amy Good- man asked Navinah Shariff, co-
ordinator with the Flint Democracy Defense League, this essential ques-
tion: “What does democracy have to do with clean water?” The story re-
lates, of course, to the high level of lead and other toxic substances that were causing health complications to Flint residents, including children who may have been permanently im-
pacted. Goodman’s question gets to the fundamental issue we all face as activists: getting elected officials to act in a manner that represents the interests of their constituents.

Flint teaches us the value of our right to self-governance and self-de-
termination, which continues to be eroded and hijacked. Too many elected officials work for their campaign do-
nors and lobbyists, who continuously come knocking, expecting eventual payback. The environmental conse-
quences present themselves over and over again.

- TPP: The Trans-Pacific Partnership continues to move forward, even though previous trade deals have failed to keep their promises about ‘free’ trade and economic benefits. Even as the strong opposition against TPP continues to grow, business as usual carries on, but we have an impact as it becomes more and more difficult to defend this trade deal.

- GMO labeling: Numerous consum-
ers, farmers, healthcare professionals, scientists, businesses, and food profes-
sionals (over 40,000 across the state and counting) have signed on in sup-
port of full disclosure and transparency regarding the presence of GMOs in our food supply through mandatory labeling. Yet campaign contributions and lobby-
izing seem to speak louder than the wishes of constituents — see my article on page 7. This is the issue for more about this fight.

Gas infrastructure: Activists across the state celebrated as DEC Commissioner-
art Marterns, DOH Commissioner Zack-
er and Governor Andrew Cuomo an-
nounced in December 2014 that they could not allow hydraulic fracturing to go forward in the state.

Extraction itself has been prohibit-
ated, but residents are still under assault as infrastructure continues to build out, private property is taken and de-
stroyed through eminent domain, and people deal with health consequenc-
es resulting from such activities. In addition, several waste sites are ac-
cepting potentially radioactive waste from fracking sites in Pennsylvania for a lucrative profit, and water is sold to fracking companies in Pennsylvania, permenantly removing it from the natural hydrological cycle. We must celebrate the victories, but still have to pay attention as corporate greed dominates our democratic process.

There are numerous other exam-
ple, of course — what’s happening in your community! Too often, elected officials care more about what the big spenders want than what their con-
stituents need. The most powerful tool and leverage we have is people pow-
er, which emphasizes the importance and value of your getting involved and meeting others who are as mad as you are. You can be active in your commu-
nity through your local group and at the state level, especially through the Atlantic Chapter.

Please indicate your interest in getting involved on our website (newyork.sierraclub.org) to ensure that our elected officials are held accoun-
table and act in the best interest of our public health, environment and natural resources. What does de-
ocracy have to do with clean wa-
ter? It’s answer clear — protect our wa-
ter, along with other aspects of the environment, public health and natural resources for the use of all the people, not corporate self interest. It is our task. We cannot count on elected officials to do it for us. This is what de-
ocracy looks like.

SIERRA CLUB EFFORT GAINS CASH REBATE FOR ELECTRIC VEHICLES

At the end of its budget session in March, the State legislature passed a bill approving $2,000 cash rebates to individuals who pur-
chase plug in electric vehicles (EVs). Also approved were $5,000 cash re-
bates to municipalities which purchase electric vehicles. Both of these rebates are in addition to the federal $7,500 electric vehicle tax credit. The Chap-
ner and Kat Benedetti-Fisher, the Si-
erra Club’s NY Electric Vehicle Initiative or-
ganizer, worked with allies, members and the public in favor of these point of purchase rebates to customers.

Actual cash rebates are an important incentive to increase electric vehicle sales. Also, the credit can be claimed in other states. With New York’s current energy mix, electric vehicles are about 70% lower in emissions than a similarly sized conven-
tional car. As renewable energy from

solar, wind and hydro ramp up in New York State, the reduction in greenhouse gas emissions (GHG) will be reduced even further.

In 2013 Governor Cuomo joined 8 oth-
er states in signing a Zero Emission Vehi-
cle (ZEV) agreement that coordinates ac-
tion to place 3.3 million ZEVs on the road by 2025. While the rebate program will help further our electric vehicle goals, the State has also recently announced a $9 million fund to build approximately 800 new EV charging stations.

Your Sierra Club has also been in-
volved in promoting plug in Zero Emis-
sion Buses (ZEBs). The Club’s Electric Vehicle Initiative recently showcased a 240 mile range ZEB in Albany to govern-
ment officials.

More than 20 Sierra Club members and the members of four partner orga-
nizations tabled at the NYC auto show where they collected some 600 signa-
tures in favor of the rebates and in sup-
port of EV infrastructure development. As one small token, out of all his efforts behind the scenes to ensure this rebate made it into the budget, Chapter Conser-
avation Program Manager Roger Downs delivered the petitions to the Governor.

The auto show volunteers also signed up more than 60 new supporters to test drive electric vehicles in a dealership near them to help collect data as part of a national effort to protect New York’s Zero Emission Vehicle Status. If you would like to become involved in test driving electric vehicles at a local dealer-
ship, or in petitioning the Public Service Commission to establish pro-electric ve-
hicle policies, please contact Kat Fisher at kat.fisher@sierraclub.org or by phone at (518) 205-3308. For more informa-
tion on the EV Program you may go to www.sierraclub.org/evguide.
CLOSE DOWN INDIAN POINT
continued from page 1

its spent fuel remains onsite. Indian Point 2, built in 1974, has continued to operate after its license expired in September 2013. Indian Point 3, built in 1976, has been operating without a license since December 2015.

Who would drive a 1974 Ford Pinto? That’s leaking fluids and suffering frequent breakdowns due to electrical problems if there were any other choices? Especially if the leaking fluids were radioactive?

The 2015 documentary Indian Point, directed by Ivy Meeropol, has footage of the control room, with analog dials and switches, and the green paint reminiscent of a sci-fi movie of the 1950s. This is a very old plant. Despite the heroic effort of its engineers and personnel to keep the plant running long after its permitted life. The region is only one bad minute from disaster.

Governor Andrew Cuomo leads a long list of New York elected officials who have called for the closure of Indian Point. He shares the concerns of the Sierra Club and many other groups about the construction of Spectra’s high-pressure gas pipeline near the plant. In February, Cuomo announced that the state will undertake an independent assessment of the environmental, health and safety risks of siting the pipeline so close to Indian Point.

Shutdowns, Leaks, an Explosion — Recent History

There have been many accidents over the years. The recent accident history at Indian Point reveals the condition of this aging industrial facility:

• On May 9, 2015, a transformer exploded, causing the automatic shutdown of Reactor 3. The video of the noisy explosion captured from across the river was a chilling sight, as the fire and smoke rose into the air.

• The failed transformer contained about 24,000 gallons of dielectric fluid, which is used as an insulator and coolant when the transformer is energized. The U.S. Coast Guard estimates that about 3,000 gallons of dielectric fluid entered the river following the failure.

• In June 2015, a Mylar balloon floated into a switchyard, causing an electrical problem that resulted in the shutdown of Reactor 3.

