



# Ashbridges Bay Erosion and Sediment Control Class EA: ABTP NLC Presentation June 17, 2013





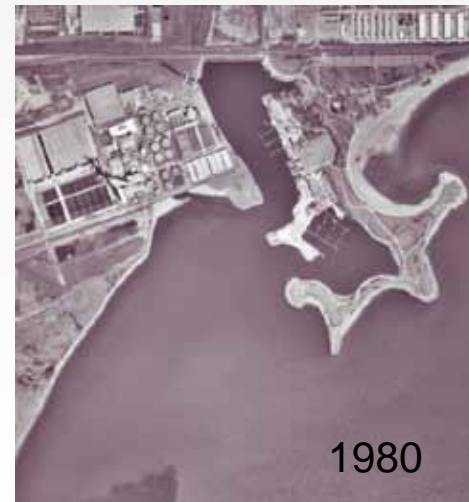
# Background





## Problem Identification

- 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 m<sup>3</sup> of sand per year bypass the Ashbridge's Bay Park headland
- Dredging volumes and costs have increased throughout the 1990s. In 2012 \$210,250 was spent to remove 3,000 cubic meters of sediment. Annual maintenance dredging is needed to ensure safe navigation.





## Timeline and Previous EA Studies

- **2002: TRCA initiated Class EA to address sediment and erosion issues**
- 2004: TRCA suspended Class EA while other planning initiatives in the area were completed
- 2008: Toronto Water completes Coatsworth Cut Class EA and Waterfront Toronto completes 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**
- 2009: Waterfront Toronto and City suspend Class EA – Projected costs exceeded available budget
- 2012: Don River Central Waterfront Class EA completed
- **2013: TRCA and the City of Toronto recommence Class EA**



## Work Undertaken Prior to the Suspension of the 2009 EA

- Baseline Environmental Conditions Report (Sept 2010)
- Interim Coastal Engineering Report (Sept 2010)
- Stage 1 Archaeological Assessment Complete (2009)
- Community Liaison Committee and Technical Advisory Committee established. Consultation with these groups and other stakeholders are documented in a draft Consultation Report (Sept 2010)
- Six alternative remedial designs (with variations) prepared



# 2013 Project Re commencement





## Background

- City Council Approval for Landform Study (Humber and Ashbridges Bay) – April 2012
  - Step 1 for Ashbridges Bay is the completion of a Class EA in partnership with the City of Toronto
- TRCA Approval to enter into joint initiative with City of Toronto to undertake studies – June 2012



# Ashbridges Bay Erosion and Sediment Control Project Process - 2013

We are here



Step 1

- **Conservation Ontario Class EA Study (April 2013 – December 2013)**
  - Complete Class EA study to deal with the erosion and sediment control landform structure – October 2013
  - Report back to City of Toronto Council in November 2013 (prior to filing Notice of Completion); seek approval to proceed with detailed design of landform pending completion of EA process
  - File Environmental Study Report for 30-day public review period – Late 2013/Early 2014

Step 2

- **Detailed Design (2014)**
  - Undertake detailed design of a landform south of the Ashbridges Bay Wastewater Treatment Plant that would utilize materials available from local infrastructure projects where possible to:
    - Create the footprint for the treatment facility and treatment wetland (based on approved concepts in their respective EAs)
    - Provide for erosion and sediment control

