

Fresh Air

The Quarterly Newsletter of the Mid-Hudson Group of the Atlantic Chapter

Winter 2021 | Vol. 53 | Issue 4 This newsletter will be posted to our website along with all previous newsletters.

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Because of differences in Email programs, the links above and back to top" links below may not work.

Come Ring in the New Year with the Mid-Hudson Sierra Club

Join your ExCom members on the Walkway Over the Hudson on January 1st to celebrate and ring in 2022!

Location:

Walkway over the Hudson, Highland side, 87 Haviland Road, Highland NY 12528 Free parking is available.

Meeting Place:

Meet us at the walkway entrance on the Highland (east side)

Meeting Time:

January 1st, 2022, 11:30 am [Rain or snow date: January 2, 2022]

Join the ExCom members of the Sierra Club Mid-Hudson Group to celebrate and ring in 2022! We will be walking across the Walkway Over the Hudson from Highland to Poughkeepsie. Every Sierra Club member who joins us will receive a complimentary 2022 Sierra Club Wilderness Calendar; retail value \$14.95.

The Walkway is 1.25 miles. You are welcome to walk the entire length in both directions, halfway or whatever distance you are comfortable with. There are heated bathrooms at both ends of the Walkway.

After the walk you are welcome to join us for lunch at the Gateway Diner on Route 9W in Highland for a celebration of 2022. For the safety of our members, we require all participants to be vaccinated. For indoor events, masks are required, as mandated by NYS and individual establishments. We will have extra masks and sanitary hand wipes for our use. Sierra Club will continue to follow federal, state, and local health official Covid guidelines.

This announcement also appears on our <u>Facebook</u> page and our <u>Website</u>.

Please reserve your spot by emailing: mhsierraprograms@yahoo.com

JoyAnn Savino

Programs Chair

Chair's Corner by Lalita Malik

The Mid-Hudson Valley has many Natural Resources that need protection. The two most threatened areas are the Hudson River and the Catskills. In January 2021 there were two big projects, a steel and concrete plant at the edge of the Bluestone Wild Forest and the Danskammer power plant in Newburgh. The former threatens the gateway to the Catskills and the latter threatens the water and air around the Hudson River. In the last newsletter we had reported the good news that we had won the first round on both projects, but we needed to stay vigilant about any following issues. There have been developments on both projects and so the fight continues. Nancy Severns has a report on status of Danskammer and Marie Caruso provides an update on the project near the Bluestone Wild Forest.

Commercial projects are not the only threat to the environment. The beauty of the Hudson Valley and the quality of life as we know it is threatened by the increasing demand for housing and the infrastructure to support the increased population. Growth is good for the economy but it has to be balanced with its effect on the environment. More housing encourages more business development and increased traffic which will then require new or wider roads. One proposed road expansion is the Route 17 corridor in Orange and Sullivan counties. This project is currently in the study phase. Our Conservation Committee is evaluating the project (see Nancy's report) and would like your input in this decision-making phase. Please give us your opinion, particularly if you live in the area, and help us make a decision that will affect not only the environment, but the lifestyle of the residents in the area.

The energy of the future is electricity. Proponents of fossil fuels use the fact that energy from solar and wind are not reliable, so we need to continue drilling and investing in more fossil fuel projects. Nivo Rovedo's article debunks that myth. Nivo focuses on water and the newest way the power of water can be harnessed to generate a more reliable source of electricity.

The constant barrage of news about extreme climate change and the destruction the changed weather patterns are causing make it even more necessary for organizations like the Sierra club to stay vigilant. Sara Kennedy's review of the book, *All We Can Save: Truth, Courage, and Solutions for the Climate Crisis*, is a good reason to pick up a copy of this book for uplifting essays on what you can do to help our cause.

