

DON GREENWAY WORKSHOP REPORT

NOVEMBER 29, 2007



Report prepared by Suzanne Barrett, Barrett Consulting, in conjunction with Waterfront Toronto and the City of Toronto



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INTRODUCTION

On September 18, 2007, an invited workshop was held to focus on determining the future identity and roles of the Don Greenway. The concept of the Greenway dates back to early proposals to renaturalize the lower Don River. The purpose of the workshop was to ensure that the idea of the Don Greenway would be furthered and reinforced as overall waterfront revitalization progresses. Fifty-three people attended the workshop, which was held at The Historic Distillery District, Archeo Restaurant, Building #45, 55 Mill Street, Toronto. A participants' list is attached as Appendix 1.

The objectives of the workshop were to:

1. Develop consensus on the functions and uses of the Don Greenway.
2. Identify opportunities to resolve any remaining issues.
3. Provide input regarding the functions and uses of the Don Greenway to the:
 - EA team for the Don Mouth Naturalization and Port Lands Flood Protection Project,
 - MVVA team for the Lower Don Lands Framework Plan,
 - Future planning for lands between the Ship Channel and Unwin Avenue, and
 - Lake Ontario Park Plan.

The workbook provided to participants is attached as Appendix 2. It includes:

- Agenda
- Objectives
- Ground Rules
- History of the Greenway Idea
- Don Mouth Naturalization and Port Lands Flood Protection Project/EA
- Lower Don Lands Framework Plan
- Discussion Questions



AGENDA – SEPTEMBER 18, 2007

4:00 pm	Welcome and agenda overview	Suzanne Barrett, Facilitator
4:05 pm	Opening remarks	John Campell, Waterfront Toronto Councillor Paula Fletcher
4:15 pm	Importance of the Don Greenway	David Crombie, Canadian Urban Institute
4:25 pm	History of the Don Greenway idea	John Wilson, Chair, Task Force to Bring Back the Don
4:40 pm	Don Mouth Naturalization and Port Lands Flood Protection EA	Paul Murray, Gartner Lee Steve Willis, MMM Group
4:55 pm	Questions of clarification	
5:00 pm	Initial concepts for the Lower Don Lands framework plan	Michael Van Valkenburgh, MVVA Associates, with Steve Apfelbaum, Applied Ecological Services, Inc
5:30 pm	Questions of clarification	
5:40 pm	Supper break	
6:00 pm	Round table discussions	All
7:00 pm	Plenary reports	Table facilitators
7.40 pm	Summary	Suzanne Barrett
7:55 pm	Concluding remarks and next steps	Christopher Glaisek, Waterfront Toronto
8:00 pm	Adjourn	

PRESENTATIONS

John Campbell welcomed participants on behalf of Waterfront Toronto. He outlined the context for the workshop in relation to a number of current waterfront planning initiatives and environmental assessments. He emphasized Waterfront Toronto's commitment to green infrastructure, and said that he was looking forward to participants' advice about the functions and uses of the Don Greenway.

Councillor Paula Fletcher noted the City's expectations for the Don Greenway, as described in the City's Secondary Plan for the Central Waterfront. She reminded participants that the scope of the Greenway extends from the tip of the Leslie Spit, through Lake Ontario Park and across the Port Lands to connect with the Don River Valley. Councillor Fletcher expressed her interest in defining a greenway that would truly bring nature into the developing Port Lands. She stressed the importance of making sure that the results of this workshop don't sit on a shelf, but are acted upon.

David Crombie talked about early discussions of concepts to re-naturalize the Don River and its mouth in *Regeneration*, the Final Report of the Royal Commission into the Future of Toronto's Waterfront, 2002. He noted that greenways are now an important part of waterfront revitalization efforts all over the world, citing some local examples including Hamilton and Oshawa. Mr Crombie noted three key values of greenways. First, they represent a transformative experience that connects ecology, economy and community. Second, they help to build good cities. And third, they can provide forms, functions and uses for everyone, in ways that may change for each successive generation.

John Wilson outlined the history of the Don Greenway idea (see Appendix 3), starting with a report to Council called *Bringing Back the Don* in 1991.

Paul Murray described the environmental assessment for the Don Mouth Naturalization and Port Lands Flood Protection (see Appendix 4).

Michael Van Valkenburgh and **Steve Apfelbaum** presented their initial concepts for the Lower Don Lands (see Appendix 5).

QUESTIONS

- Q: Dalton Shipway asked if the next stage is to assemble lands for the greenway south of the ship channel?
- A: Christopher Glasiek replied that Waterfront Toronto will work with TEDCO to assemble these lands.
- Q: John Wilson asked how the MVVA design addresses flood protection on the north side of the ship channel?

- A: Ken Greenberg replied that the team includes considerable expertise to address flood protection in an integrated way. He noted David Crombie's reference to taking the notion of the greenway and building it into green neighbourhoods. They are not just looking at storm water conveyance but at small pedestrian streets and neighbourhoods on the ship channel. Along the edge there will be very public spaces, just as there are in West 8's design for the Central Waterfront. As part of flood conveyance there will be continuity of hydrology in a very compelling and seamless system. The focus is on the Don River and the way it comes to Lake Ontario and the harbour.
- Q: Bill Snodgrass asked about the historic trace of the Don River geography.
- A: Steve Apfelbaum replied that we're not yet trying to design the greenway, but as we consider appropriate uses and functions we can also think about connectivity. We haven't defined the width yet, but we know that resident and breeding birds need 500 metres or wider. For migration, we don't need such width over a long distance. Migratory birds need to see east-west oriented greenspace along the shoreline. Then they can take advantage of smaller pieces of green to move from north to south in fall and south to north in spring. At night, they look for areas without lights and during the day they need to see green features. So our concept is to provide more orientation for spring and fall migratory birds.
- Q: Councillor Fletcher inquired whether sports fields would disrupt migration of Monarch Butterflies?
- A: Gord MacPherson replied that experience shows that sports fields are not an issue for butterflies on the waterfront, citing the example of East Point in Scarborough, where butterflies make considerable use of the habitat areas surrounding the sports fields.
- Michael Van Valkenburgh added that the team's decisions about landscape configuration will include elements to attract and improve habitat for butterflies and birds.
- Steve Apfelbaum noted that he could show us many parks in Chicago that have important staging areas for monarch butterflies.
- Q: Councillor Fletcher asked for some commentary on the wilderness opportunities in the Port Lands and Lake Ontario Park, noting that she hasn't heard that theme, but the community has said it's very important.
- A: Ken Greenberg replied that the wilderness idea was an inspiration to the organic design proposed by the team. Like the ravines, which provide a natural edge and counterpart to our entire city. The presence of nature is an extremely large element, and is strongly articulated with people like Steve Apfelbaum on the team.

ROUND TABLE DISCUSSIONS

There were seven round tables, each with 5-8 participants. They were facilitated by Nicole Swerhun, Anneliese Grieve, Tanya Bevington, Elaine Baxter-Trahair, Michael Van Valkenburgh, Ken Greenberg and Gwen McIntosh. Participants were asked to address the following questions:

1. What functions should the Greenway perform, in addition to flood conveyance?
2. How important are these functions?
3. Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?
4. What other advice do you have regarding the Greenway?
5. Do you know of good examples of greenways in other places? If so, where?

Table reports and comment sheets filled in by individual participants are included in Appendices 6 and 7 respectively.

PLENARY REPORTS

Questions 1 and 2: What functions should the Greenway perform, in addition to flood conveyance? How important are these functions?

Uses by Wildlife

Participants agreed that the Don Greenway is fundamentally all about nature. It should serve as a safe and supportive corridor and habitat for various species (small mammals, insects, birds, fish, turtles, snakes and frogs) including rare ones.

Specific requirements include:

- allow for safe passage of migratory species (bird flight, stepping stone for terrestrial wildlife),
- provide habitats for resident and breeding wildlife,
- ensure that wildlife are the prime focus,
- maximize diversity,
- provide connected tree canopy cover,
- strike a suitable balance between aquatic and terrestrial habitats to sustain wildlife, and
- ensure that the green spaces are part of a web and not an isolated entity.

Uses by People

Participants agreed that the Greenway should be a place to observe, experience and explore nature - a "wild in the city" respite. Some emphasized that access to natural

areas is important to reduce vandalism and encourage environmental stewardship. However, human use should be a secondary focus to wildlife and nature.

Many participants thought that the Greenway should be for the local community, with connections to the residential areas. It could also be a regional facility for passive recreation. Manicured space should be avoided or kept to a minimum. Services and amenities should be close by but not in the Greenway itself.

Some people advocated that trails should be generally on the periphery of the Greenway, leaving the middle wild. It was also suggested that pedestrian trails should be incorporated through a variety of wildlife habitats to increase opportunities for people to interact with nature.

Area of disagreement: Participants recognized that there can be tension between nature and human activities. For example, most table groups discussed the role of active recreation and sports fields in the Greenway. Many participants were adamant that they should not be included. Others felt that it was important not to exclude one use for another. It was suggested that if any sports fields are included, criteria should be developed, such as: provide for local (not regional) use, locate on the periphery of the Greenway, use real (not artificial) turf and prohibit lighting.

Other suggestions for human uses of the Greenway included:

- human uses should be related to the Greenway's wildlife habitat values (being in a natural setting, watching wildlife, etc),
- focus on passive uses and walking trails,
- separate bikes from pedestrians and put bike trails on the edges,
- make it a place to take kids,
- provide a series of habitats and places with different experiences,
- allow for organic and passive formation of functional trails,
- create destination nodes for people (benches, viewpoints and such spaces), but not formal picnic areas,
- include educational opportunities,
- provide shade,
- do not provide large swimming facilities,
- encourage fishing,
- maximize public safety (eg limited or no access after dark),
- encourage year-round uses, and
- ensure ways to accommodate large numbers of people without disturbing wildlife or ecological functions.

Environmental Functions

Participants emphasized the importance of connecting the Don River and the Lake, both for the river and the people. The design of the Greenway must be resilient to change and sustainable. It should function as a storm water retention and control feature and act as a floodway. The Greenway should be a place for plant communities and nature in general to thrive.

