Subject:FW: General Committee Submission: Item #9.2: Minutes of Markham Subcommittee -
Tuesday December 7yhAttachments:Markham General Committee Submission_FOSLP Dec 7 2021.pdf

From: fred.peters
Sent: Monday, December 6, 2021 3:34 PM
To: Clerks Public
Cc: Regional Councillor, Jack Heath – Markham; Councillor, Andrew Keyes - Markham; Mayor Scarpitti; Don Hamilton - Deputy Mayor and Regional Councillor; Councillor, Amanda Collucci – Markham; Councillor, Karen Rea – Markham; Muir, Robert; Wu, Eddy
Subject: General Committee Submission: Item #9.2: Minutes of Markham Subcommittee - Tuesday December 7yh

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Please find attached a submission for tomorrows meeting of the General Subcommittee.

Fred Peters





Realizing Community Goals For Water Quality

FROM THIS

BACK TO THIS





Presentation to General Committee December 7, 2021

Substantive and Critical Processes Underway

a) Essential remediation initiatives are underway

- 1) Enhanced Goose Management Program launched
 - Fall hazing doubled, strobe lights added
 - Relocation program June 2021
- 2) Park "Refresh" Program approved
 - Pollinator plantings, invasive species program
- 3) TRCA shoreline redesign in 2021
- 4) TRCA fish inventory started, removal of bottom feeders
- 5) Sediment testing in Oct 2020
- 6) Aluminum Chloride compound applied in July

b) Safety and accessibility issues addressed

- 1) Pathways repaired in 2021
- 2) Amica pathway completed Oct. 2021
- 3) 6 public parking to be added
- 4) New, safer sidewalks around traffic circle quickly put to good use



THANK YOU TO ALL INVOLVED!

Our Contribution Over The Past Year

Geese Counting - 20+ volunteers, 5-6 outings per week, Sept.–Dec, 2020 & 2021



December 2020 Pathway to Sustainable Water Quality

 Highlight four critical factors, outline possible solutions



March 2021 *Community Survey*

- Views from 367 residents of Greensborough area
- 25 volunteers distributed flyers to 900 area homes



February 2020 Fleming College Report

- Valid importance of four critical factors
- Outlined complementary options

June 2021 Reducing Stormwater Management Role

 Outline lake management options

A Restored Swan Lake Benefits all of Markham

- Swan Lake Park and Mount Joy Park are underutilized jewels
 - great recreational facilities and Natural Heritage parks
- Integral component of Markham Road/Mount Joy Secondary Plan Study Area – projected to support population of 13,500
- Potential to reduce stormwater flows into Village of Markham Flood Control area





Proposed Program Falls Short of Community Objectives Over 82% of Respondents Call For Restoration



Desired Outcome

Acceptable Outcome

Restoration Attainable But More Work Needed!

Proposed program an improvement but does not:

- Address Community Objectives
- Provide a Pathway Forward to Restoration

Our request: Use your authority today to:

- 1) Endorse core elements of program
- 2) Amend recommendation: Choose Option #2
 - Reject Option #1 (which defers actions 5+ years)
- 3) **Direct staff** to provide outline of actions to achieve and maintain restoration

Endorse Core Program:

Please Support the Following Four Items

- *Item i)* Receive the report
- *Item iii)* Approve Life Cycle funding of additional \$2.35 M over 25 years
- **Item iv)** Approve additional 10k in 2022 budget for geese relocation and fish management
- **Item v)** Approve requirement to report back to Markham Subcommittee by June 2022 on lake management options

Please Amend the following two Items

Item ii) Chose Option #2 and Reject Option #1

- Same activities, different timetable
- Associated costs 90k (Option #2 -years 2023 2026)
- Option #1 unnecessarily delays key activities for 5+ years

Item v) – Amend to support annual reporting on water quality results (as proposed) <u>and</u> evaluation of Core and Complementary Measures <u>during Phase 1</u>

Amend minutes: pg. 4

- a) Ponds owned by developer not Condo corporation
- b) FOSLP reported poor maintenance of the stormwater ponds and that a major blockage of one intake pipe needs to urgently addressed

Timetable #1 (Option #1): Lacks a Sense of Urgency

Material Activities and Decisions Deferred 5+ Years



Choose Timetable #2 (Option #2): Recognizes That Time Matters Material Activities Completed Within 5 Years



4) Decision on oxygenation options

Restoration Challenging but Attainable

- Minutes (pg 3) suggest restoration to "mesotrophic state" not realistic. Do not recall that statement during meeting but in any event disagree.
- **"Challenging"** yes, but **"almost"** attainable as per Freshwater Research report (pg. 15) scenario analysis (General Committee pg. 418)

"If external sources reduced 50% (geese management) and *internal sources neutralized then can attain <u>"almost</u> <u>mesotrophic</u>," <i>low phytoplankton biomass expected in 1st-*2nd year AT" [Emphasis added]

• Chemical treatment is only tool for neutralizing existing phosphorus in the lake ("internal sources") therefore with treatment every 2 years could approach mesotrophic state.

Direct Staff to Investigate Two Core Actions Leading to Sustainable Restoration

- 1) Actions required to achieve improved levels
 - a) Actions to "neutralize" internal sources
 - Initially more frequent treatments? Other?
- 2) Actions required to sustain improved levels
 - a) Accelerate Complementary actions as outlined
 - b) Lake Management Options
 - i. Recycle lake flows through North Channel (improves oxygen levels) feasible if internal sources neutralized
 - ii. Reduce SWM role reroute OGS and pond inflows (reduce chloride)
 - iii. Regulate lake levels (reduces downstream flood risk)

What Are We Trying to Accomplish? Contain/ Stabilize? Restore

- Address containment of bacteria, algae
- Minimize impact of Invasive Plants
- Initiate restoration of shoreline



Unstable (Hypereutrophic/Eutrophic)

Restore & Sustain?

- Water quality, fish, water based plants
- Wildlife habit, community access



Restoration (Mesotrophic)

Community has voted for Engagement and Restoration



FROM THIS FOR THIS FOR THIS FOR THIS FOR THIS





Thank You!