

Silver Lake Association Water Quality Committee Report (04/10/2021)

The SLAWQ team met via Zoom on 03/12/2021. There was a subsequent hybrid Silver Lake Dredging Committee meeting held in person and via Zoom on 03/25/2021.

Meeting Reports. In early 2021 Steve Perkins (Directory, Wyoming County Health Department) updated the Silver Lake Watershed Commission (SLWC) on the Silver Lake N-end/outlet dredging project. In brief, a basic plan has been discussed with DEC and the Army Corps and was viewed favorably by each agency. Next steps include refinement of work scope and securing funding. Timing TBD.

The Silver Lake Dredging Committee finally met in person and via Zoom on March 25th, 2021. Frank Bright, Bob Capurso, Joe Caputo, and Ron Norton from the SLA participated and are standing representatives on this committee. Previous SLAWQ Reports should be reviewed to understand this project's history over the past 18-36 months. Fortunately for us, Ron Norton attended this meeting in person because the Zoom connection was very poor.

Steve presented three (3) POTENTIAL plans that were developed in consultation with the Clark Patterson Lee (CPL) engineering firm. Each plan is summarized briefly below:

Plan 1 involves expanding the existing wildlife management area (WLMA)/wetland at the N-end of the lake and depositing the dredging materials from the lake and outlet into this site.

Plan 2 involves removing all of the to-be-dredged materials from the lake, allowing it to dewater, and then removing these materials to an off-site location.

Plan 3 involves removing all of the to-be-dredged materials from the lake, allowing it to dewater, and then spreading it onto a near-lake location.

Some pros and cons for each plan were described.

The SLA representatives discussed each dredging plan and came up with an alternative plan that was submitted on 03/28/2021 to Steve Perkins. The SLA plan is described below.

[Note: The SLA alternative plan was developed based on the fact that most of the to-be-dredged material is "Class A" and a small fraction of the to-be-dredged material is "Class B" material. Class A and B materials have different requirements for final disposition.]

Mindful of the aforementioned details, the SLA team proposed a plan that has three (3) components:

- 1) After dewatering near the class “B” material current location(s), dispose of all dried class “B” materials to a suitable off-site waste location. This should be a one-time effort because the class “B” material is localized.
- 2) After dewatering near the final deposition site, spread the class “A” materials on farm land adjacent to the lake/outlet. The key step here is to identify a farmer/landowner partner. Suitable sites are located along Oatka Rd to the E and W of Walker Rd on land owned by xxxx that is farmed by yyyy. It would make sense to place the “A” material from the Outlet and Lake onto the E- and W-side of Walker Rd properties, respectively. In this scheme, the distances to pump the dredging materials would not be excessive and the pumping machinery or piping would not cross any roadway. The farmer would receive safe, nutrient-rich sediment, and they would be helping to improve Silver Lake’s overall health. Maybe the farmer could receive some sort of a tax break from the municipality. This component can be implemented again for maintenance efforts.
- 3) Install a hybrid in-lake barrier to control sediment re-infiltration into the dredged area. This barrier could be a combination of a lake-safe synthetic break wall fronted by natural rock materials.

The SLWC is reviewing their bylaws following the 2020 Federal St. dam’s failure in the Village of Perry (VoP). Discussions are underway to see if a different operating model can be developed.

As part of the new SLWC bylaw recasting effort each partner was asked to craft a statement for incorporation in the new SLWC bylaws that describes each partner’s relationship with the SLWC.

The following text was approved by the SLA Exec Com and sent to VoP Trustee Eleanor Jacobs 02/21/2021:

The Silver Lake Association will support Silver Lake Watershed Commission activities consistent with the Association’s Mission Statement by using the Silver Lake Watershed Management Plan and other science-based resources as guides. The Silver Lake Association is available to effectively communicate with the lake residents about matters that impact these important stakeholders and we stand ready to partner on projects exhibiting mutual benefit. Reports will be submitted at each meeting summarizing lake-centered activities of relevance to the Commission.

Eleanor acknowledged the SLA submission on 02/28/2021.

Federal St. Dam. No new information. Please consult previous SLAWQ Reports.

Lake Water Level. As a reminder there is a camera located at the Federal St. dam area that is focused on the water-level gauge. A link to this camera is available on the SLA and CLEAN web sites. The URL for a direct link to the camera is:

<https://villageofperry.com/departments/water-sewer/source-of-water/lake-water-level/>

Perry Public Beach Project. In fall 2020, CLEAN partnered with the VoP and purchased coir logs for the PPB. VoP staff installed these logs at the PPB in late fall. Steve Deaton (VoP Superintendent of Public Works) reported on 03/30/2021 that the logs appear to have worked and the VoP aims to remove the logs toward the end of April '21. Steve hopes to dry and reuse the coir logs for reinstallation in fall '21.