One group suggested that the design process could use a formula that focuses on the qualities and functions of the natural places. If you start with the integrity of each natural place you can design it so that people fit in.

It was suggested that there should be a marshy area towards the centre to reflect a ravine-style landscape and overall function, with human activity situated mainly at the edges to avoid damage to the ecosystems.

Other recommendations for environmental functions included:

- adjacent development to be completely sustainable, including an off-grid, renewable energy system for neighbourhoods to mitigate climate change,
- manage stormwater on site,
- Greenway to be a natural setting with minimal or no maintenance or energy use,
- strict environmental guidelines protected by legislature,
- wildest places in the middle with a gradation to more accessible places at the edges,
- ensure a dark place with minimal/no light pollution to provide a suitable habitat for insects, contributing to the food chain,
- limit dust and noise,
- create large masses of functional habitats,
- provide appropriate buffers between people and wildlife,
- keep out cats and dogs,
- minimize Canada geese by avoiding open expanses of mown grass,
- continue uses that are available in the Don River Valley,
- find ways to incorporate stormwater from sports facilities into the natural environment (eg bio-filtering wetland), and
- consider vertical landscape elements to serve as a buffer between human users and wildlife inhabitants.

Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What should it look like/feel like?

There was general agreement that the Greenway should be a place of serenity and beauty. It should be a great piece of protected wilderness in the city where you can experience contact with water, skyline views and elements of surprise. It should enable people to close their eyes and imagine native people here before Europeans arrived. A place that is quiet, peaceful, spiritual and magical. An un-winding place.

Question 4: What other advice do you have regarding the Greenway?

Participants suggested that the Greenway should be a historical tribute that respects the origins of the Don River Mouth and Ashbridge's Bay Marsh. It should be a vast expansive delta (but how much should remain in the flood plain)?

The Greenway should be *in* the city, not *of* the city.

Consider stewardship opportunities for Portlands businesses.

Finally, the Greenway and the adjacent developments should be a reflection of the new reality of how we must live sustainably in our world and in the natural landscape.

Question 5: Do you know of good examples of greenways in other places? If so, where?

Some participants suggested examples of parks and greenways:

- Highland Creek Valley
- Music Garden, Toronto Harbourfront
- Research Triangle Park, North Carolina
- 7th hole of Don Valley Golf Course
- Below Science Centre
- Ravine at Bayview south of York Mills
- Todmorden Mills
- Boston Common
- Central Park, New York
- Stanley Park, Vancouver
- Kortright Centre Marshland
- Spadina Quay Wetland

NEXT STEPS

Chris Glasiak concluded the workshop by thanking everyone for participating and said that it had been an impressive and valuable discussion. Waterfront Toronto will circulate a draft workshop report to participants for comments and then post a final report on the website. The workshop results will be incorporated into the work being undertaken by the MVVA Team for the Lower Don Lands and by Field Operation for Lake Ontario Park.

APPENDIX 1. List of participants

Table 1

Nicole Swerhun
John Wilson
Chris Glaisek
Dalton Shipway
Gord MacPherson
Terry Fahey
Liz Silver

Table 2

Annaliese Grieve
Clay McFayden
Cindy Wilkey
Charles Waldheim
Ken Dion
Carolyn Woodland
Tim Dekker
Brenda Webster

Table 3

Tanya Bevington
Jeff Evenson
Sharon Howarth
Adele Freeman
Garth Armour

Table 4

Elaine Baxter-Trahair
Dennis Findlay
Joanna Kidd
John Piper
Gulliver Shepard

Table 5

Michael Van Valkenburgh
Julie Beddoes
Janice Palmer
Councillor Fletcher
Leslie Coates
David White
Steve Willis

Table 6

Ken Greenberg
Karen Buck
Don Haley
Phyllis Berck
Steve Apfelbaum
Paul Murray

Table 7

Gwen McIntosh
Tom Davidson
David Pratt
David Jackson
Bill Snodgrass
John Whish

Facilitators

Suzanne Barrett
Amanda Flude
Andrea Kelemen

Did not stay for table discussions

Brian Denney
David Crombie
Carlo Bonanni
Margaret McRae
John Campbell
Antonio Medeiros

APPENDIX 2. Participants' Workbook



DON GREENWAY WORKSHOP

PARTICIPANTS' WORKBOOK

SEPTEMBER 18, 2007

**The Historic Distillery District (Boiler House Complex)
55 Mill Street, Toronto
Archeo Restaurant, Building #45**



WHAT'S INSIDE...

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WORKSHOP OBJECTIVES

The objectives of this workshop are to:

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2. Identify opportunities to resolve any remaining issues.
3. Provide input regarding the functions and uses of the Don Greenway to the:
 - EA team for the Don Mouth Naturalization and Port Lands Flood Protection Project,
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 - Lake Ontario Park Plan.

PARTICIPANTS' GROUND RULES

- ~ All participants should treat each other as equals, regardless of “rank” or position in your organizations.
- ~ Accept the concerns and goals of others. You don’t have to agree with each other, but respect people’s rights to have different opinions.
- ~ Everyone should have an opportunity to be heard.
- ~ Try to consider the best interests of the total system, not just a specific interest.
- ~ All ideas are relevant and all questions are valid. If you don’t understand something, ask.
- ~ Allow the facilitator to guide the process but stay in charge of the content.
- ~ Seek consensus, but keep track of differences of opinion for future work.

HISTORY OF THE DON GREENWAY IDEA

Interim Report of the Royal Commission of the Future of the Toronto Waterfront (RCFTW), 1989

The RCFTW was established in 1988 as a federal inquiry, headed by the Honourable David Crombie, with a mandate to make recommendations on the future of the Toronto waterfront. This first interim report identifies the need for a general greenbelt along the entire waterfront for wildlife habitat and migration, recreation, aesthetics and improvement of microclimatic conditions. The Leslie Street Spit is recognized as a potential urban wilderness park. A call is made to physically link the waterfront to the river valley systems and for a continuous trail system within natural areas.

Watershed: Interim Report of the Royal Commission of the Future of the Toronto Waterfront, 1990

In this second interim report, the RCFTW recommends a Don Valley Wildlife Corridor from the Keating Channel to the Ship Channel along the approximate location of Don Roadway, with another greenspace slightly southeast running from the Ship Channel to a park on the north shore of the harbour (pg 139). The Corridor is described as running from the Mouth of the Don to Unwin Street. The greenway was to be a City park serving as a wildlife corridor and a direct link from the Don Valley to greenspace that was adjacent to the Leslie Street Spit.

Pathways: Towards an Ecosystem Approach (Report on Phases I and II of Environmental Audit of Toronto's East Bayfront and Port Industrial Area, by Joanna Kidd and Suzanne Barrett for the Royal Commission of the Future of the Toronto Waterfront), 1991

This report recommends that the City of Toronto should create wildlife corridors linking the north shore of the Outer Harbour to the Don Valley, Leslie Street Spit and Ahsbridge's Bay Park. These should be wide enough to provide buffers between wildlife and adjacent human land uses. Native plants should be used as part of a naturalization process. Connections for wildlife movement through the Don Valley should be developed in association with the Task Force to Bring Back the Don.

Bringing Back the Don: Task Force to Bring Back the Don, 1991

The Task Force to Bring Back the Don proposed a delta/marsh south of the Keating Channel's location, extending to the Ship Channel. The delta's role was natural river mouth function, but boardwalks and other pathways are included to increase education and recreational opportunities. The marsh is seen as aquatic habitat and a setting for low density "green industry".

Regeneration: Toronto's Waterfront and the Sustainable City (Final Report of RCFTW), 1992

A special feature of the report is an article on Healing an Urban Watershed: the Story of the Don, written by Michael Hough. Based in part on Bringing Back the Don, this article describes the roles of the greenway as being to provide buffers between wildlife and human uses, and link parks and green spaces. It shows a greenway on either side of an extended Don Roadway (with bridge across Ship Channel), within the context of a number of green areas within a delta. It describes a wildlife corridor continuing south from a new Don Mouth to natural areas along the north shore of the Outer Harbour with links to Tommy Thompson Park.

Forty Steps to a New Don, Don Watershed Task Force (chaired by Mark Wilson), Metropolitan Toronto and Region Conservation Authority, 1994

This blueprint for regeneration across the Don Watershed recommends a wildlife corridor, improved linkages for human access, plus roles in flood control, remediation of contaminated soil, re-establishment of historical form and function of mouth of the river.

Metropolitan Waterfront Plan, 1994

Generally, the Waterfront Green Space System was seen to restore ecosystem integrity, improve physical connections to other green spaces and provide recreation opportunities. Map (schedule I) shows a greenway running from the Don River Mouth to about Unwin Ave, (northern boundary of the proposed "THC Waterfront Park") in the approximate area of Don Roadway.

The Official Plan of the Municipality of Metropolitan Toronto: The Living Metropolis, 1994

Green space in general was to be planned and managed for protecting and rehabilitating the integrity of the natural features and ecological functions, improving physical connections to other green spaces and recreation. Map 5 shows the greenway running along the approximate location of Don Roadway from the mouth of the Don River to Unwin, connecting with parkland on the north shore of the Outer Harbour.

Greening the Toronto Port Lands, by Michael Hough, Beth Benson and Jeff Evenson for the Waterfront Regeneration Trust, 1997

This book establishes a framework for green infrastructure: wide corridors, narrow corridors, major parks, minor parks, water's edge promenades and development parcel landscapes. The Don Greenway is classified as a wide corridor, providing stormwater management, wildlife movement, wildlife habitat, air quality improvement, noise

abatement, microclimate enhancement, soil and groundwater management, sense of place and recreational opportunities. Six wide corridors are recommended, including one along the Don Roadway continuing south of the Ship Channel to Unwin and the North Shore Parklands.

A Living Place, by Joanna Kidd for the Living Bay Study Group, 1998

This report describes a plan to protect and enhance fish and wildlife habitat within Toronto Bay. Besides providing for terrestrial habitat and wildlife movement, corridors are seen to improve air quality and aesthetics and provide locations for recreation. A green corridor is shown on each side of Don Roadway, with a wider corridor extending from Commissioners Street to the Ship Channel and continuing to Unwin.

