SUMMER 2023

The Finger Lakes SIERRAN

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Facing the Environmental Challenges In our Finger Lakes Region

Thurston Fights PFAS Contamination of Their Water and Land

Bill Mattingly – Chair, Finger Lakes Group

The Sierra Club Finger Lakes Group is working with the Town of Thurston residents to protect their land and water from toxic and carcinogenic PFAS "forever chemicals".

PFAS is an acronym for **P**er or **P**oly **F**luorinated **A**lkyl **S**ubstances, a group of over 5,000 fluorinated hydrocarbons.[1] Unfortunately, PFAS are used in a wide array of household products as well as extensive use in industry. The movie "Dark Waters" is based on a true story of a lawyer, Robert Bilott, (played by Paul Ruffalo) who uncovered that the whole town of Parkersburg, West Virginia, was being sickened by PFOA, a specific type of PFAS, coming from the local DuPont chemical plant. DuPont knew of the dangers of PFOA since the early 1960's.[2]

PFAS are exceptionally pernicious in that they bioaccumulate (i.e., concentrate in the animals and plants), and they don't break down quickly in the environment (hence the nickname "forever chemicals"). PFAS are associated with many health risks; including testicular, breast, and kidney cancers, liver and thyroid dysfunctions, and fetal developmental problems.[3]

Thurston is a rural farming community at the western end of the Finger Lakes. Thurston and adjacent towns of Bath and Cameron are home to a 2,789-acre sewage sludge land spreading operation.[4] When the acreage was recently purchased/leased by Casella Waste Systems Inc. from the local owner, Leo Dickson and Sons Inc., residents expressed concern that land spreading would be expanded or even converted to a landfill.

Casella, a regional power in solid waste disposal, owns many landfills across several states in the northeast, including Seneca Meadows, the largest landfill in NY (also located in the Finger Lakes). Studies have shown that sewage sludge can be highly contaminated with PFAS.

Sewage sludge is the solid waste produced by wastewater treatment plants (WWTPs). Besides our feces and urine, WWTPs must process all the other waste that goes down the drain, like food scraps, soaps, detergents, shampoos, fabric softeners, pharmaceuticals, lotions and the like. Some of these are laced with PFAS. In addition, WWTPs accept wastewater from industries and landfills. Landfill leachate is rainwater that percolates through a landfill and collects in a retention pond. When the pond is full, the leachate is then pumped into trucks and typically sent to a WWTP. Testing of landfill leachate also shows it can be highly contaminated with PFAS.

WWTPs are a focal point for pollution from residents, industry, and landfills. Since WWTPs typically have no ability to treat PFAS, the toxins merely pass through, ending up both in the liquid discharge and solid discharge (sewage sludge) of the plant.

A recent incident in Maine caused that state to ban all land spreading of sewage sludge. Milk from dairy farms in Maine was found to be too tainted with PFAS to sell, after cows ate crops from fields spread with sewage sludge.[5] In NY, most of the sewage sludge is sent to landfills, with a minority spread on fields. However, the NYS Department of Environmental Conservation (DEC), wants to expand land spreading of sewage sludge as "beneficial use" recycling. The DEC's newly proposed ten-year solid waste management plan calls for increasing land spreading of sewage sludge to 39% in 2032 from just 22% in 2018.[4]

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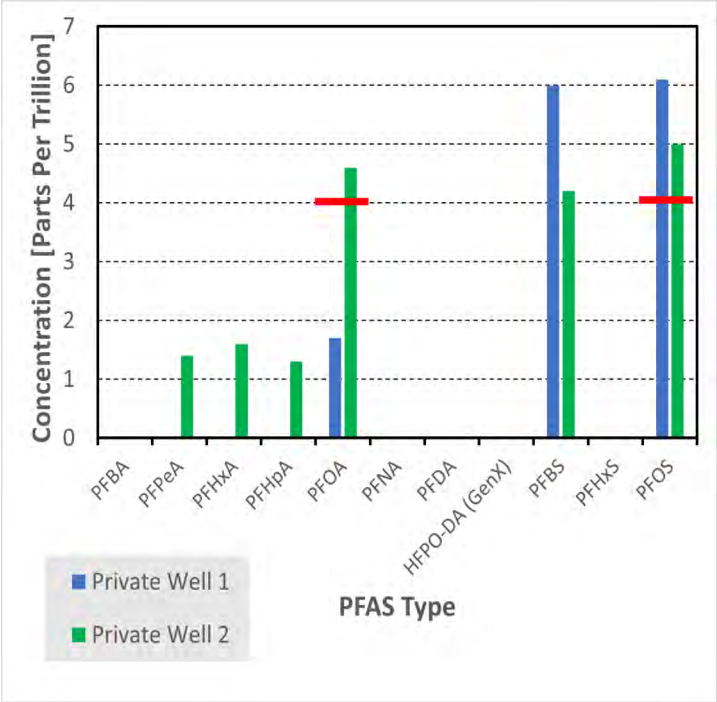
Thurston fights PFAS Contamination, cont'd



