

# Susquehanna *Sierran* **JUNE 2023**



Founded 1892

EXPLORE, ENJOY, PROTECT THE PLANET

## **Solar: Not Quite Free**

– Chris W. Burger

Most people understand the need for transitioning away from fossil fuels to reduce climate disruption. A growing number of business and community leaders are also touting the virtues of “energy independence.” New Yorkers spend over \$40 billion a year on fossil fuels: dollars that are sucked out of homes, businesses, and local economies. Renewables (hydro, wind, solar) can keep these dollars local, but they are not free.

Our home is completely electrified with electricity generated by renewables. Our electricity generated from solar panels may be “free” now, but it took 8 years to break even. The panels have a 25-year warranty, so it is more accurate to say our energy is, not free, but roughly a third of the price of fossil fuels (less if they continue working after the warranty period and/or the price of fossil fuels continues to rise – both distinct possibilities). Our monthly utility hookup fee has become, in essence, our monthly energy storage fee, and we’ll continue to pay it unless or until it goes above the cost of providing our own storage.



While we were able to mount solar panels on our roof (not everyone can), anyone who pays their own utility bill (including renters) can purchase solar panels in a local solar farm and replace their fossil fuel usage easily with virtually the same amount of savings. The bigger problem is upfront costs. We were able to provide the upfront costs of solar. To spread out these costs a little, we borrowed money for a short period of time. These options are not available to everyone. Fossil fuel costs continue to rise. In addition, as more middle- and upper-income people take advantage of these savings and become energy independent, the fixed costs of the old fossil fuel delivery systems will be spread over fewer, mostly poorer, people who can least afford it.

As we move towards a more environmentally friendly, sustainable society, we will need to find ways to bring the poorest amongst us along. Renewable energy pays for itself, but, for people of low income, the upfront costs are barriers. These upfront costs should be provided through grants or low interest loans which could be paid through utility bills guaranteed to be no more than current monthly bills. If the loans were spread over a longer period of time (more than 8 years), the monthly bills could actually be reduced, providing immediate relief. As loans are paid off with money not spent on fossil fuels, the loan fund could be self-perpetuating.

The new energy future is affordable and actually cheaper but we need to be sure we are bringing everyone along.

# The Mighty MOP – Christina Fuller

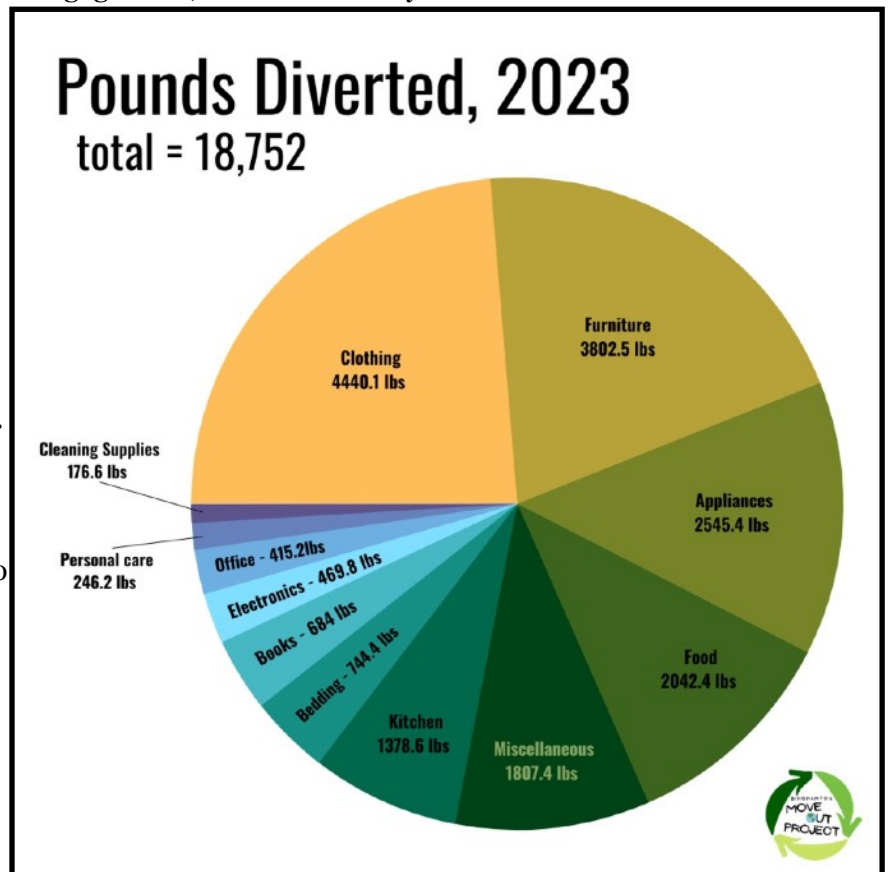


The Binghamton Move Out Project (MOP) collects and sorts items from students moving out of college housing, thereby (1) keeping heaps of valuable material out of the landfill, and (2) redistributing useful items to local organizations helping the needy, homeless, unemployed, and fostered. MOP's recently completed May 5-15 cycle was made possible by 60+ volunteers, NYPIRG, and Binghamton University Residential Life, Physical Facilities, Q Center, Center for Civic Engagement, and Food Pantry.