Our Toronto Waterfront! The Wave of the Future, City of Toronto, 1999

This vision document covers the waterfront from Etobicoke to Rouge Park. A green linkage is shown along approximately the location of Cherry Street from north of Lakeshore to the Ship Channel, and then south to the Harbour. General roles of greening in the Don River area are given: restoration of the mouth of the Don, re-creating marsh land, flood control and the resulting removal of constraints on development in the Port Lands and East Bayfront.

Design Concept: Don Roadway Open Space Corridor. TEDCO in partnership with Task Force to Bring Back the Don, 1999

This report provides an implementation scheme for the Don Roadway portion of the more general green infrastructure vision of *Greening the Toronto Port Lands*. The greenway is seen as a wildlife corridor to connect existing habitat and provide new habitat for foraging and migrating wildlife, stormwater management, improved microclimatic conditions, recreation and education opportunities, and aesthetic benefits. The report notes that TEDCO's concept plan for the redevelopment of the Port area has shown a green corridor along the east side of Don Roadway since the mid 1980's. It is shown as extending south from Lakeshore along both sides of Don Roadway, then continuing along the east side of the road from south of Villiers Street, ending at the Ship Channel.

Unlocking Toronto's Port Lands, City of Toronto, 1999

This report provides a plan for the Port Lands to revitalize vacant land, attract new business, improve the appearance and environmental quality of the area, solve flooding issues, and improve access and connections to adjacent areas. The greenway is shown as a major north-south corridor for stormwater treatment, a pedestrian trail, wildlife habitat linking the Don mouth to "North Shore Park" and to Tommy Thomson Park. Specific elements to be incorporated into this greenway: modifications of dockwalls of Ship Channel to permit wildlife access, wildlife culverts under all east-west road crossings of the greenway, viewing areas for the public, and stormwater ponds. The greenway is shown as being on the east side of Don Roadway, from the Gardiner to the Ship Channel and continuing south to Unwin, where parkland would continue to the harbour.

Unlocking Toronto's Port Lands: Consultation Results, City of Toronto, 2000

This report by Lura Consulting documents public consultation on *Unlocking Toronto's Port Lands* (1999). Working groups were formed to comment on and refine the vision presented in *Unlocking*. 350 people and 75 companies were involved in the consultation process. The community vision includes a major swath of green space connecting the south end of the Don Valley via the north shore area to the Leslie Street Spit, providing wildlife and bird habitat and travel corridors. The industrial/business forum vision shows a greenway to the east of Don Roadway, from Lakeshore to Unwin.

Toronto Olympic Bid Environmental Assessment Report, Marshall Macklin Monaghan (lead) for Toronto 2008 Olympic Bid Corporation, 2001

General roles for green infrastructure are listed: provide multi-functional framework for development (attractive and functionally useful setting); protect and restore health and biodiversity of land, air and water; provide linkages; increase natural habitats and wildlife movement; enhance recreational opportunities (e.g. trails); improve aesthetics; improve public access; improve air quality; reduce noise; enhance microclimate; and manage stormwater, soils and groundwater. Figure 6-2 shows a greenway running from parkland southeast of the Don to the Ship Channel, to the west of an extended Don Roadway.

Making Waves, Central Waterfront Part II Plan, City of Toronto, 2001

This report, prepared by Urban Strategies, shows the greenway connecting the Don Valley, Tommy Thomson Park and Lake Ontario, specifically from the mouth of the Don, meandering along the west of Don Roadway to the Ship Channel, then straight to parkland at the harbour. The greenway is described: "A new green, natural heritage corridor will be created in the centre of the Port Lands, functioning as an important open space connection linking the Don Valley, Tommy Thompson Park and Lake Ontario. The corridor will be a key component of the Centre for Creativity and Innovation offering a unique amenity attractive to knowledge-based industries of all types. In addition to providing local open space and subject to its Natural Heritage designation in the Official Plan, the corridor will be

able to fulfill a variety of functions, including neighbourhood recreation, compatible community uses, multi-use pathways, a wildlife corridor and habitat, and a receptor for stormwater from adjacent communities”.

Our Waterfront: Gateway to a New Canada (The Development Plan and Business Strategy for the Revitalization of the Toronto Waterfront) by Toronto Waterfront Revitalization Corporation, 2002

A discontinuous series of green and blue corridors is shown running north and south of the Ship Channel. The largest of these extends from the reconfigured Don River Mouth along the Don Roadway, across the Ship Channel to Lake Ontario Park (LOP). Linkage is described between LOP and Tommy Thompson Park and the naturalized Don Mouth is identified as a priority.

Central Waterfront Public Space Framework, by Urban Strategies for Toronto Waterfront Revitalization Corporation, 2003

A green connection is shown between the Don Mouth and Lake Ontario Park for wildlife habitat and movement, active and passive recreation and trails, as well as stormwater functions. Many uses and ecosystems are envisioned as co-existing. The greenway is shown extending from Commissioners Park (south of the Don River mouth near the Keating Channel) west of the Don Roadway, south to the Ship Channel and then continuing south to LOP.

Toronto Official Plan, 2006

Refers to Toronto Waterfront Secondary Plan for specifics. The Natural Areas Policy

4.3.3 states: “The areas shown as *Natural Areas* on Maps 13-23 will be maintained primarily in a natural state, while allowing for:

- a) compatible recreational, cultural and educational uses and facilities that minimize adverse impacts on natural features and function; and
- b) conservation projects, public transit, public works and utilities for which no reasonable alternatives are available, and that are designed to have only minimal adverse impacts on natural features and functions.”

Port Lands Implementation Strategy, Toronto Waterfront Revitalization Corporation, 2006

This report implements the policies of the Central Waterfront Secondary Plan at a finer scale. There was a Community Advisory Committee as well as public consultation meetings and a landowners/tenants meeting. Roles of the greenway: hydraulic function, stormwater, terrestrial corridor, may include common open space features such as sports fields, gardens and informal park spaces. While the intention is to create a green link, roadways, walkways or similar uses may also be located within the greenway provided that these features do not pose an impediment to the flow characteristics of a flooding spillway function. The greenway is shown west of Don Greenway from Commissioners Park (south shore of Keating Channel) to Ship Channel continuing south of Ship Channel to Lake Ontario Park. The Martin Goodman Trail is shown as crossing the Ship Channel but no bridge is shown.

DON MOUTH NATURALIZATION AND PORT LANDS FLOOD PROTECTION PROJECT (DMNP) AND ENVIRONMENTAL ASSESSMENT

Objectives

The Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP) seeks to design a river mouth that works. The Project will remove the risk of flooding of 230 hectares of urban land to the east and south of the river and transform the existing mouth of the Don River into a healthier, sustainable, more natural river outlet to the lake. The Project must also respect both the future plans for urbanization and the needs and interests of the many other activities in the area. This is particularly challenging for the mouth of the Don since it is located in an area with a rich cultural heritage that is also densely occupied by the roads, buildings, bridges, trails, and other infrastructure that is essential to making our city work.

Process and Timelines

TRCA and their consultant team, led by Gartner Lee and SENES, are undertaking a coordinated Environmental Assessment process to determine an alternative that best meets the objectives while at the same time addressing both provincial (Individual Environmental Assessment) and federal (Environmental Screening) requirements.

The first stage of the provincial EA process requires the establishment of an EA Terms of Reference (ToR) that outlines how the EA will be conducted. The Project received approval of the EA ToR from the Minister of Environment in August 2006.

In fall 2006, TRCA and the consultant team began the further development and evaluation of alternatives based on the guidelines established in the approved EA Terms of Reference. TRCA and the consultant team have also been working closely with Waterfront Toronto throughout the International Design Competition Process for the Lower Don Lands, recognizing that elements of the design submitted by the winning team would become an additional alternative to be considered through the EA process. Since the conclusion of the design competition in May 2007, TRCA and their consulting team, Waterfront Toronto, the City of Toronto, and the winning design team (led by Michael Van Valkenburgh Associates - MVVA) have been working together to incorporate the new alternative into the EA process. This Don Greenway Workshop is but one aspect of the integration and information gathering process that is required to build the MVVA design into the DMNP EA process.

Once a preferred alternative is selected, likely early- to mid- 2008, TRCA and Gartner Lee will begin the development of an Environmental Screening (to meet federal regulations) based on the preferred alternative.

As the EA continues to progress, the public will have a number of opportunities to review and provide input into the development of the preferred alternative. We anticipate submission of the documentation for both the federal and provincial EAs for public and government approval in late 2008. Construction of Phase I of the project may commence as early as 2010.

Alternatives

The study area identified in the approved EA ToR is outlined in the following map.



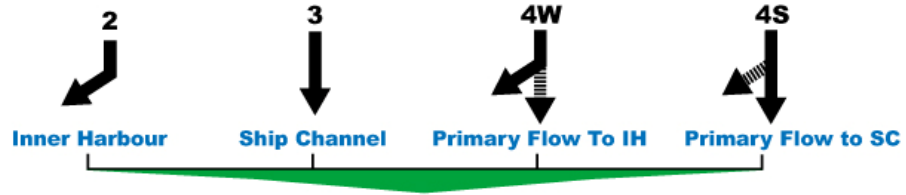
Within this study area, four alternatives (discharge points) were identified in the EA ToR:



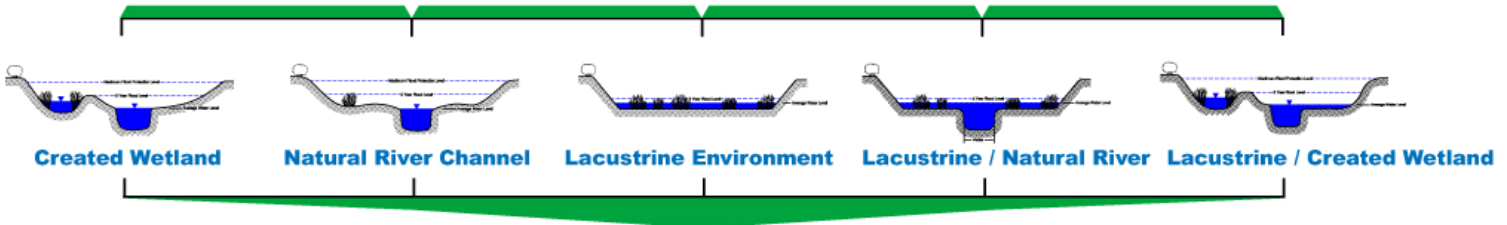
The ToR defines Alternative 4 (W and S) as having one primary channel (assumed 300 m wide) and one regional overflow channel (200 - 300 m wide). Alternatives 3 and 4S envisioned the Don Greenway as a river mouth, providing both greenway and naturalized river mouth functions. Alternative 4W aligns the greenway with a proposed overflow spillway function.

