

At a meeting organized by Friends of Swan Lake Park held at The Swan Club on March 9, residents were informed of issues facing Swan Lake and Swan Lake Park and how the City of Markham is planning to remediate these problems. Attendees, approximately 180 in number, were asked to respond to a survey on their views about current conditions and their preferences for a long-term solution.

Fred Peters, on behalf of the organizers of this event, welcomed residents and visitors representing the City of Markham, as well as Keith Irish, Councillor of Ward 1 in Thornhill. He thanked key contributors to the group's launch, extending special thanks to Sandra Pazienza (designer of the group's logo) and Ward 5 Councillor Andrew Keyes (instrumental in setting up their website.)

Swan Lake Village resident Bill Ferguson, a member of United Association, Local Union 46, Toronto Plumbers and Fitters, announced that his union would contribute \$2,000 to support Friends of Swan Lake Park. The meeting's attendees donated another \$1,300 in support of the group's effort to save Swan Lake and Swan Lake Park.

The meeting was moderated by Lloyd Robertson who told us of his own expectations for a clean and healthy lake.

Fred Peters outlined the causes leading to the creation of the cyanobacteria prevalent in the lake today and posing a potential health risk. Excessive phosphorus, primarily from geese droppings, creates algae which kill fish and aquatic plants, and generate cyanobacteria.

He presented three possible long-term options for restoration of the lake:

1. Drain the lake and convert it to a wetland or parkland.
2. Contain the phosphorus with treatments every few years at a cost of \$100,000 or more per treatment.
3. Re-engineer the layout of the lake, restoring its natural environment by adding native fish and plants. This is likely the most expensive option.

Phoebe Fu, Director of Environmental Services for the City of Markham, pointed out that Swan Lake was originally a quarry which filled with water from underground sources to create a lake. It is a closed system, meaning there are no outlets for the water to flow in and out. Sediment increases until the lake becomes filled with algae. It is doubtful that the lake will ever return to the blue water it had at inception. Phoebe felt it is unlikely, since there is no legislative requirement for the city to maintain the lake, that the city would approve a costly remediation. Phoebe ended her presentation with the commitment to meet with Councillor Andrew Keyes and to have more discussion with Friends of Swan Lake Park.

David Plant, Senior Manager of Parks, Forest and Horticulture for the City of Markham, provided perspective on developments in the Park environment. He explained that Swan Lake Park is 5.6 hectares with many amenities such as benches, waste containers and play structures to maintain. His staff does a regular cleanup of the shoreline and the pathways. A major cleanup effort is planned for early spring to get rid of litter from construction sites.

Don Hamilton, Deputy Mayor of Markham, promised to work with the city staff in finding a solution. He said that all ideas would be taken to council and a decision would be made.

A show of hands was taken regarding the possibility of culling the geese. A large majority was in favour of this action.

Questions from the floor were taken:

1. **Can the lake be engineered to have water flowing both in and out?**

Phoebe Fu replied that it was not feasible as it would impact flood control plans.

2. **If Phoslock is not long-lasting, are there other solutions that are sustainable and cost effective?**

The city has tried bringing in dogs and birds of prey to scare the geese, but this has not worked.

3. Are fountains effective?

Donald Plant says they may have a negative impact on the Phoslock treatments.

4. Why wait until 2021 to do the Phoslock treatment?

Budget for 2020 has been set and there are no additional funds to do it sooner.

Answers from the city were discouraging, as we were told that the goal to get back to blue water would be too costly. To hear that the city would like to continue with what is being done at present was not what we wanted to hear.

Lloyd Robertson closed the meeting by reminding the city officials that we in Swan Lake Village really care about the Lake.