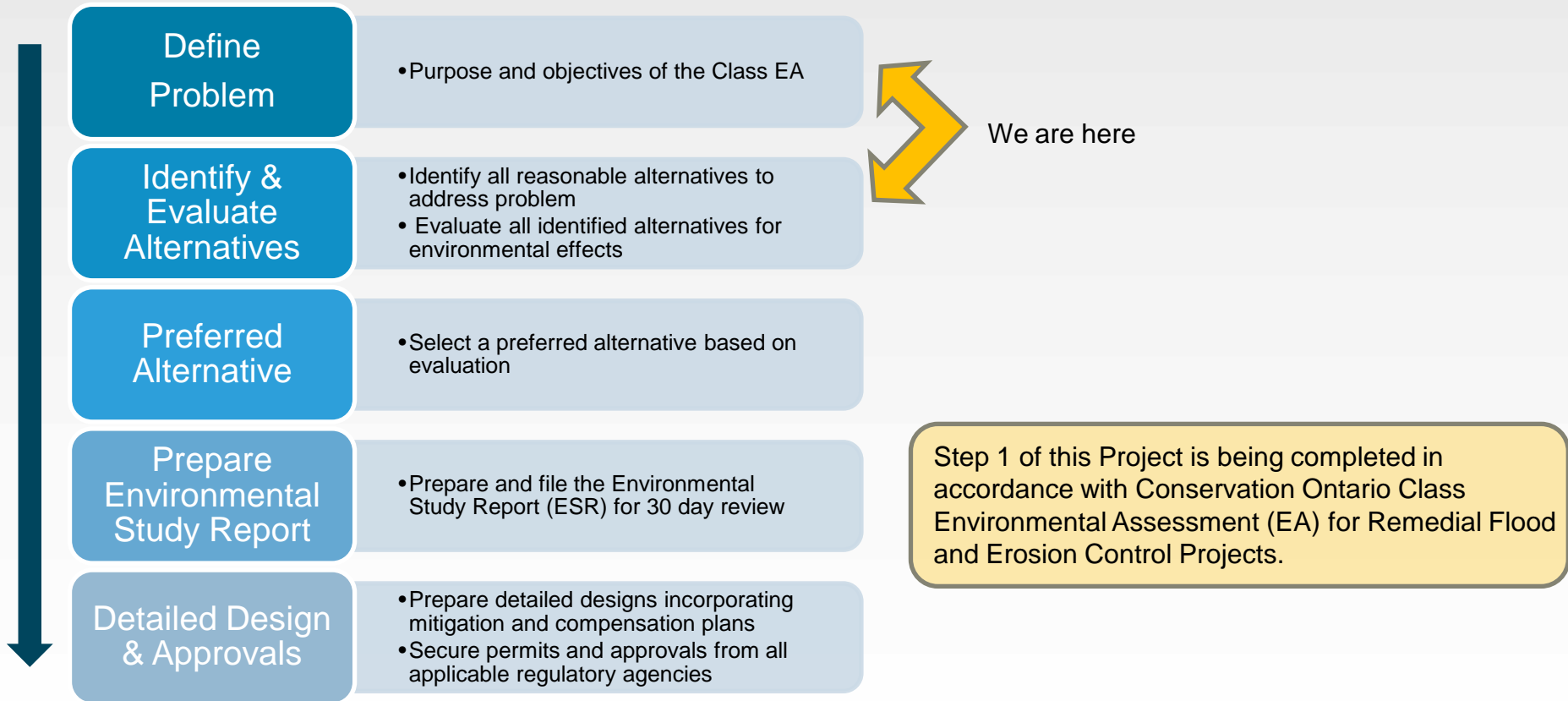
Step 3

- **Construction Strategy (Spring 2014)**
  - Secure permits and prepare construction strategy





# Conservation Ontario Class Environmental Assessment Process





## 2013 Class EA Objective

To identify a preferred solution that will mitigate the risk to navigation due to sediment erosion and deposition at the harbour entrance of Ashbridges Bay and Coatsworth Cut while considering the various approved facilities , planning initiatives and current uses in the study area.





## Class EA Scope

The Environmental Assessment (EA) process will build upon the work completed to date through TRCA's 2002 and 2009 EAs and explore the development of a landform to provide erosion and sediment control while considering:

- the City of Toronto's approved facilities (as identified in completed EAs) in the vicinity of the Ashbridges Bay Wastewater 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.