Thurston, Cameron, and Bath have been dealing with land spreading of sewage sludge on their fields for decades, so residents were clearly concerned after learning about the PFAS contamination in sewage sludge. Is their land and water already contaminated with PFAS? How should future sewage sludge be managed? Will the DEC allow expansion of sewage sludge land spreading which Casella has requested?

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To assist Thurston, Cameron, and Bath residents in answering these questions, the Sierra Club Finger Lakes Group purchased over thirty test kits designed by Cyclopure, Inc. for measuring PFAS in drinking water. Elizabeth Donderewicz, a Bath resident and Sierra Club member, organized testing of resident's private wells, focusing on those residents with property adjacent to the land spreading. Some residents purchased their own test kits.

Donderewicz also analyzed the results and presented the findings at a Thurston town hall meeting. Results showed PFAS was present in the private wells of many residents with property adjacent to land spreading. The bar chart below shows detailed results of just two wells. There are 11 common types of PFAS, which are listed on the chart's horizontal axis by their chemical acronyms (for example, PFOA is fifth from the left). Six of the eleven common PFAS compounds were detected in private well 2 (as shown by the green bars). Three common PFAS compounds were detected in private well 1 (as shown by the blue bars).

The chart's vertical axis indicates the concentration of each PFAS compound in parts per trillion (ppt). Private well 2 showed PFOA and PFOS at 4.6 and 5.0 ppt, respectively. Both compounds are above EPA's proposed limit of 4 ppt (shown by the red bars) for those specific compounds in public water systems. Private well 1 showed PFOS at 6.1 ppt, again above the limit proposed by the EPA in May 2023.

Given these results, the Town of Thurston unanimously passed a moratorium on expansion of sewage sludge land spreading for one year. The Town of Cameron followed suit by passing their own moratorium. The moratorium law adopted by the towns was drafted by Rachel Treichler, an environmental lawyer and Sierra Club member working with the Thurston town board.

Even with the adoption of moratoriums, the fight against PFAS contamination isn't over. The DEC is still deciding the best course of action regarding land spreading of sewage sludge. The DEC could continue with its new ten-year plan to expand land spreading, or ban the practice like Maine did. Our hope is the latter. It is never a good idea to reintroduce toxins into our own food chain, especially toxins as persistent and bioaccumulative as PFAS. The public comment period for the DEC's ten-year solid waste plan is open until June 14, 2023. Review the plan[4] and submit your comments via email to NYSSolidWastePlan@dec.ny.gov . Please include "Comments on SSWMP" in the subject line of the email.

https://waterfrontonline.blog/2022/09/21/doh-skips-deadlines-in-law-requiring-regulations-to-limit-pfas-in-drinking-water-as-epa-sounds-alarm-about-risks/

https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html

https://waterfrontonline.blog/2023/05/01/suny-esf-tests-confirm-seneca-lake-trout-laced-with-pfas-state-advisories-protect-anglers-habits-not-their-health/

https://www.dec.ny.gov/docs/materials_minerals_pdf/draftsswmpmainplan.pdf

https://waterfrontonline.blog/2022/12/13/new-york-regulators-take-see-no-evil-stance-on-evidence-sewage-sludge-and-effluent-is-contaminated-with-pfas/

My Search For Composting Food Scraps

by Phil Gillemot

In April, I was visiting the Phoenix area while on a family visit. I was preparing to leave town, and had accumulated a container of food scraps. Instead of throwing them out, I decided to search for a place to compost them. I had just taken part in a rally the prior weekend to protest the proposed continuation of operation for another 15 years of the Seneca Meadows landfill, beyond its scheduled closure in 2025. Part of the abatement of solid waste is to develop widespread municipal food waste composting programs. The organic component of solid waste in sanitary landfills produces methane, and methane is an extremely potent greenhouse gas. It can be partially captured (20% to 80% with current technologies in an open landfill) with a system of tubes, refined, and used for electrical generation and to feed into natural gas lines. This still leaves a huge amount of methane that is produced by organic landfill waste, which can last for up to 30 years, and which is heating up our atmosphere and causing climate change. If food waste can be separated and composted instead of being sent to a landfill, the process of composting does prevent the production of methane. Additionally, the mulch that is produced can be used to help grow crops and reduce the need to use inorganic fertilizers such as phosphorus and nitrogen (which promote the loss of oxygen in bodies of water, the growth of toxic algae, and the death of fish and other aquatic life).