• In July 2015, Reactor 3 was shut down after a water pump failure.

• On December 5, 2015, Indian Point 2 was shut down after several control rods lost power. Bird “streaming” (poop) caused the outage.

• On February 6, 2016, tritium-contaminated water leaking into the groundwater reached the highest levels ever detected at Indian Point.

Radioactive Water Leaks

Radioactive fluids were found to be leaking into the groundwater from Indian Point in 2005 and are still seeping into the Hudson. Entergy’s inability to locate and stop these leaks is another manifestation that the nuclear reactors are unreliable and dangerous. Tritium and other cancer-causing radionucleides, including Strontium-90, Cesium-137, Cobalt-60 and Nickel-63, have been identified in the leaks, according to an assessment by the New York Department of State as part of its Coastal Zone Management Assessment.

Groundwater contamination is not covered by decommissioning funds under NRC regulations. These costs will fall squarely on NYS taxpayers. Groundwater contamination greatly increased decommissioning costs at the Connecticut Yankee plant.

The Hudson River is a direct source of drinking water for many river towns and is a backup source of drinking water for New York City and Westchester. Radioactive contaminants may be sucked into these drinking water systems. In January 2007, it was reported that Strontium-90 was detected in four out of twelve Hudson River fish tested.

Security in the Age of Terrorism and Cyber Attacks

Indian Point has been a known terrorist target since 9/11. Plans for attacking the nuclear facility were found in the caves of Afghanistan, but the terrorists decided against it. Since then the world has become an even more dangerous place. Nation-states and cybercrime gangs now have the ability to destroy our infrastructure from within.

Damaging software has been developed that could shut down an electrical grid for an extended period, in turn causing a nuclear plant’s back-up generators to shut down. Within days after the back-up generators would run out of diesel fuel, lack of power would lead to loss of control over both the nuclear reaction in the reactors and the water cooling the 1,500 pounds of irradiated waste fuel stored in the spent fuel pools.

Indian Point’s Power is Unneeded

The New York Department of State, Bureau of Coastal Management recently determined that IP is no longer needed to power our grid and did irreparable harm to the Hudson River.

The New York Department of State Bureau of Coastal Management recently determined that IP is no longer needed to power our grid and did irreparable harm to the Hudson River.

The BCM report states: “Entergy contends that if Indian Point generation were no longer available, highly polluting fossil-fueled facilities would be used to replace IP’s nuclear energy. This contention is disproved by the three transmission line improvements, none of which involves generation of additional fossil fuel emissions. Clean energy replacement for Indian Point exist and are available this year.”

Con Ed is under contract to purchase only 560 megawatts of Indian Point’s production of electrical energy. If both reactors were immediately shut down there would be no power shortage. New York does not need Indian Point nuclear energy!

NRC Decision

The ultimate authority on relicensing or decommissioning a nuclear power plant is the Nuclear Regulatory Commission. The NRC has never refused to relicense a plant. In 2007, President-elect Barack Obama called the commission a “moribund agency,” a captive of the industry it regulates. And so it is.

The NRC stands firm in its opinion that there is “no danger to the public” from any of this litany of serious vulnerabilities. The risks at IP are magnified due to the unwillingness of the NRC to enforce its own standards, weakening them when it would cost Entergy too much to comply. The operating standard of the NRC is money, not safety.

Volunteer Connection: Your Chance to Get Involved!

The Atlantic Chapter is now posting volunteer opportunities on our website through “Volunteer Connection” at clubvolunteer.org. Current positions posted include Biodiversity/Vegetarian Outreach Team Member, Social Media Content Coordinator, Fundraising Team Member, Sustainable Agriculture Team Member, and Transportation Team Member.

In addition, you can simply register with Volunteer Connection and indicate your skills or areas of interest. Then, we can follow up with you as opportunities emerge.

The Sierra Club is one of the oldest and most effective grassroots environmental organizations because of you—our members! Visit newyork.sierraclub.org to connect with chapter leaders and ongoing activities related to the topics that interest you most.
The IPCC has relentlessly publicized that the planet may safely reach 2°C and that we would somehow turn off the emissions spigot just before that benchmark. This never made sense, but the IPCC said it did, and the media parroted it constantly as if it were true. By saying that, the IPCC was effectively complicit in the low bar for action on emission goals at COP 21 in Paris last winter.

It was at the Copenhagen IPCC conference in 2009 that the decision was made to dismiss using parts per million of carbon dioxide in the atmosphere as a marker of increasing vulnerability to global warming. It then substituted the 2°C temperature goal that informs the public of nothing. This slight of hand was an out-of-sight, out-of-mind strategy that served the fossil fuel industries well. An accurate marker would have been to include a daily measure of methane as well as carbon dioxide. No mechanism has been established for a daily count of atmospheric methane that is readily available to the public on the internet. We need both everyday if we are to understand where we are going.

We find that fast increasing carbon dioxide in the atmosphere parallels the temperatures we are finding on the surface of the Earth. Measurements of monthly average CO2 hit 404.2 ppm in February 2016 at Mauna Loa observatory. For the month of February 2015, they recorded 400.3 ppm. This is an increase of 3.9 ppm of CO2 in one year. It is far beyond anything recorded in nearly 60 years of careful measurements at Mauna Loa.

Atmospheric carbon dioxide measurements started in 1958. At first the year-to-year increases were less than 1 ppm of CO2 annually. But the year-to-year increase has been growing, such that the current rate of increase has been about 2 ppm per year. An increase of nearly 4 ppm is unprecedented. We can conclude that the surface temperatures we are seeing today are not temporary freaks of nature. They foreshadow the future.

In 2006, climate scientist James Hansen had prophesied that a temperature increase of 1 degree Celsius would leave us with a planet so altered we would not recognize it. But his science was ignored by the IPCC and he remained marginalized. Actually he was probably too optimistic. By the time the planet reached +1°C, the melting of permafrost had begun to release methane some years before.

Increases in temperatures may be caused, in some part, by another greenhouse gas, methane. Methane is far more powerful than CO2 at trapping heat. The massive expansion in hydro-fracking deep into the ground for natural gas and oil has produced a dangerous by-product: methane. The natural gas will be burned, but significant amounts of methane are released to the atmosphere beginning with drilling and continuing during production, even after the well is abandoned decades later. The USEPA recently announced new regulations designed to control methane emissions from the oil and gas industry, but it will be years before this technology is implemented. In the meantime, the release of methane continues. This adds to the climate emergency. It is like taking the genie out of the bottle.

Uncontrollable methane releases in the Arctic

Huge repositories of methane, estimated to be as many as 450 billion metric tons across Alaska, Canada, and Siberia are stored under the permafrost. Permafrost is an icy blanket covering the vast arctic lands. It functions as a cap on methane releases. Yet it is melting rapidly as temperatures in the Arctic rise. Holes in the ice are developing and the methane is bubbling out on its way to the atmosphere. This is why it is essential to have permafrost securely frozen in the Arctic. Scientists have long understood that maintaining the permafrost is the condition for the survival of Earth as we know it.

