

Markham Sub-Committee Meeting Minutes

November 16, 2021, 9:00 AM - 12:00 PM Electronic Meeting

Sub-Committee Members	Regional Councillor Jack Heath Councillor Karen Rea Councillor Andrew Keyes Councillor Amanda Collucci Deputy Mayor Don Hamilton (Ex-Officio) Regional Councillor Jim Jones (Ex-Officio)
Regrets	Mayor Frank Scarpitti (Ex-Officio) Councillor Keith Irish (Ex-Officio)
Other Attendees	Councillor Alan Ho Councillor Khalid Usman Prathapan Kumar, Senior Manager of Infrastructure Rob Muir, Manager of Stormwater Zahra Parhizgari, Environmental Engineer David Plant, Senior Manager of Parks Horticulture & Forestry Division Morgan Jones, Commissioner of Community Services Victoria Chai, Assistant City Solicitor Bryan Frois, Manager of Executive Operations & Strategic Initiatives Biju Karumanchery, Director of Planning & Urban Design

1. CALL TO ORDER

The Markham Sub-Committee convened at 9:05 PM with Regional Councillor Jack Heath in the Chair.

2. DISCLOSURE OF PECUNIARY INTEREST

There were no disclosures of pecuniary interest.

3. PRESENTATIONS

3.1 Swan Lake Water Quality Management Plan

Rob Muir, Manager, Stormwater, provided a presentation on the Swan Lake Water Quality Plan and the recommended Option 1.

Committee discussed the following relative to the presentation on the Swan Lake Water Quality Plan:

- The outflow of water from Swan Lake into the City's storm water management system;
- The water bodies that have been assumed by the City versus the water bodies still owned and maintained by the developer;
- How to obtain funding from the developers to maintain the east and north stormwater management ponds that have yet to be assumed by the City;
- The effectiveness of laser lights and ineffectiveness of strobe lights in deterring the geese;
- Questioned if the pathway circling Swan lake is salted;
- The difference between using Phoslock and PAC to treat the water;
- The role Swan Lake plays in flood control and taking overflow water from the stormwater management ponds;
- The Swan Lake Condominium Board management of salting its grounds and the effect it may have on Swan Lake;
- Suggested that the Swan Lake Condominium Board considers contracting the City to oversee its salting;
- The flow of water from the Oil and Grit Separators into the lake;
- The City of Brampton's lake revitalisation policy;
- Acknowledged the hard work of staff and the Friends of the Swan Lake Park in preparing the documentation for today's meeting.

The following deputation was provided:

Fred Peters, Friends of Swan Lake Park, provided a presentation relative to the staff report entitled "Towards Realizing Community Goals For Water Quality". A copy of the presentation was circulated to the Committee. Some of the highlights of the presentation included:

• Suggested the Water Quality Plan does not address the community's additional holistic objectives for the Lake and the Park;

- Suggested that the maintenance and restoration of the Swan Lake and Park should be addressed holistically, like how the City of Brampton is approaching its lakes;
- Supported endorsing Option 2, as the staff recommended Option 1 focuses too much on the chemical treatment, while Option 2 includes Alternative Measures to addressing the issue in addition to the chemical treatment and earlier implementation of Complementary Measures (i.e., adding fish stock, and submerged plants);
- Believed that the lake could be restored to a mesotrophic state;
- Suggested the program should also directly address the algae, oxygen levels, the inflows of winter salt into Swan Lake, and the protection of fish habitat;
- Suggested the outflows of water from the Oil and Grit Separators should be rerouted;
- Recognized that improvements to Swan Lake will occur overtime;
- Concern on the use of Phoslock instead of PAC due to PAC chloride impacts
- Suggested there should be an annual chemical treatment program for the first 5 years.

Staff Provided the following responses to inquires from the Committee:

Water Treatment

Staff were comfortable using Phoslock or PAC to treat the water in Swan Lake, as it is generally a closed system. Phoslock was not available to import in 2021.

Staff confirmed that the Phoslock or PAC treatment will help address the algae and oxygen levels in Swan Lake, as by improving the phosphorus levels in the lake, the oxygen levels should increase and the algae should decrease, based on past observations.

Staff indicated based on our limnologist's report that the water quality of Swan Lake could be improved to a low eutrophic status with the implementation of the recommended Option 1 treatment plan, and that a mesotrophic state was not identified as a realistic result.

Oil Grit Separators

Staff advised that based on the analysis done to date on the water quality of Swan Lake, it appears that only a small proportion of the flow is coming form the Oil and Grit Separators. Staff suggested that the water balance be reviewed to see how much chloride is originating from the Oil and Grit Separator systems prior to investing in a study to reroute system outflows. Staff noted that it would be very

costly to redirect the flow of water from the Oil and Grit separators and that implementation would be complex as it will involve revising private systems.

Cleaning of Stormwater Facilities.

Staff advised that the Development Services inspection group has advised the condo corporation to prioritize the maintenance of the blocked East Pond intake pipe. Ponds sediment levels have been surveyed but have not identified the need for cleaning.

Trail Circling the Lake

Staff advised that the pathway circling the lake is treated with sand rather than salt.

Swan Lake Condominium Board

Staff advised that the City does not regulate private salt usage, but noted that private organizations can obtain certification in appropriate salt usage through the "Smart About Salt Program".

Fish Stock, Planting, and Enhanced Geese Deterring Measures

Staff recommended first undertaking reliable Core Measures such as the chemical treatment of water to see how it improves the water quality, then considering Complementary Measures such as adding fish stocks and submerged plants at the end of Phase 1.

Staff suggested that that invasive fish species could be continued to be removed and that the geese could be relocated in 2022 if the 2022 budget was increased by about \$10K.

Moved by Councillor Andrew Keyes Seconded by Councillor Deputy Mayor Don Hamilton

1. THAT the report entitled "Swan Lake Water Quality Management Plan" be received;

2. AND THAT Staff implement the Plan presented as Option 1 including proposed Core and new Complementary measures beginning in 2023;
 3. AND THAT an additional \$2.35M over 25 years be reflected in the 2022 Lifecycle Reserve Update;

4. AND THAT an additional \$10K be added to the 2022 Budget for geese relocation, and fish management at Swan Lake;

5. AND THAT Staff report back annually on water quality results and evaluation of adapted Core and Complementary measures for consideration in Phase 2 of the strategy through the Markham SubCommittee with the participation of the Friends of Swan Lake Park;

6. AND THAT staff report back to the Markham Sub Committee within the next 6 months (before the end of June) to discuss suggestions in Friends of Swan Lake Park in today's presentation and other concerns that have arisen;
7. AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

4. ADJOURNMENT

The Markham Sub-Committee adjourned at 11:50 PM.