Silver Lake Association Water Quality (SLAWQ) Report (for April 11, 2025)

<u>Dredging Project.</u> The WCWRA (Wyoming County Water Resource Agency) met on January 22, 2025 and discussed the Silver Lake Dredging Project. Frank participated vitually. The County Administrator, Scott Schrader, reported on a January 21, 2025 virtual meeting between Wyoming County and DEC. (No SLAWQ team member was invited.)

The DRAFT WRA meeting minutes read as follows:

S. Schrader stated that the County met with DEC yesterday virtually and it went ok. There is a possibility that we may never be able to dredge the lake, but the DEC did not say no. They were informative and provided some options. It is possible, but not ideal to move the dredged material outside of the watershed to be land spread. The DEC answered our questions: 1.) Can we land spread? The DEC didn't necessarily say no. which is important. 2.) Could we hold dredged material in a staging area, the DEC didn't say no. 4.) Can we dredge all at once or in stages, how quickly can we get rid of the dredged material? The DEC said the permit is good for 10 years and as far as they are concerned, the material is clean because it is nutrient rich. Since the permit is only good for 10 years, we would need more partners to help in getting rid of the dredged material. If we can show the benefit that it is clean and not hot, farmers would be more receptive. CPL [Clark Patterson Lee] is setting up a meeting with the County next month to determine our next steps and to discuss partners to take the dredged material because a significant amount could be applied to fields. There are opportunities that need to be explored for the placement of the dredged material: solar fields, windmill areas, landfills. 5.) Why was our permit rejected? It was rejected for a variety of reasons. The primary reason was the lack of specificity of the material's composition, how long and where we would store it, and where it would be disposed of. The secondary reason was the finding of significant artifacts in the area that was originally planned for land spreading. J. Bragg stated that a Phase II study would need to be conducted because of the artifacts. The DEC asked if we are pulling our application or modifying it. The engineering firm, CPL, wants to start over, however, we need to have further discussions. Any material that is deemed hot is in the report and it would need to be hauled to a special disposal site. The samples that we took are still good, but a little aged, but our application indicated that we could do continued sampling.

Frank submitted the following response on March 8, 2025 to Cheryl Ketchum (Board Clerk, Wyoming County Board of Supervisors):

Thank you for providing a DRAFT set of minutes for the January 22, 2025 WRA meeting.

I am confused by some of the text.

Specifically, under the Silver Lake Dredging Project Update section on pp 5 and 6 the following text appears on p.6:

"5) Why was our permit rejected? It was rejected for a variety of reasons. The primary reason was the lack of specificity of the material's composition..."

This text is very, very surprising to me for two reasons.

Firstly, the sediment in the to-be-dredged areas of Silver Lake have been professionally sampled and assessed by certified laboratories. The associated reports from these laboratories have been in hand for many years. As such the sediment's "composition" as well as classification is indeed known. Were these reports on the Silver Lake and Silver Lake Outlet sediment provided to DEC? Assuming the reports were provided for evaluation, what is missing / problematic? If the reports were not provided to DEC, can this oversight be corrected?

Secondly, earlier in the same section of the DRAFT minutes the following statement is attributed to the DEC, "The DEC said the permit is good for 10 years and as far as they are concerned, the material is clean because it is nutrient rich." I don't see how this statement and the one questioning "lack of specificity of the material composition..." can both be true. Which of these statement is the accurate NYS DEC viewpoint?

It would be helpful to have these points cleared up and the minutes revised to full reflect the discussion.

It would also be helpful to have a copy of the written rendering from DEC on the proposed Silver Lake Dredging Project. Can you provide me with this?

The message was acknowledged and forwarded to Jim Bragg (Planning Director), but we have not received a response.

<u>Don't Rake in the Lake.</u> Please see previous SLAWQ Reports and the *Perry Herald* March 27, 2025 issue (p. 6).

According to Julie M. Barrett O'Neill, Esq. (DEC Region 9 Director):

Dumping of leaves in the lake is a violation of Environmental Conservation Law. The law applies regardless of who is doing the dumping - resident/homeowner, commercial company, etc.

Suggested Actions:

- Educate residents about the law.
- Create and implement a comprehensive yard waste disposal plan for Silver Lake.
- Contact landscapers regarding the law.
- If violators are spotted, observers should take pictures and videos and reach out to the DEC (716-851-7050).

We have posted this new information on the SLA and CLEAN Facebook pages.

We have also forwarded this new information to the municipal leadership in the Village and Town of Perry and the Town of Castile.

