



## BACKGROUND: PORT LANDS FLOOD PROTECTION

The Port Lands is a 400 hectare (988-acre) district 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. Much of the Port Lands – which is primarily underutilized industrial area with extensive waterfront access – is publicly owned and is within a 30 minute walk of downtown Toronto.

Currently, about 290 hectares (715 acres) in the area – including parts of South Riverdale, Leslieville and the First Gulf/Unilever development site at the eastern base of the Don River – are at risk of flooding from the Don River watershed and cannot be developed until they are flood protected.

The Don River flood protection projects offers a unique opportunity to combine revitalization and development with extensive disaster mitigation.

### History of the Port Lands

The Port Lands resulted from decades of infilling what was once the largest wetland on the Great Lakes. Beginning in the 1912, the area was gradually infilled to make more land available to serve the city's growing industrial sector and for shipping. The current and historical uses of the land include storage facilities for coal and oil, an electrical generating station, cement storage and production, a residential waste transfer station (previously operated as an incinerator) and a variety of other municipal yards and services.

While still used for industrial and port purposes today, the lands are generally underutilized, as the majority of the area currently lacks adequate municipal services such as water mains, storm and sanitary sewers necessary for other uses and a large portion falls within the flood plain of the Don River. The Port Lands were identified for revitalization through the efforts of the Toronto Waterfront Revitalization Task Force in the early 2000s, leading to the adoption of *Making Waves – Central Waterfront Plan* in 2003, which is now known as the Central Waterfront Secondary Plan.

Revitalization also requires remediating the area's contaminated soil that resulted from the historical infilling and industrial uses, and also requires crucial flood protection.

Two key approvals necessary to advance the Port Lands Flood Protection project have been received:

- 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.

## **Designing a Naturalized Don River Mouth**

The new river mouth will be created by rerouting the existing river from its current location at the Keating Channel on the eastern side of Toronto's inner harbour, to the middle of the Port Lands between the Ship Channel and the Keating Channel. The project will create a new river outlet to Lake Ontario, new parkland along the river and inner harbour, 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.

In 2006, the Terms of Reference for the Don Mouth Naturalization Project Environmental Assessment (DMNP EA) were received from the Ontario Ministry of Environment. The Terms of Reference set the parameters for the work that has been underway since.

Four alternative solutions were developed to address the significant challenges within the Project Study Area, as identified in the EA. Because of the complex problems and significant technical challenges that needed to be addressed by the EA, Waterfront Toronto, with the support of TRCA and the City of Toronto, held an International Design Competition in 2007 in recognition of the link between naturalization, flood protection, infrastructure and the land use potential of the area and the desire to find an integrated solution.

The competition's stated goal was to obtain a bold and comprehensive concept design and a unifying vision to guide revitalization of the Lower Don Lands, merge the natural and urban fabric and establish an iconic identity for the Don River that accommodates habitat restoration and crucial flood protection.

In May 2007, Michael Van Valkenburgh Associates Inc. (MVVA) was selected as the winning team in the Design Competition. Despite the large scale of the project, MVVA created a spectacular plan that addressed the myriad of challenges posed by the site and the assignment.

The concept relocated the naturalized portion of the river valley, included an overflow green spillway, and retained the Keating Channel as an urban artifact and third river outlet. MVVA's concept also resolved the majority of the infrastructure challenges the team and the DMNP EA were struggling to resolve.

The current plan has evolved over time, and, while it is still based on MVVA's award winning "Port Lands Estuary" plan, the original concept design has been modified several times through the DMNP EA process to meet project needs.



*Overhead view of Don Mouth Naturalization and Port Lands Flood Protection Project*

### **Villiers Island Precinct**

When the new mouth of the Don River is built, the outline of a new urban island – Villiers Island – will emerge. Villiers Island will act as a gateway from the West Don Lands and East Bayfront neighbourhoods into the rest of the Port Lands. Waterfront Toronto, in collaboration with the City of Toronto and the Toronto and Region Conservation Authority, is developing a precinct plan for Villiers Island, which is expected to go to Toronto City Council for approval by the end of 2015.

The precinct plan will establish design and development objectives, local street patterns, block structure, linkages between local parks and open spaces, and built form controls. The plan will also identify other mechanisms needed to ensure revitalization and high-quality development in the Villiers Island Precinct. The plan will also embed strategies to ensure a complete community is established, including identifying locations for community services and facilities, public art, heritage conservation and celebration, active and passive transportation routes, affordable housing, office/retail and sustainable infrastructure.