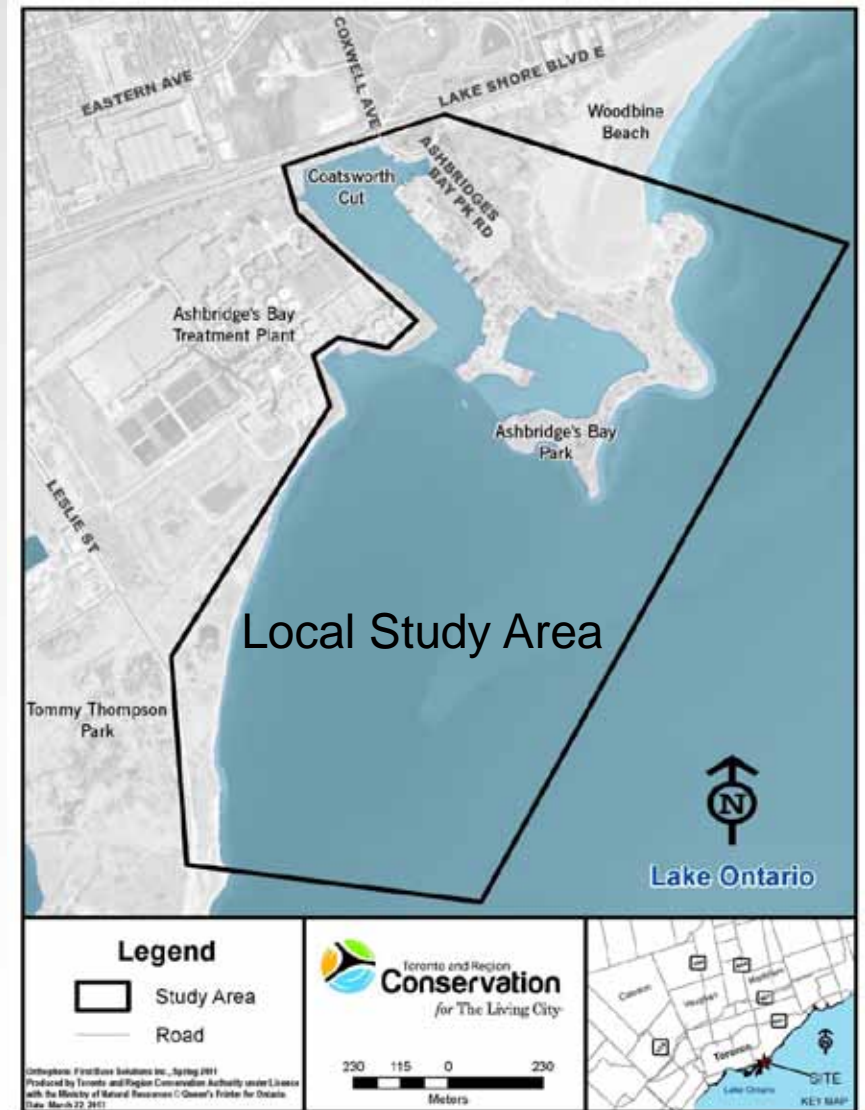
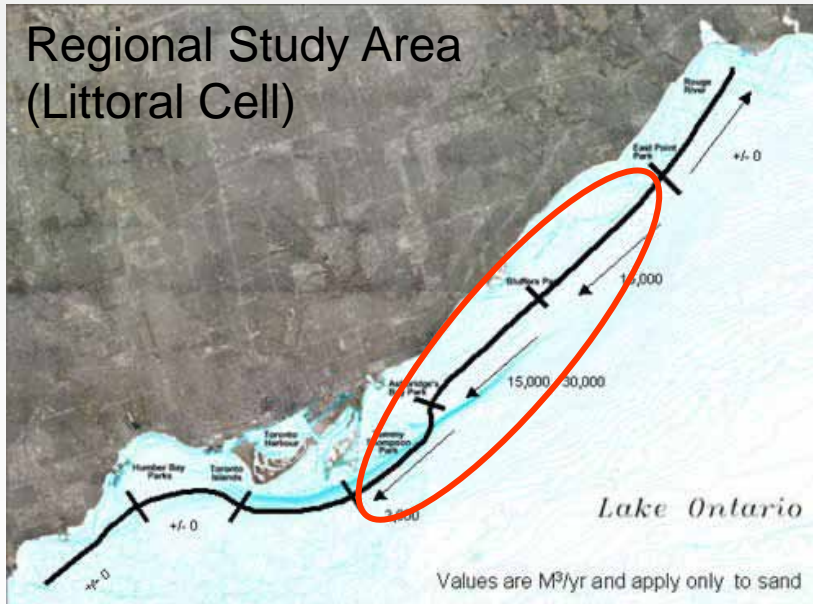
The Class EA study will not include:

- 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.



