# Don Mouth Naturalization & Flood Protection Environmental Assessment

Stage 1
Terms of Reference
Public Forum #2
January 10, 2006







### Overview

- I. Reasons for this Project
- II. Description of Stage 1
- III. Key Components of ToR
- IV. What Happens Next





### Reasons for this Project

# This is about realizing a vision to naturalize the mouth of the Don first initiated by Task Force to Bring Back the Don in 1991

- Public interest groundswell integrated this vision into City plans
- Part of a coordinated group of projects to revitalize the waterfront
- TWRC has contracted TRCA to do the EA and Functional Design
- Need for a rigorous technical evaluation







### I. Reasons for this Project

An opportunity to correct the most significant flood risk hazard in TRCA's jurisdiction and to naturalize the Don River mouth







Reasons for this Project

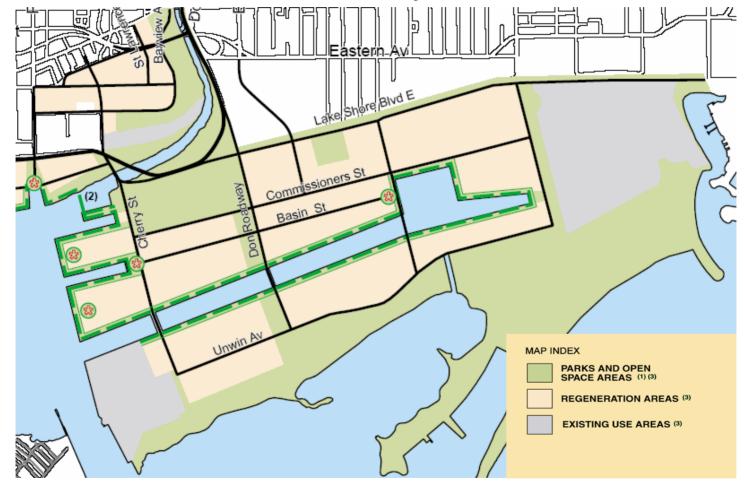


- Central Waterfront Secondary Plan recognizes Don Mouth naturalization and flood protection
- TWRC given ownership of this plan through "Our Toronto Waterfront" Report
- Adopted by City Council in 2003 and supported by TRCA
- Currently before the OMB





### I. Reasons for this Project





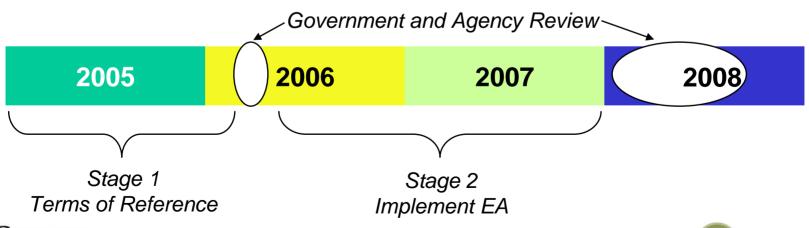


### II. Description of Stage 1

#### An individual Provincial EA is completed in 2 Stages:

- Stage 1 Plan how you're going to do the EA (Terms of Reference)
- Stage 2 Do the EA (following the Terms of Reference approval)

#### A Federal EA is completed concurrently in the 2<sup>nd</sup> Stage.





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# II. Description of Stage 1



# Key components of this Terms of Reference:

- Goal and Objectives
- "Alternatives To"
- Study Areas
- "Alternative Methods" Framework
- Evaluation Framework
- Consultation Framework





# II. Description of Stage 1

#### Consultation activities:

- Initial public meeting
- 3 public working sessions
- 4 meetings with the Community Liaison Committee
- Individual meetings
- Site Walk
- 3 meetings with the Technical Advisory Committee







#### Key Messages from the Public Consultation:

- People are eager to see the Don Mouth Naturalization and Port Lands Flood Protection Project (Don Mouth Project) move forward.
- 2. The Don Mouth Project should have a mix of approaches to naturalization and flood protection that both "leave it to nature" and involve a "human fix".
- 3. Naturalization opportunities should be maximized, with mixed views on the relative importance of flood protection.
- 4. There is a desire to see a delta and/or marsh as a key part of this Project.
- 5. It is critical that the needs of this Project be conveyed to and inform other projects in the area.





#### Key Messages from the Public Consultation:

- 6. This Project should not negatively impact use of the bike trails, Cherry Beach, the sailing clubs, and existing areas of environmental value.
- 7. The Don Mouth Project should create improvements to the trail system, increased appropriate accessibility (including handicapped), and more options for people traveling south through the City to cross into the Port Lands.
- 8. The Project needs to developed in the context of the entire Don River watershed and be adaptable over time.
- 9. Broadly speaking, many people are generally comfortable with the evaluation approach.
- 10. Public involvement in the process is critical.