Milkweed. We all hopefully recognize the importance of native plants that provide food and homes for beneficial animals and insects. Milkweeds provide leaves for hungry monarch caterpillars and flowers for other beneficial insects, plus add beauty to your garden.

The National Garden Bureau selects one perennial, one annual, one bulb, one houseplant, one shrub, and one edible, as their "Year of the" plant designations. Plants are chosen based on their ease of growth, versatility, popularity, adaptability and genetic diversity.

2025 is the Year of the Milkweed!

Look for milkweed plant distributions at Silver Lake Event / SLA Meetings. Follow along on Facebook.

Walker Rd Bridge Replacement Project. Completed.

<u>Aquatic Algae and Plant Management.</u> We are looking for someone to lead this group.

The team is considering a Lake Management Plan, but are reviewing previous Reports.

<u>Drinking Water Source Protection Program (DWSP2).</u> The project continues to move along.

<u>Japanese Knotweed (JK).</u> SLAWQ team members will revisit previously treated sites in spring '25.

Infestations at the golf course persist and remain untreated.

New infestations have been reported within the Silver Lake Institute (SLI). We have passed along relevant information to the SLI leadership and advised them regarding how previous efforts were funded.

A small infestation was recently discovered in Fairview North.

<u>Silver Lake Watershed Local Water Revitalization Program (LWRP) Waterfront Advisory Committee (WAC).</u> This committee is led by Land Ethic Planning & Restoration (LEPR) with representation from the Towns of Castile & Perry and the Village of Perry, farmers, lake-front cottage owners, SLA, CLEAN, lake-front business owners, NYS Parks, and DEC.

This Program will shape Silver Lake for the foreseeable future.

<u>Citizens Statewide Lake Assessment Program (CSLAP).</u> The 2025 campaign costs have been paid and we will continue with eight (8) samples per season. Sampling supplies should arrive in late May.

The 2024 CSLAP report for Silver Lake (CSLAP id: 25) is available at the following web site:

https://extapps.dec.ny.gov/data/IF/CSLAP/0403SIL0115/

This link will direct folks to an online folder with links to the 2024 report as well as any historical reports that are available.

Look for these report to appear on the NYSDEC infolocator website.

<u>Silver Lake Bioreactor.</u> The original Silver Lake Bioreactor project has been placed on hold.

WCSWCD staff are considering new sites. We suggested the original buffer planting site (Site P) as a possibility to gain a foothold and secure before / after data.

During our recent discussions with the DEC Region 9 leadership they voiced strong support and interest in these types of projects and partnerships.

If one or more of these Bioreactor projects can get off the ground and prove to be beneficial, they would be an obvious target for inclusion within a LWRP.

<u>Buffer Plantings.</u> WCSWCD provided SLA / CLEAN with a list of potential sites.

We met in the field and discussed each site with the WCSWCD staff. The preference list follows:

Site #7 (Bacon Rd between houses 3271 and 3261). Potential site for shrubs or for a pollinator garden.

Site #31 (6574 Abbott Rd). Removal of non-natives. Potential tree and shrub planting site.

The site along the tributary paralleling Pvt Dr 1 was discussed too. It saw significant restoration work in 2017/'18 to create a plunge pool and reshape the tributary trek. This project was funded by WCSWCD, SLA, and landowners.

Unfortunately, this area is currently infested with JK and the property owner opted out of the original JK spraying effort. As a reminder the original JK eradication effort was funded by WCSWCD, SLA, CLEAN, and property owners with minimal cost to property owners (~5%).

Given the propensity of JK to displace most native plants, we feel JK issues must be addressed first prior to any planting efforts at any site. Also, based on our experience JK eradication can take several years.

In May/June we will aim to zero in on a site for 2025.

<u>CLEAN / SLA Water Quality Golf Tournament.</u> Thanks to Michelle Hess's expert IT skills, everything is moving along well.

Details

Date: Saturday, July, 19, 2025

Format: 4 person team, 18 hole scramble

Location: Silver Lake Country Club & The Club at Silver Lake

Time: 8:00 AM (coffee, pastries); 9:00 AM (shotgun start); lunch follows play

Extras: Basket Raffles

The 2024 Tournament sold out by early June.

Online registration for the 2025 Tournament opened in late March. Former team captains and SLA tract directors were all contacted by email in late March. Three (3) teams have registered already!

Solicitation letters went out to possible donors in early April.

Please put together a raffle basket. Baskets can be dropped off to the Norton's or Bright's any time after mid-June. Handing baskets off at the June 14, 2025 SLA meeting might be a good plan too.