The Obama administration canceled drilling for oil on the Atlantic coast, yet promised to open up the Arctic to oil exploration. Other nations are doing the same. Pipelines for oil and natural gas, and electrical lines, are still being built everywhere. Coal mining is ongoing. We are mining coal on public lands. It seems to us that there is an incredible disconnect with the reality of climate change when there are 510 coal plants under construction now and 1874 proposed for construction in China, India and many other nations. (Global Warming Policy Forum)

The numbers tell us that the world is looking at possible runaway global warming with a horrific outcome: sea-level rise of 5-6 feet by the end of the century, increased frequency of prolonged droughts, massive storms like Katrina and Sandy, major displacement of species that can adapt, and extinction of those that cannot, the collapse of agricultural systems, and the spread of tropical diseases into mid-latitudes (Europe, N. America). The impact on the oceans is barely comprehended at this point, but what is known is frightening: coral reefs are succumbing to the double daggers of higher temperatures and ocean acidification. Over 25% of fish species depend on coral reefs.

Real National Security means no fossil fuel burning

If we agree that the job of the federal government is national security, a different approach is required. It needs to recognize finally that we cannot burn any more fossil fuels. The first step is to starve the fossil fuel industry by stopping the enormous subsidies for fossil fuel development that our government provides. It is American banks that are financing new construction of coal plants. We will not accomplish an about-face on fossil fuel extraction, unless the public demands it. A focus on rapid emissions reductions is entirely possible, as pointed out in numerous reports that show that the combination of renewable energy, efficiency, and conservation can really work. It will not be easy, but it is doable. Yet we have not scratched the surface. The reallocation of subsidies from oil to solar energy must be part of the plan. Electric cars, powered by solar energy, are on the streets of Albany and Troy already.

We both live in upstate New York. In mid-winter we see tawny empty fields, and it feels wrong. Not many years ago those fields were covered with snow for at least three months. Snow melts very slowly in the spring and there are last minute flurries. One gets the impression that winter is reluctant to leave. But below the surface the longer days of sun are turning the snow to a steady stream of water soaking the land beneath the insulating snow, and feeding the roots of plants and trees with the moisture they need for immediate robust growth once the snow is gone. Instead, this year heavy rains poured and poured over frozen ground. The continual force of the water damaged the terrain, and then went straight to the Hudson River. There was little recharge to the aquifers.

This is global warming, and it is only the beginning. Every year the impacts will increase. New York is a rich agricultural region that will become even more important as other agricultural regions become too arid for agriculture, or as in Florida, consumed by the rising sea. The new world of climate change will be less beautiful and very dangerous. Just having the food and water necessary to feed this populous planet will become a formidable challenge, one that may ultimately be impossible to meet. Unless we act. Now.

M. K. Bledsoe and Don Hughes are co-chairs of the Climate Crisis Committee.
On Friday April 22, (Earth Day) the New York State Department of Environmental Conservation (DEC) denied the 401 Water Quality Certification for the proposed Constitution Pipeline, permanently blocking this 124-mile pipeline from construction. The pipeline was to connect the fracking fields of Susquehanna County, Pennsylvania with planned natural gas export infrastructure beginning in Schoharie, New York. As proposed, the Constitution Pipeline would have carved a 125-foot wide scar along the western slope of the Catskills, plowing through 277 stream crossings, clear-cutting more than 700,000 trees and destroying more than 90 acres of wetlands.

In spite of vocal public outcry and strong criticism from New York regulators, the Federal Energy Regulatory Commission (FERC) approved the pipeline in December of 2014 and allowed eminent domain proceedings to commence. The only remaining authorization required to begin construction was the New York State Department of Environmental Conservation 401 water quality certification, an approval meant to ensure that the pipeline’s hundreds of at grade water crossings comply with the Clean Water Act. It was also a certification that was standardly granted. But based upon a long history of serious water quality violations with other ill-conceived pipeline proposals, the DEC prolonged the approval process for more than 18 months while it deliberated over how to mitigate an inherently problematic pipeline with unavoidable impacts.

Tree cutting begins in Pennsylvania despite lacking permits in New York State

Because the Williams company could only clear the 700,000 trees obstructing the pipeline route between October 1st and March 31st (to comply with the Migratory bird act that protects the breeding requirements of birds and bats) they grew impatient as they saw their 2016 construction window close. At the end of January, Williams petitioned the FERC to allow tree clearing, despite the fact that New York still had not given the proper water quality certification. The Sierra Club, Attorney General Schneiderman and our environmental allies objected with filings of our own. On January 29, 2016, FERC, in a king Solomon-like-ruling, split the baby and gave the pipeline company permission to cut down trees along the 25 mile Pennsylvania section of the pipeline route, but temporarily held off on permission to take the chainsaws to New York trees. This partial victory was bittersweet as the company’s logging crews took to the forests of unwilling land owners in Pennsylvania and put unfair pressure on New York’s DEC to approve a project that seemed fated to move forward. It would appear now that a replanting effort should be ordered as mitigation for this wasteful act.

Of particular concern is the Holleman family’s North Harford Maple

continued on page 11
LIVING TREES, OUR TRUE FORTUNE

When I was young, trees defined my universe. Whether it was the stately black walnut across the driveway providing shade in the summer and delicious nut meats in the fall, or the small grove of older maples keeping watch outside my bedroom windows every night, trees pervaded my life. I was beyond fortunate to be raised in a rural setting, especially when I think of the unkempt orchard of heritage apple trees, where I played and gathered wild black raspberries, and the sprawling crabapple under which my sandbox was built. Trees were friends, animate beings — I talked to them, read to them, hugged them and hid among them. This theme grew exponentially when, in sixth grade, I discovered Tolkien’s Middle Earth and began looking for Ents, tree herders, wherever I went in the woods.

One very clear memory from that distant time is of two beautiful country roads, both dirt, running almost parallel to one another. One road was seasonal, with no houses along its entire length, while the other was dotted with perhaps nine residences. Both were lined with a magnificent variety of tall trees — beech, oak, hickory, maple, walnut — all rising upward and meeting to form the apex of a canopy over the roads. In summer they were lush green tunnels of coolness and autumn brought on the scintillating reds, yellows and golds, so it seemed like one traveled down the nave of a cathedral with the sun blazing through stained glass. To the young person I was then it was a magical place.

Then town road crews decided that the inhabited road needed to be widened to ensure better maintenance for its residents. Thus ended one of my magical tunnels. In my youthful naivety, I pleaded with my parents to stop this horrible destruction, but of course, there was nothing they could do, so the trees fell. The second road managed to survive intact for another few years before several people began to build homes along its length — then those trees came down. I often wondered if people chose to build on those roads because of the fantastic quality of the arboreal tunnels. If so, it was a sad irony that their desire to live within that beauty caused its destruction.

