

Dear Friends of Cayuga Lake,

Spring 2020

Happy Spring!

We are excited to get back out on the lake and hope to see you out there!

First, some good news: Cornell Trustees voted on May 22 to place a moratorium on new investments in fossil fuels and on March 16th Cargill signed an out-of-court settlement in which they agreed to greatly improve environmental stewardship of their above-ground operations at Portland Point.

More on the Cargill agreement below, but here is a quick comment on the Cornell vote. The burning of fossil fuels is the major driver of climate change and so Cornell's announced moratorium is an important step toward becoming a carbon-neutral campus by 2035 using 100% renewable energy. Climate change is understood to be driving harmful cyanobacterial blooms in the Finger Lakes and globally, so the Trustees' vote will eventually be good for Cayuga Lake.

According to this [Cornell Chronicle](#) article, fossil fuel-oriented equity and bond assets make up "about 4.2% of Cornell's long-term investment" in an endowment worth \$6.9B. According to Ken Miranda, Cornell's chief investment officer, that percentage is expected to dwindle to zero over time as existing investments mature and assets are redeployed to other areas, including renewables.

CLEAN would like to thank Cornell for the vote but would ask Mr. Miranda to go ahead and sell the \$290M invested in fossil fuels now and invest those funds into high ESG stocks and bonds. No need to wait years for bonds to mature. Time is of the essence and bonds like stocks are readily marketable assets.

What CLEAN is doing in 2020:

Cayuga Lake Environmental Action Now continues to advocate for the health of Cayuga Lake and hold industrial polluters accountable. It is important to encourage the DEC to reduce

ongoing contamination. This year we will focus on three areas:

- Identifying water quality conditions that lead to harmful algal blooms in the lake
- The need to immediately halt the release of coal ash leachate in the lake at Heorot Power
- Risks to groundwater and surface waters from Cargill's operations at Portland Point and 1001 Ridge Road in Lansing.

CLEAN researchers are ready to continue the Cayuga Lake Water Monitoring Project. In coordination with research partners such as Discover Cayuga, Community Science Institute and Cayuga Lake Watershed Network, we will return to last year's testing sites to resume collection of data that will aid in informing researchers of water quality issues and hopefully help developing effective prevention or mitigation strategies. Additionally, as the Cayuga Power Plant site is transitioning to a data center and solar arrays, CLEAN will continue to maintain that remediation of the coal combustion residuals landfill must be the responsibility of the current owner, Heorot Power. Any subsidies from Empire State Development Corporation should be on the condition of ending leachate discharge into the lake and into groundwater.

