

Open House Summary- Silver Springs Park

Overview

The purpose of the Open House was to provide information and update the public on the current state of the ponds in Silver Springs Park, as well as answer questions, gather feedback, and discuss possible options and solutions with residents.

The Open House was hosted by the RM of East St. Paul on Thursday August 20th, 2019. The event ran from 6-8pm in the RM's Council Chambers. To provide the greatest flexibility for attendees, the event was held as a come-and-go. Poster boards provided information to attendees (Appendix A). A pre-recorded presentation (*Managing the Ponds*) did not run due to technical difficulties. In its place, a verbal presentation by the RM's Climate Adaptation Coordinator was given with a question and answer session following. Representatives from the RM Administration and Council were on hand to answer questions and obtain feedback. A representative from North South Consultants, an aquatic consulting firm providing advice to the RM, was on hand to answer questions on water chemistry and pond health.

The event was advertised on the RM of East St. Paul's website, Facebook page, as well as sent by email to residents. Posters advertising the event were also placed throughout the municipality at the community mailboxes. A copy of the *Protect Our Ponds* brochure was available and attendees were invited to fill out the *Open House Participant Survey*.

Information Presented

The presentation boards provided background on the ponds including the water quality investigations occurring over the spring and summer of 2019. A verbal presentation was provided by the RM's Climate Change Adaptation Coordinator. Background information on water quality indicators, as well as an overview of information collected through water quality investigations over the spring and summer of 2019 was presented. The relationship between nutrients in the ponds and aquatic vegetation growth, and how individual actions can affect pond health was outlined. The implications of a changing climate on the ponds was also presented.

An overview of what the RM has learned from its investigations over the season were presented verbally as well as on the boards. All ponds have elevated levels of pH, likely because of the limestone residuals in the ponds. However, Pond B has seen dramatic increases in the pH levels as the water levels have dropped over the summer.

The vegetative communities in the ponds vary significantly:

- Pond A is dominated by high levels of brown algae;
- Pond B is using the available nutrients to grow submerged aquatic plants;
- Pond C is dominated with green algae including the presence of some blue green algae; and
- Shallow pond D has a mixture of both algae and submerged aquatic plants.

It was noted that for Pond B, the substrate the submerged aquatic plants are growing in may be buffering the pond's exposure to lime and preventing the pH from further rising. Removal of the plants

using a mechanical method may disrupt this substrate and further increase the pH levels, which have been steadily rising over the summer as the water levels drop.

The former quarry owner-operators, the Swistuns, also provided additional verbal information. Pond A and Pond B were originally constructed, followed by Ponds C and D. Additional material was removed from Pond C and D and the center island was used as the silt wash plant area. The quarry ceased operation in the late 90s and the quarry site was restored to create a park that anchored a housing development. The surface of the limestone is uneven throughout the quarry resulting in uneven excavation depths; thus the depths of the four ponds vary. It was noted that Pond A was originally the deepest pond, but was subject to significant sedimentation from bank erosion off the steep side slopes and it was thought that deep areas may have filled in. Erosion can still be seen, but vegetation growth has dramatically reduced the erosion into the pond. Locations of groundwater infiltration have been noted in Ponds A and C. In the past, water used to flow between the ponds, however it is unclear how much transfer occurs with the introduction of the paths that have separated the four waterbodies. The elevation of the ponds has varied over the years, seemingly to correspond with the water table. The ponds were very low in during the dry years in the 1980s and early 90s.

Feedback Opportunities

More than 40 individuals attended the Open House. Nearly 50% (19) of attendees lived on the streets directly bordering the park (Silverfox Place (9), Highfield Place (7), Ridgeview Place (3), but other residents that lived in the surrounding neighborhood (mainly Keedian Drive, Agar Ave, Birds Hill Road) attended as well.

Summary of verbal feedback

Verbal comments received during the Open House included questions about water levels, water quality, reason for removal of the aerators, and opportunities to improve the ponds. Comments were received on the current state of pond health such as the over-abundance of aquatic plants and algae, odours, and weedy and invasive plants on the edge of the ponds. Common questions included:

- *Why are the aerators not operating this year?*
- *Is there a way to remove the algae and weeds?*
- *Why is the water so low and can anything be done to help that?*
- *Is there a way of getting additional water into the ponds to raise the water level?*
- *Why do the ponds have odours? – this seems to be more so than previous years?*
- *Can the mowers cut less of the vegetation to increase the size of the natural areas?*

Additional feedback provided at the Open House:

- *Residents indicated that a notable decline in water quality occurred approximately 5 years ago.*
- *Residents have also used the ponds for kayaking and canoeing. Many years ago people swam in the ponds. Pond A used to be the pond used for swimming and then a few years ago it turned color and developed odours.*
- *Resident geese populations are being kept in check by predators that use the area so their population is not growing.*
- *Purple loosestrife seems to be making a comeback. There is more this year beside the ponds than in past years.*

- *Concerns that dogs may not be able to swim in the ponds.*
- *Predator decoys, and measures to block the geese from entering the ponds should be considered.*
- *The water quality decline seemed to correspond with the installation of the pathways that separated the four ponds.*

Presentation board feedback

Three of the presentation boards gave attendees the opportunity to provide feedback on actions that the community would like to see or participate in to improve the ponds. One board asked residents about their preferred method of receiving communication from the RM on the ponds in the future (Attachment 1). At the end of the meeting a few attendees provided detailed feedback on the history of the ponds such as specific locations of groundwater recharge, wildlife activity, and changes they have observed. This information was recorded on one of the air photos.