(L-R) Fred Peters, Nancy Robertson, Deputy Mayor Don Hamilton, David Plant, Phoebe Fu, Lloyd Robertson

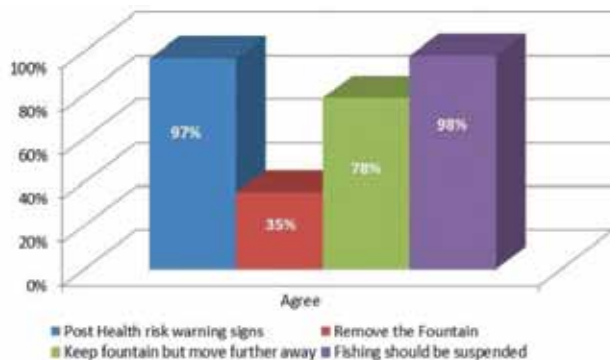
Results of the Survey Conducted on March 9, 2020.

These results will be shared with the City of Markham in an effort by Friends of Swan Lake Park to encourage the city to pursue long-term sustainable solutions. They summarize responses from 98 Swan Lake Village residents and one other attendee.

Health Risks

Cyanobacteria levels concerned about 85% of respondents; 14% were somewhat concerned; only one respondent was not concerned.

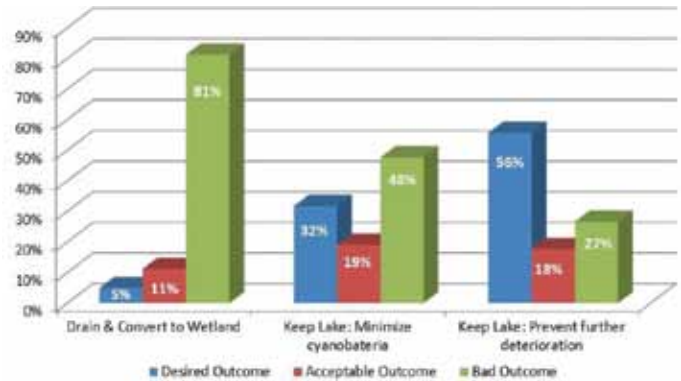
When asked their views on what temporary measure the city should enact until risks are lowered, 97% felt posting of health risk signs was warranted and 98% said fishing should be temporarily banned.



There is concern that a fountain installed each summer close to the viewing dock may contribute to the risk of airborne cyanobacteria to visitors on the dock. The response indicated that 35% felt the fountain should be removed, but if not removed, 78% felt it should be moved further into the lake.

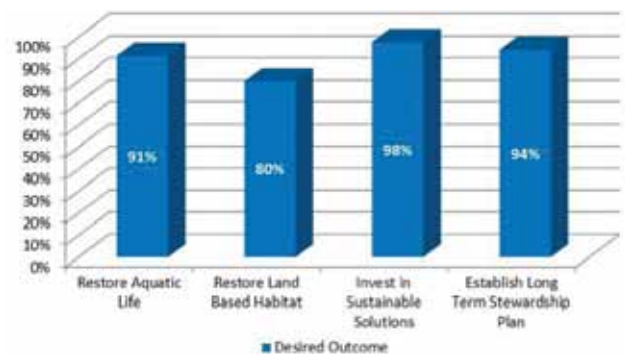
Future Outcomes

In response to the three possible long-term solutions outlined at the meeting, 81% felt that turning the area into a wetland would be a bad outcome; 11% felt it would be acceptable; only 5% felt it would be the desired outcome.



If the lake were to be maintained as is, only 32% felt the current focus on containing cyanobacteria risk was the desired outcome, while 56% felt that prevention of further deterioration in water quality was a better objective.

A policy involving investment in sustainable solutions and restoration of the aquatic and land-based habitat was clearly preferred. 98% felt that it was important to establish a long-term stewardship plan for Swan Lake and Swan Lake Park.



The original vision for Swan Lake included canoeing and kayaking, ice skating and fishing as recreational activities. Of the respondents, 45% said they would like to see canoeing and kayaking on the lake, 54% would like to see ice skating. There was less support for sport fishing—31% supported it, while 69% were opposed to it. □