# 2013 Study Area

## Regional Study Area (Littoral Cell)





# Existing Conditions





## Existing Conditions

The existing conditions of Ashbridges Bay and surrounding environs will provide the information needed to evaluate the alternative options developed through the EA process, and a baseline from which to monitor the types and level of environmental impacts that may result from implementing the Preferred Alternative.

- Physical Environment
- Biological Environment
- Cultural Environment
- Socioeconomic Environment





# Existing Conditions

## Socioeconomic Environment: City of Toronto Environmental Assessments and Approved Projects

### Don River and Central Waterfront Class EA (completed in 2012)

- Recommended a wet weather flow treatment facility that will provide high-rate treatment for combined sewer overflows, captured from 50 combined sewer outfalls that discharge to the Lower Don River and Inner Harbour.

### Coatsworth Cut Stormwater and CSO Outfalls Class EA (completed in 2007)

- Recommended a wetland (approx. 10 hectares) to treat stormwater from outfalls discharging into Coatsworth Cut.

### Ashbridges Bay Treatment Plant Individual EA (approved in 2008)

- Recommended a new outfall for the ABTP that provides greater discharge capacity.





# Sediment Control Alternatives







# Screening of Alternatives

## Preliminary Screening of 2002 and 2009 Alternatives

- In light of the revised project scope all 2002 and 2009 Alternatives that deal with relocation of the boat clubs were not carried forward as a result of the preliminary screening.

Alternative	Alternative Methods	Status
Do Nothing – Continued Maintenance Dredging	Do Nothing	Required
Alternative 1 and 1A	Small or Large Breakwater West of Overflow Gates at Treatment Plant	CARRIED FORWARD in 2013
Alternative 2 and 2A	Small or Large Breakwater East of Overflow at Treatment Plant	CARRIED FORWARD in 2013
Alternative 4 and 4A	New Southern Harbour Entrance (modified headland at Ashbridge's Bay Park), Boat Clubs not Moved	Screened out in 2013 because of Impacts to current land based public use
Alternative 6	Dredging of Woodbine Beach	Screened out in 2009 and 2013 due to severe impact to current public use

## Screening of Remaining 2002 and 2009 Alternatives

To reflect current planning and operation conditions, the remaining Alternatives were screened under the following four (4) conditions:

- Allow for continued operations of Ashbridges Bay Wastewater Treatment Plant (ABTP) overflow gates
- Allow for operation of the existing and future ABTP outfall(s)
- Allow for the implementation of 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)
- Allows for existing land based recreational uses in the area to continue.



## Alternatives Carried Forward as a Result of Screening

- Highlighted area shows where the City of Toronto has approved EA projects.
- All alternatives will be revised during the evaluation stage to reflect the new potential shoreline associated with City of Toronto approved concepts. **These figures are presented for screening purposes only.**



### Alternative 1

- 120m breakwater west of overflow gates
- 100m extension of headland at Ashbridge's Bay Park



### Alternative 1A

- 600m breakwater west of overflow gates
- 100m extension of headland at Ashbridge's Bay Park



## Alternatives Carried Forward as a Result of Screening

- Highlighted area shows where the City of Toronto has approved EA projects.
- All alternatives will be revised during the evaluation stage to reflect the new potential shoreline associated with City of Toronto approved concepts. **These figures are presented for screening purposes only.**



### Alternative 2

- 175 to 200m breakwater east of overflow gates
- 100m extension of headland at Ashbridge's Bay Park



### Alternative 2A

- 600m breakwater east of ABTP overflow gates
- 200m groyne west of overflow gates
- 100m extension of headland at Ashbridge's Bay Park



# Alternative Evaluation

Alternatives will be evaluated against a range of criteria grouped in the following five (5) categories:

- Cultural Heritage Environment
- Feasibility and Costs
- Natural Environment
- Socio-economic Environment
- Technical Considerations





## Draft Evaluation Criteria

Cultural Heritage Criteria	Typical Questions
First Nations/Metis Interests	Does alternative impact any identified First Nations or Metis interests in the area?
Cultural Heritage Impacts	Does alternative potentially impact unknown cultural heritage resources in the area?
Accessibility and Scenic Views Impact	Does alternative impact public access and/or existing scenic views?