I had mentioned in the last issue that the progress towards clean, renewable energy presents new challenges. Sierra Club supports development of new Solar and Wind projects and development of high-capacity transmission lines to bring electricity from upstate to downstate where it will be needed. In 2022 we expect to be involved in assessing Large Scale Renewables projects all around the state and in the Hudson Valley. We will be organizing field trips to assess these sites. If you know of a project that we should assess and would like to work with us to evaluate these projects please contact us and join one of our field trips.

In 2022 the Mid-Hudson group will renew in person events with walks and field trips. The first event will be on New Year's Day with a walk on the Walkway Over the Hudson. All members who join us will receive the coveted Sierra Club Wilderness Calendar (a \$14.99 value). We appreciate your membership in the Sierra Club and invite you join us and get involved.

We look forward to hearing from you and meeting you at one of our events.

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Conservation Corner

Mid-Hudson Group Conservation Committee

by Nancy Severns

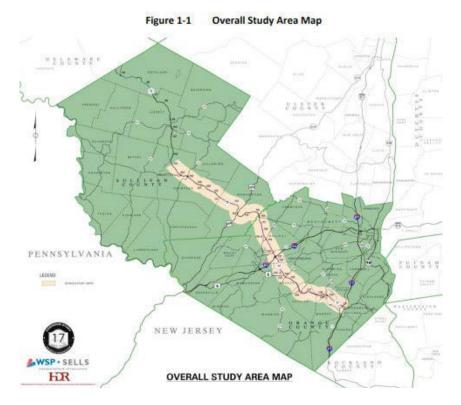
Danskammer (Newburgh, NY) The re-powering of Danskammer is subject to approval by the New York State Board on Electric Generation Siting and the Environment under Article 10 of the Public Service Law. A Preliminary Statement of Issues for Litigation was filed by Orange RAPP (Residents against Pilgrim Pipelines) and Sierra Club advising that the Examiners should conduct their investigation consistent with the goals of the NY State Climate Leadership and Community Protection Act (CLCPA). The CLCPA requires 70% renewable electricity by 2030 and zero emissions electricity by 2040.

NY Department of Environmental Conservation (DEC) Commissioner Basil Seggos announced the DEC's denial of the Title V permit required to operate the Danskammer Energy Center on October 27, 2021. The primary reason given was that the "proposed project does not demonstrate compliance with the requirements of the Climate Leadership and Community Protection Act. The proposed project would be inconsistent with or would interfere with the statewide greenhouse gas emissions limits established in the Climate Act. Danskammer failed to demonstrate the need or justification for the proposed project notwithstanding this inconsistency."

Thank you to all for your positive energy and actions to get us to this crucial decision! The DEC position has been appealed so we're not done yet!

Route 17 Expansion study

An expansion of Route 17 corridor in Orange and Sullivan counties is in the study phase. See the map (below) of the study area from HDP/WSR Sells, the joint venture compiling the report. The Mid-Hudson group Conservation committee met with Catskill Mountainkeeper in order to discuss our positions on this project. We will discuss the Sierra Group position further at our next Conservation committee meeting so if you're interested in this topic, join us!



Mid-Hudson Sierra Club Conservation Committee

The Conservation Committee meets every other month on the third Thursday of the month at 6:30 pm via Zoom. Our members provide updates on five topics (Route 17 Expansion, Bluestone Wild Forest, Danskammer, Wheaton Park, and Education).

Our next meeting is January 22, 2022 at 6:30 pm and will be held via Zoom. We currently need a point person for the Danskammer project. If you'd like to join the meeting or be the point person for Danskammer on the committee, send an email to Nancy via midhudsonsierragroup@twc.com.

Update:

Bluestone Wild Forest

By Marie Caruso

850 Route 28 Site Slammed with Violations, Cease and Desist Order

Thomas Auringer, owner of 850 Route 28, LLC, the company which proposes to build a concrete and steel slab manufacturing facility on property which sits amidst the Bluestone Wild Forest, was ordered to halt all construction activities after the DEC visited the site on October 29. The investigation was prompted by numerous complaints from neighbors and recreational users of the forest. The DEC discovered a number of activities illegally being conducted without the required permits.