Based on these original discharge points, a long list of alternatives was developed by considering a range of channel cross-sections and habitat types for each of the original four alternatives. These channel cross-section and habitat types are typical of streams found naturally along the north shore of Lake Ontario. The diagram below shows how the long list of alternatives was developed by considering a multitude of combinations.

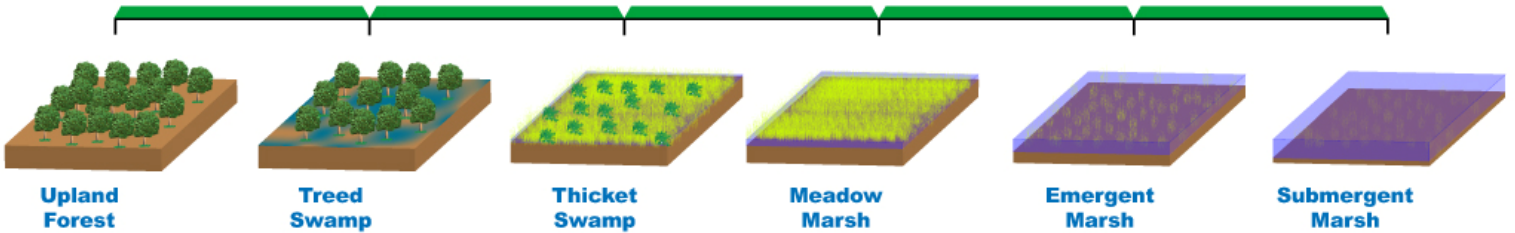
Discharge Points



Cross-Sections



Habitat (Vegetation Communities)

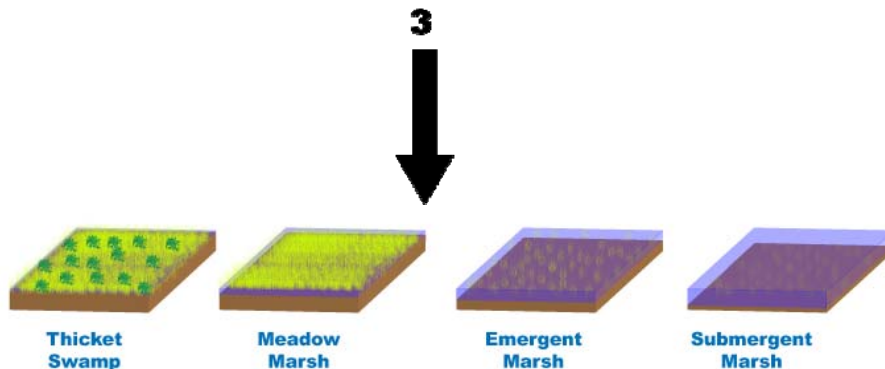


An initial screening of this long list of alternatives was conducted in fall 2006 on the basis of whether a particular combination of discharge point, channel cross-section and habitat type would be able to convey the Regulatory Flood and whether in so doing, the desired habitats would be self-sustaining over time.

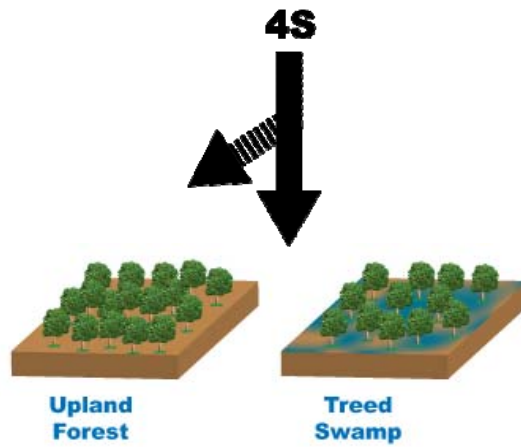
Generally speaking, if the combination of floodplain width and resistance to flow (ie. larger trees produce higher resistance to flood flows) was such that the Regulatory Flood could not be contained within the created valley system, then that alternative was screened out. Conversely, if the channel and floodplain conditions were such that the required depth and frequency of inundation made it impossible for a desired vegetation community to be self-sustaining, that alternative was also screened out.

Alternative 2 did not propose to use lands within the Greenway alignment.

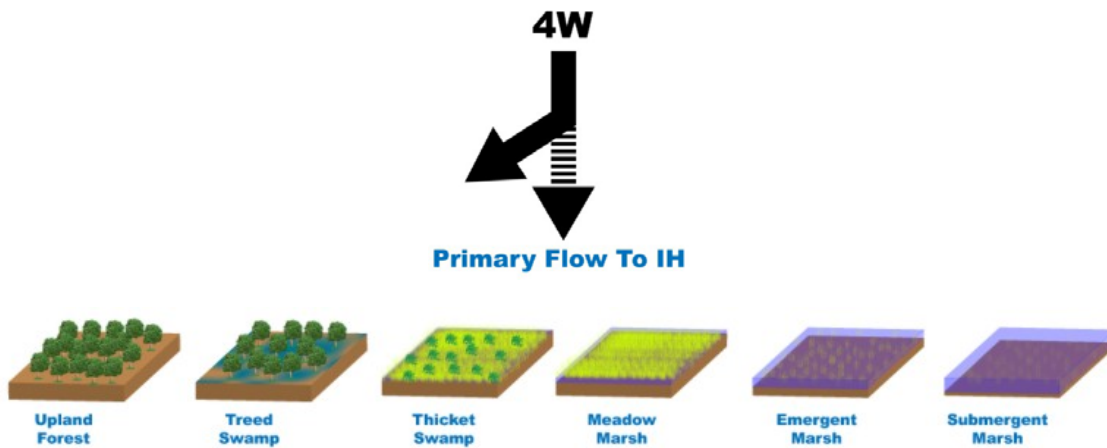
For Alternative 3, it was determined that only those physical conditions that allowed the establishment of thicket swamp, meadow marsh, emergent marsh and submergent marsh were viable alternatives for further consideration given the need to pass the entire Regulatory Storm through one discharge point. Other vegetation types would exert too much resistance to contain the entire Regulatory Storm within the dimensions of the proposed constructed floodplain.



For Alternative 4S, upland forest and treed swamps were also viable habitat types along the primary channel given that the proposed overflow channel leading to the Inner Harbour would be able to convey flows up to the Regional Storm.



For Alternative 4W, the overflow spillway could include upland habitat types, again, due to the additional amount of area and hydraulic conveyance associated with the two channel alternatives.



Following the results of the International Design Competition, a new alternative discharge point is being developed for inclusion in the evaluation of alternatives. This new alternative discharge point can be identified as Alternative 4SW with a primary channel flowing to the Inner Harbour through the Port Lands, bounded by two overflow channels - one wet overflow channel to the north through the existing Keating Channel, and one potentially dry overflow channel going south to the Ship Channel along a Don Greenway which had been moderately realigned to the west. The integration process is ongoing.

The Don Greenway as reflected in the EA

To summarize, the Don Greenway is reflected in the EA either as a river mouth or as an overflow spillway.

If a single discharge point is selected through the EA process, the range of viable habitat types in the Greenway is reduced to submergent, emergent, meadow and thicket vegetation species. Given the physical conditions that a single discharge point alternative would be required to maintain in order to convey the Regulatory Storm, the range of viable secondary land uses would also be significantly limited.

For those alternatives with two or more discharge points, the range of viable habitat types to be considered for the Greenway increases to include treed swamp and upland forest conditions. Under such alternatives, there would also be much more flexibility in considering a range of secondary land uses within the Greenway, including trail systems, open fields and possibly sports fields.

LOWER DON LANDS FRAMEWORK PLAN

Design Competition

The Lower Don Lands run from the Parliament Street Slip east to the Don Roadway and from the rail corridor south to Commissioners.

Over the past three decades, public calls for the naturalization of the mouth of the Don River have grown steadily stronger. At the same time, waterfront revitalization efforts have put increasing pressures on the Lower Don Lands area, which sits squarely between three emerging new neighbourhoods; the West Don lands, the East Bayfront, and the Port Lands. Initial planning has already begun for bringing new roads and new transit infrastructure through the Lower Don Lands to service new development – overlapping the same area being studied for naturalization of the river mouth and creation of a flood protection system. However, until now, no comprehensive process has been established to produce an overall vision for integrating these various initiatives while simultaneously addressing the complex technical challenges this area presents.

Waterfront Toronto in cooperation with Toronto Region Conservation (TRCA) and the City of Toronto launched an Innovative Design Competition in February 2007.

The goals of the competition were to:

1. Naturalize the mouth of the Don River
2. Create a continuous riverfront park system
3. Provide for harmonious new development
4. Connect waterfront neighbourhoods
5. Prioritize public transit
6. Develop a gateway into the Port Lands
7. Humanize existing infrastructure
8. Enhance the Martin Goodman Trail
9. Expand opportunities for interaction with the water
10. Promote sustainable development

Four multi-disciplinary international design teams submitted proposals for consideration. Mid-term and final reviews were conducted by a Don Mouth Naturalization and Port Lands Flood Protection EA technical review team, a City of Toronto technical review team, and a Community Liaison Committee team. Presentations by the individual design teams were given to the general public, from which public comment was consolidated and a report prepared. Waterfront Toronto appointed an independent jury to review presentations by the design teams, the two technical review teams, the community liaison committee, and the general public comment summary. From this process, the team led by Michael Van Valkenburgh Associates (MVVA) was selected as the winning team.

Vision

The MVVA Team's vision for the Lower Don Lands is that of an urban estuary, a place of exchange, where liveable urban neighbourhoods and robust natural systems intermingle in a balanced yet dynamic relationship to create a unique environment.



