Section III – Items for the Information of the Board

TO: Chair and Members of the Board of Directors

Friday, April 19, 2024 Meeting

FROM: Anil Wijesooriya, Director, Restoration and Infrastructure

RE: UPDATE ON MUNICIPAL AGREEMENTS AND PARTNERSHIP

GRANTS FOR WETLAND RESTORATION PROJECTS

KEY ISSUE

To provide an update on TRCA's partnerships with municipalities to implement the Etobicoke Creek Wetlands Enhancement and Kingston Road Wetland Restoration Projects.

RECOMMENDATION:

IT IS RECOMMENDED THAT the report on the Update on Municipal Agreements and Partnership Grants for Restoration Projects be received for information;

AND FURTHER THAT TRCA staff continue to finalize necessary agreements with the City of Brampton, and Town of Ajax towards successful implementation of the Etobicoke Creek Wetlands Enhancement Project and the Kingston Road Wetland Restoration Project.

BACKGROUND

Toronto and Region Conservation Authority (TRCA) has a history of successful partnership projects with municipalities aimed at enhancing degraded natural features impacted by human uses. These projects focus on protecting and restoring ecological function, maximizing natural cover and integrating enhanced natural features into park systems to responsibly connect users to nature. TRCA recently partnered with the City of Brampton and the Town of Ajax on the development of two wetland restoration project proposals by providing concept designs, cost estimates, logistics, and construction planning. Both wetland restoration projects have been awarded grant funding by the Ministry of Environment, Conservation and Parks (MECP) through the Wetlands Conservation Partner Program (WCPP).

The Etobicoke Creek Wetlands Enhancement Project (Brampton Partnership)
The City of Brampton is the recipient of a \$2.5 million grant from the MECP through the WCPP. TRCA will be entering into a Partnership Agreement, under our updated Municipal Memorandum of Understanding (MOU) with the City of Brampton, to plan, design, and implement wetland and shoreline restoration to complete the project.

Loafer's Lake, originally built for beautification and recreation, connects to the Etobicoke Creek Trail and is a part of Brampton's natural heritage system. The north shoreline of Loafer's Lake is degraded, with failing gabion baskets and a lack of shoreline vegetation

Item 9.1

and in-water habitat. The trail around Loafer's Lake is eroding and informal access points have been created by park users resulting in further degradation to the shoreline. The lake's water quality has historically been poor, with persistent algae growth despite previous mitigation efforts.

In addition to Loafer's Lake, there are a series of wetland restoration projects upstream that are included in the WCPP grant and agreement with Brampton. Located within natural and manicured spaces along the park system, these sites have experienced historic human alterations that have negatively impacted their function, size, and habitat value. Past alterations include vegetation clearing, landscape topography changes, and ditching.

The Etobicoke Creek Wetlands Enhancement Project will enhance wetland function and improve flood resiliency within the Etobicoke Creek watershed. This will be achieved by managing invasive species, improving shoreline habitat, expanding emergent marsh vegetation, installing rocky shoals and habitat structures, planting native aquatic and terrestrial vegetation, and restoring floodplain wetlands spanning approximately 65 ha from Loafer's Lake to Conservation Drive Park.

This project will also concurrently provide education and awareness opportunities for the local community to learn about wetland ecology and the importance of restoring and protecting local habitats. Specifically, the project will enhance turtle and other wildlife habitat within Loafer's Lake and throughout the Etobicoke Creek watershed at the locations described below. This effort will include the City and TRCA working closely with the citizen group, Heart Lake Turtle Troopers, to protect, conserve and restore turtle populations.

A summary of the restoration works to be completed at the four project site locations under The Etobicoke Creek Wetlands Enhancement Project is as follows:

- Loafer's Lake Wetland: 700 m of shoreline restoration including expanding the wetland habitat within the lake.
- Loafer's Lake Park Wetland: Restoring 0.1 ha of wetland to improve habitat and flood resiliency.
- Conservation Drive Park West Wetland: Restoring 1 ha of wetland to improve habitat and flood resiliency.
- Snelgrove Wetland: 0.5 ha of invasive species management and topography repair totaling 1.4 ha of wetland enhancement.
- Planting of 6500 trees and shrubs and 3000 aguatic plants.

Kingston Road Wetland Restoration Project (Ajax Partnership)

The Town of Ajax is the recipient of a \$650K grant from MECP through the WCPP to implement the Kingston Road Wetland Restoration Project. TRCA will be entering into a Partnership Agreement, under our MOU with the Town of Ajax, to plan, design, and implement the wetland restoration project.

Item 9.1

The project site is located at 453 Kingston Road East in the Town of Ajax within the Carruthers Creek watershed. The property has been assessed through TRCA's Restoration Opportunities Planning (ROP) program and multiple opportunities were identified for the restoration of aquatic habitats and riparian zones. These areas need ecological restoration based on the current degraded state of wetlands on the property and the need to protect existing natural features from the impacts of future development and climate change.

