DEPUTATION SUBMISSION

SILVER LAKE REVITALIZATION PROJECT
COUNCIL IN COMMITTEE MEETING
JUNE 13, 2023

PURPOSE

1. Update Council regarding the community driven Project to revitalize Silver Lake and

2. Request that Council direct Staff to consult with the Silver Lake Revitalization Project Team and recommend options as to how the County could best partner with the community, at this early stage of the Project, for Council's consideration by no later than September 2023.

SUMMARY

Situated at the end of the Lynn River watershed, with nine storm water drains emptying into its basin, Silver Lake provides a storm water management service to Norfolk County and acts as a silt trap that has kept the lower Lynn River navigable.

Approximately two thirds of Silver Lake have silted in. If nothing is done, Silver Lake will completely silt in and not be able to:

a. Effectively control storm water flowing from residential and commercial developments as well as farmers' fields from as far north as Simcoe
b. Continue to trap silt to ensure the lower Lynn River remains navigable for recreational boats, marine vessels and commercial fishing fleet
c. Filter water before entering Lake Erie
d. Provide fish and wildlife habitat
e. Offer waterfront and on-water recreational opportunities

If the community is not successful with the Project to revitalize Silver Lake, Norfolk County will become, by default, solely responsible for managing the services Silver Lake provides.

Since Misner Dam was repaired, community organizations and volunteers have raised funds and completed a variety of initiatives aimed at revitalizing Silver Lake. An environmental consulting firm has confirmed the approvals required to revitalize Silver Lake and proposed a multi-staged approach to complete the required studies and design.

To raise funds for completion of the first Stage, the Silver Lake Revitalization Project team requires confirmation that Norfolk County continues to support the Project and is prepared to make a significant investment at this milestone. Without confirmation of support and a significant investment from the municipal level, the community driven Project will not be able to raise additional funds from other sources such as provincial and federal sponsored programs.

Given the complexity of the Project and the confidential nature of some information, the Project Team is asking to meet with Staff to explore how the County could best partner with the community at this early stage of the Project. Staff will then be able to make informed recommendations to Council including whether funds should be allocated in the 2024 Capital Budget.

BACKGROUND

1. Repairing Misner Dam was confirmed by the consulting engineering firms contracted by Norfolk County (Douglas Vallee Ltd and Stantec) to be:

    a. Less expensive than decommissioning the dam or building a new dam;
    b. The most effective way to protect the lower Lynn River and Port Dover harbour from sediment accumulation.

2. In June 2019, community organizations committed to lead the Silver Lake Revitalization Project and to seek funds to revitalize Silver Lake on the understanding that Norfolk County would consider investing in the Project on a "case by case" basis.

    The Norfolk County Task Force Misner Dam and Silver Lake Revitalization Projects Report stated that Norfolk County would:

    "…consider payment of costs or provision of services related to the revitalization of Silver Lake on a "case by case" basis if these costs or services are related to County property or infrastructure surrounding Silver Lake or are deemed to benefit Norfolk County;"

    Accordingly, Norfolk County Council directed Staff to tender for the rehabilitation of the Misner Dam.

3. In February 2021, the Port Dover Waterfront Preservation Association (PDWPA) convened the first meeting of the Silver Lake Revitalization Project Steering Committee (PSC) made up of representatives from:

- Long Point World Biosphere Reserve
- Port Dover Board of Trade
- Port Dover Harbour Authority
- Port Dover Lions Club
- Port Dover Waterfront Preservation Association
- Port Dover Yacht Club
- Amy Martin, Ward 6 Councillor

4. In March 2021, the PDWPA agreed to Chair the Silver Lake Revitalization PSC and appointed Jim Dover volunteer Project Manager.

   The following Vision and Objectives were reviewed by the Silver Lake PSC and approved by the PDWPA:

   VISION:

   To revitalize and secure Silver Lake and its wetland for everyone forever.

   OBJECTIVES:

   i. Manage sedimentation
   ii. Improve fish and wildlife habitat
   iii. Improve water quality
   iv. Provide recreational and educational opportunities
   v. Improve the public's physical and visual access
   vi. Achieve our objectives in a sustainable manner

5. In the summer of 2021, the repair of Misner Dam was completed.

6. Since 2021, over $70,000 in cash and "in kind" contributions have been raised for the Silver Lake Revitalization Project and over 2,500 volunteer hours have been dedicated to the following initiatives:

   i. Installation of a floating dock in partnership with the Port Dover Lions Club
   ii. Monitoring of water quality in partnership with Water Rangers
   iii. Removal of Phragmites in partnership with the Nature Conservancy of Canada
   iv. Launch of a Purple Loosestrife biological control initiative in partnership with the Invasive Species Centre and Ontario Beetles
   v. Written confirmation of the studies and approvals required to revitalize Silver Lake

7. In May 2021, the PDWPA awarded a contract to GHD – an environmental consulting firm that provided services to Norfolk County for the repair of Misner Dam – to prepare a roadmap for the revitalization of Silver Lake.

8. In February 2022, GHD finalized the Terms of Reference for an Environmental Impact Study in consultation with the Long Point Region Conservation Association, Ministry of Northern Development Mines and Resources, Ministry of Environment, Conservation and Parks and the Department of Fisheries and Oceans.

9. On July 7, 2022, John Scholten Chair of the Long Point Region Conservation Authority confirmed in writing that "the LPRCA supports the project and…LPRCA staff will provide technical support as needed to assist the Port Dover Waterfront Preservation Association in meeting the project goals and objectives."

10. In October 2022, GHD proposed the following approximate three-year staged approach to complete the required studies, prepare a design, obtain the approvals and prepare the specifications to tender the work to revitalize Silver Lake:

    - Stage 1 - Feasibility Assessment
    - Stage 2 - Soil Contamination Analysis
    - Stage 3 - Ecological Studies
    - Stage 4 – Finalize a Design
    - Stage 5 - Obtain Permits

    The PDWPA negotiated a contract proposal with GHD to complete the Stage 1 – Feasibility Assessment. The purpose of Stage 1 is "to have an estimate of the rate of sedimentation within the lake and the feasibility to trapping and removing sedimentation to maintain the proposed dredged areas."

    If it is determined feasible to trap and remove sedimentation in the Silver Lake basin, a conceptual design will be prepared consisting of:

    - Drawings
    - Details regarding main components of the design – for example silt traps and associated access points as well as creek bed and shoreline treatments
    - Cost estimates
    - Artistic renderings

    A geomorphic assessment of Silver Lake is the most significant cost component of the Feasibility Assessment. It would complement the recent analysis of the Lynn River watershed completed by the Long Point Region Conservation Association. The findings of the Feasibility Assessment could be used by LPRCA and Norfolk County for storm water management and land use planning purposes even if the Project to revitalize Silver Lake were not to proceed beyond Stage 1.

NEXT STEPS

Fundraise approximately $125,000 to:

a. Complete the Stage 1 – Feasibility Assessment
b. Implement a bird nesting and feeding initiative
c. Compile an invasive plant species inventory
d. Upgrade the PDWPA website

ATTACHMENTS

Attachment 1 – Sediment Accumulation in Silver Lake

Attachment 2 – Algae Accumulation in Silver Lake

Attachment 3 – Invasive Species Storyboard

ATTACHMENT 1

Sediment Accumulation in Silver Lake

ATTACHMENT 2

Algae Accumulation in Silver Lake

ATTACHMENT 3

Invasive Species Storyboard