The activities documented in the <u>Notice of Violation</u> and <u>Cease and Desist Directive</u> include, among others: disturbing several acres of soil and removal of a forested area without the required SPDES (State Pollutant Discharge Elimination System) permit for stormwater discharge, the lack of erosion and sediment controls resulting in turbid stormwater discharges and sediment deposited into several ponds on the property and wetlands which feed the Prayhamer Brook, a protected trout stream, rock fill placed in a tributary to that brook without a Stream Disturbance Permit, fill placed on the bank of Pickerel Pond (which is almost entirely within the Bluestone Wild

Forest) and other activities which carry a high risk of polluting these water bodies. The company was ordered to cease all activities except for remediation and erosion and sediment control measures. Some of the photos from these documents follow:



Photo 7: Disturbance near mine floor entrance from south of entrance



Photo 8: Disturbance south of mine floor entrance.



Photo 9: Fill Placed in Pond B and on bank of Pickerel Pond.



Photo 11: Disturbance along eastern side of pickerel pond.



Photo 12: Material Stockpiles with no erosion controls.



Photo 16: Fill Placed on bank of Pickerel Pond.

A few days after the DEC's action, the Town of Kingston Code Enforcement Officer also issued a Notice of Violation against Mr. Auringer, charging that his company's stormwater discharges had violated the municipality's MS4 SPDES permit, and ordering him to take immediate action to control these discharges. This after this same officer, Robert Cologero, had on a previous visit to the site maintained that no illegal activities were taking place.

The site continues to be used for storage of large cranes, construction equipment and other materials. Although this use was permitted by the Town of Kingston, land clearing was not. As far as the concrete and steel plant proposed for this site, the company has not yet filed the draft scoping document, which is the first step in writing the Environmental Impact Statement that was demanded by the Town of Kingston last July.

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Energy Corner by *Nivo Rovedo*

In this energy article I would like to focus on **water**. In particular, the subject matter relates two examples of water as a medium providing energy.

You have heard about solar power in which the sun's ray are converted to electricity that can be used to power everything that electric currents are used to animate. There are almost no moving parts involved in this harvesting of the sun's energy. But other renewable energy sources generally require turning an electrical turbine to generate current; there is some sort of "flowing" material involved that pushes the turbine blades to cause rotation. An example of this from the early days of the electric grid and which is with us today, is hydropower, which is generated by harnessing water flowing out of a dammed reservoir, impelled by gravity to turn turbines to create the electric current.

Wind power creates electrical energy in a similar way, except air and air pressure differences replace water and gravity, respectively, so air flow (wind) is used to turn propellers that have turbines attached to them atop towers, generating electric power. In each case, no fossil fuels need to be burned, a win for the environment. But there's another energy source involving water and flow of a different kind: tidal flow of ocean water. And the Orkney Islands of northern Scotland are at the epicenter of testing this concept of using tides to generate electricity thanks to the stronger tidal currents found there.

The idea itself seems simple and straightforward: imagine a wind turbine placed upside down in a bay with strong tidal currents, so that as the water flows with the tide it turns the propellers. And here there is no intermittency as occurs with solar when the sun is not shining or with wind power when the wind is not blowing: the tides run all the time. A recent article in The Washington Post by William Booth entitled "Harnessing the energy of the ocean to power homes, planes and whisky distilleries" explored this concept. Read the article.

The concept is not new, and the article notes that over the last two decades many previous attempts at harnessing tidal power in the Orkneys have failed. But there has been learning from mistakes and progress has been made to reduce costs and improve efficiencies. The dire situation with the climate crisis has also encouraged investors and governments to take a closer look at this technology. Besides

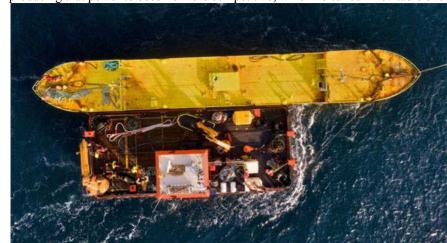
Scotland, "Competitors are at work along the coasts of China, France, South Korea and Canada. In the United States, they've done demonstration projects in Maine and Washington state, and one in the East River in New York City."