Upon leaving my hotel, I asked a couple of workers in the lobby restaurant if the hotel composted their food waste. They told me no, and that the food scraps went into the garbage along with all kinds of inorganic waste. So I decided to search for a vegan restaurant for breakfast, on my way to the airport. Surely they would compost their food waste! I found a promising restaurant under "Vegan restaurants near me" and had a great meal outdoors. Unfortunately, it was not a vegan restaurant. I asked the owner/waitress/cook of the eclectically-decorated restaurant if she composted her food waste. She said that she did not have food waste! After I cocked my head and looked quizzically at her, she stated that her food scraps went to help feed her friend's turtle. Undeterred, I decided to research Phoenix-based composting programs while eating my breakfast. I had briefly considered chucking the food scraps next to a cactus or yucca, but this would have been unsightly, and wouldn't have really composted the organic waste.

I came upon a website for R.City, a "food waste-to-farmland compost collection" for "farmland for the future". It described itself as a full-circle service "that makes it easy to turn your food waste back into farmland". It further explained that approximately 40% of food grown is not eaten, that 95% of food waste goes to landfills or incinerators, and that 50% of the Earth's topsoil has been eroded. Also, composting speeds up the process of decomposing food waste (compared to a landfill), and its production reduces the need for chemical fertilizers. The rub is that most people do not have the time, space, and resources to devote to maintaining a compost at home. R.City offers a food waste pickup service and leaves a clean bin. Since 2013 they have collected food waste, composted it at their farm, and used the compost on their farm to grow produce without the use of chemicals or pesticides. Pickups of food waste are available from monthly to weekly, costing from $10 (monthly) to $33 (weekly with an extra bin).

Contemporaneously, Mayor Jim Ryan of my home village (Montour Falls) was given a federal award for the composting program of the village. The program provides for residents to bring their food waste to collection bins outside of the library and four other sites, at no cost to the individual.

Finally, my attention was drawn to a Friday May 5 headline in the Rochester Democrat & Chronicle: "Cooking oil thefts rise; 6 arrested in Monroe County". The article explained that federal agents made the arrests of the accused for stealing used cooking oil with plans to sell it for refinement into biodiesel fuel. It also noted that this crime is becoming common nationwide. Similar thefts occurred in the Albany area and Long Island this year. It stated that law enforcement has been hesitant to investigate and prosecute the crime in recent times, and some of the thieves have been working in organized crime circles. The owner of Buffalo Biodiesel, Sumit Majumdar, state that he has lost millions through such thefts.

There is much in our "trash" that is of value, and which can be separated, collected, refined, and reused. It has usefulness in our society and in our environment. It is vital that we come back into alignment with our environment in order to save it, and ourselves.

Resource Gems about NYS Legislation on Atlantic Chapter Website

by Tom Hirasuna

Perhaps you are hearing about a lot of activity going on with NYS legislation but have little experience and want to find out more. One option is to go the respective websites for the Assembly (https://assembly.state.ny.us) and the Senate (https://www.nysenate.gov). Both sites are packed with information, and you can learn of the status of a bill that you have a number for already. Both sites will help you connect to your own Assembly Member and Senator based on your address. On the Assembly site, you find your Assembly Member (https://assembly.state.ny.us/mem/search/) and can be sent to their website. The Senate site has a guide to help you find out more: https://www.nysenate.gov/citizen-guide. It also helps you to set up an account and this will enable you to quickly notify your Senator about whether you are in favor (or not) for a particular bill and to send comments directly.