Additional public consultation on the Villiers Island Precinct Plan will take place in the fall of 2015.

## **Outcome**

The new, naturalized mouth of the Don River will create an iconic identity for the lower Don River that will literally change the face of Toronto's eastern waterfront, while delivering a healthier, more natural river outlet to the Toronto Inner Harbour and Lake Ontario. This comprehensive solution addresses a complex set of problems by innovatively integrating ecology, development, transportation infrastructure, and the river mouth in a harmonious whole to deliver an extensive range of benefits.

Flood protecting the area enables the development of new, highly-livable, mixed-use communities, while maintaining the vital functions of Toronto's working port. With flood protection in place, a revitalized Port Lands will attract billions of dollars of private sector investment, provide capacity for the growing number of people who come to Toronto for the city's economic opportunities, quality of life and vibrant cultural offerings, and support the city's competitiveness among the top tier of global cities.

In the last decade, governments across the country have had to deal with extreme weather events that are occurring with more frequency and severity. In particular, not only are floods happening more often in urban areas, but also the financial risk to governments to pay for the damages is also increasing.

Without adequate mitigation and protection measures in place, governments will continue to assume the growing risk and costs associated with flooding in urban areas. This is why investing strategically in flood protection not only unlocks development value and protects existing neighborhoods, but also protects governments from significant financial risk. This is underlined by the estimated cost/benefit cost ratio for investment in flood protection: a 2011 report from the National Round Table on the Environment and the Economy estimated that for every dollar invested, five dollars of damages are mitigated.

## **Public Consultation**

Public consultation played a central role in developing all aspects of the plans for the Port Lands and included traditional in-person public meetings, interactive social media, and web enabled consultations as well as newsletters and website project updates. In addition to consulting with regulators, utilities and various governmental bodies, individual land owners and Aboriginal groups, the public was engaged through a variety of public forums, events, workshops, Community Liaison Committees and Stakeholder Advisory Committees.

- During the DMNP EA, six rounds of public consultation were held comprising approximately 20 meetings, including Technical Advisory Committee meetings, Community Liaison Committee meetings, public/stakeholder workshops and events, and consultation with Aboriginal groups.
- During the LDL EA, three rounds of public consultation were held comprising approximately 12 meetings, including public information meetings, and Stakeholder Advisory Committee, Technical Agency Committee and Client Steering Committee meetings and consultation with Aboriginal groups.
- To date, public consultation in connection with the Villiers Island Precinct Planning has included three meetings. Additional stakeholder advisory committee and LUAC meetings will be held in the fall of 2015.

To view project information including summary reports, presentations, videos and other meeting materials please visit the consultation website at [www.portlandsconsultation.ca](http://www.portlandsconsultation.ca).

### **Improving the Area**

During this planning process, a number of improvements have been made, including:

- Landscaping and key street and intersection enhancements
- Cycling trails added as part of a greening of the area
- Landscape improvements and restoration of Cherry Beach (2004)
- The Cherry Beach Sports Fields (2008)
- Baselands and north shore planting and landscaping
- Tommy Thompson Park Interpretation Centre
- Outer Harbour Recreational Node (2015)
- Baselands pedestrian trail network (in progress)

### **Quick Facts:**

Flood protection facts:

- 290 hectares of land are at risk due to flooding from the Don River, under a Hurricane Hazel-sized storm event
- The new Mouth of the Don River will remove the flood risk to 240 hectares of land
- The majority of the remaining 50 hectares of land still at risk due to flooding are designed to be flooded as they are located within the Keating Channel and the new naturalized river valley system
- The Don Valley Parkway will continue to flood north of Lake Shore Blvd to Eastern Avenue. The only solution to flooding of the DVP would be to rebuild this section of the highway, which is outside the project scope

What the naturalization of the mouth of the Don River will deliver:

- Over 1,000 m of new river channel
- 13 hectares of new coastal wetland, including a 2-hectare wetland patch adjacent to the Don Roadway connecting to the Ship Channel
- 4 hectares of terrestrial habitat located within the constructed valley system with additional greenspaces anticipated outside the valley system
- Creation and enhancement of 13 hectares of aquatic habitat