Currently, there are three machines being run as demonstration vehicles in the Orkneys. From the article:

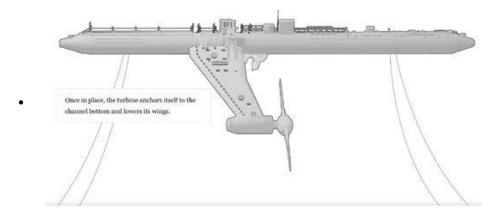
• "One is a prototype wave energy converter called "Blue X," by Mocean Energy [cool name, eh?] The thing is a 65-foot hinged raft that resembles a floating double-ended kitchen spatula. As waves raise and lower the machine, the rocking motion of the hinge captures the energy of the ocean and the turbine converts it into electricity."



• "ATIR" is much larger and was developed by Spanish developer Magallanes Renovables. It could be capable of producing 1.5 megawatts of power. The company's founder gave the author a tour of the machine and said "Basically, what you see is something that looks like a boat...but with a big windmill hanging off the bottom. And this boat isn't moving. It's anchored to the seafloor. What is moving is the ocean." The author writes that the entrepreneur said "the concept of generating power for the grid has already been proved. ATIR and other devices have sent a trickle of electrons to the shore." What needs to happen, he said, is for the price of producing that power to become more competitive, which he called "inevitable over time."



• Larger still is "Orbital O2," from a British firm. It is rated for two megawatts, enough to power 2,000 homes a year. "240 feet long, weighing 650 tons, as big as a floating jumbo jet. The thing looks like the Beatles' yellow submarine. ... On the O2, the turbines are hung on a pair of sea wings which carry pitched rotor blades, with a huge 65-foot diameter, that can capture the tide as it runs in both directions. The wings and turbines can be raised to the surface for maintenance, so repairs don't require ocean divers, submersibles or a tow back to the dock. Basic maintenance can be done between the tides, its designers say."



Let's stay on the topic of water and its ability to help our situation with climate change. In this case, by reducing cooling costs through a technology called deep lake water cooling (DLWC). An article on it by Tik Root, also in The Washington Post, caught my eye; it is entitled "Toronto is home to the world's largest lake-powered cooling system. Here's how it works."

Instead of relying on air conditioning equipment, cold water from Lake Ontario is piped through heat exchangers at various customer buildings to absorb the heat there and carry it away. The system now cools 100 buildings in Toronto and it so popular that it is enlarging by adding a fourth intake pipe for the cooling water to service more customers, expanding capacity 60%.

Water is taken from Lake Ontario at 280 feet underwater where the water remains cool year-round at 39 degrees F. Whereas traditional commercial water-cooling systems often use evaporative towers to expel heat, DLWC avoids that evaporation with an estimated savings of roughly 220 million gallons of water annually for the Toronto system. In addition, Toronto's system uses largely passive heat exchangers, rather than energy-intensive air conditioners and chillers. Enwave, the company that owns and operates Toronto's DLWC, says the system already saves 90,000 mega-watt hours of electricity use annually — roughly enough to power a town of 25,000."

Cornell University has the largest and oldest DLWC in the United States. The system cost \$58.5 million (compared to \$170 million for Toronto's DLWC). According to Todd Cowen, an engineer at the university, the investment "has easily already paid for itself," because operating and maintenance costs are so low.

There are caveats for the system, however. It requires a suitable body of water in proximity of the customer base. And designers must consider potential environmental impacts in the design. Alex Horne, an environmental engineer and lake expert, and professor emeritus at the University of California Berkeley, "...points out that if the warmer, nutrient-rich water coming from DLWC systems is released too close to the surface of the lake, it can lead to issues such as blooms of algae, including potentially toxic variants. But he says the fix is fairly simple — discharge the water deeper in a lake and through diffusers in the pipes."