Executive Excursion on Silver Lake. The 10/09/2020 event captained by Mike Bellamy and the SLAWQ team showed off the lake's N-end, described SLA-led projects within the watershed, and toured the lake. Outside attendees were: Jim Brick (Town of Perry), Eleanor Jacobs (VoP), Steve Deaton (VoP DPW), and Eileen Hopkins from Senator Gallivan's office. Meg Keeves from R.S. Mayer reported positive feedback from attendees on her end.

Perry High School. Todd Shuskey reported that he secured a new Earth Day Program grant to conduct research on Silver Lake. He also shared an interesting report on "Self-Fertilization" in Lake Erie. This report exhibits many features that parallel what we see in Silver Lake. Specifically, that when deeper lake waters become low in O₂ (anoxic), there is a release of nutrients from the sediment, leading to algae blooms. The nutrients within the lake sediment are referred to as legacy nutrients. These legacy nutrients develop in the lake sediment over years from unchecked sediment influx and are part of the reason that the SLA and CLEAN focus on efforts to mitigate sediment influx into the lake.

Due to COVID, Todd's lake outings were limited in 2020 to family this past summer and fall. He's hopeful that he'll be able to get students out on the boat soon.

For the 2021 Lake Season, Todd reports that: the Hydrolab is freshly calibrated; he's secured a 2nd shaker table for sediment testing; hopes to use new grant to secure microscopes and nets to study zooplankton; aims to continue to gather data so that they can increase resolution of the lake phosphorous map they're working on; students are working on a gravity sediment sampler; he's keeping an eye on Silver Lake nitrate and ammonia levels after learning that these are being found in Conesus; he'll use the drone imaging to capture HAB; and he'll secure a grant to analyze HAB at PHS.

Boat Steward. The State-supported boat steward at the Silver Lake State Boat Launch screened over 8,000 boats in 2020. The site will be staffed again in 2021.

Plantings. The 2020 planting effort at the State Park went well. The plants are being checked for predation.

SLAWQ is looking at a site on East Lake Road and East Spring Brook for the 2021 effort.

Diver Day. Kelly Paganelli is working with the divers and Asbury Retreat Center leadership to hold the event on May 15 or May 22, prior to Silver Lake Triathlon.

Triathlon. The event, spearheaded by Bert Gellman, is scheduled for June 6, 2021 at the Camp Asbury Retreat Center.

Invasive Species. Kelly Paganelli is working with Andrea Locke from the Western NY PRISM to develop Spring/Summer info session.

Tart Tins & Flares. Bob Capurso reported that flares and tart tins for the 2021 ring-of-fire are in hand.

As part of a regional lake-consortium effort we will conduct head-to-head testing on battery-powered LED and chemical flares during the 2021 ring-of-fire. Lee Loomis and Kelly Paganelli will report results at the August SLA Annual Meeting.

Golf Tournament. The tournament is scheduled for July 31, 2021 at the Silver Lake Country Club. Joe Caputo will oversee efforts and Karen Norton will work to secure/coordinate gift baskets for the Raffle. Gift baskets will be stored at the Bright's home. ***We are in desperate need of someone to secure/coordinate event/hole Sponsorships.*** Joe has all the necessary contact information in hand.

Temperature Arrays. Array 1 (located mid-lake) has been working reasonably well following re-deployment. The graphical data is available through the SLA web site.

Array 2 will be installed nearer the S-end of the lake in spring '21.

Please consult earlier SLAWQ Reports regarding how to interpret the array outputs.

From time-to-time the arrays require in-person "resetting". Ron Norton has stepped up to handle this task for our team. Thank you, Ron!!

Harmful Algae Blooms (HABs). The New York Harmful Algal Bloom System (NYHABS) remains live.

The SLAWQ team has discussed this program many times during previous SLA meetings. Please consult previous SLAWQ Reports.

The relevant URL is: <https://www.dec.ny.gov/chemical/83310.html>

Please remember that the NYHABS website represents the official notification site for HABs in New York State. Individuals should familiarize themselves with the definitions used by NYS DEC regarding HABs. Also, as discussed several times during previous SLA meetings, SLAWQ will no longer send information or updates to individuals regarding HABs. We encourage individuals to bookmark the aforementioned URL and consult this web site as often as they feel is necessary.

SLAWQ has been asked to partner with the Wyoming County Health Department to develop a more efficient HAB monitoring effort at Silver Lake. Toward this end, we are seeking five (5) additional volunteers: two volunteers located on the E-side (N and S) and three on the W-side (N, middle, and S). These volunteers will be trained, supplied, and asked to secure potential HAB samples on an as-needed basis that would then be handed off promptly to the Wyoming County Health Department. Please reach out to Frank Bright (chefvb@buffalo.edu), if you are interested in helping with this important effort.

2021 CSLAP Campaign. The campaign will begin in May.

The 2020 annual report will be available in spring 2021.

Land Conservancy Discussion. Kelly Paganelli is working with Ben Gajewski from the Genesee Conservancy to coordinate a presentation to the SLA membership on Land Trust issues.

Next SLAWQ Zoom Meeting. The next SLAWQ meeting is scheduled for April 23, 2021 at 4 pm (via Zoom).