On-campus students donated over 4.5 tons of material at 10 active collection tents and 6 passive collection bins. Off-campus students made appointments to donate over 5 tons of material collected by volunteers.

Back at the warehouse, teams of volunteers sorted all the items and prepared them for a two-day "shopping event" during which nonprofit organizations came in to select items for their organizations and clients. MOP received great feedback about this distribution model and will refine it further next year.

Clothing was the largest donation category by weight: a whopping 4,440 pounds! Looking ahead, MOP remains committed to further expanding capacity, cultivating more partnerships, and exploring innovative strategies to promote community sustainability and support. MOP has some exciting projects planned for the off-season. If you're interested in getting involved, email [binghamtonmoveout@gmail.com](mailto:binghamtonmoveout@gmail.com) or visit our website at [moveoutproject.org](http://moveoutproject.org)





## Susquehanna Group

(All of Broome and Sullivan, & most of  
Chenango, Delaware, Otsego, and Tioga  
Counties)

Chair	*Valdi Weiderpass
Vice Chair	*Scott Lauffer
Secretary	*Karen Boba
Treasurer	*Joann Lettis
Political Chair	*Scott Lauffer
Chapter Delegate	*Jim Taft
Newsletter Editor	*Jim Taft
Webmaster	Chris Harasta
Conservation Co-Chairs	*Doug Gausman, *Mary Cronk
Alt. Chapter Delegate	*Joann Lettis

\* Member Executive Committee

To become a candidate for the  
Susquehanna Group's Executive  
Committee, mail by November 1, 2023  
a candidate statement of 150 words or  
less to:

Susquehanna Group  
PO Box 572  
Endicott NY 13760

The Nominating Committee will create  
a slate of candidates, and ballots will be  
mailed with the December *Sierran*.

## Invitation to the Pollinator Garden

– Jim Taft

Master Gardener Sarah Hodder continues to lead Club volunteers in the 6th year of expanding, improving and maintaining the pollinator garden. Our partner, Binghamton Parks & Recreation, has ceded additional beds to the project, and provides services including copious mulch.

As we work, many citizens—dog walkers, runners, bicyclists, fisherfolk, tourists—stop to compliment the Club on the project. The garden is also visited by Canada geese, beavers, songbirds, bees, butterflies, and many other creatures.

You are invited to:

**(1) Visit.** The historic location is Confluence Park where the Chenango and Susquehanna Rivers merge. The Park connects to extensive recreational trails along both rivers. Parking can be found on Washington Street or across the pedestrian bridge on Conklin Avenue.

**(2) Volunteer.** Contact Sarah at [shaddow@stny.rr.com](mailto:shaddow@stny.rr.com)



Redwing blackbird  
Boland Pond, Chenango Bridge  
photo by the late Ray Cronk



# BJCJSTP Update

– Scott Lauffer

The **Binghamton-Johnson City Joint Sewage Treatment Plant** defends the Susquehanna River and downstream communities and ecosystems from wastewater toxins flowing from several Broome County municipalities. It is probably the most valuable public resource in Broome County and can process 60 million gallons of wastewater per day.

Superintendent Elliott Wagner recently gave a presentation to the Susquehanna Group on the operation and importance of the plant. His overview of the Treatment Process sequence:

- coarse screens (heavy material)
- fine screens (down to 6 mm)
- aerated grit
- primary settling / solids removal
- secondary treatment – a biological process developed by Kruger Veolia
- carbon removal and nitrification
- tertiary treatment / denitrification
- ultraviolet disinfection.



All liquid that enters the facility is treated and then released to the Susquehanna River. Sewage sludge (solids) is dewatered and sent to the landfill (6,380 tons in 2022) where it is used as a top dressing. The landfill has a pre-treatment facility, in which leachate is treated then sent to either Endicott or Ithaca wastewater plants. Capstone turbines at the plant capture and combust methane from digesters thereby producing over 5,000 kW hours of electricity per day. The plant also has an array of solar panels which provide some of the plant's electric needs.