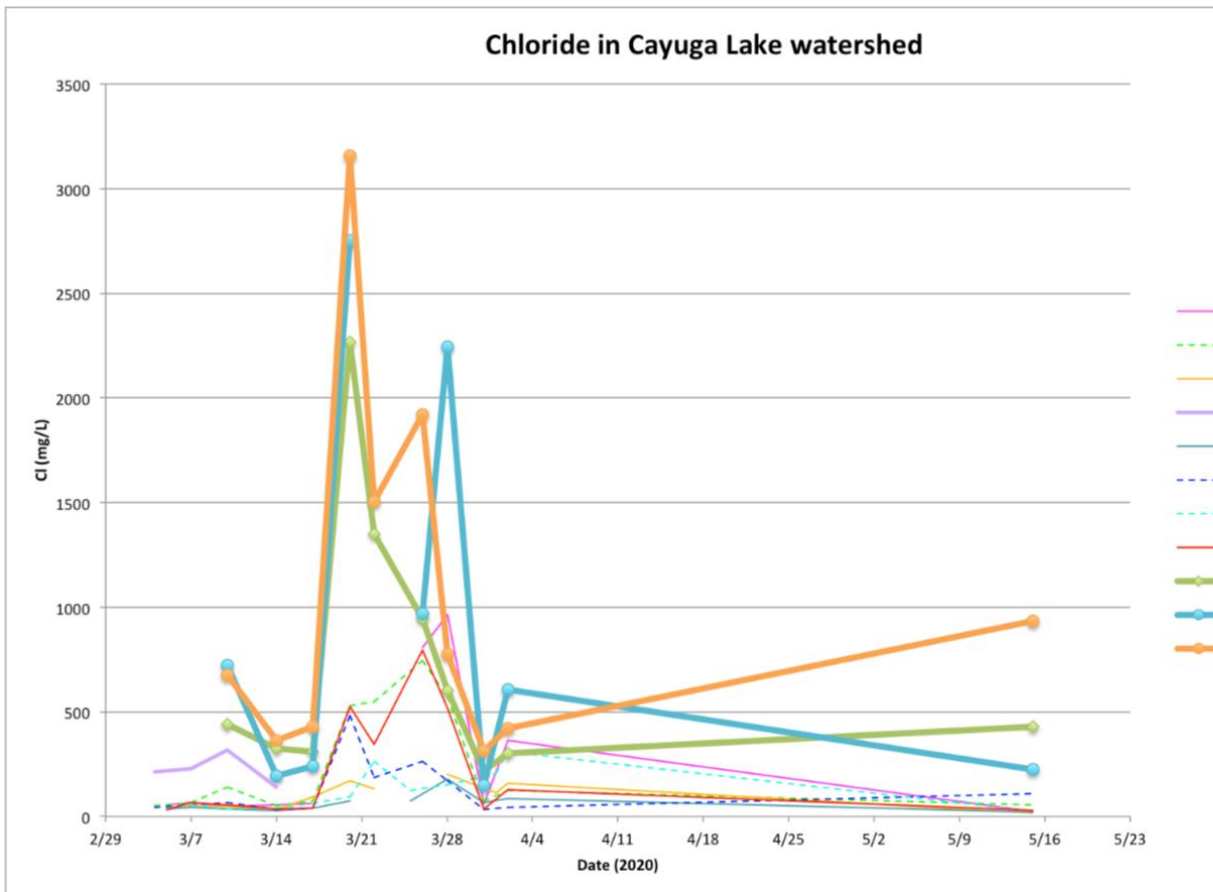
Please continue reading below to learn more about current research projects and ways you can support our work.

Water Quality Research

For many of us in the Northeast US, this is a time of year when we receive the rains of spring. CLEAN researchers have been monitoring tributaries that flow into the southern end of Cayuga Lake, paying particular attention to the chloride levels in the many creeks, brooks, and streams. Sodium chloride, the road salt applied to roadways and sidewalks to keep them clear and safe for use in the winter, washes into nearby waterbodies, raising the salinity of water supplies and negatively affecting aquatic organisms and soil structure.

As you can see in the figure below, CLEAN has been monitoring chloride levels in some of the tributaries that flow into the southern portion of Cayuga Lake. For more information and regular

updates, please visit <https://cleancayugalake.org/lake-station/>



Cayuga Lake Water Rules and Regulations

The Cayuga Lake Intermunicipal Organization is gauging interest in your input on maintaining and improving water quality. If you have concerns about your water supply and protecting it, please contact them at thunter@town.ithaca.ny.us. At the same time, please let CLEAN know about your interest in this important topic (email to George Patte, our liaison on CLEAN Steering Committee: gdpatte@georgepatte.com). There are many challenges in protecting our public water supply from Cayuga, including harmful Cyanobacterial blooms.

What Next at Heorot Power-Cayuga?

In 2019 Heorot Power Holdings—then largely owned by GSO Capital Partners—is understood to have applied for a \$65M grant from the Empire State Development Corporation to pay for

the \$60M data center construction project at the Cayuga Power site. According to Blackstone.com, GSO has \$121B in assets under management. It's not clear whether Heorot was able to make a convincing case for financial need and why it felt no need to put any of its own money into the putative datacenter project.

In December 2019, GSO Capital Partners, which is wholly owned by Blackstone Group, sold its 88.57% interest in Heorot Power Holdings. Two companies with Nordic names, Freyr Dataenergy, Inc, and Mjolnir Energy, Inc., now own 99.86% of Heorot Power Holdings, LLC. Cayuga Power and the Somerset Power Plant in Niagara County are two of six power plant sites purchased from GSO Capital Partners.

We know that Heorot Power's attempt to convert an old coal-fired power plant in Hardin, Montana, which is similarly miles from anywhere, met with problems. According to Jack Lane, the mayor of Hardin, Heorot owes the town \$23M in back property taxes.

