

This is our second issue in a series of **TSPOA Conversations & Updates** about Robinson Pond, which we fondly refer to as "the lake". For the first issue in August, we sat down with a few key board members to find out more about this year's efforts to address some of the challenges in our lake. This month we did chat again with board member Frank Scorzello, as well as Sandra Baptie of the Lake Committee, to find out about progress on the Action Plan 2021. We also had the opportunity to listen to an interesting presentation by our Lake Manager, AJ Reyes of North East Aquatic Research (NEAR), during the September 11, 2021 Lake Committee meeting. For more details, please see the NEAR presentation slides on the website at: https://taconicshores.org/lake.

The following is a recap of the conversations with our volunteer board and committee members, as well highlights from the NEAR presentation.

How is NEAR continuing to work with TSPOA? What was shared at the September Lake Committee meeting?

NEAR is fulfilling the terms of their agreement with us by regularly testing and monitoring the lake, and reporting its findings to the Lake Committee. On October 23, 2021 at 9 AM, AJ Reyes of NEAR will present preliminary findings and 2022 recommendations at the Lake Committee meeting. After that, AJ, with the Lake Committee and the TSPOA Association Manager, will be able to begin working on and submitting all the necessary permits by January 1, 2022. A final, comprehensive report will also be presented by NEAR to the TSPOA Board at that time.

As mentioned above, AJ made a presentation to the Lake Committee at its recent September meeting. His approach is realistic and practical. He started off by saying that Robinson Pond, like all lakes, will fill in over time. The irregular shape and shallow depth of our lake also provides a good environment for invasive plants, adding to its challenges. The lake is a watershed area into which the Roeliff-Jansen Kill

empties an enormous amount of water relative to the size of the lake. The water coming into the lake from this source is very high in nitrogen which encourages vegetative growth.

As has been frequently noted, last year's extended drawdown to fix the dam did not help the situation with our lake. Fortunately, there are short and long-term steps we can take to slow down both natural and human influences on the lake's evolution. AJ and his team are monitoring our current remediation practices place to see if they are effective. As a reminder, all remedies depend on permits with the DEC.

Here are some interesting facts about the types of vegetation growth in our lake: Eurasian Milfoil is the most invasive species and the hardest to control. Interestingly, however, milfoil and our other prominent weed, duckweed (also called watermeal), are actually useful in controlling algae as well as keeping sediment levels down. They, along with our current nemesis the cattails, also act as effective filters against excessive nutrients and toxins flowing into the lake from the Roeliff-Jansen Kill. Right now we have too many of all these plants and they are choking our lake, but our goal should not be to wipe them out entirely or we will face other challenges such as algae blooms and increased sediment build-up. It's all in the balance.

AJ asserted that mechanical harvesting is not the best technique for a long-term, lake wide solution to the problem. He will be evaluating the efficacy of this year's harvesting and skimming and efforts over the winter and will include in his final report at year-end.

In his view, the most effective technique is application of an herbicide, but as mentioned in our last issue, the DEC has repeatedly declined/delayed our applications for herbicides for the last several years. A new product, ProcellaCOR, has been recently approved by the FDA and NYS and does not remain in the water long after application. AJ feels fairly confident that we can get a permit approved to apply this herbicide in 2022. An important mention: NEAR is solely a lake management company. They do not receive any financial or other benefit from recommending chemical, harvesting or any other kinds of treatments.

AJ did bring up that he is evaluating our present aeration system located in Section 5, which is supposed to increase the amount of dissolved oxygen in the water column. Measurements from the beginning of the season indicated that the system was not effective, although the numbers for August were good. There may be a need for more of these diffusers and/or to place them closer together, although early measurements might have been affected by a brief shutdown of the system for cleaning. His team will assess and include any necessary recommendations in their report.

As for dredging, it will not improve the overall ecology of the lake. It is also extremely expensive and while useful for a limited area, dredging is not practical on a large scale. The Lake Committee is exploring what options are available per the DEC.

During Q&A, a members asked if biological additives could be helpful, but AJ said that there have been no peer review studies to show that these products work. It was also asked if divers could be hired to dig out invasive plants, and AJ indicated that divers typically charge \$2,000/day and it takes them about 10 days to clear one acre, so it gets pricey. Someone also expressed concern about leakage of fuel from motorboats, but unless there is a great amount of traffic from gas powered motors, AJ said it is unlikely to further add to our lake challenges.

AJ closed by agreeing that individual homeowners have a significant part to play in maintaining the health of the lake by adhering to best practices. Homeowners should be encouraged to educate themselves as to these practices (see Table 1).

We look forward to hearing more from AJ at the October meeting about plans for 2022!

Now for some Lake Q&A...

In the last month, we experienced two significant rain events and the lake levels lowered to the spillway, providing a sense of relief for some homeowners and heightened concern for others. Whenever there is an expectation of heavy rain from any type of storm we assume lake levels need to be lowered, but can you briefly explain the process so everyone knows what to expect in the future?