Process and timelines

Prior to the selection of a preferred alternative by the Don Mouth EA, the Lower Don Lands work will focus on data gathering for the site and verification of assumptions within the competition design. As part of this verification process, the design will be discussed with city agencies, technical advisors and stakeholder groups.

If the competition winning design is selected as a preferred alternative by the Don Mouth EA, Precinct Plans and EA's will begin for the Lower Don Lands neighborhoods. These processes will include added opportunities for public involvement.

Highlights of the Lower Don Lands concept

The MVVA Team approached the competition with two initial questions: "Where does the mouth of the Don River want to be and what form does it want to take?"

The MVVA Team proposal for the Lower Don Lands originates from these questions and from a very simple observation about the two types of park that one encounters in Toronto: the traditional square derived from the urban grid, and the irregularly formed parks generated from the natural curves of the Don River. Given these two distinct typologies, and Waterfront Toronto's objectives in undertaking the naturalization project, it seemed apparent that the new greenway park and river mouth should take their cues from river morphology, rather than the existing urban condition as represented by the right angles of the Keating Channel.

The MVVA Team proposal consolidates the program of naturalized mouth, floodway, and recreational park into a single and complex central parkland along the new alignment of the Don River. Naturalizing the mouth of the river in this way has the broadest possible effect on the Lower Don Lands, creating miles of parkfront property and a sustainable "urban estuary" of great richness and complex mixing on multiple levels: spatial, ecological, functional, economic and social. Most importantly, it makes new parkland very close to the new neighbourhoods for all to enjoy. In shifting pre-established boundaries, new possibilities are opened up for new relationships between city, river, and lake. Finally, the relocation of the mouth of the river reasserts the presence of the river in its city. The riverside park extends into the Inner Harbour with a new hill that will make a magnificent prospect for Torontonians to experience the lake's edge.



The Don Greenway

The MVVA concept creates two greenways for the Don River: an east-west oriented greenway that acts as an ecological stepping stone at the reinvented mouth of the river, and a north-south greenway creating a lush natural connection from the Don River southward.



Relationship to EAs and other planning processes

The Framework Plan for the Lower Don Lands will become the vehicle for coordinating the parallel planning efforts of the Don Mouth EA, transit and master servicing EAs, and the goals of the Secondary Plan. If the competition winning design is selected as a preferred alternative by the Don Mouth EA, the Framework Plan will continue its role as a guide to future Precinct Plans and EAs in the adjacent Lower Don Lands neighborhoods, creating a united vision for the emerging Port Lands.

DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			

Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?

Question 4: What other advice do you have regarding the Greenway?

Question 5: Do you know of good examples of greenways in other places? If so, where?

Please hand in your comment sheets to Andrea Kelemen before you leave, or send them to her by fax 416-214-4591 or mail 20 Bay Street, Suite 1310, Toronto, ON M5J 2N8 by September 25th, 2007.

Thank you for your participation!

**Your name:
Phone number:**

**APPENDIX 3. History of the Don Greenway Idea. Powerpoint Presentation by
John Wilson**

Don Greenway Workshop September 18, 2007

History of the Don Greenway Idea

John Wilson

Task Force to Bring Back the Don

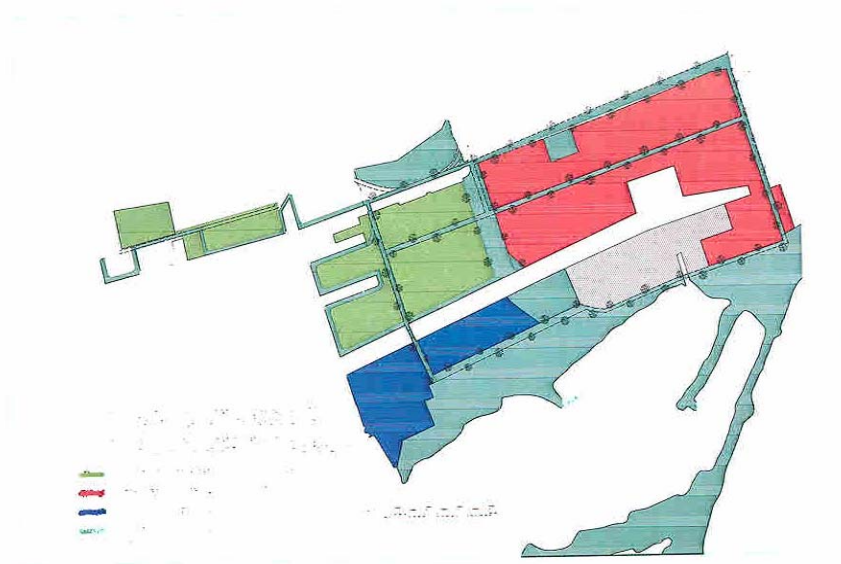
Royal Commission on the Future of Toronto's Waterfront

- Drawing upon work of others, e.g. Toronto Field Naturalists, Toronto Ornithologists, Friends of the Spit, etc.
- Hearings and background studies, e.g. # 10 "Environment in Transition"

"The vegetated areas along the north shore provide a connection to the Don Valley, albeit a fragmented one, for continued migration."

(P. 60)

Royal Commission of the Future of the Toronto Waterfront
“Watershed” (2nd Interim Report) - 1990



Regeneration

Toronto's Waterfront and the Sustainable City
Final Report 1992

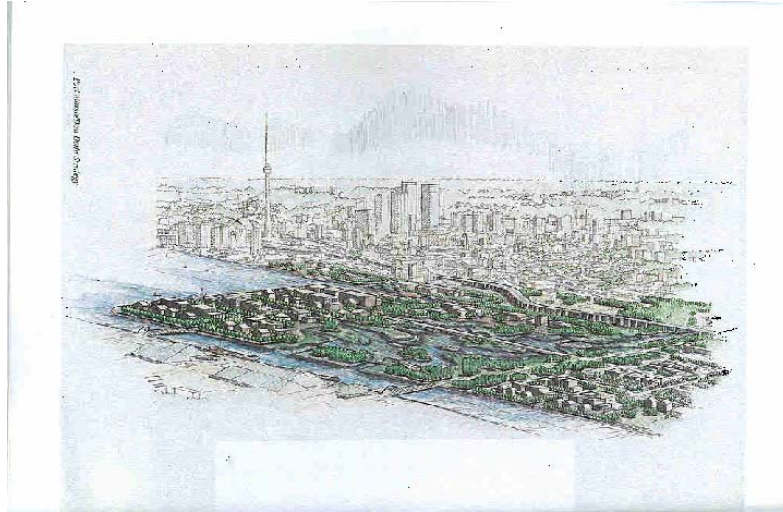
Don Greenway purpose:

Provide buffer between wildlife and human uses.

Provide linkages between parks and green spaces.

Especially, provide a migratory link from Tommy Thompson and North Shore Parks to Don Valley.

Bringing Back the Don - 1991



“Bringing Back the Don” Report to Council 1991

- Recommended a Port Lands delta for the Don River.
- Hydrological link to restore natural function at the Mouth of Don River.
- No discussion of “greenway” link to North Shore.

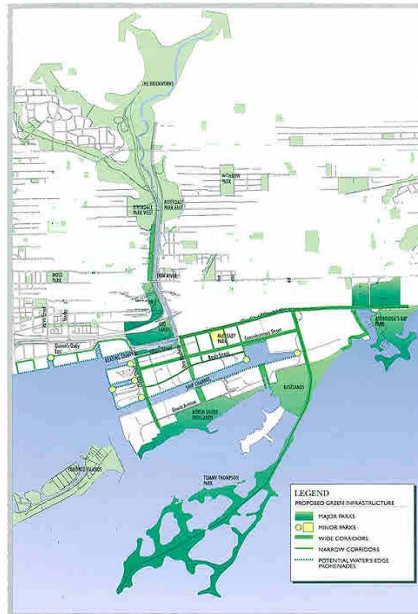
Metropolitan Toronto Official Plan 1994
Metropolitan Green Space System



Metropolitan Toronto Official Plan 1994

- First expression of the Don Greenway in an official planning document.
- Only shown on the map – No specific discussion.
- In general the Waterfront Green Space System was to restore ecosystem integrity, to improve the physical connection to other green spaces, to provide recreation.

Greening the Toronto Port Lands - 1997



Greening the Toronto Port Lands

Waterfront Regeneration Trust 1997

Michael Hough, Beth Benson & Jeff Evenson

- Green Infrastructure system to attract investment and encourage revitalization in brownfield Port Lands.
- Approved in principle by Council, Sept. 1997
- Six-fold “hierarchy of green space”: Major and minor parks, wide and narrow corridors, water’s edge promenades & “development parcels”.
- Ten “green infrastructure functions...”

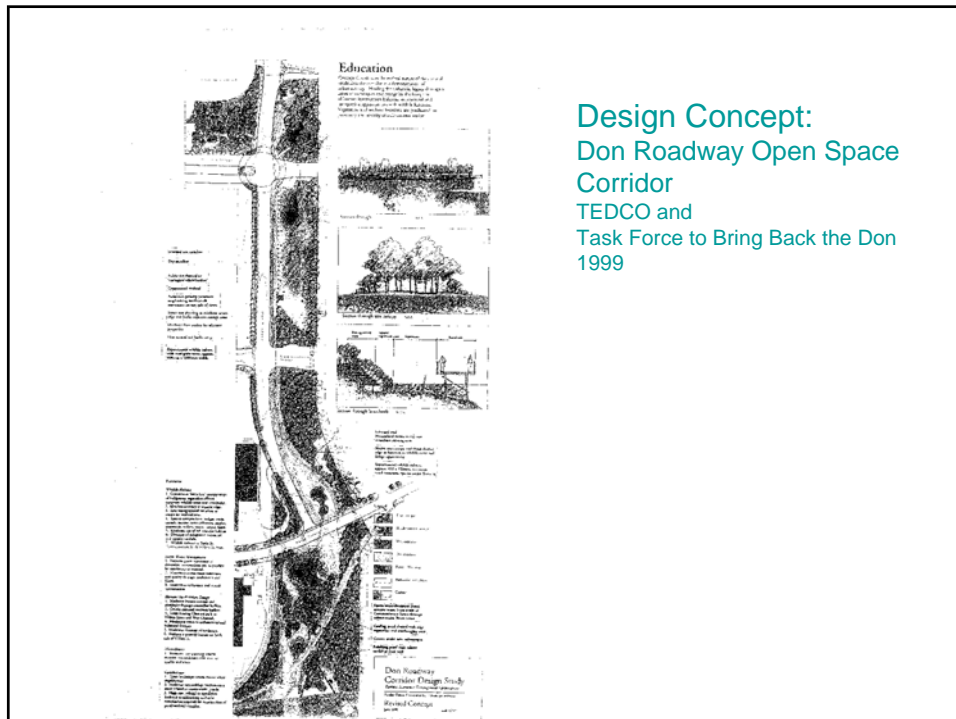
Greening the Toronto Port Lands

Hough, Benson & Evenson

1997

Green Infrastructure Functions

- Ambient air quality improvements
- Noise abatement
- Microclimate enhancement
- Stormwater management
- Soil & groundwater management
- Wildlife movement
- Wildlife habitat
- Sense of place
- Pedestrian/cycle trail
- Recreational opportunities



