



Ashbridges Bay Erosion and Sediment Control Project

Project Brief

Overview

Toronto and Region Conservation Authority, in partnership with the City of Toronto, intends to carry out remedial erosion control works to resolve long-term shoreline stability and sediment issues at the mouth of Coatsworth Cut and Ashbridge's Bay Park. The planning and design of the preferred remedial measures will be in accordance with the *Class Environmental Assessment for Remedial Flood and Erosion Control Projects* (January 2002, as amended in September 2009). A key component of the Class Environmental Assessment (EA) will be public consultation throughout the planning of the project, providing opportunities for members of the general public (including, affected stakeholders, public interest groups and any other interested parties) to offer recommendations on the development of the proposed sediment and erosion control designs where appropriate.

The TRCA and City of Toronto will be co-proponents in the EA study. TRCA will be the project lead and the project spokesperson. The City of Toronto will be the project funder and actively involved in Steering and Technical Advisory Committees.

Background

In 1983, Toronto and Region Conservation Authority (TRCA) began dredging operations at the mouth of Coatsworth Cut to maintain navigation between Lake Ontario and the boating facilities located at Ashbridge's Bay Park. As a result of ever increasing dredging volumes and associated expenses, TRCA began to investigate shoreline modification options that would eliminate the need for annual maintenance dredging in 1999.

In 2002, TRCA initiated a Conservation Ontario Class Environmental Assessment (EA) to remediate navigation hazards due to sediment accumulation in Coatsworth Cut. The purpose of the EA was to develop and evaluate preliminary detailed design plans to reduce or eliminate sediment deposition in Coatsworth Cut. The process identified six design alternatives which were evaluated based on considerations for the positive and negative impacts on the existing physical, biological, socioeconomic and cultural environments, as well as technical concerns, cost and feasibility. However, the Class EA was suspended pending completion of other planning initiatives related to the City of Toronto's Wet Weather Flow Management Master Plan and the Lake Ontario Park Master Plan.

Following the suspension of TRCA's Class EA study, the City of Toronto completed a Municipal Class EA for the Coatsworth Cut CSO and Stormwater Outfalls Control in November, 2007. The Coatsworth Cut Class EA (Schedule C) considered alternatives to improve water quality conditions within the Coatsworth Cut area. The preferred alternative includes source and conveyance controls throughout the sewershed as well as a 10 hectare treatment wetland, proposed south of the Ashbridge's Bay Wastewater Treatment Plant within the City's waterlot. Other planned projects as part of the City's implementation of the Wet Weather Flow Master Plan include a combined sewer overflow high-rate treatment facility within the City's waterlot south of the Ashbridge's Bay Wastewater Treatment Plant. The proposed design concept of this treatment facility, as determined through the City's Don River and Central Waterfront Class Environmental Assessment Study, would provide treatment for flow captured from 50 combined sewer outfalls that currently discharge to the Lower Don River and Inner Harbour. This planned treatment facility meets the City's interest in improving water quality conditions within the Don River and Central Waterfront area.

A 2008 plan for Lake Ontario Park prepared by Waterfront Toronto recommended major modifications to Ashbridge's Bay Park and adjacent shorelines, including a waterfront pedestrian connection, wetlands, recreational areas and boating activities. On May 13, 2009, Waterfront Toronto received board approval to proceed with Phase 1 of Lake Ontario Park, which included construction of a new landform at Ashbridge's Bay Park to facilitate relocation of the boat clubs currently located in Coatsworth Cut to the boat basin occupied solely by Ashbridge's Bay Yacht Club. At Authority Meeting #6/09 held on July 24, 2009, Resolution #A116/09 directed TRCA staff to work cooperatively with City of Toronto and Waterfront Toronto to achieve this vision. As part of TRCA's contribution, staff committed to reopen and complete the Class EA process to address local shoreline erosion and sedimentation issues. The original alternative designs identified in the TRCA's Erosion and Sediment Control Class EA were re-examined, in addition to the new alternative identified as per the Lake Ontario Park Master Plan.

Two rounds of meetings were held with Technical and Community Advisory Committee members to introduce the project objectives, receive input and present new alternatives that would control sediment deposition, prevent shoreline erosion and relocate the boat clubs in Coatsworth Cut to the

headland of Ashbridges Bay. Several one-on-one meetings with the individual boat clubs were also undertaken. Through the development of alternatives, it was determined that the potential costs to achieve the boat club relocation and shoreline management objectives of the project would range from \$20M to \$40M. These costs were deemed to exceed the available funding, and therefore the Class EA was suspended once again in January 2010.