Noteworthy too is that "...there has also been progress on salt water air conditioning (SWAC), which utilizes ocean water instead of lake water as coolant. DLWC and SWAC systems are now up and running in dozens of locations around the world, from Hong Kong to Bahrain." Perhaps the technology needs more exposure in the press. An employee at a company that designs and installs the piping for these systems says "I think the big thing is informing people that it exists." Hopefully, this article can make some small progress in that respect.

So ideas for getting us off fossil fuels and better utilizing our given resources do exist, in the fight against our climate catastrophe. We need to hope we don't run out of time before we can explore them and put the best ones to use.

Is there a particular energy topic that you would like to hear about in the Mid-Hudson Sierra Club newsletter? Send an email to midhudsonsierra@twc.com.

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Outings by Andy Moss

We are seeking individuals who would like to learn more about becoming a Sierra Club Outings Leader. This is a very rewarding opportunity to get outside with like-minding people and share your love of the outdoors. For more information send an email to our Group mailbox: midhudsonsierra@twc.com Please include your name, phone number and a good time to call

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Book Review by Sarah Kennedy

If you are in need of encouragement to get more active in the fight against the Climate Crisis, *All We Can Save: Truth, Courage, and Solutions for the Climate Crisis* is worth diving into. This book, edited by Ayana Elizabeth Johnson & Katherine K. Wilkinson can serve as a catalyst to get you on your way if you have not yet begun, or to lift you to greater heights if you are already on this path. All are welcomed to participate.



The book contains a collection of essays, poetry, and artwork that addresses a huge range of topics and concerns related to the Climate Crisis. A great variety of people of all ages are involved in this project, including professors, farmers, scientists, activists, politicians, writers and so on. All are women.

In the opening essay, the editors provide compelling reasons why they chose to make this a book by women. Here are just a couple of those reason: "Look around and you will see on the rise climate leadership that is more characteristically feminine and more faithfully feminist, rooted in compassion, connection, creativity, and collaboration." "There is an appreciation for heart-centered, not just head-centered, leadership... What's so powerful about integrating head and heart: It's where scientific rigor and moral clarity, analysis and empathy, strategy and imagination meet. It is what allows us to sustain bold aspirations and insist upon the action that's necessary rather than what's expedient or 'practical.'

I was strongly drawn to several of the topics explored in this book. Of particular interest for me were some essays that addressed the feeling of existential dread which bogs me down at times. Reading Ash Sanders' essay "Under the Weather" made me feel in good company.



Native plantings support monarchs and other pollinators

In this essay, Sanders explains that "According to a 2017 report by the American Psychological Association and ecoAmerica,

acknowledging the reality of climate change and its consequences can trigger chronic fear, fatalism, anger, and exhaustion—a condition the psychologists are increasingly referring to as ecoanxiety." She explores these emotions, and offers thoughts on how to move out of a state of paralysis.

The importance of the Sierra Club's activity in the realm of political engagement is noted in an essay entitled "The Politics of Policy" by Maggie Thomas. She writes, "Organizations like Next-Gen America, the Sierra Club, the League of Conservation Voters and the Sunrise Movement have galvanized public support to a point where politicians know that they can't ignore climate action." Her essay also addresses environmental justice, elucidating the importance of considering this in all our work on environmental issues.

Mary Anne Hitt, the former director of Sierra Club's extremely effective Beyond Coal Campaign, wrote an informative essay about her work. The essay includes details about the futility and danger of replacing coal with fracked gas, as we work toward clean energy use.

Locally, the Beyond Coal Campaign was involved in the fight against allowing Danskammer to become a fracked gas power plant. We were part of a coalition of environmental groups and concerned citizens that joined together and gave voice to concerns. On October 27, 2021, Governor Hochul and the New York State Department of Environmental Conservation denied an air permit for the power plant.



