Item 9.1

Item for the Information of the Regional Watershed Alliance

- TO: Chair and Members of the Regional Watershed Alliance Wednesday, May 25, 2022 Meeting
- FROM: Sameer Dhalla, Director, Development and Engineering Services

RE: DON RIVER MOUTH NATURALIZATION PROJECT – RESTORATION OF FISH HABITAT IN TORONTO

KEY ISSUE

To inform the Regional Watershed Alliance regarding the fish habitat restoration results of the recently completed Cherry Street Stormwater and Lake Filling Project.

RECOMMENDATION

WHEREAS the Toronto and Region Conservation Authority (TRCA), on behalf of Waterfront Toronto, completed a two-year post-construction evaluation to determine the success of newly created fish habitat near the Keating Channel at the mouth of the Don River;

THAT the Don River Mouth Naturalization Project – Restoration of Fish Habitat in Toronto report on the Cherry Street Stormwater and Lake Filling (CSLF) project be received.

BACKGROUND

The Port Lands Flood Protection (PLFP) project follows the completion of the 2016 Don Mouth Naturalization and Port Lands Flood Protection Environmental Assessment. This project is one of the largest infrastructure projects in Toronto's history, led by Waterfront Toronto, with the support from both the City of Toronto and the TRCA. Both the federal and provincial governments, as well as the City of Toronto, have invested \$1.25B in the project that will provide regulatory storm flood protection (equivalent of Hurricane Hazel) for 290 hectares of mixed-use lands east of downtown Toronto. The project will enable urban development, recreational opportunities, and natural habitat restoration within the site, which was a former brownfield site. With the 23 sub-projects in the Port Lands, including the creation of a new 1 km long river valley and a new naturalized river mouth that will flow into Lake Ontario, the future naturalized river mouth will include the creation of 11 ha of coastal wetland, 5 ha of upland terrestrial habitat, and almost 14 ha of aquatic habitat. This PLFP project is currently in the construction stage and is scheduled for completion by the end of 2024. For more information on this project, please visit https://portlandsto.ca/.

RATIONALE

The Cherry Street Stormwater and Lake Filling (CSLF) project (formerly known as Essroc Quay Lake-filling project) is located on the south side of the Keating Channel (current Don River mouth), where the channel meets Toronto's Inner Harbour, and is one of the sub-projects of the larger PLFP project. Waterfront Toronto is the proponent for the CSLF project and the TRCA has completed the environmental monitoring work related on their behalf. Through lake-filling, the CSLF project created a new landmass around the former Essroc Quay. The completion of the CSLF stabilizes the Essroc Quay area shoreline under flood conditions was finalized in autumn 2019.

Work on the CSLF project was authorized by Fisheries and Oceans Canada (DFO), and to compensate for the lake-filling work, several offsetting measures were required, including the creation of two aquatic habitat coves. These coves are located near the existing Keating Channel, an area known to have very limited fish habitat. The new coves and the connecting shoreline between the coves used a variety of materials to provide fish habitat to the system, including anchored wood, boulders, and aquatic plants. Following two years of monitoring, the new habitat has been used by 16 native and non-invasive fish species, including Largemouth Bass, Northern Pike, and Yellow Perch. This project has successfully shown that increasing habitat complexity is an important part of improving fish habitat in the Toronto Harbour.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan: Strategy 2 – Manage our regional water resources for current and future generations Strategy 4 – Create complete communities that integrate nature and the built environment

Strategy 9 – Measure performance

Strategy 7 – Build partnerships and new business models

FINANCIAL DETAILS

TRCA completed the project under a fee-for-service delivery agreement with Waterfront Toronto for \$543,633 from 2017 to 2021.

DETAILS OF WORK TO BE DONE

TRCA will continue to support our Waterfront Toronto and the City on the larger Don Mouth Naturalization and Port Lands Flood Protection project.

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