Feasibility and Cost Criteria	Typical Questions
Capital and Maintenance Costs	Compare alternatives, relative to one another, for cost to construct and maintain
Construction Phasing Impacts (Land and Water)	Does construction phasing of alternative result in significant impacts to existing users (staging, access, disruption of use, etc.)?
Land/Water Lot Requirements	Does alternative require lands or water lots under ownership or lease by other agencies/stakeholders?
Impacts on Other Projects	Does alternative produce impacts to projects not currently identified under Technical Considerations Criteria?



## Draft Evaluation Criteria

Natural Environment Criteria	Typical Questions
Aquatic Habitat Impacts	Does alternative result in impacts to aquatic habitat? Does alternative result in a Net Loss/Gain of habitat?
Terrestrial Habitat Impacts	Does alternative result in impacts to sensitive terrestrial habitat or migration of terrestrial communities?
Migratory and Breeding Bird Impacts	Does alternative result in impacts to habitat for migratory or breeding bird communities?
Species of Interest Impacts	Does alternative impact species of interest/concern?
Fisheries Impacts	Does alternative impact fish community assemblages?
Unique Habitat/Landform Impacts	Does alternative impact any unique habitats or landforms in the area?
Soils and groundwater Impacts	Does alternative impact soil/groundwater quality, or is it potentially impacted by contaminated soils/groundwater?

\* Impacts can be positive or negative



## Draft Evaluation Criteria

Socio-Economic Environment	Typical Question
Parks – Public Use and Infrastructure Impacts	Does alternative impact public use and infrastructure in the area?
Parks Planning – Ashbridge’s Bay Park, Tommy Thompson Park and the Lake Ontario Park Master Plan	Does alternative impact the goals and objectives of existing planning initiatives in the area?
Boat Club Facility and Operations Impacts	Does alternative impact boat club facilities, programs and operations?

\* Impacts can be positive or negative



## Draft Evaluation Criteria

Technical Considerations	Typical Questions
Public Safety	Does alternative impact public safety during construction and/or day-to-day use following construction?
Water Circulation	Does alternative impact water circulation?
Safe Boat Passage	Does alternative impact the movement and interaction between anticipated types of watercraft; the Coast Guard Auxiliary Station; or Federal navigation safety guidelines?
Shoreline Stability	Does alternative impact wave energy within the area and subsequently shoreline erosion?
Dredging Impacts	Does alternative reduce annual long term dredging requirements?
Climate Change Impacts	Is the alternative able to adjust / function / adapt in the event of changing lake levels due to Climate Change?
Recreational Water Use Impacts	Does alternative provide for sheltered / flatwater conditions required by canoes/kayaks?

