

MSC MINUTES (ITEM 8.1.1) APPROVAL FOR OXYGENATION RESEARCH AT SWAN LAKE

Markham Council June 14, 2023, 2:00 pm

FOSLP Initiated Project:

Request Approval for Oxygenation Project

Improved oxygen levels critical to restoration of Swan Lake

- Research project by the Water & Energy Lab of U of T assesses impact of mechanical oxygenation at Swan Lake
 - Provides scientific information unique to Swan Lake
 - Only require approval for location. No funding requested.
- 2) Staff had three opportunities to raise objections to this project but has not:
 - a) At meeting with FOSLP on April 19th
 - b) Before the Markham Subcommittee on May 11
 - c) Before the General Committee on June 6th
- In submission to Markham Subcommittee (slide 31) staff indicated support of project "as long as it did not interfere with city's approved program"

Last Minute Denial (June 9th)

Staff Denies Approval For Research Program Cites:

"mechanical aeration disturbs the sediment and would interfere with the approved program that intends to improve water quality".

- Staff view may be true, but it is based on conjecture:
 - Conclusion derived from international scientific research
 - There is no direct Swan Lake data to support this conclusion nor data to quantify the impact (if any) on water quality

WERL Program Provides Direct Evidence

- WERL project enhances Swan Lake program by increasing specific scientific information about Swan Lake:
 - a) How sensitive are the Swan Lake sediments to disruption?
 - b) Will more, or less, phosphorus be released?
 - c) Will the process reduce water clarity?
 - d) How helpful is the process in improving oxygen levels?

For a program that is costing Markham millions of dollars, staff should embrace an opportunity to gain valuable information at virtually no cost.



WERL Research Project Overview

Wind Powered Device



Size of Partitioned Area



- Test area is < 3% of Swan Lake, required for 2-3 months
- Even if project adds or reduces phosphorus, impact would be minimal in a large water-body such as Swan lake

Markham Subcommittee Minutes Item 8.1.4

FOSLP Proposed Amendment

That staff work with Friends of Swan Lake Park in support of implementing the Swan Lake research project by Water and Energy Research Labs.

We thank Council for their continuing support for the restoration of Swan Lake and Swan Lake Park



FOCUSED ON RESTORING SWAN LAKE AND SWAN LAKE PARK

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