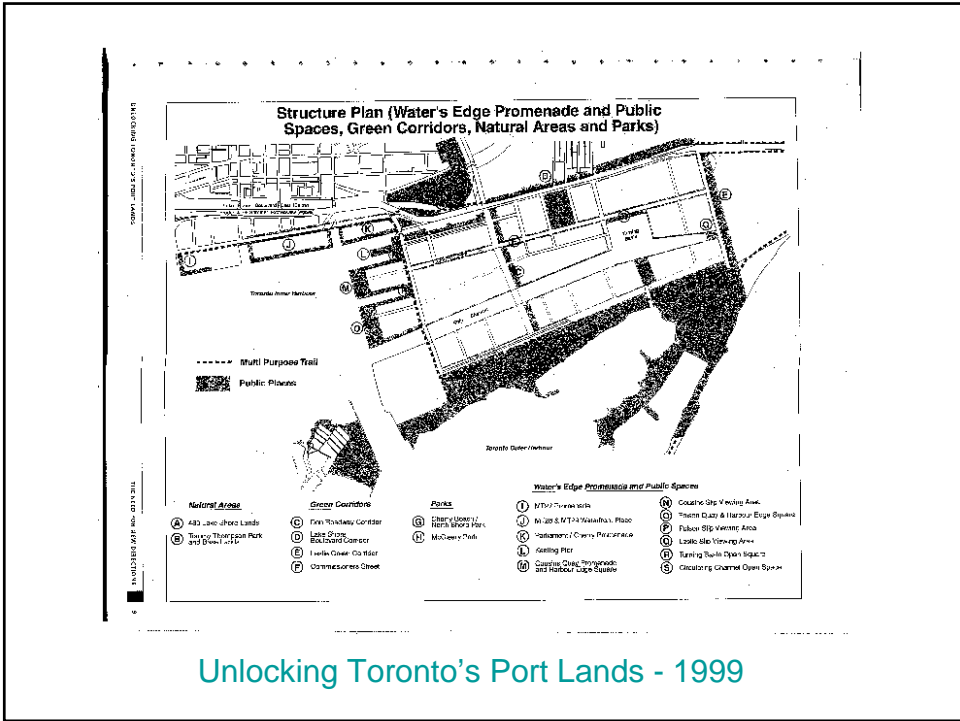
Design Concept:
Don Roadway Open Space Corridor 1999
TEDCO and “Bring Back the Don”

- “TEDCO’s Concept Plan for... the Port Area has shown a ‘green corridor’ along the east side of the Don Roadway since the mid 1980’s.” P.1
- Primary goal to achieve an urban wildlife corridor – a linear vegetated natural area.
- Seven objectives...

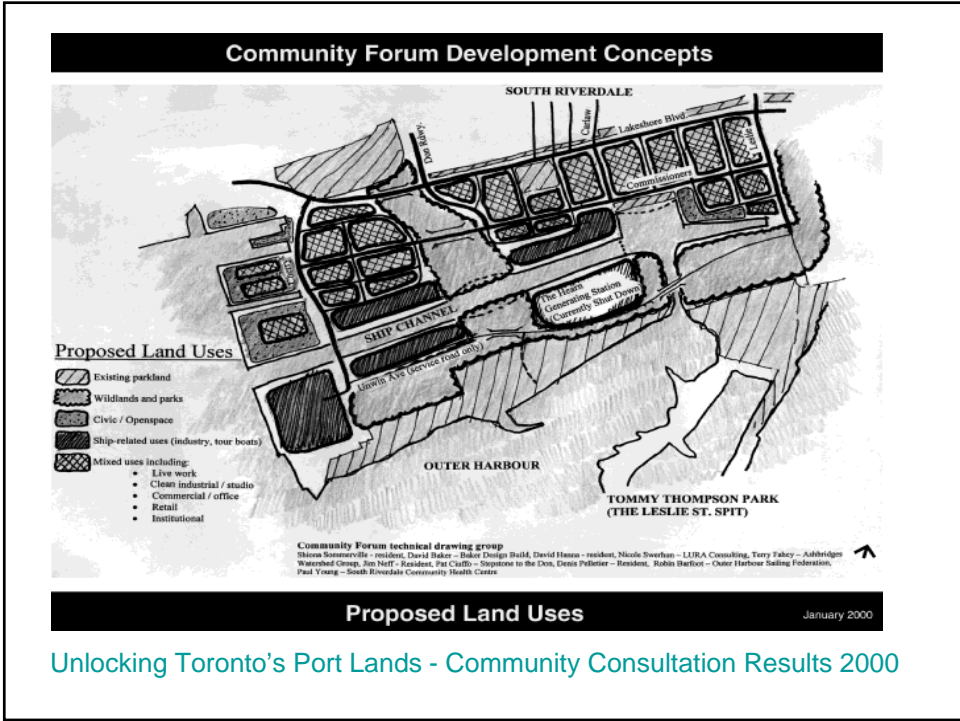
Design Concept:
Don Roadway Open Space Corridor 1999
TEDCO and “Bring Back the Don”

Don Roadway Open Space Corridor Objectives

1. Connect nodes of existing habitat
2. Reduce potential “sink effect” by maximizing linkage techniques
3. Provide a diversity of natural habitat for foraging and migrating wildlife
4. Discourage predators, parasites and invasives
5. Attract target species
6. Provide for recreational and educational/ demonstration opportunities
7. Enhance the overall perception and appearance of the Port Area.



Unlocking Toronto's Port Lands - 1999



Unlocking Toronto's Port Lands - Community Consultation Results 2000

Task Force to Bring Back the Don "Vision" - 2000



Central Waterfront Public Space Framework – 2003 Waterfront Toronto



Central Waterfront Public Space Framework – 2003

Waterfront Toronto

“The Vision: A green spine serving as a connective place making a corridor between the Don Mouth and Lake Ontario Park and as a key structuring element for community space for emerging Portland neighbourhoods...

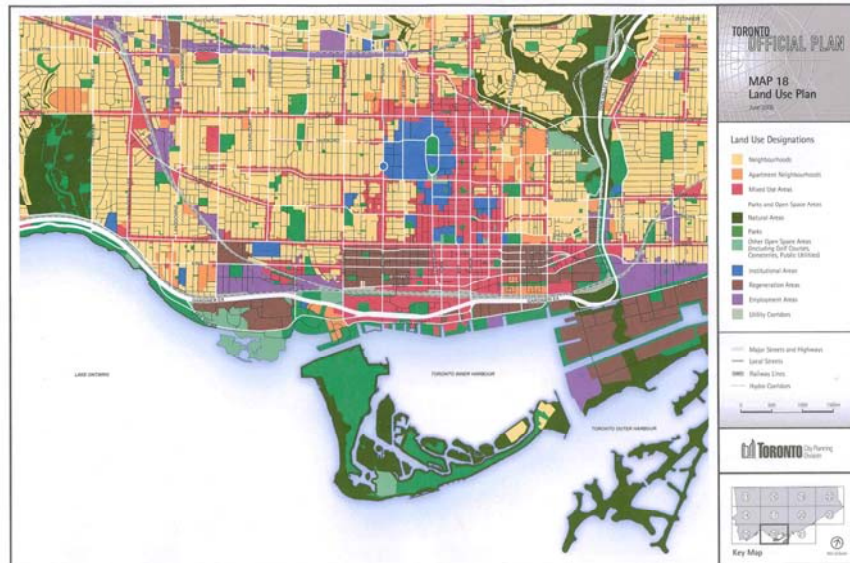
The Greenway will be functionally diverse and act as a habitat corridor, active and passive recreational space, trailway connector and as adjunct to community spaces.” (Panel 9)

Port Lands Implementation Strategy – 2006

Waterfront Toronto



Toronto Official Plan

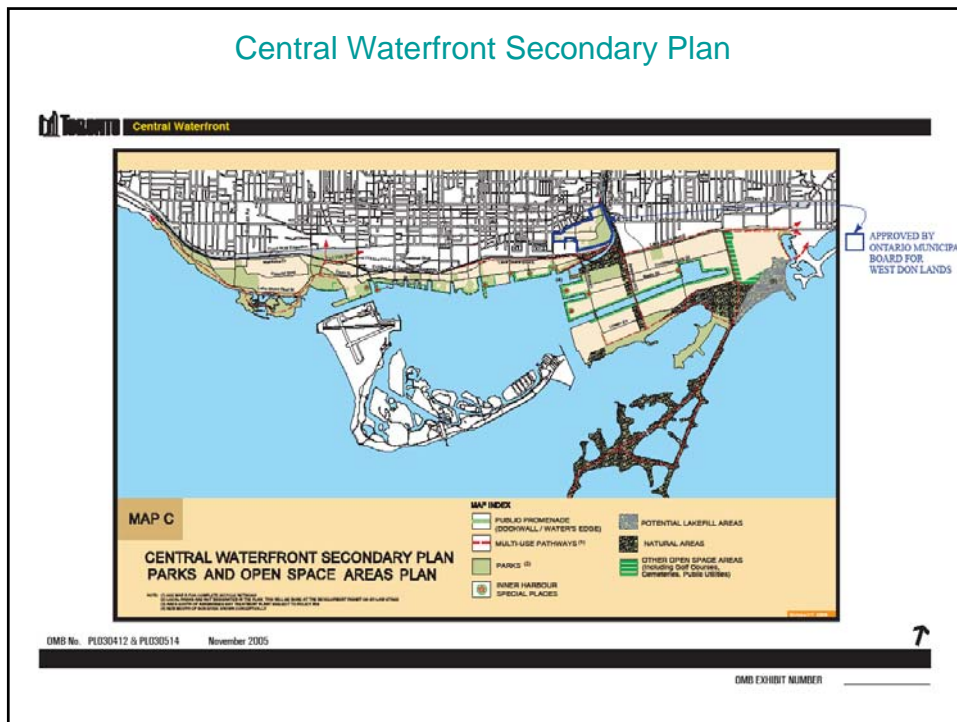


Toronto Official Plan

Policy 4.3.3 (Page 4-7)