In my studies at university and beyond, I’ve come to appreciate how incredibly vital trees are to the entire biosphere. Trees have adapted to nearly every environment on the planet. Certain trees represent some of the oldest living organisms on earth — second only to certain species of fungi. The fact that trees — and plants in general — have been so successful colonizing and flourishing on land and in so many varied environments is because of a special symbiotic relationship established in the very distant geologic past with a certain group of fungi. These fungi live in the roots of members of plant kingdom and bio-chemically alter atmospheric nitrogen to render it metabolically accessible.

Then there’s photosynthesis. Admittedly, it’s far from the most efficient biochemical reaction, but it is what evolved and enabled plants to harness the photon energy in sunlight to produce carbohydrate food energy for use as food or other needed metabolic functions. Plants — trees — can feed themselves by making their own food within their own bodies. That’s pretty astounding. That means that the tallest tree that ever lived, a Mountain Ash or Eucalyptus tree (Eucalyptus regnans) in Tasmania, called the Robinson Tree, which reputedly grew to the height of 470 feet, was able to do so purely through the products of photosynthesis. Not only that, water, being essential to photosynthesis, was transported up these vast heights by two simple mechanisms, both of which rely on the special properties of the water molecule known as cohesion and adhesion: capillary effect and transpiration pull.

We, and all other living organisms, would be in sorry shape without photosynthesis, given that it’s the source for nearly all the oxygen we breathe. And it is also the reason there has not been an overabundance of carbon dioxide (until recently) in the atmosphere, because photosynthesis uses carbon dioxide to make glucose molecules from which plants synthesize all the other compounds they need. Thus it’s apparent that trees are doubly important due to their photosynthetic property: they provide oxygen to the environment and remove carbon dioxide from the air.

Trees are of cricial importance to the health of the biosphere. Unfortunately, not all trees are created equal in terms of effective carbon dioxide absorption, nor are all of them as beneficial when it comes to mitigating climate change. Mature trees absorb more carbon dioxide than do young growing trees. Lighter, broad-leafed trees are more beneficial in reducing warming than are dark-needed conifers. Conifers absorb more ultraviolet radiation than deciduous trees, trapping heat near the earth’s surface. Because they do not shed their needles, this happens year round. Deciduous trees, on the other hand, shed their leaves in the fall, leaving the ground open to the sunlight, which will be reflected back into the atmosphere when the ground is snow covered.

Which brings me to a question I have no clear answer for: If trees are of such critical importance to the health of the biosphere, why do they continue to be harvested, cut down, cleared (pick your own terms) in such vast numbers with seemingly no regard for the consequences? Of course, that is not the only threat leveled against the forests of the world. Global commerce has brought with it unwelcome, aggressive, non-native, invasive species that can destroy forests just as easily as a chainsaw. How do we balance our genuine need for wood and wood products — need, not want — with the valuable ecosystem and climate adaptation services trees provide? The answer to this question requires a paradigm shift.

One way not to answer the question is to continue allowing corporations to define what sources of energy we can and can’t use. Nor should we continue to allow federal agencies to occupy and take our land by force to destroy trees for a pipeline that may never be permitted to be built or a well Pad to drill for climate-destroying methane. We must tear away the fabric of manipulation and deceit to take back decision-making power for ourselves, our children and our planet.

Recently I suffered a real, vivid flash-back to the desecration of those two roads from my childhood, only this time it wasn’t a road, it was a stand of sugar maples — a sugar bush — on a family farm in Pennsylvania. This time there was no public safety rationale to validate the felling of 90% of the ac- tively bearing bushes. A filing with FERC (Federal Energy Regulatory Commission) of a “Certificate of Public Need and Necessity” to build a pipeline to connect to another pipeline to take fracked gas from Pennsylvania either to Canada or to Massachusetts for export. The need and necessity was that of the corporation’s stockholders. To make the situation even more darkly ludicrous, the pipeline would run through both Pennsylvania and New York, but the company had yet to receive all the necessary permits in New York. The trees may have been cut for no reason.

Members of the family-owned maple syrup business refused to sign a lease and so the property was taken by eminent domain. At the site hoping their presence would stop the cutting, but a federal judge put the fear of heavy fines and jail time into the equation. Accompanied by automatic assault rifle-toting federal marines, the chef and I arrived during the week of March first, and within two days had felled the entire lot of young, vibrant sugar maples — trees that had begun offering their sap for syrup several weeks before.

The sight of the armed federal mar- shals terrified a bus of school children as it drove past, though one brave young soul found the courage to yell out the window, “Stop cutting our trees!” We needed thousands more just like him if the forests, the trees, are to prevail. The answer all boils down to: Who decides? Do we allow some faceless corporate bureaucrat or political appointee to make decisions about our forests, our trees? Or do we, ourselves, take back that author- ity to regulate the woods and paths and plights that we know and care about? I believe this is perhaps the only way to prevent further forest devastation and even more harmful impacts to the biosphere. There are no Ents in our world to be guardians of the forest. It’s up to us. ■
THE FIGHT FOR MANDATORY GMO LABELING

By Erin Riddle

The U.S. Senate has finally moved forward with a federal bill on GMO labeling. Big agriculture and corporate food have been lobbying for this Senate bill number 2669 for months, along with industry allies, such as Sen. Debbie Stabenow (D-MI). On March 1, the Committee on Agriculture, Nutrition, and Forestry approved the bill after a hearing titled “Biotechnology Labeling Solutions Markup.” The bill moves to the next stage in the Senate — most likely for a final vote.

This labeling bill will not lead to consumer information or transparency about food. However, in fact, it is an effort to thwart these initiatives.

• Voluntary labeling
  This bill would establish a “national voluntary bioengineered food labeling standard with respect to (A) any bioengineered food; and (B) any food that could have been bioengineered, or may have been produced or developed using bioengineering.” In other words, labeling would be voluntary. We already have this system. In fact, Campbell Soup Company has decided voluntarily to label its own products.* “Campbell Labels Will Disclose GMO Ingredients” New York Times 1/7/2016. We don’t need a federal bill for voluntary labeling that leaves it up to companies to decide. We need a bill requiring all GMO foods or foods containing a GMO ingredient to be labeled.

• Prohibits states from passing labeling laws
  This bill would prohibit states from passing their own labeling laws, such as the one we are fighting for in New York State. The most worrisome to big agriculture and industrial-food corpora-

• Food Costs
  The industrial food corporations have been trying to scare consumers and elected officials from labeling by claiming that it would lead to dramatic increases in food cost. However, several research reports have found that this is not the case. The best one I’ve seen is from Consumers Union. The Environmental Working Group has a list of other reports reaching similar conclusions.*

• Close relationship of research scientists and GMO corporations, and corporate control of research
  Elected officials are being told that GMOs are proven safe and beneficial through scientific research, but more and more evidence of the close collaboration of publicly funded researchers and the corporations that benefit from their “science” is emerging. The New York Times recently published an article called “Food industry Enlists Academics in GMO Lobbying War, Emails Show.” It discloses Ken Foltz and his collaboration with Monsanto to it. The industry claims that there is nothing wrong with GMOs and that they are safe. But adequate long-term and cumulative analysis continues to be lacking, mostly because that’s how the corporations want it.
  For example, an article from Scientific American, “Do Seed Companies Control GM Crop Research?” 8/1/2009 discloses how companies strictly forbid independent research on seeds. They do this under the guise of patent law and proprietary rights. As the article indicates,* only studies that the seed companies have approved ever see the light of a peer-reviewed journal.