Members should know that the TSPOA maintenance crew regularly monitors water levels and weather conditions throughout the year. The goal is to keep the recreational level of 18" above the spillway during the season and at the spillway level during the off-season, while preventing flooding in low-lying areas in our community. The crew must also comply with DEC parameters to protect local habitat, which affects how much water they can release/retain in a given time frame. It is a delicate balancing act.

Our 2021 dam upgrade does allow the maintenance crew to respond more easily than the labor intensive process of years' past, so water levels can be adjusted much more quickly. Please note we did explore automating the lake level adjustment process as part of the project, but the DEC denied the permit for that functionality.

Do you know if the new work on the dam will require a significant drawdown of the lake again, like last year?

A proposal for additional dam repair is currently under review by the board. While not a guarantee, our contractor has advised us that the lake will not need to be drawn down below normal off-season levels in order for the work to proceed.

Now that hydroraking has officially begun to create the 50' channel through the cattails in section 6, can you share more about what we can expect to see?

It took a few days to set the equipment and fencing up and then hydroraking at last began on September 12 (see Figures 1 and 2). There has been tremendous progress and as of this writing, one full tractor trailer load of cattails had been trucked away. We're hopeful the crew can finish clearing the permitted area of 1.24 acres in the time they have left. There will be a smaller cattail island remaining.

IMPORTANT: For your own safety, **please stay away from the areas that are being hydroraked**. Do NOT attempt to go over the silt fence with your paddleboards or kayaks – yes, this happened – as the fence can break. The time the crew has to take to repair the damage is time that should be spent hydroraking. Please call the office if you see anyone attempting this type of activity.

What's the latest on individual homeowners being able to do hydroraking along their own properties?

The Lake Committee is working on a plan for hydroraking individual shorelines. There was a very preliminary conversation with DEC about hydroraking cattails. Because Robinson Pond is a regulated wetland, the use of machinery, either from the shore or from the water, requires a permit. There are a lot of limitations and requirements as to what you can do and when. The DEC is very concerned about the disturbance of sediment which can destroy habitat and create downstream problems. Stay tuned.

We're excited to see the smaller weed harvester operational and on the lake once again! Will the harvesters continue to work in section 6 while hydroraking is underway?

There are plenty of weeds throughout the rest of the lake so both machines are busy cutting and skimming them in other sections. The harvesters will do minimal work in Section 6 during the hydroraking project.

Once hydroraking ends, both harvesters may work together to clean up cattails in the permitted areas.

Table 1: Lake FAQs

Can I go to Lake Committee meetings to find out more?

- Meetings are held on-site, but Zoom meetings are possible per the Chair
- Members are invited to attend
- Save your questions until the end
- Meeting dates, times, and Zoom log-ins are at https://taconicshores.org/cale ndar

What can I personally do to help?

- Keep the area of the lake up to 20 feet from the end of your individual property cleared
- Follow homeowner guidelines https://taconicshores.org/lake
- Volunteer for special clean-up projects as announced

How often will I get these updates?

- Once a month during the season
- During the off-season as needed

I have other questions about the lake...

- Find the answer on the website https://taconicshores.org/lake
- If it's not there, e-mail office@taconicshores.com

What happened to the boom that was purchased to clear away some of the harvesting debris?

As we mentioned last month, the boom requires manpower resources that we don't currently have in place. As a result, deploying the boom this season is highly unlikely.

Speaking of manpower, what are our 2022 hiring plans?

We are looking to hire more staff in 2022 to operate the two weed harvesters and assist with other lake maintenance activities (like the boom). If members are interested in finding out more about these open positions, please contact Association Manager Susan Newland at office@taconicshores.com.

Disclaimer: Please note this "What's Up with the Lake?" issue is meant to be a supplement to – but not a substitute for – in-depth updates which are shared at Board, Community, and Lake Committee meetings or in posts on the TSPOA website https://taconicshores.org/lake.

Figure 1: Map of Robinson Pond with Sections

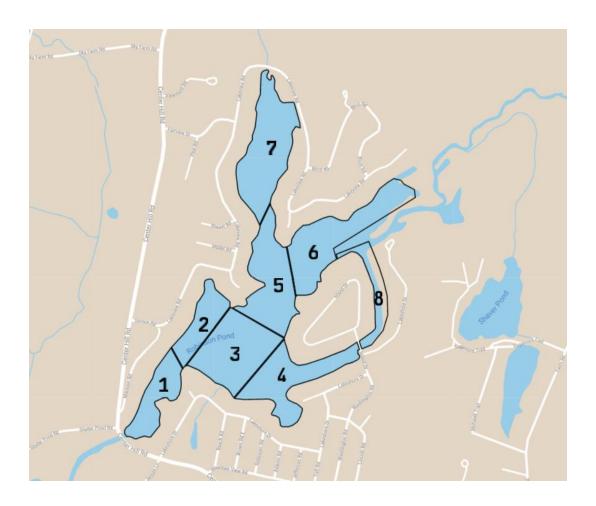


Figure 2: Hydroraking Activity in Section 6