Timeline at a Glance

- Mid-1970's: Ashbridge's Bay Park constructed
- Early 1980's: Start of Dredging in Coatsworth Cut
- 1990's: Reports by Sandwell (1991) & Baird (1999) indicate ~10,000.00 m³ of sand per year bypass Headland. Dredging volumes and costs in Coatsworth Cut increase throughout 1990s
- 2002: TRCA initiated Class EA to address sediment and erosion issues
- 2004: TRCA suspended Class EA due to potential water quality impacts and waterfront studies and planning initiatives underway in the area by City of Toronto and Waterfront Toronto.
- 2008: Toronto Water completes Coatsworth Cut Class EA along with Ashbridges Bay (formerly Main) Treatment Plant - Individual EA. Waterfront Toronto completes also Lake Ontario Park Master Plan (LOP)
- 2009: TRCA recommences Class EA to address sediment, erosion and facilitate public access and the potential relocation of Boat Clubs in Coatsworth Cut
- 2010: Waterfront Toronto and City suspend Class EA due to the high costs of the proposed relocation of the Coatsworth Cut boat clubs (estimated at \$20 - \$40 million)
- 2012: City of Toronto completes Don River and Central Waterfront Class EA

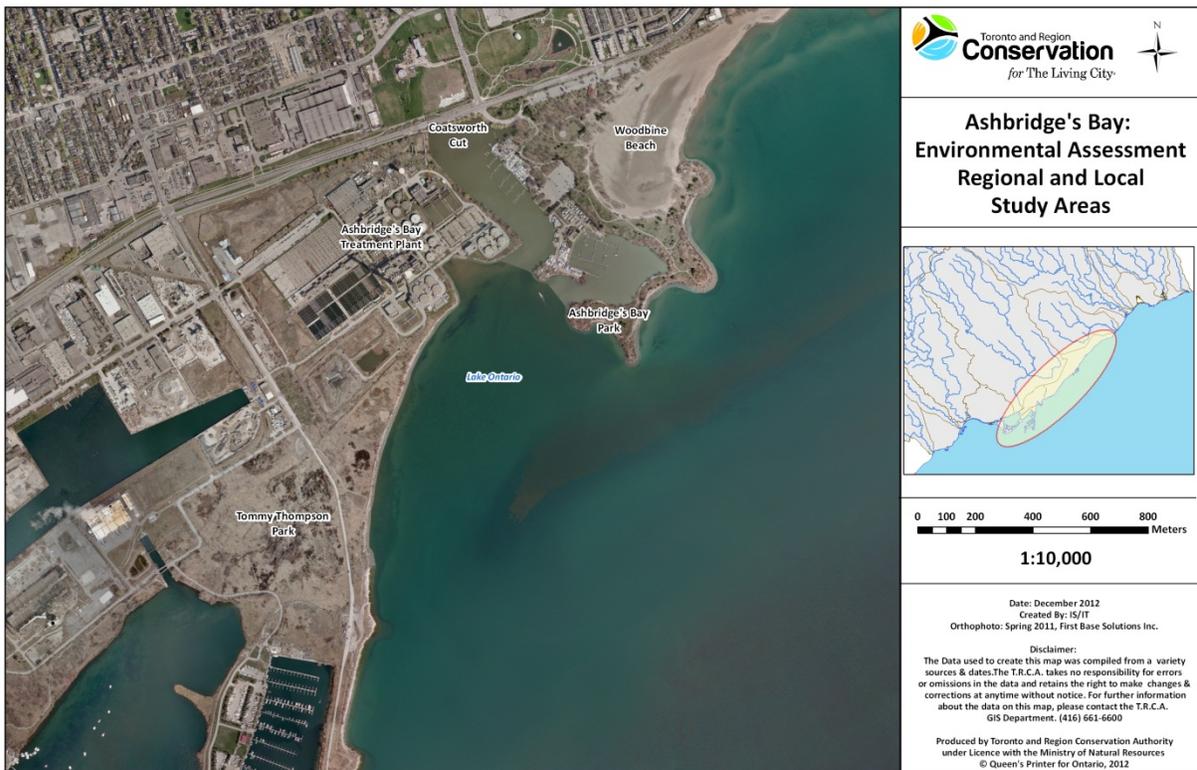
Work Undertaken as Part of TRCA's 2009 Sediment and Erosion Class EA Prior to Suspension

- Baseline Environmental Conditions Report (TRCA, Sept 2010)
- Interim Coastal Engineering Report (Shoreplan Engineering, Sept 2010)
- Stage 1 Terrestrial Archaeological Assessment (TRCA, 2009)
- Community Liaison Committee and Technical Advisory Committee established. Consultation with these groups and other stakeholders are documented in a draft Consultation Report (TRCA, Sept 2010)
- Six new and revised design alternatives developed

In April 2012, Toronto City Council approved a motion to direct Toronto Water to enter into a joint initiative with TRCA to undertake an EA Study at Ashbridge's Bay and further that TRCA be requested to lead the EA in collaboration with Toronto Water, Parks, Forestry and Recreation Division, and Waterfront Toronto, subject to available funding from the City of Toronto. In response to this TRCA, in partnership with the City of Toronto, is recommending their Conservation Ontario Class EA to address the outstanding erosion and sediment issues at Ashbridges Bay in order to develop a solution to resolve the on-going navigation hazards created by sediment deposition at Coatsworth Cut while taking into consideration the various approved EAs and proposed facilities in the area and the objectives of the *Lake Ontario Park Master Plan*. With a number of the recommendations of the City of Toronto's *Wet Weather Flow Management Master Plan* implemented or being planned for future implementation, the issues faced in TRCA's 2002 Class EA are expected to be mitigated. Further, with the relocation of the Coatsworth Cut Boat Clubs no longer being explored, and hence not within the scope of a re-initiated Class EA for Erosion and Sediment Control, the cost of implementation will be greatly reduced and thus not a limiting factor.