\* Impacts can be positive or negative



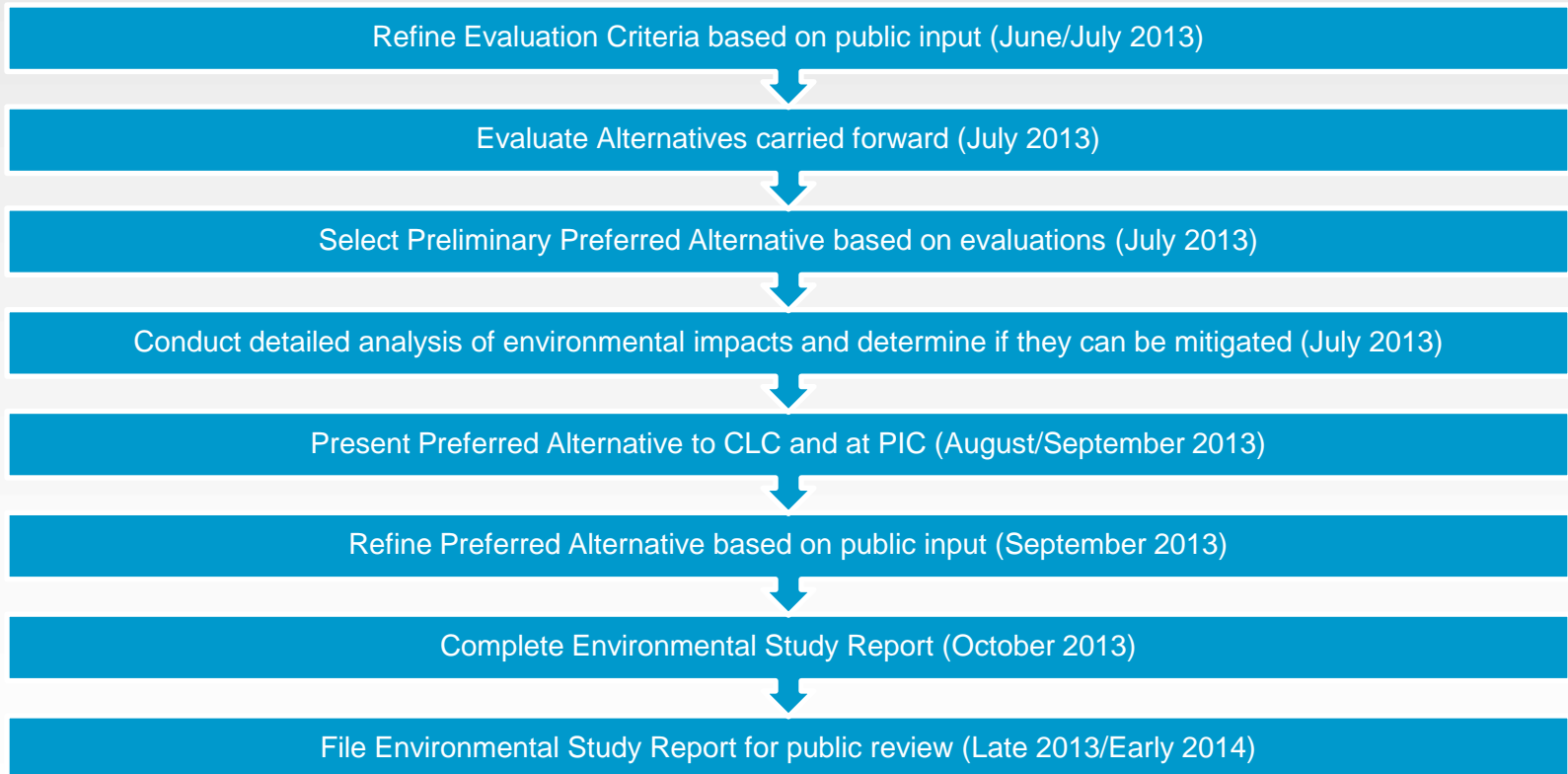


## Public Information Center #1

- June 19, 2013 (this Wednesday) – Fire Academy (895 Eastern Ave, Main Auditorium) from 6:30 – 8:30pm
- Information Booths with Staff available to address questions
- Our goal for this night is to have attendees:
  - Understand the background to the Ashbridges Bay Erosion and Sediment Control Class Environmental Assessment project
  - Give feedback on the Evaluation Criteria for the alternatives aiming to solve the sedimentation issue
- Workbook will be provided for comments to be recorded
- Will receive public comments for two (2) weeks following the meeting (until July 3, 2013)
- Report summarizing comments will be prepared



## Next Steps





## Contact

Visit: [www.trca.on.ca/ashbridgesbayproject\\_ea](http://www.trca.on.ca/ashbridgesbayproject_ea)  
for on-going updates on the project status and information on upcoming Public  
Information Centers

Project contact:  
Lisa Turnbull, Project Manager II  
Toronto and Region Conservation Authority  
[lturnbull@trca.on.ca](mailto:lturnbull@trca.on.ca)  
416-661-6600 x5645



*Longnose Gar at Ashbridge's Bay, 2008*