The site was drained of its wetland habitat via a system of ditching and historic tile drains and includes numerous invasive species. The site will therefore require site preparation and invasive species management before wetland restoration work can begin. The restored wetland will improve flood resiliency, and also act as a buffer between the Carruthers Creek corridor and any future development lands.

Restoration works will involve recontouring depressions into the landscape to capture and retain surface water, promote groundwater infiltration, and expand habitat for wildlife. Project outcomes will include:

- 3 ha of wetland restoration with improved connectivity to the adjacent natural heritage system.
- 1 ha of forest habitat as a buffer for the wetland.
- Approximately 4500 trees and shrubs to be planted.

RATIONALE

TRCA has partnered with municipalities on wetland restoration projects since the early 1990s through TRCA's wetland restoration programs. Significant gains in wetland area and connectivity have been made through these programs. Building upon past successes, these two projects demonstrate how that municipalities can continue to deliver projects in partnership with TRCA in order to expand habitat for wildlife, mitigate stormwater impacts, and improve water quality through wetland restoration.

Wetland restoration projects implemented through the MECP WCPP grant have four main objectives:

- 1. Improve functionality of wetlands through improving connectivity, removing invasive species, planting native species, improving wildlife habitat, water quality treatment, and flood attenuation;
- 2. Conserve, restore or enhance existing wetlands, including their features and functions;
- Mitigate urban stormwater flooding and erosion impacts exacerbated by impervious surfaces and more frequent and intense weather events associated with climate change; and
- 4. Foster participation and stewardship by engaging and empowering the local community to contribute to the enhancement of the wetlands.

Item 9.1

Implementation of these wetland restoration projects support TRCA's natural heritage goals and objectives and greening targets outlined in our watershed plans and numerous strategies. This work also supports municipal objectives around protecting and restoring natural habitats.

The Etobicoke Creek Wetlands Enhancement Project (Brampton Partnership)
This project supports Brampton's Grow Green Environmental Master Plan (updated 2020) and Eco-Park Strategy (2019). Restoration within Loafer's Lake supports the Brampton Lake Enhancement Strategy (2021) where four lakes within Brampton have been prioritized for restoration. The Lake Enhancement Strategy applies an Eco-Park lens to improve community parks and conserve signature natural features that service and attract a broad range of users and community members. The series of wetlands identified for restoration span across 2 priority restoration areas identified in TRCA's Etobicoke Creek Watershed Plan (2024-2034) and supports the goal to "Protect, enhance, and restore the Natural Heritage System and urban forest within the watershed to improve ecosystem resilience and sustainability."

Kingston Road Wetland Restoration Project (Ajax Partnership)

This project supports the objectives of Ajax's Climate Risk and Resiliency Plan (2019) which provides a strategic framework to address current and future climate change risks. Previous partnership projects under this plan include Kerrison Road Wetland Restoration Project and the Church and Bayly Wetland project. The project is situated within a priority restoration area identified in the Carruthers Creek Watershed Plan 2021-2031 and supports the objective to "improve the quality and quantity of the Natural Heritage System across the watershed through ecosystem protection, enhancement, and restoration".

Relationship to TRCA's 2023-2034 Strategic Plan

This report supports the following Pillars and Outcomes set forth in TRCA's 2023-2034 Strategic Plan:

Pillar 1 Environmental Protection and Hazard Management:

1.3 Maintain healthy and resilient watershed ecosystems in the face of a changing climate

Pillar 1 Environmental Protection and Hazard Management:

1.4 Balance development and growth to protect the natural environment ensuring safe sustainable development

Pillar 3 Community Prosperity:

3.1 Connect communities to nature and greenspace

FINANCIAL DETAILS

With contributions from TRCA and Brampton, the total budget to complete the Etobicoke Creek Wetlands Enhancement Project is \$2,736,502.89, including taxes and contingency. Funds to complete the project will be available in project account 180-07.

With contributions from TRCA and Ajax, the total budget to complete the *Kingston Road Wetland Restoration Project is* \$663,290.33 including taxes and contingency. Funds to complete the project will be available in project account 180-10.

DETAILS OF WORK TO BE DONE

TRCA will be entering into individual Fee for Service Agreements with the City of Brampton and the Town of Ajax to undertake the works. The project planning has started, and implementation is targeted to be completed by December 2024. Any additional work beyond this existing scope that arises through ongoing discussions with the City of Brampton or the Town of Ajax would result in an amendment to the existing Agreements or the development of a secondary Agreement under the MOU between TRCA and the partner municipality.

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Attachments: 2

Attachment 1: Etobicoke Creek Wetland Enhancement Projects - Brampton

Attachment 2: Kingston Road Wetland Restoration Project - Ajax