- The areas shown as Natural Areas on Maps 13-23 will be maintained *primarily in a natural state*, while allowing for:
- a) *compatible recreational, cultural and educational uses and facilities that minimize adverse impacts on natural features and function; and*
- b) *conservation projects, public transit, public works and utilities for which no reasonable alternatives are available, and that are designed to have only minimal adverse impacts on natural features and functions.*

Central Waterfront Secondary Plan



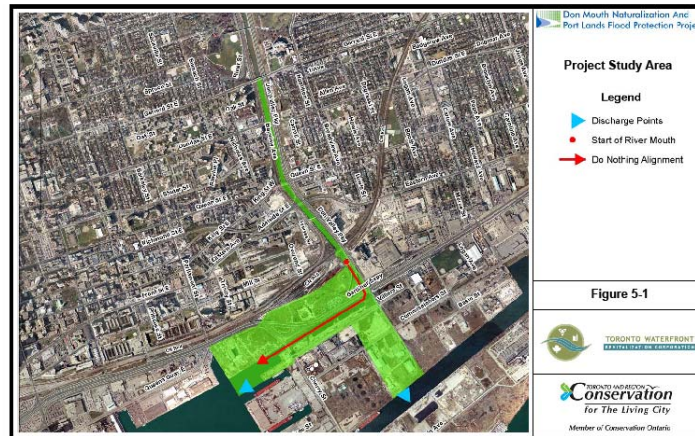
Central Waterfront Secondary Plan

THE DON GREENWAY, A NATURAL HERITAGE CORRIDOR

A new green, Natural Heritage corridor will be created in the centre of the Port Lands, functioning as an important **open space connection** linking the Don Valley, Tommy Thompson Park and Lake Ontario. The corridor will be a key component of the Centre for Creativity and Innovation offering a unique amenity attractive to knowledge-based industries of all types. In addition to providing local open space and **subject to its Natural Heritage designation in the Official Plan**, the corridor will be able to fulfill a variety of functions, including **neighbourhood recreation, compatible community uses, multi-use pathways, a wildlife corridor and habitat, and a receptor for stormwater from adjacent communities.**

Don Mouth Naturalization and Port Lands Flood Protection Project

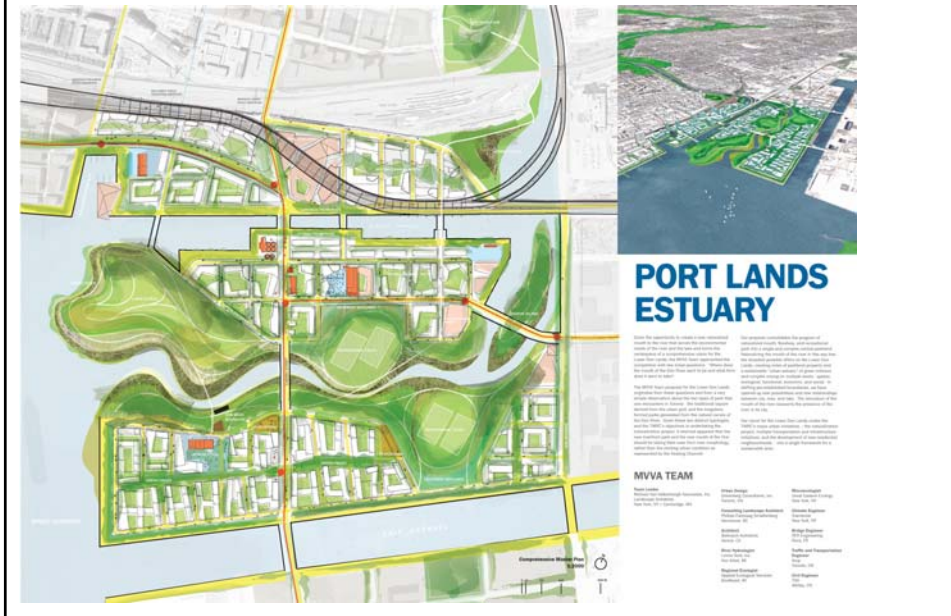
Waterfront Toronto & TRCA 2006



Michael Van Valkenburgh Associates Lower Don Lands Innovative Design



Michael Van Valkenburgh Associates
Lower Don Lands Innovative Design



Don Greenway Workshop
September 18, 2007

History of the Don Greenway Idea

John Wilson

Task Force to Bring Back the Don

416-926-1907 x 234

jwilson@pollutionprobe.org

APPENDIX 4. Don Mouth Naturalization and Port Lands Flood Protection Project and Environmental Assessment. Powerpoint Presentation by Paul Murray

Overview of Environmental Assessment

Alignment with Don Greenway



Background on EA

- EA commenced in August 2006 after approval of Terms of Reference (ToR)
- Addresses 3 key objectives

Naturalization



Revitalized City



Flood protection



Study Area



Alignment of Alternatives

- Four alternatives (discharge points) identified in ToR



- ToR defines alternative 4 (W and S) as having one primary channel and a regional flood overflow
- All alternatives from ToR consistent with Central Waterfront Secondary Plan

Alignment of Alternatives (cont'd)

- For 3 and 4S:
 - Use of planned greenway as potential river mouth
 - Aligns linear corridor function of greenway with river mouth function
- 4W aligns greenway with overflow spillway

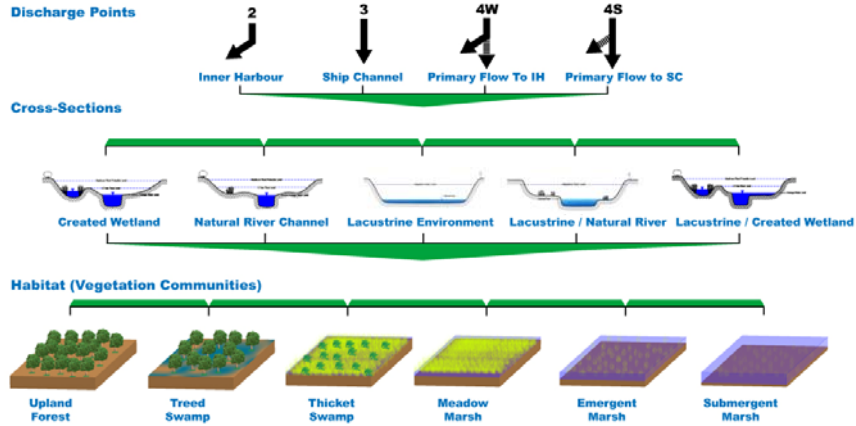


Overview of EA process

- Step 1 - Develop long list of alternatives
- Step 2 - Screen long list to identify short list of alternatives
- Step 3 - Describe short list of alternatives
- Step 4 - Reduce the short list of alternatives
- Step 5 - Select preferred alternative

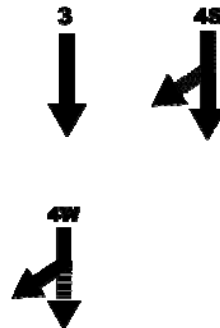


Step 1 Long List of Alternative Methods



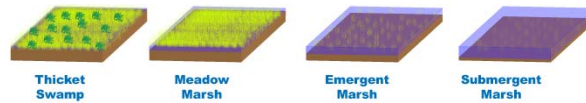
Step 2 – Flood Protection

- To convey Regulatory Flood, floodplain for primary channel 300 m wide
- Overflow spillway 200 – 300 m wide to convey Flood

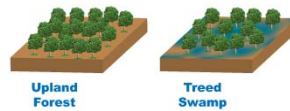


Step 2 - Naturalization

- For Alternative 3, vegetation communities that do not impede water flow include:



- Primary channel of Alternative 4S may also contain treed communities



Step 2 - Naturalization (cont'd)

- For alternative 4W, overflow spillway may include upland habitat types
- Opportunities for more naturalization closer to the lake based on lake levels



Alignment with the Greenway Naturalization

- Alternatives depict greenway as river mouth or overflow spillway
- Variety of wetland communities would be located within greenway

Alignment with the Greenway Public Use / Recreation

- Trail system could be located within greenway parallel to river mouth
- Greenway would be designed for compatible uses between flood events:
 - Walking / biking trails
 - Sports fields
 - Open space



Lower Don Lands Competition

- Undertaken by Waterfront Toronto from January to April 2007
- Great public interest and support
- MVVA design team chosen to integrate with DMNP EA team



Where we are going

- Revise study area to reflect larger area for integrated urban fabric with natural river mouth as the centrepiece
- Revise alternatives to reflect ideas and design elements emerging from competition
- Refine assessment of feasible alternatives
- Integrate urban fabric with naturalized river

Changes from Design Competition

- New alternative is variation of 4W,
with following attributes:
 - Primary channel to Inner Harbour
south of Keating Channel
 - Overflow spillways to Shipping
Channel and Keating Channel
- EA team is working with Waterfront
Toronto, the City and MVVA to
integrate new alternative into
existing evaluation framework



Integrating Workshop Comments

- Potential uses of greenway will be refined
based on outcome of workshop
- Will be integrated into short list of alternatives
during Step 3



**Don Mouth Naturalization And
Port Lands Flood Protection Project**

Timeline

Step	2006	2007	2008	2009	2010
Step 1 - Develop Long List					
Step 2 - Assess Technical Feasibility					
Step 3 - Refine Short List					
Step 4 - Reduce Short List					
Step 5 - Select Preferred Alternative					
Step 6 - Assess Preferred Alternative					
Step 7 - Develop Functional Design					
Implementation					