Open House survey feedback

Approximately ¼ of attendees (9) completed the Open House participant survey. The response to (Q1 - *How did the information change your view or understanding of how the creek and ponds function?*) was positive, with the majority of the responses saying the Open House was informative, interesting and helped with understanding of the pond system. The responses to (Q2 - *Based on the information presented, do you think you will be changing your yard care practices? and what measures are you thinking of?*) stated that they would not be changing yard care practices either because they do not fertilize or fertilize very little, or because their properties do not border the pond system. On questions regarding their impressions of the Open House (Q3 – i.e. *How did we do today?*), the majority rated the Open House overall as “good” or “better”. A number of respondents also noted interest in forming a neighborhood association to help protect the ponds (Q5). A detailed summary of the responses to the Participant Survey is found in Attachment 3.



Attachment 1

Presentation Board Feedback

Several of the boards also provided sticky notes to write feedback or dots to vote on preferred actions. The results were as follows:

How can the RM best engage you and your Neighbors regarding the ponds?

Website	3
Email blast	13
Community Newsletter	12
Facebook	1
Other (open house presentations and questions and answer sessions)	2

What information would help you support pond health?

- *Planting tips*
- *What plants, bushes and trees to plant that will help not only the pond area but the whole development keep our pond clean*
- *Information on wildlife impacts*
- *Give pool owners a proper system to draw and backwash pools*

What changes have you seen?

Vegetation/Wildlife

- *Purple loosestrife growing/increasing*
- *Blue-green algae*
- *Have not seen the cranes this year*
- *Very few egrets*
- *Great mergansers early this year- no longer there*
- *Pond B especially- is there elodea growing? This has been a national problem in the past.*

Water quality

- *Odor and slime around edge*
- *Can't walk our dogs in there anymore*
- *Significant decline in the water quality. The water was clean and clear 20 years ago.*
- *The ponds smell bad*
- *We can walk our dogs- but not let them in the H2O*
- *Low water levels*
- *Green water*
- *No aerators*
- *Strong water smells especially in spring.*
- *20-25 years ago we could swim in the ponds. They were beautiful and clear.*
- *Concerned about water levels and quality!*
- *Dog owners also need to clean up after their dogs!*
- *Pond A smells like an outhouse this summer*
- *Lower H2O levels last few years*

Which ponds do you see geese – raising young? fall migration? Spring migration?

Responses were dots placed on an air photo of the ponds. Pond D is the only pond that geese were not observed frequenting. Geese use all 3 other ponds for raising young and during spring and fall migration.

Other information

- *Many different species are periodically seen using the ponds including muskrat, raptors great horned and great grey owls, bald eagles*
- *The lake once had silver bass, perch and bullhead.*
- *Residents have also used the ponds for kayaking and canoeing. Many years ago people swam in the ponds*
- *Resident geese populations are being kept in check by predators that use the area so their population is not growing.*

Attachment 2

Open House Participant Survey

Open House Participant Survey

Q1 How did the information change your view or understanding of how the creek and ponds function?

Q2 Based on the information presented, do you think you will be changing your yard care practices? and what measures are you thinking of?

Q3 How did we do today?

Question	Poor	Fair	Good	Very Good	No opinion
Overall how would you rate the Open House?					
Was the Open House well organized?					
Was the Open House held at a time that was convenient?					
How effective was the Open House at providing information on the subject?					
Was the information understandable?					
How effective was the Open House at providing opportunities for feedback?					
Was the team approachable?					
Was the team knowledgeable?					

Q4 Is there anything else you would like to share?

Q5 Would you be interested in participating in a stewardship association for to work together on supporting healthy ponds and creeks?

Yes! - See our signup sheet at the welcome desk!

Attachment 3

Summary of Responses to Open House Participant Survey

Q1 How did the information change your view or understanding of how the creek and ponds function?

- *Great info, we need to make sure dog owners clean up after their dogs too, not just blame geese.*
- *I used to teach ecology, so most of the information provided I used to teach in the classroom.*
- *Interesting about difference in the 4 lakes and pH levels. Some buffer zones for lower yards near lake so people don't fertilize.*
- *I understand the reasons why are ponds are in the state they currently are in.*
- *Now I understand what's happening and I'm so happy the RM is looking into this*
- *Helped to understand the ponds much better*
- *Very informative, thank you*

Q2 Based on the information presented, do you think you will be changing your yard care practices? And what measures are you thinking of?

- *No, we don't throw stuff into the ponds.*
- *N/A- Do not live next to creeks or ponds*
- *No- we rarely fertilize our yard and run off does not affect the pond*
- *Already practicing low levels of fertilizers and use very little herbicide. Municipal mowers don't need to cut grass so often and so low and short.*
- *N/A- don't have a yard as of this summer*

Q3 How did we do today?

Question	Poor	Fair	Good	Very Good	No opinion
Overall how would you rate the Open House?			4	4	
Was the Open House well organized?			3	5	
Was the Open House held at a time that was convenient?		1	2	4	1
How effective was the Open House at providing information on the subject?		1	1	5	
Was the information understandable?			2	6	
How effective was the Open House at providing opportunities for feedback?		1	4	3	
Was the team approachable?			3	5	
Was the team knowledgeable?			3	5	

Q4 Is there anything else you would like to share?

- *Climate Adaptation summer student was super knowledgeable you need to get her back for sure!!!*
- *Thank you so much for this session. I learned a lot.*
- *Concerned with dogs not being able to swim in ponds.*
- *Doing nothing and "let nature take its course" is not what residents want. Several measures need to be taken such as geese decoys, string barriers, aeration, sediment treatments.*
- *Climate Adaptation summer student was fantastic and provided great information.*
- *We put up wood duck houses and wren bird houses. Enjoy ducks flying around. Lots of turtles.*
- *The impact of poorly functioning septic systems on the ponds and our groundwater in general.*
- *Concerned about the water level, the quality and the developing smell.*

APPENDIX A

Presentation Boards