We continue to ask why has DEC Region 8 required coal ash leachate from Greenidge Power's Lockwood CCR Landfill to be treated at a waste water treatment plant rather than be released directly to Seneca Lake while DEC Region 7 continues to allow Heorot Power to discharge up to 35M gallons of untreated coal ash leachate into Cayuga Lake annually? Please call or write DEC R7 Regional Director Matt Marko to ask why this situation continues. matthew.marko@dec.ny.gov, 315-426-7403. More questions to ask the DEC can be found [here](#).

A Victory for Cayuga Lake! But, is it superficial?

Cargill is to be congratulated for signing on 16 March 2020 an out-of-court settlement of a Clean Water Act Lawsuit brought by Our Children's Earth Foundation in April 2019. Peter Mantius has written about the settlement [here](#). Our Children's Earth Foundation's statement is here: www.ocefoundation.org/cargill-salt

CLEAN spent 3 years monitoring brine and salt dust emissions from Cargill's surface operations prior to OCE's successful Notice of Intent to Sue. Over the next three years an OCE engineer will be making site visits to Cargill's Portland Point facility to ensure that several

hundred pages of new Best Management Practices are being put into practice. As part of the agreement, Cargill has agreed to enclose in a roofed structure its bulk salt storage pad closest to the lake and to pump and treat a fugitive brine source that has been draining to Gulf Creek for decades.

Already, salt dust emissions at Portland Point appear to be down. While we will be delighted by any and all environmental improvements at Portland Point, we worry that palpable improvements in surface operations will be folded into a PR campaign that will coincide with Cargill's completion of Shaft 4 later this year and a Cargill Application to the NYS Office of General Services to double the size of Cargill's permitted salt reserves under Cayuga Lake.

Last summer, a Cargill seismic study ran seismic from near the Ithaca Yacht Club all the way north to Long Point, a distance of 18 miles or slightly less than half the length of the entire lake. If DEC permits an 8-mile extension of the permitted reserves this could double the footprint of the mine under the lake and more than double the risks of long-term salinization of the lake. A former CLEAN geology consultant, John Mason, has estimated the value of mineable salt from the northern limit of Cargill's present reserves to Long Point to be between \$3B and \$4B or the sort of values it's worth putting a shine on one's surface operations for.

Shaft 4 Issues

The CLEAN legal team has presented strong arguments that the construction of Shaft 4—four miles north of Cargill's surface operations at Portland Point—may have negative impacts on Shaft 4 neighbors as a result of noise, traffic, increased runoff, damage to ground water and the overall industrialization of bucolic agricultural landscape that happens to be directly across the lake from central New York's premier park destination: Taughannock State Park (the only one that stays open all winter).

Furthermore, Cargill has stated in writing that the new shaft—which is scheduled for completion later this year—will enable another 20+ years of mining under the lake. The negative cumulative impacts of mining further north into zones of thinning bedrock could lead to a repeat of the Retsof Salt Mine collapse of 1994, which led to the salinization of a freshwater aquifer above that mine. However, in this case, it is New York's second largest

Finger Lake above the mine. In 2014, Akzo Nobel, the owner of Retsof, paid New York \$20M to be released from on-going liability for “breaking” a freshwater aquifer. What would Cargill pay for “breaking” Cayuga Lake? Currently, Cargill only posts \$3.5M in financial assurance for its Cayuga Salt Mine operations.

To make matters worse, there is another huge wild card at Cayuga Salt Mine that was not at Retsof. In 1995, a Cargill seismic study discovered a large artesian aquifer located between the bottom of the lake and above the mine. (You can see a map of the top of a portion of the aquifer [here](#) at our web site.) Cargill’s 2013 stratigraphic borehole encountered salinity at a depth thought to coincide with the depth of this aquifer. The presence of a large artesian saline aquifer under New York second largest Finger Lake is a ticking time bomb that could be triggered into releasing brine into Cayuga Lake as a consequence of Cargill’s salt mining under Cayuga Lake. The emergence of an active brine seep on the east shore of Cayuga Lake appears to coincide roughly with Cargill’s mining in that area. A Cargill consultant tested this brine seep in a 2015 well study, but Cargill has refused to include this former beach well in its on-going well study related to Shaft 4.