• Campaign contributions and lobbying spending
  Last year, a petition in support of labeling with over 40,000 signatures was delivered to elected officials in Albany. Numerous polls indicate that approximately 90% of people surveyed want labeling. Yet this battle has been ongoing in Albany for over two years, and still no bill has moved through the state assembly or senate. A report from the New York Public Interest Group reported that “opponents of GMO food labeling legislation spent over $3.2 million lobbying New York policymakers in 2013,” outspending supporters by nearly 7 to 1.*
  In addition, the report indicated that “opponents of GMO food labeling legislation contributed more than $460,000 in campaign donations in 2013. Sixty percent of these campaign dollars originated outside of New York State. No campaign contributions were made by groups public-

Proposed NYS Clean Energy Standards

Last summer, when Governor Cuomo issued the final Clean Energy Standards, the public had a look at how green the State’s goals are. It sets three significant goals for the year 2030:
  50% of electricity would be produced from renewable sources.
  40% would be reduced greenhouse gas emissions compared to 1990 levels.
  23% would increase energy efficiency in buildings.

In December, Governor Cuomo called for the New York Public Service Commission to establish a Clean Energy Standard to ensure that the 50% renewable energy and 40% Green House Gas emissions reductions targets would be achieved.

New York’s renewables will also create new industries. The 50% renewable energy mandate establishes New York as a national leader in the fight against climate change by significantly reducing the State’s emissions of greenhouse gas emissions and other pollutants, and improving the health of New Yorkers. Increasing New York’s renewables will also create new industries and jobs and bring billions of dollars of direct economic investment right here in New York State. Renewable development also promotes fuel diversity, protects ratepayers from volatile gas prices, and creates energy security and independence for New York residents.

Last January, the Public Service Commission released a White Paper for development and implementation of the Clean Energy Standard. (Case 15-E0302). This includes scheduling technical conferences in March, and public hearings across the State in May.

The Clean Energy Standard’s White Paper currently consists of three tiers:
  Tier 1 is dedicated to new renewable energy sources, Tier 2 is designed to maintain existing renewable energy sources, and Tier 3 is intended to provide temporary subsidies to the nuclear industry with the purpose of maintaining these resources while New York’s renewables continue to develop. It is important to note that the White Paper does not count nuclear energy as a renewable source in the Clean Energy Standards and consequently it will not be included in the calculation of the 50% renewable energy target by 2030.

The Atlantic Chapter, and a number of other environmental groups, are delivering comments and calling for our members to participate in the May public hearings. Our highest priority is to make sure that the 50% goal is achieved and that there are strong measures adopted to ensure that there are enforcement mechanisms that require the utilities and the State to achieve the 50% target. Consequently the Atlantic Chapter supports Alternative Compliance Payments where utilities would be charged

continued on page 9
TPP AND SHIPPING, A DANGEROUS INVASION

By M. K. Blechman

When I was very young, I read a book about how a local human tribe called a meeting of all the animals to discuss how to respond to a crime committed by the local human tribe. I remember how I imagined that meeting.

It is harder to imagine such a meeting between the fish and mammals of the sea since they cannot sit together. But the dolphins and the whales are smart. They know what is going on, and they know who is responsible. They are all suffering from the invasion of 100,000 commercial ships everyday in the watery world that once belonged to them. If they could, they would unite in a protest against the enormous increase in international shipping in the last ten years. They would be aghast at the possibility of a trade agreement that would increase shipping by 11 percent in the next fifteen years.

It is an unprecedented invasion. We think of ships as floating on top of the water and occupying only that space, but the sound of their engines penetrates to the final depth of the ocean and miles in every direction. It is an assault that disrupts the animal’s communication systems, orientation, feeding, and breeding success. Noise stress makes them more vulnerable to predation. Large ships make a penetrating noise even when they are dropping an anchor. Shipping has created a cacophony that can tear apart the social networks of whales because they do not rely on sight. They rely on hearing. Water diminishes visibility to the point that oceanic life has replaced distant seeing with song. Song is a major presence in the ocean. Shipping noise eradicates that song.

Worse, there is a new torture to be implemented soon. The Obama administration reversed an earlier decision to allow oil drilling off the U.S. East Coast. This is no victory for the Sierra Club. If they want, they can unite. But the dolphins and the whales are making sure they will not. If they could, they would nail their containers.

Sea animals did not evolve to compete with immense ships for space. Collisions with ships are a regular hazard mangling or killing them. Most corals are shallow and vulnerable. The richest fish diversity in the world is found in the corals of the Pacific and Indian oceans where there are 6,000 to 8,000 species in population concentrations much greater than in the sea around them. More ocean life is located in the Pacific Ocean than anywhere else in the world, and occupy about 14 million square miles. Yet this is the arena of the 12 member nations of the TPP. It is likely that shipping will increase accordingly. This territorial invasion into vital marine habitat spells danger for the entire oceanic ecosystem.

As cargo ships proliferate year by year, their contribution to worldwide pollution is mounting and significant. The major pollutants are sulfur dioxide, nitrogen dioxide and carbon dioxide that then start chain reactions resulting in volatile organic compounds (VOCs) surface ozone, poisonous at sea level and a Green House Gas in the atmosphere, and nitrogen compounds that contribute to ocean acidification. Acidification of ocean water has already reached a crisis point for marine life. We could call it the chemical invasion of oceans by humans.

The oceans are vast lonely spaces out of sight of government. ‘Few places on Earth are as free from legal oversight as the high seas.’ This is what Ian Urbina revealed in his series of articles for the New York Times. The oceans are vast lonely spaces. Out of sight of any government, we find shipping companies behaving in unethical self-interest. In the privacy of isolation, the ships can do whatever they want. ‘What they want, and do, is intention- ally dump more engine oil and sludge into oceans in the span of 3 years than the combined oil spills of the Deepwater Horizon and the Exxon Valdez accidents. When they dump their oil/slime, the ships leave a visible trail for miles. They emit huge amounts of air pollution, far more than all the world’s cars. Shipping pollution is responsible for enough methyl mercury to make canned tuna the single largest source of mercury in the American diet. This is horrific pollution.

It has been said that the oceans are the foundation of all planetary life, but industrial shipping treats it as a waste-disposal system. This is why the TPP contradicts the Clean Power Plan. The latter could never compensate for the level of pollution. The shipping industry is proven to be environmentally lawless everywhere, whether the peoples of the world must devote themselves to environmental restoration. For oceanic health, we need a treaty to diminish shipping as quickly as feasible. Increasing it substantially with the TPP should be out of the question.