But what if you want to know which current bills are important from the Atlantic Chapter's perspective and what the pertinent details are? There is an easily accessible tool that you can use, provided by Legislative Committee of the Atlantic Chapter. Look at the Legislation website: https://atlantic2.sierraclub.org/content/legislation. At first glance, this page can be a bit overwhelming but there are two important sections to look at first. There is a 2023 Legislative Priorities Handout (pdf) which is a 2-page downloadable document and provides an overall summary: https://atlantic2.sierraclub.org/sites/newyork.sierraclub.org/files/documents/2023/02/SCAC%202023%20Priorities%20Feb%2016%20%283%29.pdf. If you want to start getting involved in lobbying your representatives, there is the Atlantic Chapter Lobby Toolkit: https://atlantic2.sierraclub.org/content/atlantic-chapter-lobby-toolkit. It also includes information about how bills become laws, how to search for bills and how to contact and lobby with your legislators.

Once you are more comfortable with this site, you can dig into details about the bills which are supported (or opposed) by the Chapter. If there was a memo written for a particular bill, you can look it up. Bills are grouped by broader categories: Water, Energy, Building Electrification, Toxics, Environmental Law, Banning Harmful Insecticides and Herbicides, Plastic Pollution/Zero Waste, Transportation, Wilderness/Wildlife/Parks, Democracy/Voting Rights, and Additional Bills. Details can be looked at going back to 2011, for those interested in historical trends.

Suppose you wanted to find out more about the Proof-of-Work Cryptocurrency Mining Moratorium from last year. On the Legislation page, click on the 2022 link under Bill Memos (https://atlantic2.sierraclub.org/content/2022-bill-memos). Under the Energy category you can find "**Cryptocurrency Mining Center Moratorium: S.6486-D (Parker)/A.7389-V (Kelles)** and see the details of when it passed the Assembly and Senate and when signed by Governor Hochul. You can also view the support memo: https://atlantic2.sierraclub.org/sites/newyork.sierraclub.org/files/documents/2022/03/Crypto%20MoratoriumS.6486-D%28Parker%29_A.7389-C%20%28Kelles%29.pdf. You can get this level of details for most of the bills of interest for the current session.

"No Mow May" anyone?

By Jim Trondsen

Originating in England and quietly spreading to communities in the US, "No Mow May" has the objective of promoting pollinators such as bees and butterflies, by making residential lawns a more supportive habitat. This is accomplished by delaying mowing in the spring, by mowing less often and by letting the lawn grow longer by adjusting the mower. Lawns are the single largest irrigated crop in the US, and a great opportunity to help the pollinators. Pollinators are the essential workers of our food supply. We need each other.

There are benefits for us as well. This is a "grassroots" movement, quite literally, because it also makes your lawn put down deeper roots, making them more drought-tolerant and requiring less watering and mowing. It promises to be a healthier, more diverse and lower-maintenance lawn. In spring the no-mow lawn is a beautiful forest meadow, with many surprising flowers.

After years of dealing with persistent bare spots in the shadow of trees, I invited native plants by making the mower higher and mowing less often. The bare spots filled in and the lawn became more interesting and beautiful, with multiple hues and textures. Broad-leafed plants, clovers, cushy mosses, striking native flowers all coexisted in their preferred areas. To me, it was much preferable to the monoculture of non-native industrial grasses that required noxious chemicals and high maintenance.

Dry Weather and Smoky Skies: Clean Solutions

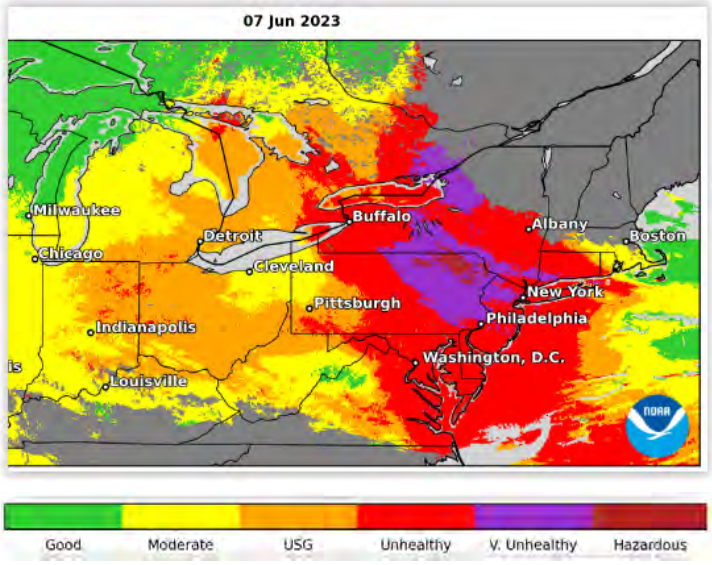
By Hal Bauer, Finger Lakes Group

Earlier in the month of June 2023, due to a dry Spring, low humidity, Atlantic weather and large wildfires just north of us in Canada, our Finger Lakes Region was subject to abnormal and dangerous smoke plumes creating hazardous health conditions for some people. Satellite imagery of northern NY and the Canadian shore of Lake Ontario reinforced our ground experiences of a striking haze, and the smell of wood smoke from those forest fires.