#### Goal:

To establish and sustain the form, features, and functions of a natural river mouth within the context of a revitalized City environment while providing flood protection up to the Regulatory flood.







#### **Objectives:**

- Naturalize and rehabilitate the mouth of the Don River utilizing an ecosystem based approach
- 2. Provide flood protection for Spill Zones 1 and 2
- 3. Maintain the provision for navigation and existing flood protection through sediment, debris and ice management.
- 4. Integrate existing infrastructure functions that could not be reasonably moved or removed (including road, rails, utilities, trails, and power)
- 5. Encourage additional compatible recreation, cultural heritage opportunities and public/handicap accessibility
- 6. Contribute to the revitalization and sustainability of the waterfront and coordinate with and inform other planning and development efforts and associated certain and foreseeable infrastructure
- 7. Design and implement this project in a manner consistent with TWRC's Sustainability Framework. (e.g. Contaminated Soil/Groundwater Rehabilitation)







### **Alternative Discharge Points Considered**



Legend

Start of River Mouth

Do Nothing Alignment

Discharge Points



#### Reasons to limit the list of "Alternatives To" for Stage 2:

- Want to focus available time and effort on those "Alternatives To" that have the highest potential to meet the project goal and objectives
- Allows this project to effectively inform other planning efforts in a timely manner





#### "Alternatives to" Evaluation Criteria

Objective	Criteria				
Naturalization	Area available for naturalization				
Flood Protection	Ability to remove flood risk				
	Ability to manage debris				
River Operation	Ability to manage sediment				
	Changes to water quality				
Integration With Infrastructure	Amount of infrastructure affected				
Integration With Infrastructure	Port activities affected				
Recreation, Culture and Heritage Opportunities	Changes to existing recreation opportunities				
	Consistency with Central Waterfront Secondary Plan				
Coordinate With Other Planning Efforts	Maintain designated environmentally sensitive areas				
	Area of land which will no longer be developable				
Consistency With TWRC Sustainability Framework	Area of contaminated land to be managed				