A viewport failure in the secondary treatment area occurred in February 2022. It flooded the gallery and destroyed a lot of equipment. It was necessary to bypass secondary treatment and convert tertiary treatment to carbonaceous, and inject sodium hypochlorite on top of ultraviolet treatment to get as much pathogen kill as possible. Six months of feverish work restored the plant to full treatment operation. During that period the plant was over limits of discharge allowed by the DEC but was able to get back to meeting its monthly permit requirements by September. The Total Maximum Daily Load, a key measurement, was kept from exceeding 2022's regulatory limit. Getting the plant back in proper operation was a major achievement that was recognized by DEC Commissioner Basil Seggos.

When asked about concerns for the future, Wagner brought up PFAS removal which will likely be a future requirement. He said it would require additional construction and incur cost. Yet he hopes for continued improvements to make the facility viable for another 20-25 years.

Six years ago he saw dead fish and algae blooms in Chesapeake Bay, which disturbed him. Wildlife largely deserted the plant site after the 2022 damage but started to come back after the reconstruction. Wagner reported that ducks, waterbirds, mink, red fox and bald eagles have been seen. He stressed that they're trying to do something good for the community, downstream areas, the Chesapeake Bay and the Earth.

What can people in the community do to help? Be careful what you flush, especially 'flushable wipes'. They can clog the system. For further information, see: <http://www.bjcwwtp.org/Minutes>

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# Red Sun is Climate Crisis Warning!

– Valdi Weiderpass



A red sun over a half hour before sunset (photo #1) instead of being pretty, should be seen as a Climate Crisis warning. This is because so much wildfire smoke from western North America has been carried thousands of miles to New York State that it turns the sky from blue to a gray haze and dims sunlight to have a yellow tint in the middle of the day. We live in our own apocalyptic science fiction movie, except it is real and we can't just leave the theater and then all is back to normal! We must Act Now, with WWII scale and urgency to Save a Habitable Climate! I have been depressed by the hazy sky because I know it is due to Climate Change causing forests to dry out. Much of this smoke happens to be from huge wildfires in Alberta, Canada. A little north of Fort McMurray, Alberta the Athabasca tar sands oil is found. It is the dirtiest oil on the planet and when used emits the most greenhouse gas: as much as 30% more than conventional oil during its extraction, refining and use. Photo #2 (from [Center for Biological Diversity](#)) is an aerial view of a small portion of the tar sands oil extraction area and the yellow arrow indicates a very large dump truck appearing as just a dark speck in the photo! These tar sands cover an area larger than England. It is ironic that massive 2016 wildfires in the same region destroyed 2,400 buildings, mostly in Fort McMurray, and temporarily crimped oil production by 1 million barrels per day. This year the region is experiencing fire again, with 30,000 people evacuated and oil and gas production temporarily reduced. The leading edge of the smoke came into our skies in early May but was

worse on May 22. About 45 minutes before sunset I noticed how eerily reddish the sun was. I stepped out of my car in Vestal NY and took the photo a few minutes before 8pm. Sunset was at 8:24pm that day, the sun should not be red a half hour before sunset. Smoke particles were adding the color and making it dimmer. The sign in photo #3 (taken the same time) says "CONVENIENCE STORE," but folks don't want to be inconvenienced so they argue against climate action and renewable energy projects. But if we don't take adequate action quickly we could lose our Habitable Climate. This could easily lead to the collapse of human civilization—much worse than inconvenient.



## Pun In A Garden Of Jargon by Bob Wright

Artie's mind is just barley average.  
At times he seems somewhat slaw. Anyhoe, I've never  
seen my artichoke, So why should I carrot all?  
Now I'm not a radishing beauty,  
But we make a peach of a pear. Though the truffles of life  
often turnip, There's lentil that we cannot bear.  
Sometimes we're bushled and wilted, And peel irrigated  
and tired.

So farm we're just small potatoes,  
In a yam or the pits often mired.  
But peas let our bad luck be spinached. It'll be grape  
when our stars align.  
Our celeries and wealth will keep raisin. Thanks mulch,  
now we'll be just vine.  
So, lettuce not disparagus.  
Top banannas we may never be. We've kumquat far  
already. Remaining a team is the key.



# Susquehanna Group Gets Out



*Binghamton U. Greenhouses*



*Birding, Waterman Center*



*End-of-project potluck, Roundtop Park*



*Invasives workshop, Otsiningo Park*



*Arbor Day tabling, Highland Park*



*Earth Day tabling, Ross Park*



*Wolf Mountain Nature Center, Smyrna*



Susquehanna Group

PO Box 572

Endicott NY 13760

<https://www.sierraclub.org/atlantic/susquehanna>