The Air Quality Index (AQI) is a scale used to describe daily air purity. The higher the number, the worse the health effects. In NYS it includes monitoring of ozone, fine particulates, carbon monoxide, sulfur dioxide, nitrogen oxides, methane & non-methane hydrocarbons and meteorological data. Thick smoke occurred in a region due south of the fires in Quebec that included clouds in the region of Lake Ontario south into the Finger Lakes. In June 2023, we experienced unprecedented high values, over 300, from Kingston, Ontario, through the Finger Lakes Region and down south to NYC. An Air Quality Alert was in place for sensitive groups including people working out of doors and with lung related diseases. The Bureau of Air Quality Surveillance is at 518-402-8508. To find out current monitored air quality, you can go to https://ww.airnow.gov

Also, the NYS DEC Fire Index put our region at Level 3-, a high fire danger, including hazardous fire weather conditions. Dry thunderstorms were possible with no rainfall, causing lightning strikes, possibly igniting dry vegetation. Fortunately, rain in mid-June in our region may have reduced the more extreme fire hazards. NYS DEC Fire predictive services are at: 518-402-8839, and the AQI can be found in the www.DEC.NY.gov website.

In 2019, New York State passed the nation leading **Climate Leadership and Community Protection Act** and since has passed more climate legislation requiring significant action to mitigate and adapt to our changing planet. However, we must involve nature in specific, strategic and meaningful ways. We've lost over a billion migrating birds in the last 50 years. Reforestation in New York and beyond is a natural climate solution that offers a great mitigation method, as we have nearly two million acres of land suitable. About 74% of NYS forests are privately owned, crucial for carbon sequestration. But there are many challenges to our forests, in addition to drought and associated fires: In the early 1990s a powerful ice storm took down many trees in the Finger Lakes Region. Over-browse by deer is a major problem limiting regrowth of forest. Also, until recently, there is little incentive for allowing trees to grow on private land, and rural loggers and firewood collectors have no incentive to stop cutting healthy trees. It's not uncommon for new owners of private forest to cut trees for cash, then use it to pay the land costs. There is no NYS sales tax on firewood, so large scale operators get cash for *p*rocessing standing forest into firewood for delivery with heavy equipment. In 2023, NY's **Regenerate NY Growing Forests** has a cost share program for reversing a historic trend to cut and burn standing forests. Here's a NYS DEC webinar on the incentives, which end by Oct. 6, 2023: https://meetny.webex.com/recordingservice/sites/meetny/recording/cbc460d4dc69103bbddf005056818e9f/playback



In addition to greening our world, let's not forget reducing our energy use: Passive design of new homes, and insulation with air sealing of remodeled homes greatly mitigates heating and cooling costs. NYSERDA has a **Comfort Home Program**, not really known, with incentives to insulate and weatherize homes. It allows incentives of $1,000-$4,000, after a free home energy assessment by a supported contractor. Also, the **NYS Clean Heat** program funds heat pumps that are a smarter, more energy efficient way to heat and cool your home or business. This program may also qualify for up to 25% of geothermal energy system equipment expenditures. These add up to $4,300 in tax incentives, which help reduce both fossil fuel use, and New York forests from firewood collection, both reducing the emission of even more CO2 and other pollutants into the changing planet's atmosphere.

So, these are just a few answers to greening our healthy planet home here in New York

Finger Lakes Group Summer Picnic

Champlin Beach Park, Hammondsport
Wednesday, July 5

Copyright Sea Swim

The Sierra Club Finger Lakes Group is hosting a Summer Picnic for members and guests. The picnic will take place at the Champlin Beach Park Pavilion in Hammondsport, on July 5th, at 5 pm. Meet fellow environmental advocates and see what the Finger Lakes Group is doing to preserve the local and global environment.

Pizza, salad, and drinks provided.

Members, feel free to invite family and friends.

Please visit our website to sign up:
https://www.sierraclub.org/atlantic/finger-lakes

Or email: fl-group@newyork.sierraclub.org

Sierra Club Finger Lakes Group
Summer 2023 Newsletter

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