If we are serious about confronting the steep numerical decline of fish in the oceans, we must give its creatures a fair chance at survival. Keep in mind that in 2000, the biggest container ship carried 8,000 containers. In 2013, the biggest ships carried 18,000 containers. This is grotesque. But the Trans Pacific Partnership would encourage this grotesque invasion of the sea. It is, after all, the whole point of the proposed treaty. These huge ships magnify every environmental problem of noise, collision, acid, chemical pollution, territorial takeover, ballast discharge of invasive species, and overwhelming amounts of oil and sludge.

For ocean health we need to reduce trade. The planet itself cannot afford the TPP. In one decade, 1992-2002, shipping traffic increased 60 percent. What can we expect from the TPP? We need an alternative proposal to incrementally increase trade while nations rebuild their former capacities. We need to live within the bounds of our geography, and laws of nature.

Martin Luther hated trade because of its interruption of social and ecological harmony. Martin Luther King would agree. For marine life, the TPP is the ultimate nightmare. It is time for the whales and dolphins to nail their trade to the doors of all nations, especially the doors of the 12 member nations of the Trans Pacific Partnership. Since they cannot do it, we have a moral obligation to support marine life by renouncing the TPP. We have the same moral obligation to support each other for the same reasons by killing the TPP.

Some information came from the New York Times Series, Sailing Beyond the Rule of Law by Ian Urbina and from Environment 360. (e360.yale.edu, ocean_noise_pollution)

Support Chapter’s work in NYS

We need your help to fight fracking infrastructure, maintain the Chapter’s other critical conservation efforts and continue a print publication of the Sierra Atlantic. Your membership dues primarily support the Club’s national priorities. Your additional support is needed to strengthen the Chapter’s work in the state legislature and throughout the state. Please use the coupon below to send us your donation.

Contributions and dues to the Sierra Club are not tax deductible. Thank you for your generosity.

Yes, I want to help the Atlantic Chapter preserve and protect the environment of New York state. I am enclosing my gift of:

☒ $500 ☒ $250 ☒ $100 ☒ $500 ☒ $500 Other $________

☒ Check made payable to Sierra Club Atlantic Chapter is enclosed.

☒ I’d like to make a single payment by credit card. Please complete the credit card information below.

☒ I’d like to become a sustainer with a $_______ monthly or $_______ quarterly credit card donation.

Bill to: ☒ Mastercard ☒ Visa ☒ Discover

Acct no._________ Exp date________

Signature

Name

Sierra Club membership no.

Street

City________ State____ ZIP____

Mail this completed form with your check or credit card information to: Sierra Club Atlantic Chapter, PO Box 38225, Albany, NY 12203

A copy of our latest financial report can be obtained by writing to Sierra Club Atlantic Chapter, PO Box 38225, Albany, NY 12203, or the NYS Attorney General.
CHAPTER URGES PASSAGE OF DIVESTMENT ACT TARGETING NYS COMMON RETIREMENT FUND

By Lisa DiCaprio

This article is based on testimony that I presented in support of the proposed NYS Common Retirement Fund Divestment Act on behalf of the Atlantic Chapter at a forum on this legislation, which was held in Albany on February 29, 2016.

State Senator Liz Krueger and Assembly Assistant Speaker Felix W. Ortiz, the legislation’s sponsors, organized the forum which included State Senator Brad Hoylman, representatives from environmental organizations, professional associations, and the American Petroleum Institute; and financial analysts.

Two years ago, our chapter adopted a resolution calling for divestment of fossil fuels from the NYS Retirement Fund and the NYS Teachers’ Retirement System. We now support the Fossil Fuel Divestment Act which requires the New York State Comptroller to divest the NYS Common Retirement Fund, currently worth about $180 billion, from its holdings in the top 20 publicly traded fossil fuel companies, which are listed in the Carbon Underground 200 based on the carbon content of their proven coal, oil and gas reserves. Divestment from coal companies must be completed within one year and from all other fossil fuel companies by January 1, 2020.

Support for divestment increases

The Fossil Fuel Divestment Act has 11 sponsors in the State Senate and 10 sponsors in the State Assembly. To increase the number of sponsors, we can call and write to our representatives in the NYS Senate and Assembly and ask them to cosponsor S5873–2015 and A8011A–2015. For a list of NYS legislators, see http://assem bly.state.ny.us/mem and http://www.ny senate.gov/find-my-senator

As of September 2015, 500 institutions and individuals globally have pledged to divest fossil fuels from assets worth a total of $3 trillion. Fossil fuel divestment is part of a global campaign to keep fossil fuels in the ground and encourage the transition to a new, green economy.

Today, climate change is the greatest threat to basic human rights — the right to water, food, health, housing and human dignity. The National Climate Assessment report issued in 2014 concluded that climate change now adversely affects all regions of the U.S. and all sectors of our economy: agriculture, manufacturing, transportation, infrastructure, etc.

In 2011, the Carbon Tracker Initiative found that the swing to low-carbon energy will double the value of fossil fuels worldwide, strand fossil fuel assets and devalue fossil fuel investment. The aspirational goal of a 1.5-degree Celsius limit will keep even more fossil fuel reserves in the ground. An example, the COP 21 meeting in Paris also featured the launch of the International Solar Alliance by France and India, which will include 120 governments and the Global Solar Council, comprising over 1,000 companies.

Clifford Krauss and Keith Bradsher wrote an article, “Climate Deal is Signal to Industry: The Era of Carbon Reduction is Here,” which appeared in the December 1, 2015 New York Times. It said, “If nothing else, analysts and experts say, the accord is a signal to businesses and investors that the era of carbon reduction has arrived. It will spur banks and investment funds to shift their loan and stock portfolios from coal and oil to the growing industries of renewable energy, like wind and solar.”

Similarly, Jennifer Morgan of the World Resources Institute, stated that the Paris Agreement sent “a long-term signal about the inevitable shift to a zero-carbon economy.”

As reported in a December 12 Guardian article, “Paris Climate Agreement may signal end of fossil fuel era,” Paul Polman, chief executive of Unilever, stated: “The consequences of this agreement go far beyond the actions of governments. They will be felt in banks, stock exchanges, boardrooms and research centres as the world absorbs the fact that it is embarking on an unprecedented global programme to decarbonise the global economy. Unilever and members of the Renewable Energy 100, an alliance of 55 diverse companies that have committed to obtaining all of the energy required for their daily operations from renewable sources.

Paris Agreement viewed as a turning point toward a low carbon economy

Institutional investors also view the Paris Agreement as a turning point, as related in the article, “Pension funds welcome ‘momentous’ Paris climate agreement,” which appeared in the December 15 edition of the publication, Investment & Pensions Europe. According to this article, “Investigators said the agreement . . . showed ‘great potential’ and would accelerate the global transition away from dependence on a carbon-based economy.”

The article quotes Stephanie Pfeifer, the chief executive of the Institutional Investors Group on Climate Change (IIGCC), as saying, “The agreement is a significant moment for the climate movement and for the financial services industry. It is a clear signal that the world is moving away from fossil fuels and towards a low-carbon economy.”

Fossil fuel divestment is part of a global campaign to keep fossil fuels in the ground and transition to a new green economy.