# Assumptions made regarding each "Alternative To" to enable evaluation:

- Length, width of river
- Footprint area
- Alignment
- Channel cross section

#### Data mapped:

- ESAs
- Existing uses
- Infrastructure replacement required







### Discharge to the Inner Harbour



#### Legend

Environmentally Sensitive Areas

Alternative Footprint

Discharge Points

#### Infrastructure

Rail Replacement

Road Removal

--- Bridge/Causway Replacement

Road Replacement

Existing Uses

Commissioners Park







# Discharge through the Port Lands to the Ship Channel

3



Environmentally Sensitive Area

Alternative Footprint

Discharge Points

#### Infrastructure

Rail Replacement

Road Removal

---- Bridge/Causway Replacement

Existing Uses

Commissioners Park







# Combination of alternatives 2 and 3



#### Legend

Environmentally Sensitive Area

Alternative Footprint

Discharge Points

#### Infrastructure

Rail Replacement

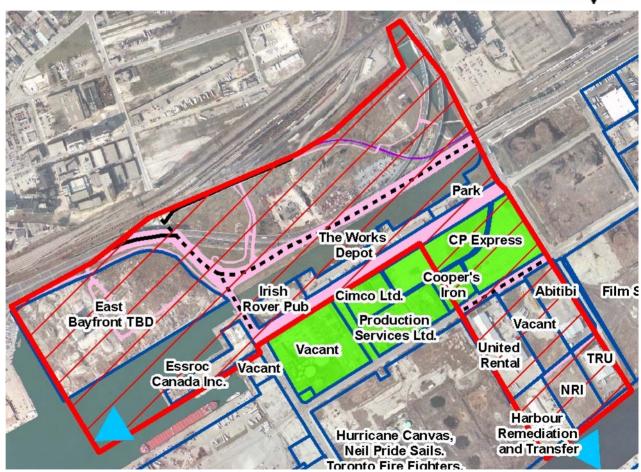
Road Removal

· • • • · Bridge/Causway Replacement

Road Replacement

Existing Uses

Commisioners Park









#### Legend

Environmentally Sensitive Area

Alternative Footprint

Discharge Points

#### Infrastructure

Rail Replacement

Road Removal

Bridge/Causway Replacement

Existing Uses

Commisioners Park

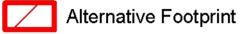


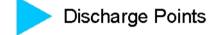




#### Legend

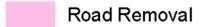






#### Infrastructure

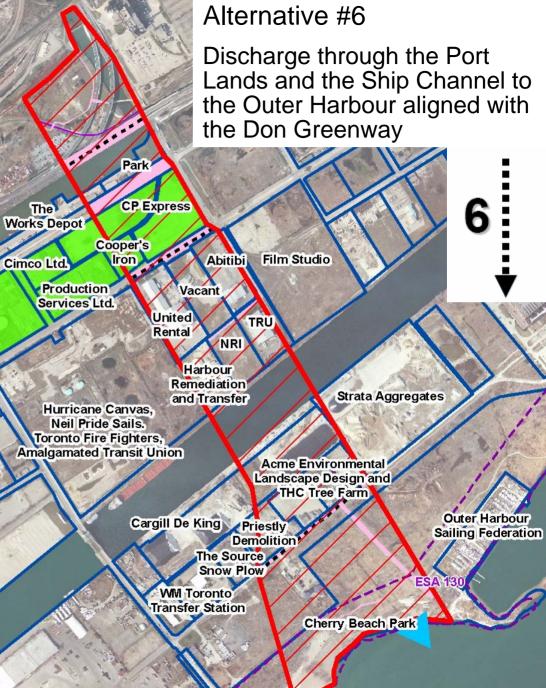
Rail Replacement



---- Bridge/Causway Replacement

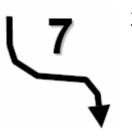
Existing Uses

Commisioners Park

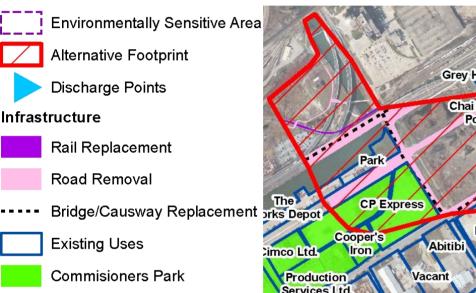


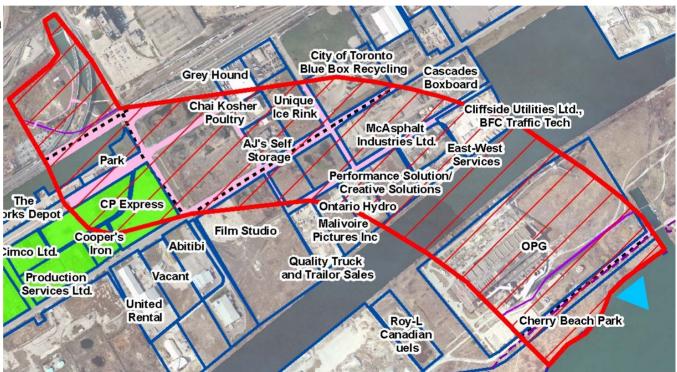


Discharge through the Port Lands and the Ship Channel to the Outer Harbour through the eastern end of the Outer Harbour



#### Legend



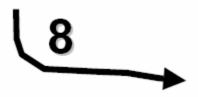








Eastern Port Lands discharge point (Ashbridges Bay area)



#### Legend

#### Infrastructure

Environmentally Sensitive Area



Rail Replacement



**Existing Uses** 



Alternative #8



Road Removal



Commisioners Park



**Discharge Points** 

---- Bridge/Causway Replacement









### III.

# Key Components of ToR 25

"Alternatives To" Evaluation

	"Alternatives To"							
PROJECT OBJECTIVES	<b>1</b>	2/	3	4	5	6	7	8
Naturalization	- N	Medium	Low	High	High	High	High	High
Flood Protection	Law.	Tilgri	High	High	High	High	High	Hell
River Operation	High	High	High	High	High	Low	Low	Low
Integration with Infrastructure	High	Medium	High	Medium	Mealum	Low	Low	Low
Recreation, Culture and Heritage Opportunities	High	High	High	High	Low	Low	Low	Low
Coordinate with Other Planning Efforce	Medium	High	High	High	Low	Low	Low	Low
Consistency with TWRC Sustainability Framework	High	Medium	High	∠ow	Low	Low	Low	Low
OVERALL POTENTIAL TO MEET / ACHIEVE PROJECT OBJECTIVES	Medium	High	High	High	Medium	Low	Low	Low
RECOMMENDED ACTION	CARRIED FORWARD AS EA REQUIREMENT	CARRIED FORWARD IN EA	CARRIED FORWARD IN EA	CARRIED FORWARD IN EA	NOT CONSIDERED IN EA	NOT CONSIDERED IN EA	NOT CONSIDERED IN EA	NOT CONSIDERED IN EA







### **Project Study Area**

#### Legend

- Discharge Points
- Start of River Mouth
- Do Nothing Alignment





#### Alternative Methods – What are they?

#### They describe:

- How the water will get from the river to the discharge point (alignment, number of channels, slope, width, water level, etc.)
- What the river mouth will look like (submergent marsh, upland vegetation, etc.)
- How the river mouth is going to function (flood protection, management of debris and sediment, quality of habitat, recreational uses, etc.)
- Link to adjacent ecosystems





