

# **Backgrounder: Flood Protection in Toronto's Port Lands**

## The Port Lands: Context

The Port Lands, bounded by the Keating Channel/Don River and Lake Shore Boulevard in the north, the Toronto Inner Harbour in the west, Ashbridges Bay in the east and Lake Ontario and Tommy Thompson Park in the south, is a man-made area created by decades of infilling what was once one of the largest wetlands on Lake Ontario. Beginning in the 1880s, the area was gradually filled in to make more land available for industry and shipping. As the natural mouth of the Don River was filled in, the Keating Channel was created to provide an outlet for the Don River watershed into Lake Ontario and a means to convey stormwater. Today, the Port Lands area sits within a designated flood plain, which is defined as an area anticipated to experience flooding in the event of a regional storm or the 100-year flood – whichever is greater.

# **Cherry Street Stormwater and Lakefilling Project**

This project is a component of the larger Port Lands Flood Protection Project. It is located at Essroc Quay on the south side of the Keating Channel, where it meets Toronto's Inner Harbour. The project involves creating a new landmass around the current Essroc Quay (see image below) through lakefilling. This will stabilize the area shoreline under flood conditions, as the current dockwall on Essroc Quay is old and is at risk of collapsing under flooding conditions. This provides a direct benefit for stormwater conveyance.



Lakefilling shown above in green; future re-aligned Cherry St. in grey

Infilling Essroc Quay is an important element of safely conveying increasing storm and flood waters, although it does not eliminate the flood plain designation in the Port Lands. It will also improve water Page 1 of 4

quality, optimize water and storm infrastructure, and create new naturalized open spaces and aquatic habitat.

This project is a prerequisite for significant work required to address a related major stormwater conveyance issue: currently, the existing Cherry Street Bridge over the Keating Channel causes a significant restriction to storm water flows during flood events. To remove this restriction, lakefilling around Essroc Quay is necessary to facilitate the future re-alignment of Cherry Street and the construction of a new bridge that will have a higher span over the Keating Channel to accommodate anticipated flood levels.

The project will also enhance aquatic habitat and ultimately form part of the proposed Promontory Park, which is a component of the larger Port Lands Flood Protection Project.

Completing this work will further accommodate the construction of roads and transit into the Port Lands as part of the economic revitalization of this area.

The project began construction in December 2017 and will be completed by March 2020.

Funding for the project is provided as follows:

- Government of Canada: \$32,500,000
- Province of Ontario: \$16,250,000
- City of Toronto: \$16,250,000

#### Scope of Work

The project includes the design and construction of the following elements:

- Confinement berm structures
- Rock dock wall structures
- Lakefilling
- Aquatic habitat structures and features
- Diversion of an existing storm sewer

The project also includes two pilot studies:

- To assess alternative technologies for dredging and managing sediments
- To determine how soils from the Port Lands (and other brownfield sites) may be treated through innovative technologies to allow for their potential reuse for purposes such as lakefill and stabilization

## About the Port Lands Flood Protection Project

In June 2017 Waterfront Toronto received \$1.25 billion in shared funding from the governments of Canada, Ontario and Toronto to flood protect the Port Lands. This includes the \$65 million in trigovernment funding received for Cherry Street Lakefilling.

The Port Lands Flood Protection Project is a comprehensive plan for flood protecting 290 hectares (715 acres) of southeastern downtown Toronto – including parts of the Port Lands, South Riverdale, Leslieville, south of Eastern Avenue and the First Gulf/Unilever development site that are at risk of flooding. The Project addresses the fundamental challenge of transforming the underused and post-industrial Port Lands into a long-term asset that will support Toronto's growth and economic competitiveness.

Working together for more than a decade, Waterfront Toronto, the Toronto and Region Conservation Authority (TRCA) and the City of Toronto have developed and refined an innovative solution to protect the Port Lands and adjacent areas from costly damage associated with a major flood, to remediate the area's contaminated soil, and to better adapt the area to the impacts of climate change.

The Port Lands Flood Protection Project will create a new mouth for the Don River in the middle of the Port Lands between the ship channel and the Keating Channel, as well as a new urban island neighbourhood called Villiers Island, continuous riverfront open space and expanded opportunities for interaction with the water. It will also enhance habitat for natural species and will re-establish wetlands in the area, which provide social and environmental benefits and naturally moderate the effects of flooding and erosion.

Naturalizing the mouth of the Don River will provide the necessary flood protection and unlock the development potential of this premier waterfront area. Providing flood protection for the Port Lands was identified as a top priority by all three levels of government when they first established Waterfront Toronto in 2001.

Two key approvals necessary to advance the Port Lands Flood Protection Project have been received by the Ontario Ministry of the Environment and Climate Change:

- The Don Mouth Naturalization and Port Lands Flood Protection Project Environmental Assessment (DMNP EA), which addresses the flood protection and naturalization of the river. The DMNP EA was initiated by Waterfront Toronto and Toronto and Region Conservation Authority (TRCA) in 2005 and was approved by the province on January 28, 2015.
- The Lower Don Lands Environmental Assessment (LDL EA), which addresses associated city building, including the transit, roads, bridges, water, wastewater and stormwater management. The LDL EA was initiated in 2008 and approved in 2014.

Waterfront Toronto completed its Port Lands Flood Protection and Enabling Infrastructure Due Diligence Report in 2016 and has made the report public on our website <u>here</u>. This report provides great certainty on the costs, risks, scheduling and implementation strategy associated with the proposal to naturalize the mouth of Don River Mouth and provide flood protection to the area.

Like other Waterfront Toronto projects, the Port Lands Flood Protection Project was the subject of extensive public consultation and engagement, including traditional in-person public meetings, workshops, interactive social media, web-based consultations, tours and design charrettes. The project team consulted with regulators, utilities and various governmental bodies, Indigenous people, individual land owners and tenants, and Stakeholder Advisory Committees. More than 45 meetings have been held that have included approximately 5,000 participants.

In addition to the multiple community benefits of parkland, water access and new natural habitat, the project has the potential to deliver wide economic benefits. A third-party economic impact study estimates that spending on construction alone will generate approximately:

- \$1.1 billion in value to the Canadian economy;
- 10,829 person years of employment; and,
- \$373 million in tax revenues to all orders of government.

The study also indicates that there are economic benefits related to future development unlocked by the project, including approximately:

- \$4.0 billion in value added to the Canadian economy;
- 41,100 person years of employment; and,
- \$1.5 billion in revenues to the three orders of government.

The Port Lands Flood Protection Project is scheduled for completion in 2023.

Project	Cherry Street Stormwater and Lakefilling Project	Port Lands Flood Protection	Total funding by contributor
Government of Canada Contribution	\$32.5 million	\$384.2 million	\$ 416.6 million
Province of Ontario Contribution	\$ 16.25 million	\$ 400.4 million	\$ 416.6 million
City of Toronto Contribution	\$ 16.25 million	\$ 400.4 million	\$ 416.6 million
Total funding by project	\$ 65.0 million	\$ 1.185 million	\$ 1.25 billion

## Additional media:

This 30-second fly-through animation shows what the naturalized mouth of the Don River and nearby neighbourhoods might look like in a decade's time. View <u>here</u>.

This two-minute video describes some of the challenges and the unfulfilled potential of the Port Lands as well as the vision for a new Don River channel and reimagined waterfront community.

The solution for providing needed flood protection is to make more room for the Don River to flow – a green approach to vital infrastructure that will improve Toronto's resiliency. View <u>here</u>.