For failing to meet annual renewable targets, Alternative Compliance Payment funds would then be used to procure more renewable generation or to reduce the soft costs of renewable development, such as siting and permitting issues.

Offshore wind development will establish New York as a regional hub. Climate change is threatening human rights. Additionally, the Chapter is calling for a separate offshore wind tier within the Clean Energy Standard as an incentive for the development of this enormous untapped renewable resource. Offshore wind development will establish New York as a regional hub, creating thousands of jobs and billions of dollars of economic investment, as well as being the only large-scale renewable resource in close proximity to New York City and Long Island where the energy is needed most. Deploying offshore wind will be necessary to ensure that the State meets the 50% target as well as New York City’s goal to power 100% of the city’s operations with renewable energy by 2050.

The Atlantic Chapter is also asking that energy efficiency targets be set for the utilities in order to further bring the cost of the program down.

Concerning the nuclear Tier 3, the Sierra Club strongly opposes a nuclear tier under the banner of the Clean Energy Standard. Nuclear energy is not clean, nor is it renewable. The Clean Energy Standard should not include funds that would otherwise be used to develop renewable energy.

The Atlantic Chapter calls on our members to New York City and Long Island to attend hearings in May. Stay tuned! n

Bob Gieselski
Chapter Energy Committee Chair

PROPOSED NYS CLEAN ENERGY STANDARDS

continued from page 7
A GREAT NATURALIST REDISCOVERED

The Invention of Nature

By M. K. Blechman

Most of you do not know his name, yet in Napoleon’s era, Alexander von Humboldt was second in international fame only to Napoleon himself. In 1869, the Centennial of his birth was celebrated in Europe, Africa, Australia and all of the Americas. In Moscow, he was called the Shakespeare of the sciences. In Boston, Emerson called Humboldt “one of those wonders of the world” and the London Daily News wrote “that he was in some way bound up with the universe itself.” In Syracuse alone 15,000 people joined in a mile-long march. The streets of New York City were lined with flags. Thousands of people followed ten marching bands from the Bowery along Broadway to Central Park to honor him, and thousands more joined them to hear speeches and sing songs for hours in a cold torrential rain. Can we imagine such a celebration of intellect today?

The only visible remnant of that excitement is a geography filled with streams, rivers, mountains, glaciers, and parks named after him. Nevada was almost named Humboldt State, and today the organic Humboldt Creamery is making ice cream in Humboldt County CA. Living in that geography are almost 300 plants and 100 animals named after him, probably because he was the first to introduce their existence to the wider world.

Without Humboldt there would not have been The Origin of the Species
Alexander von Humboldt gave us our concept of nature itself. His writing about his travels in South America inspired Charles Darwin to take his voyage on the Beagle. Like Humboldt, Darwin spent 5 years exploring, and observing South America. The books Darwin had next to his hammock as he traveled were by Humboldt. Without Humboldt there would not have been The Origin of the Species.

The Hudson River School of painters was so taken by Humboldt’s ideas that they saw no higher ideal than to elevate in art not only the beauty of the natural world, but a natural world unchanged by man. Landscape painting without humans was a first in the history of painting. Effectively, those painters became environmental missionaries. As if on cue, Frederick Church appeared on the scene with Humboldt a mentor and friend with whom he maintained a daily dialogue. Humboldt’s thinking was the nourishment that helped Thoreau become the writer we know. Eventually it blossomed into the concept of “civil disobedience” that we use today in defense of planetary life. Sierrans have a special reason to be grateful to Alexander von Humboldt. He inspired in John Muir the passion that led to his founding the Sierra Club. John Muir studied Humboldt closely and tried to model his life by his example. This motivated his move to California and it is why he traveled, often on foot, into wilderness at every opportunity. As with Thoreau, he believed that a walk in the forest was to meet the truth. For them, that walk was a daily spiritual tonic. Humboldt gave both Thoreau and Muir the idea that the duality of science and love of nature is the most productive approach to life and intellectual discovery. For balance and rationality, Humboldt believed in the need to experience nature through feelings as well as science, and taught that they nourish each other. In that sense, he was not just a scientist but also an artist. It is why he appealed to painters, poets and scientists and finally, to the imagination of the broad public. Clearly, those concepts were still dominant in 1869 at the time of the Centennial celebrations.

Though eclipsed by the rise of Industrialization and its attitude that nature was disposable for economic gain, Humboldt’s ideas remain embedded in our culture through those he influenced. However, industrialization, driven by convenience, power, greed and a focus on the stock market eclipsed Humboldt’s belief in the primacy of natural law. Industrialization replaced it with the idea that nature is at the disposal of man for his personal use. This attitude remains the driving force of economics and government today. No wonder the name of Alexander von Humboldt is covered in dust.

While we do not remember Humboldt’s name, much of his thinking is imbedded in our culture through his science and those he influenced.

Humboldt viewed nature as a global force with corresponding climate zones across continents, a radical concept at the time. He invented isotherms, or the lines of temperature pressure still used on maps. He discovered the magnetic equator and wrote that in this great chain of causes and effects no single fact can be considered in isolation. With this insight, he not only invented the web of life, but proposed that all science is better science if the approach includes as wide a field of inquiry as possible.

It was Humboldt who first wrote about the potential harmful effects of human-induced climate change. Humboldt was the first scientist to write about harmful human-induced climate change. He warned that climate change could have an unforeseeable impact on future generations. He first noticed this when he proved that a disappearing lake was a consequence of nearby deforestation.

Alexander von Humboldt’s writing proved to be the springboard for environmental science and philosophy for more than 200 years starting with Darwin. He deserves a place in history as a foundational thinker who had discovered and promoted the inner correlation between all aspects of nature.”

Alexander von Humboldt’s writing proved to be the springboard for environmental science and philosophy for more than 200 years starting with Darwin. He deserves a place in history as a foundational thinker who had discovered and promoted the inner correlation between all aspects of nature.”

Andrea Wulf invested years into as meticulous and complete research as possible. She retracted many of Humboldt’s journeys in order to experience them herself. The result is a splendid and richly woven narrative.
A CALL FOR WATER POLICY CHANGES IN NY STATE

By Peggy Kurtz and Gale Pisha

Sierra Club and its allies in the Rockland Water Coalition won a groundbreaking victory for the environment and for ratepayers in December with the defeat of a massive desalination proposal for the Hudson River. After eight years of work to stop the desalination proposal by Suez, one of the largest water companies worldwide, this dramatic victory finally puts Rockland County in a position to move ahead with first steps toward sustainable water planning. At the same time, Suez has filed a request for Rockland residents and businesses to pay an astounding $54 million for the failed desalination proposal, which never started construction.

Major Victory Yet Rockland May Still Pay $54 Million For Failed Proposal

On December 17, the NYS Public Service Commission (PSC) rejected the energy intensive desalination proposal, which would have drawn Rockland’s drinking water from the Hudson River, 3 miles downstream from the Indian Point nuclear power plant. The PSC ordered the company to move ahead with far less expensive and less harmful water supply sources, such as water conservation and efficiency measures and repair of leaking pipes.