Cargill has owned Cayuga Salt Mine since 1970 and has mined road salt from under Cayuga Lake for about 36 years. Although Cayuga Lake is less saline than it was in the 1970s, the DEC currently permits Cargill to discharge unlimited volumes of brine—up to twice the salinity of sea water—into Cayuga Lake at Portland Point. By contrast, DEC Region 8 limits the amounts of chloride that Cargill and US Salt can put into Seneca Lake. Currently, DEC Region 7 is believed to be conducting a technical of Cargill’s SPDES permit for their Portland Point operation. We need to pressure to DEC to create a reasonable, science-based permit that respects the need for Cayuga Lake to remain a source of drinking water for centuries to come.

Cargill Continues Operations During Coronavirus Shutdown

North America and the planet as a whole are in the midst of the Covid-19 pandemic. In Tompkins County, NY, 152 people have tested positive and two non-resident individuals have died from Covid-19. Compared to the tragedy down-state, upstate New York has thus far been fortunate.

It’s not clear whether a Second Wave of Covid-19 infections will be significant, whether

mutations will render trial Covid-19 vaccines ineffective, or whether Covid-19—like the flu—will become endemic.

In any case, it is unconscionable that Cargill Deicing Technology of Lansing ignored the Governor's declaration of a Disaster Emergency on March 7th, ignored the safety of its employees, consultants and their families and continued to mine, process, and ship road salt for next winter under a bogus claim that producing road salt for next winter is "essential business."

Cargill has many meat processing plants with high Covid-19 infection rates.

<https://newsinteractives.cbc.ca/longform/cargill-covid19-outbreak>

In a major news story about their plant in Schuyler, NE, it was clear that the local municipal officials wanted the plant closed for cleaning. They were opposed by Cargill whose motto is "We put people first."

When what we do today affects the infection rate in 2-3 days from now, it makes no sense for Cargill to be putting their employees, contractors and their families at risk as well as the larger population of the Northeast. Apparently, the Attorney General's office for whatever reason decided not to challenge Cargill's decision to stay open.

By contrast, on March 18th, out of respect for Executive Order 202, American Rock Salt shut down their Hampton Corners Salt Mine. This is the newer, safer, more productive road salt mine in New York State, whose employees are members of the United Steelworkers. As can be seen at USW.ORG, Covid 19 awareness and protection are crucial issues dominating their home page. By contrast, [the Cargill Deicing Technology website](http://www.cargill.com) seems to have no mention of Covid-19 whatsoever. A search on the larger Cargill website leads to [a short Covid-era video](#) about keeping food production going during the pandemic. It shows people shaking hands, standing side by side, and going about their work with no PPE whatsoever. There is one exceedingly-brief poorly-lit closeup of a person wearing a mask. Cargill obviously doesn't get it about the need to take the pandemic more seriously.

It's been unconscionable that Cargill Deicing Technology of Lansing has been putting the entire Northeastern community at risk by mining, processing and shipping road salt for next winter throughout the pandemic.

Art Fundraiser at Gimme Coffee in Trumansburg:

Several local artists generously donated to an Art Show Fundraiser that was intended to be displayed on the walls of Gimme Coffee during the months of March and April. However, as it became necessary to adapt to the current situation, the art show has now moved online. Many

of the pieces are displayed at <https://cleancayugalake.org/art-fundraiser/> Please contact us at CLEAN.CayugaLake@gmail.com if you are interested in purchasing a piece. Thank you!

Reminder: Please visit cleancayugalake.org/coal-ash-landfill and sign the petition to DEC Commissioner Seggos urging the DEC to require remediation of the Coal Ash Landfill at Cayuga Power Plant as a quid pro quo for any permitting of a data center.

CLEAN needs your help! If you are interested in adding your energy to our campaigns to protect the lake, please contact us at CLEAN.CayugaLake@gmail.com and include information about yourself and your volunteer interests. You can help our organization grow.

We appreciate your continued support. Tax-deductible donations can be made to CLEAN [here](#).

Thank you, Cayuga Lake Environmental Action Now

Clean the Lake.
Protect the Lake.