# Don Mouth Naturalization And Port Lands Flood Protection Project

# III. Key Components of ToR

**Creation of Long List of Alternative Methods** 

### Discharge Points Define River Mouth Floodplain Low flow channel Flood protection **Alternatives** Water depths To Based on reference sites (forms found in Nature Define Habitat Based on performance threshold/indicator species

**Long List of Alternative Methods** 







#### **Creation of Short of Alternative Methods**

**Evaluation Step 1:** 

**Screen/Refine Long List** 

Long List of Alternative Methods

Recreation

Short List of Alternative Methods

Infrastructure

- River Operation
  - Sediment
  - Navigation
  - •lce
  - Debris

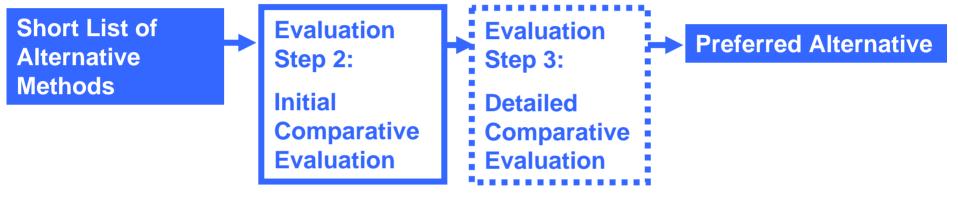




# Don Mouth Naturalization And Port Lands Flood Protection Project

# III. Key Components of ToR

#### Selection of Preferred Alternative



**Preferred Alternative** 

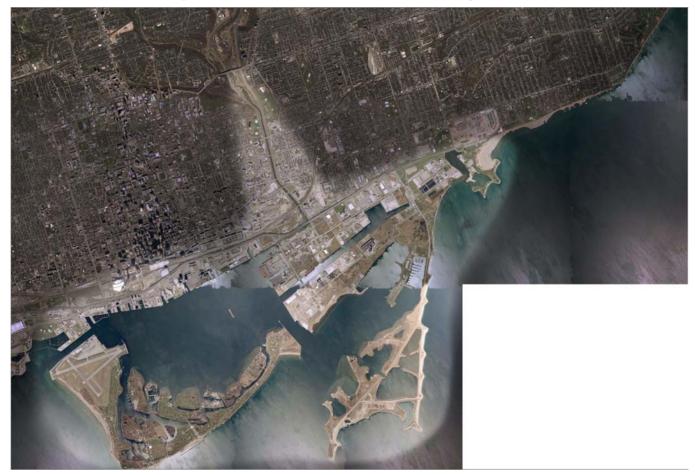
**Functional Design:** 

More detailed development of alternative





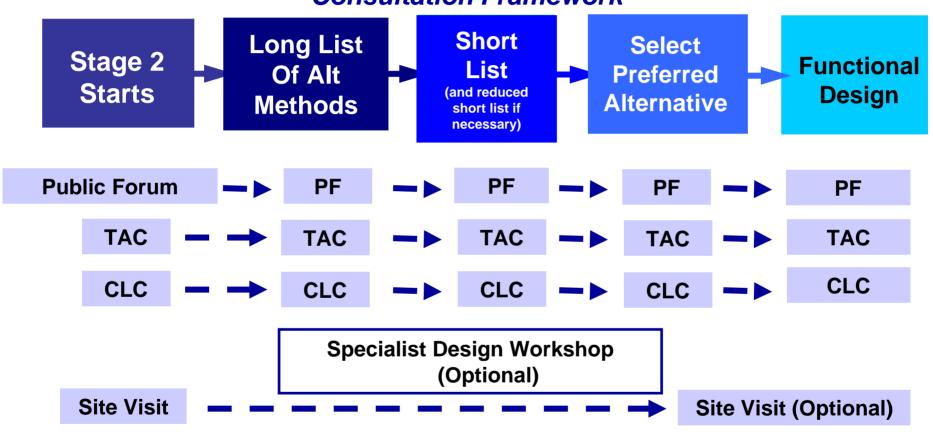
Impact Assessment Study Area







# III. Key Components of ToR Consultation Framework



Ongoing activities – project newsletters, flyers, web updates, newspaper ads, workshops, individual meetings as required





### IV. Next Steps

- Circulate draft Terms of Reference for stakeholder comments following Public Forum #2
- Comment period 2 weeks
- Based on comments prepare final ToR
- Submit ToR including a record of public comment to MOE in March
- Start Stage 2 after MOE approval





### IV. Next Steps

#### **MOE Process for Approval of ToR:**

- Post on EA website
- MOE Public Review Period 5 weeks from posting
- MOE Staff review and recommend:
  - Approval
  - Amendment
  - Mediation
- Ministerial Decision 7 weeks from end of comment period