Now, in a major new case filed with the PSC, Suez has proposed a water conservation plan, a plan for smaller supply sources, and a plan for repair of leaks. The Rockland Water Coalition and experts are reviewing these policy proposals to be sure that they are strong enough to lay the groundwork for sustainable alternatives to desalination.

Suez has also proposed a major rate increase. If approved, Suez’s request for an average 13.7% rate increase would come on top of a 17% rate increase in the last two years, so that Rockland rates, already among the highest in the nation, would climb steeply, by more than 30% over a period of three years. A local attorney summed up the community reaction well by saying, “How many Rockland residents have seen a salary increase of 30% over a period of three years?”

This rate increase includes a request for $54 million for the failed desalination proposal, despite years of Rockland residents arguing that the company should bear the costs of an imprudent business decision to pursue the extraordinarily expensive and environmentally harmful desalination project.

Rockland County Water Task Force Moving Ahead Despite Lack of Funding

After years of struggle over the hugely unpopular desalination proposal and its massive costs, the Rockland County Water Task Force is now in a position to move ahead with the sustainable alternatives to desalination, yet ironically, it lacks the funding to make this happen. Ordinarily, a portion of this funding would be expected to come from Suez, the water utility for 88% of the county. The hope is that the Task Force and Suez will be able to put some of this conflict behind as they move ahead on this rate case, to work collaboratively on a plan which will be a model for the entire region.

HOW YOU CAN HELP NOW:

Call for Water Efficient Standards at the State Level

As part of that effort, Rockland activists are joining forces with others around the state to call for changes in water policy at the state level. Water efficiency is an important step forward in reducing energy use and New York’s carbon footprint.

We are asking for an update to state building codes to require EPA WaterSense certification for fixtures and appliances, to be less wasteful of water. Water efficiency also results in energy efficiency, since water is energy intensive, requiring energy for pumping, heating, and wastewater treatment. WaterSense standards, some of which have been in place since 2006 and which are required in NYC and in four states, are widely available, well tested by the marketplace, and which are required in NYC and in four states, are widely available, well tested by the marketplace and would not raise costs for consumers.

YOU CAN HELP US GET WATER EFFICIENCY STANDARDS AT THE STATE LEVEL:

Ask your state legislators to contact the NY State Department of State to let them know that you support passage of WaterSense standards.

You can also help by sending a letter to your local government officials:

To: Tony.Giardina@dos.ny.gov
Diendre.Sozafa@dcedc.ny.gov
mark.blanke@dos.ny.gov

For more information, check:

www.sustainablerockland.org
www.sustainablerockland.org
paccs@sierraclub.org
rocklandatemach@gmail.com

Peggy Kurtz and Gale Pisha are co-chairs of the Lower Hudson Group Desalination Committee.
as stating that “the agreement was an unequivocal signal to investors that an escalation of financing for low-carbon infrastructure was needed to deliver the targeted reduction in carbon emissions.” The ILGCC is “a network of 120 members, including some of the largest pension funds and asset managers in Europe.” Investors worldwide must choose which side they’re on. According to a 2012 International Energy Agency (IEA) report, a trillion dollars must be invested annually and globally in green infrastructure and technologies. Currently, these investments total $500 billion annually. Institutional investors, such as the NYC and NYS pension funds, can and must play a crucial role in meeting this goal by divesting from fossil fuels and reinvesting in green infrastructure and renewable forms of energy.

Invest in a habitable planet

We call on the New York State Legislature to support the Fossil Fuel Divestment Act targeting NYC Common Retirement Fund.

JOIN THE SOLAR ROOFTOP REVOLUTION IN NEW YORK!

Every single day, there are things we can do, choices we can make, that help protect the planet. Small or large, they make a difference.

If you're gauging effort versus impact, it's tough to make a more effective choice than making the switch to clean energy by choosing to power your home with sunshine. As New York continues to divest from oil, coal, and natural gas, there is no better way for you to invest in clean energy solutions than to go solar at home.

Through an innovative partnership with Sungevity, a leading national solar company, the Atlantic Chapter is able to offer members and supporters like you an affordable and easy way to go solar.

When you go solar with the Sierra Club and Sungevity, you will receive a special $750 discount and Sungevity will send the Sierra Club $750 to protect local wildlife and wild lands, keep our air and water clean, and move us toward a clean energy future.

“In order to end our dependence on dirty energy, we need as many Americans as possible to switch to clean energy like rooftop solar. This is a high priority for the Sierra Club. We are urging all of our members and supporters in New York to work with Sungevity to find out if solar is right for them. Every home that goes solar gets us one step closer to our goal of a clean energy economy,” said Sierra Club Executive Director Michael Brune.

Clean energy is winning. Are you going to be a part of the victory? Getting started with solar is quick and easy. It takes less than three minutes. Request an iQuote from Sungevity to get started today at SC.org/SolarPrint or call 844-815-5614 for more information.

Go Solar by May 31st and Get a Special $1,000 Discount

Summer is here! With more daylight hours, rooftop solar panels around the country are generating lots of clean energy and powering thousands of homes.

When you go solar with the Sierra Club and Sungevity by May 31st, you will receive a special $1,000 discount and the Atlantic Chapter will receive $750 to continue to protect our local communities and environment.

Getting started with solar is quick and easy. It takes less than three minutes. Request an iQuote from Sungevity to get started today SC.org/SolarPrint or call 844-815-5614 for more information.

Take advantage of these sun-filled hours by finding out if solar energy is right for your home. Go solar today!

To get your free quote today visit http://www.SC.org/SolarPrint

Go to the Chapter's website to read the revised “Switch to Renewable Energy” Chapter brochure.

CHAPTER CALLS FOR EXCOM NOMINATIONS

The Atlantic Chapter Executive Committee (ExCom) sets Sierra Club conservation policy in New York State and administers the Chapter. The Chapter ExCom meets in person four times a year and meets by conference phone several times a year.

Some ExCom members are chosen by their local Groups. Others, the nine at-large delegates, are elected by the Chapter membership statewide for two-year terms. This fall’s election will fill four at-large seats beginning in January 2017.

Every member of the Chapter is eligible. If you are interested in running for one of these seats, please let the Nominating Committee (NomCom) know by July 1.

Send your name, address, and membership number to the Nominating Committee, Sierra Club Atlantic Chapter, 353 Hamilton St., Albany, NY 12210-1709 or by e-mail to caitlin.ferrante@sierraclub.org. You can contact her by phone at 518 426-9144 if needed. Please include a statement about your qualifications and reasons for running to help the NomCom decide whether to nominate you. The NomCom will notify you by July 15 if they are nominating you as a candidate for at-large delegate.

If you are not nominated by the NomCom you can become a candidate by filing a petition signed by at least 50 members of the Chapter. The deadline for filing petitions to be a candidate is September 8. The NomCom has the option until September 8 to nominate more candidates. The deadline for all candidates to submit the final version of their ballot statements is September 8.