Study Area

Ashbridges Bay is situated on the north shore of Lake Ontario in Toronto, Ontario. Within the local study area, Coatsworth Cut serves as an access route to the lake for several boat clubs, and a public boat launch, and offers sheltered water for sailing, kayaking, and canoeing. Lands surrounding the local study area include Woodbine Beach, Ashbridge's Bay Park, Tommy Thompson Park, and Ashbridge's Bay Treatment Plant. The Coatsworth Cut catchment area, as defined by the Coatsworth Cut Class EA ESR (2007), is bounded by Milverton/Springdale Boulevard (North), Leslie Street/Langford Avenue (West), Lake Ontario (South) and Waverly Road/Southwood Drive/Malvern Avenue/Sibley Avenue (East). Coastal processes occurring between Tommy Thompson Park and East Point Park define the regional study area limits.



Project Scope

The EA process will build upon the work completed to date through the TRCA's 2009 EA and consider:

- the City of Toronto's approved facilities (as identified in completed EAs) in the vicinity of the Ashbridges Bay Treatment Plant;
- the creation of coastal and terrestrial habitats;
- improvements in public and ecological connectivity to and along the waterfront as per the objectives of the Lake Ontario Park Management Plan and the Tommy Thompson Park Master Plan.

The main objectives for the planning and design of the remedial works of the Local Study Area, are the following:

- exploring the development of a landform in TRCA's waterlot south of Coatsworth Cut along with within the City of Toronto's waterlot south of the Ashbridge's Bay Wastewater Treatment Plant, to provide for erosion and sediment management while taking into consideration the conceptual designs for the Coatsworth Cut stormwater treatment wetland and combined sewer overflow high-rate treatment facility (approved City of Toronto facilities as identified in completed Class EA studies);
- an assessment of impacts on surrounding water quality, sediment transport, flood levels, fish and wildlife habitat, shoreline protection, recreational opportunities, marine navigation and recreational boating;
- broad public consultation with affected stakeholders; and
- consideration for existing waterfront planning initiatives.

TRCA will ensure that the design alternatives considered through the Class EA process will:

- seek to reduce sedimentation and dredging requirements at the mouth of Coatsworth Cut and the entrance to Ashbridge's Bay Yacht Club;
- take into consideration (not prohibit) opportunities for the future development of a public waterfront linkage between Tommy Thompson Park and Ashbridge's Bay Park (as per the Lake Ontario Park Master Plan);
- consider potential impacts to the new and existing outfall and sea wall gates for Toronto Water's Ashbridge's Bay Wastewater Treatment Plant;
- reflect shoreline and habitat recommendations as outlined in the Toronto Waterfront Aquatic Habitat Restoration Strategy and Terrestrial Natural Heritage Strategy;
- take into consideration the Tommy Thompson Park Master Plan Environmental Assessment and plans for shoreline enhancements in the areas of the Park that abut the Ashbridge's Bay Treatment Plant;
- illustrate TRCA's planned works in relation to the conceptual design of the City of Toronto's approved facilities (Coatsworth Cut stormwater treatment wetland and combined sewer overflow high-rate treatment facility), as identified in completed Class EA studies.

The Class EA study will not include:

- any further explorations pertaining to moving the boat clubs out of Coatsworth Cut. The needs and current uses of these clubs will be part of the socio-economic considerations but their relocation is no longer within the scope of this EA.

Project Process

TRCA, in partnership with the City of Toronto is re-initiating their Conservation Ontario Class EA to address erosion and sedimentation issues within Coatsworth Cut and Ashbridge's Bay Park. The 2013 EA will pick up where the 2009 Class EA left off and identify the design alternatives that still remain valid given the change in project scope.

The Preferred Alternative design will be evaluated and selected with input from a Community Liaison Committee and the general public. The conceptual designs of the approved facilities in the local area and cumulative effects in the local study area on (for example) coastal processes, water quality, water circulation will be considered.

Once the necessary studies have been completed an Environmental Study Report containing detailed documentation of existing conditions, the preferred remedial design and record of public consultation will be published and made available for public comment (30 days).

Pending Completion of the Class EA process it is anticipated that TRCA, in partnership with the City of Toronto, will proceed to detailed design of a landform to accommodate all of the approved EAs in the study area. The final detailed design would be an integrated approach which based on the conceptual designs of the approved EAs in the study area. This design would provide the footprint for the approved design concepts developed in the City of Toronto EAs and the solution to the erosion and sediment control issue (approved alternative design for TRCA's Class EA). Public access will be a consideration during detailed design and construction would be phased subject to the engineering recommendations and budget availability.

For Further Information

Visit www.trca.on.ca for on-going updates on the project status and information on upcoming Public Information Centers.

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