<u>Temperature Array.</u> The Silver Lake temperature array has been working well. Steps should be taken to back up all the data.

Data from the new array can be seen at the following web site:

https://karl.hanafins.com/silver-lake-thermocline-data---station-1

<u>Water Steward.</u> We will again have a Steward at the Silver Lake State Boat Launch in 2025. The schedule will be similar to previous seasons.

<u>State Boat Launch.</u> We had a recent e-mail exchange with Doug Kelly (Park Manager, Letchworth/Silver Lake/Conesus Lake).

<u>Wash Station.</u> Looking into a "waterless system" because of limitations with the on-site water well. We suggested a water tank and gas-powered pressure washer where the tank could be filled at the water plant on Standpipe Rd.

<u>Launch.</u> Doug has spoken with his Trades Supervisor to come up with a stop-gap fix for the end of the launch to help mitigate the drop off from people power loading. He is hopeful this is remedied by the time low water conditions present themselves. Parks extended the launch a few years ago to try and help with this issue.

<u>Docks.</u> Parks plans to install docks early next week. They try to keep the install on the same week each year.

<u>Discussion with DEC Region 9 (09/26/2024).</u> SLAWQ team members and LWRP leadership had a very productive discussion. There were several important outcomes.

Leaf Dumping

Dumping of leaves in the lake is a violation of Environmental Conservation Law. The law applies regardless of who is doing the dumping - resident/homeowner, commercial company, etc.

Julie M. Barrett O'Neill, Esq. (DEC Region 9 Director)

Aquatic Invasive Species (AIS) Map

Lindsay Yoder (Region 9 AIS Coordinator) and her team completed a full aquatic invasive species map (AIS) for Silver Lake (attached).

Other

Additional discussions focused on strategies to manage excess nutrients in Silver Lake as a way to improve overall lake health and manage "weeds".

60-80% of the excess nutrients in Silver Lake are legacy nutrients meaning they are currently in the lake sediment. (All our efforts to remediate steam banks, etc. are focused on the 20-40% of nutrients that flow into the lake.) Given this, strategies to either tie these legacy nutrients up and / or remove them are preferable.

In the past alum was a treatment tool used to lower the dissolved phosphorous in freshwater lakes. Unfortunately, NYS DEC no longer allows alum treatments.

The plant matter removed during a harvesting and removal campaign contains nutrients. Thus, removal of harvested plant matter <u>from the lake</u> will eventually lower the nutrient load in the lake. Herbicide treatments, cut-and-drop harvesting, or benthic mats will <u>not</u> lower the nutrient load in the lake.

Hypolimnetic aeration (HA), also known as deep-water aeration, is a technique that supplies oxygen to deep water without disturbing the water's natural stratification. HA is used to increase oxygen in the water layer nearest the sediment which helps to keep the phosphorous tied up within the sediment layer. Dissolved phosphorous is the key nutrient feeding algae and plants. Keeping phosphorous tied up in the sediment keeps it from feeding algae and plants. (Note: A typical HA system covers ~20 acres; Silver Lake is ~840 acres.)

Another strategy for addressing excess nutrients within the sediment is to physically remove sediments that contain high nutrient loads. Clearly, this can become very expensive for a lake-wide campaign. Fortunately, we thought about this issue many years ago and Todd Shuskey (Perry High School) and his students have mapped out the entire lake bed of Silver Lake and they have discovered there are nutrient "hotspots". In principle these hot-spots could be targeted for nutrient removal efforts. (Todd's labs are unfortunately not certified by NYS. As such, sediment testing would need to be repeated, but we know where to focus any testing.)

All these efforts could become part of a LWRP.

New York State Federation of Lake Associations (NYSFOLA) Meeting. The 31st Western NYSFOLA meeting was held on 10/26/2024.

The SLAWQ representative left the meeting with three (3) useful bits of information:

- a) The lecture by Prof Emeritus Greg Boyer, Emeritus Professor of Biochemistry, SUNY ESF entitled, "Rapidly Changing Cyanobacteria In A Changing World" Boyer's lecture focused on algae being populations and he went through the factors causing algae growth and more importantly leading to the <u>harmful</u> agents in harmful algae blooms (HABs).
- b) A local vendor that offers weed harvesting services. Their contact information was given earlier. They operate like a lawn service. The vendor has been contacted, but has not responded.
- c) The "Lake Friendly Living" program at Canandaigua Lake. https://www.canandaigualakeassoc.org/education-outreach/lake-friendly-living/
 This program has been created so it can be adopted by all watershed residents (Ag and lakers). We could create a similar program here at Silver Lake.