

In the June issue of *Lakeview*, I outlined Friends of Swan Lake Park's (FOSLP's) primary recommendation to Markham Council—that Markham host a solutions workshop of independent experts to consider the best options for restoring Swan Lake water quality.

We proposed establishing a workshop in 2024/2025 to review the current water quality plan, plus the merit of additional options proposed by FOSLP, such as oxygenation techniques, removal of 50% of the lake water to reduce the road salt impact and the possible removal of some of the lakebed sediments that store phosphorus and nitrogen—the two perpetual nutrients fertilizing the algae growth in the lake.

Rather than support a timely review of the current plan and alternatives, Council endorsed the staff recommendations that a workshop be held in 2026 or later, and that it focus only on the current plan, not on any new or alternative ideas.

Most frustratingly, Council also supported staff's decision to deny access to the lake to a team from University of Toronto for research into the impact of adding oxygen to the lake.

As a stagnant body of water, Swan Lake has a chronic lack of oxygen which is compounded by the excessive algae in the lake. The current water quality plan is focused on reducing the algae through a chemical program. Reducing algae will indirectly improve oxygen levels, so staff have concluded that nothing else needs to be done to improve and sustain oxygen levels.

FOSLP proposed various forms of oxygenation such as recycling of water via the North Channel, the use of bubblers or forms of mechanical oxygenation to improve and stabilize the aquatic environment. All suggestions have been rejected by staff and their consultants, because academic research suggests there is a risk that these processes may disturb the lakebed sediments and make problems worse. The U of T project would have provided direct evidence on whether disrupting the sediments is a real risk for Swan Lake.

The research team was not asking for money from the city, just permission to block off a 60 metre section of the shoreline for three months. How disappointing that meaningful information is not required, even when it is free! We can only conclude that, like the workshop, staff do not want to reopen discussions on matters they view as closed.

Substantive Progress on Other Fronts

There is good news to report on other FOSLP initiatives approved by the previous council:

- 1) Next spring, staff are expected to report on the results of the \$150,000 Flow Diversion Study which will follow up on FOSLP's recommendations for ways to reduce the quantity of road salt entering the lake each year via the stormwater system.
- 2) Staff supported FOSLP's research recommendations into ways to remove chloride (from road salt) from the lake. The initial \$40,000 phase of the York University project will be a lab-based experiment to see if biochar, a type of charcoal filter, can be effective in removing chloride from Swan Lake water.
- 3) Another \$150,000 chemical treatment is planned for 2024, three years after the 2021 treatment. The review planned for 2026 will assess whether to keep with the 3-year cycle or whether less frequent treatments will suffice.
- 4) The shoreline restoration project is underway. The first phase was removal of the tall invasive reeds surrounding the lake (phragmites). Next year, subject to budget approval, the redesign of the shoreline will be implemented. We hope to find out more details on the planned changes this fall.

Not directly related to the efforts of FOSLP, but important to note, is the upgrade to the children's playground equipment this summer. Thank you to Markham for the playground improvements and the many other good things that are underway.

The End of an Era

In preparation for restoration of the shoreline, Markham asked VAC to remove the old swan feeding station. A special thank you to all the residents that supported the swan feeding program over the years. FOSLP plans to research what can be done to encourage wild trumpeter swans such as P88 to settle in Swan Lake, rather than just visit for a month or two each year. □



[Photo courtesy of Don Fowler]