Beaver Pond at Vassar Farm and Ecological Preserve

Throughout the book, there are calls to action. Many practical suggestions for how each of us can choose to be involved are found within these pages. A suggestion made by Leah Cardamore Stokes in her essay "A Field Guide for transformation" involves simply joining an organization. "These groups can help you understand what next steps you can take to advocate for climate action... You can also give money to these groups, or others, to help them fund their work."

Rather than waste time dwelling on what others are not doing, Hitt believes making the changes we can will be more effective. "If we get our own house in order, innovate affordable solutions and demonstrate that people can enjoy a high quality of life in a decarbonized economy, that will accomplish far more than endless hand-wringing about China and India. Leadership is best shown through action."

Lastly, Emily N. Johnston does not criticize those who are not able to devote a lot of time to this cause right now. She writes that "Not everyone can focus on this work, of course—many people are too full up with the difficulties of their daily lives...But if you can, then the world needs you, and it needs you right now, because anything that we do this year or next is worth ten of the same thing ten years from now." I find this a logical and an inspiring thought.

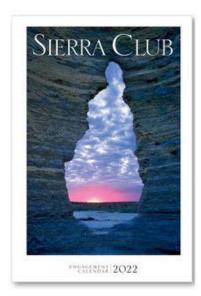
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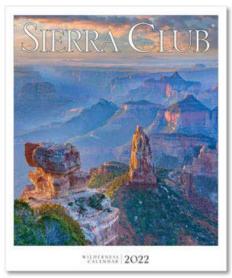
Letters from our Members

Editor's note: Send us a letter about issues that are important to you—whether local, state or national. Please submit your letter to our Newsletter Editor: Andy Moss, at andy@hvi.net. Our submission schedule is posted at the bottom of our website's Newsletters page. We will consider letters of up to 250 words. Your letter will be published in the next newsletter upon review and acceptance by the editor. Subjects should focus on Sierra Club areas of interest: conservation, environmental protection, political action, climate change, getting outdoors, etc. Visit the Sierra Club, Atlantic Chapter, or Mid-Hudson Group website to learn more about where we stand.

2022 SIERRA CLUB CALENDARS NOW AVAILABLE

The Sierra Club Wilderness (wall size) and the Sierra Club Engagement (Desk/appointment size) are available.





We are pleased to offer the calendars at a below retail price to our members and friends. The calendars are available on our Group Ebay page at the following links:

Wilderness Calendar Desk/Engagement Calendar

If you prefer arranging to pick up calendars in New Paltz, please contact David Friedman (Fund Raising Chair) to make arrangements: bibliotique@gmail.com

Visit our Mid-Hudson Group eBay page

We feature Sierra Club items and related goods. You can even let us know if you have items you wish to donate to be sold on our page!

Visit our eBay page today to see what's for sale.

To make a contribution or for more information contact David Friedman (Fundraising Chair) at: <u>Friedman_David@msn.com</u> or call/text: 845-701-6229.

Make A Gift - Make A Difference

Our local group depends on the support of volunteers and the generosity of our membership. The work of the group takes Sierra Club volunteer effort, and of course funds. We hope that you will consider making a gift to the Mid-Hudson group of the Sierra Club. In these turbulent times it's vital that we all do what we can to speak out and work for the protection of our environment and the future of our world. We welcome and appreciate your support, and encourage you to consider providing financial support for our efforts. Our mailing address is at the bottom of this newsletter.

To speak about specific opportunities, or with any questions, please contact David Friedman, Friedman David@msn.com or our

Treasurer, George Treutle, georgetreutle06@gmail.com.

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<u>Visit our Mid-Hudson Group Website</u> <u>Visit our Facebook Page</u> <u>Visit our Meetup website for Programs and Outings</u>

Contact us:

Email: midhudsonsierra@twc.com

Mail: Mid-Hudson Sierra Club, PO Box 1012, Poughkeepsie, NY 12601

You can find the names of our Executive Committee members on our website:

<u>Go to our Contact page</u>

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