APPENDIX 5. Lower Don Lands Framework Plan. Powerpoint Presentation by Michael Van Valkenburgh and Steve Apfelbaum

PORT LANDS ESTUARY

Toronto Waterfront Revitalization Corporation

MVVA TEAM

Team Leader

Michael Van Valkenburgh Associates, Inc.
Landscape Architects
New York, NY + Cambridge, MA

Urban Design

Greenberg Consultants, Inc.
Toronto, ON

Consulting Landscape Architect

Phillips Farevaag Smallerberg
Vancouver, BC

Architect

Behnisch Architects
Venice, CA

River Hydrologist

Limno-Tech, Inc.
Ann Arbor, MI

Regional Ecologist

Applied Ecological Services
Brodhead, WI

Microecologist

Great Eastern Ecology
New York, NY

Climate Engineer

Transsolar
New York, NY

Bridge Engineer

RFR Engineering
Paris, FR

Traffic & Transportation

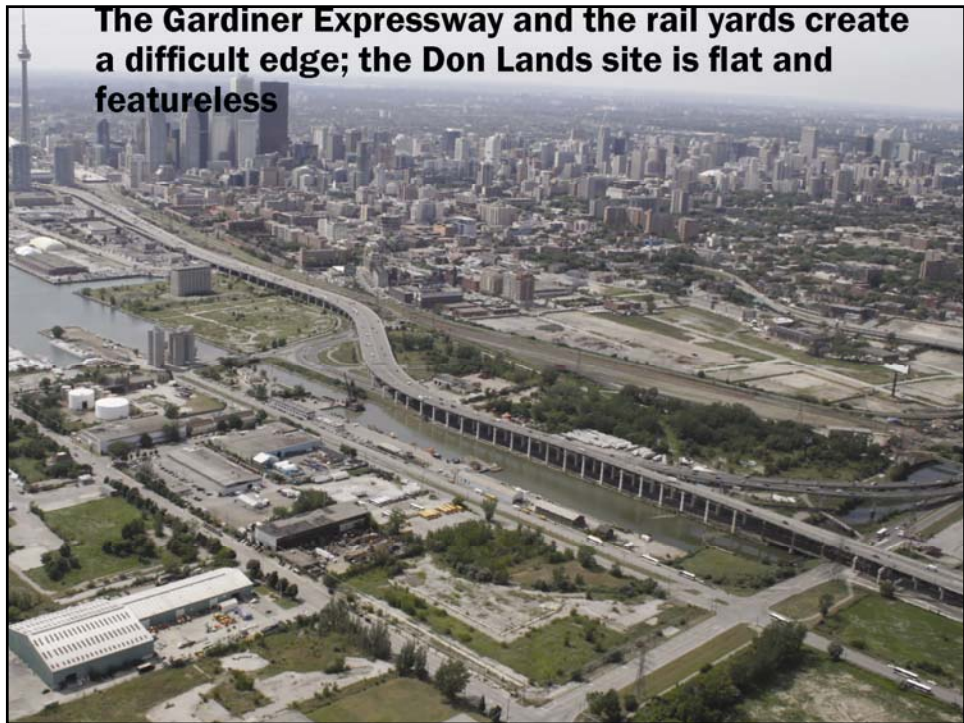
Engineer
Arup
Toronto, ON

Civil & Marine

Engineer
TSH

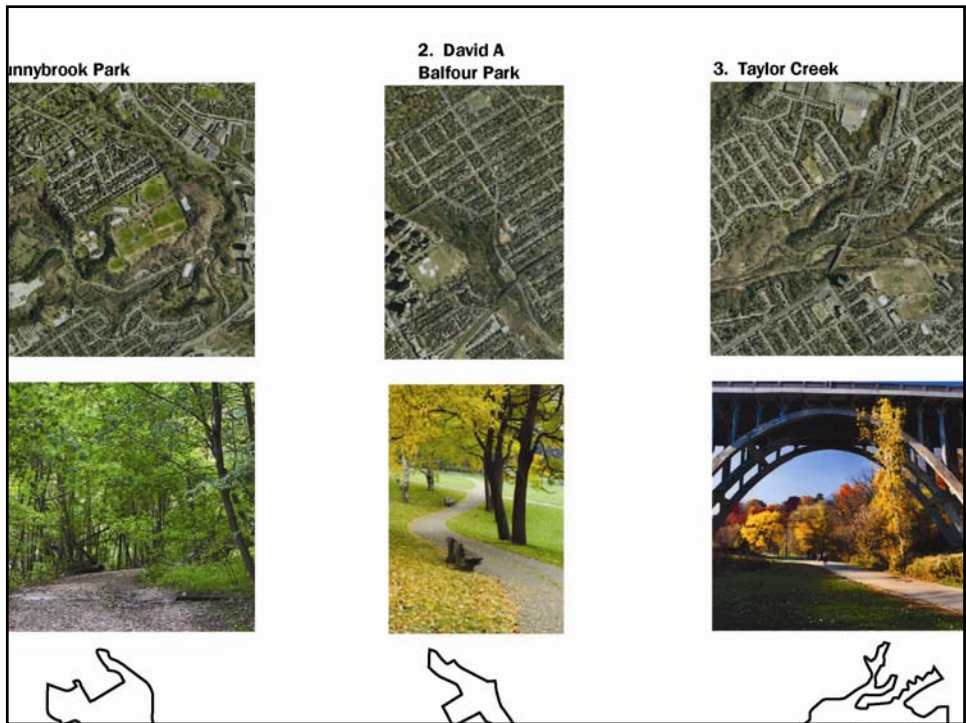
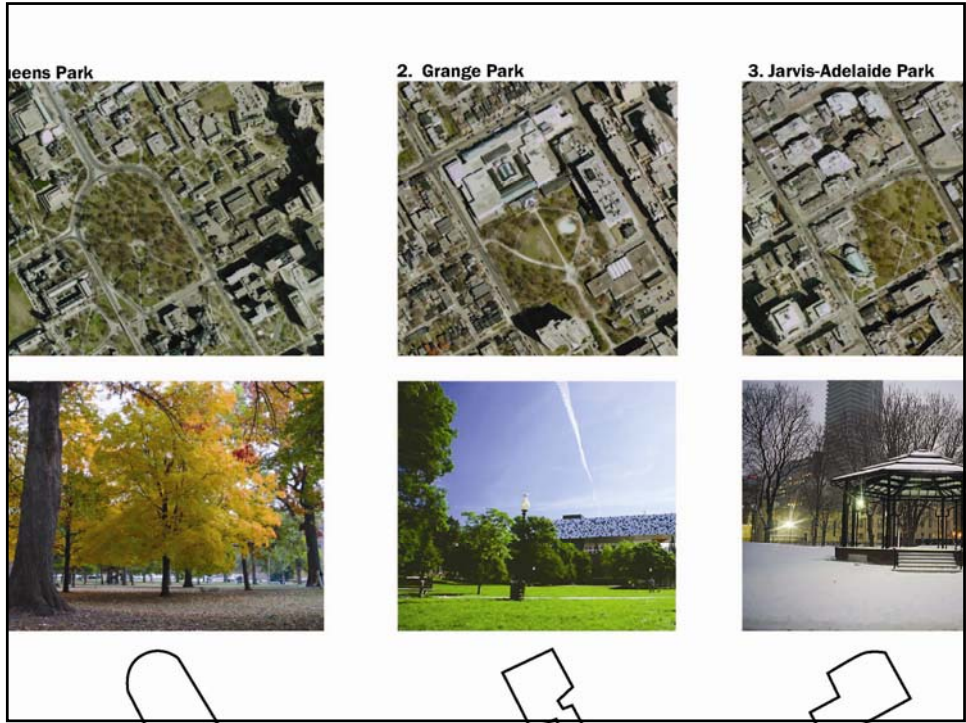




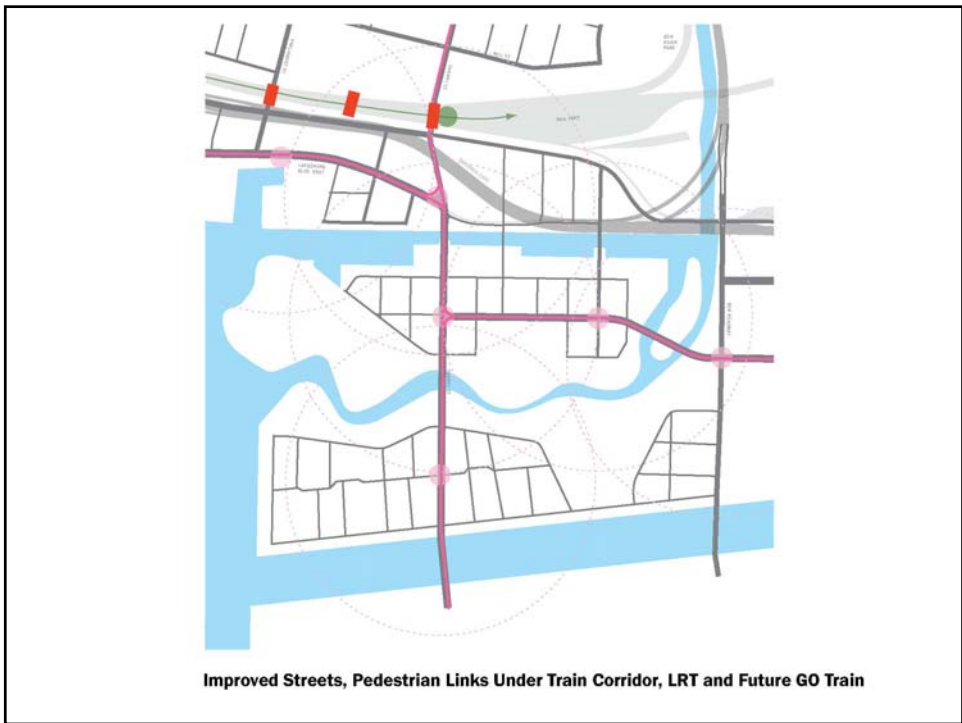




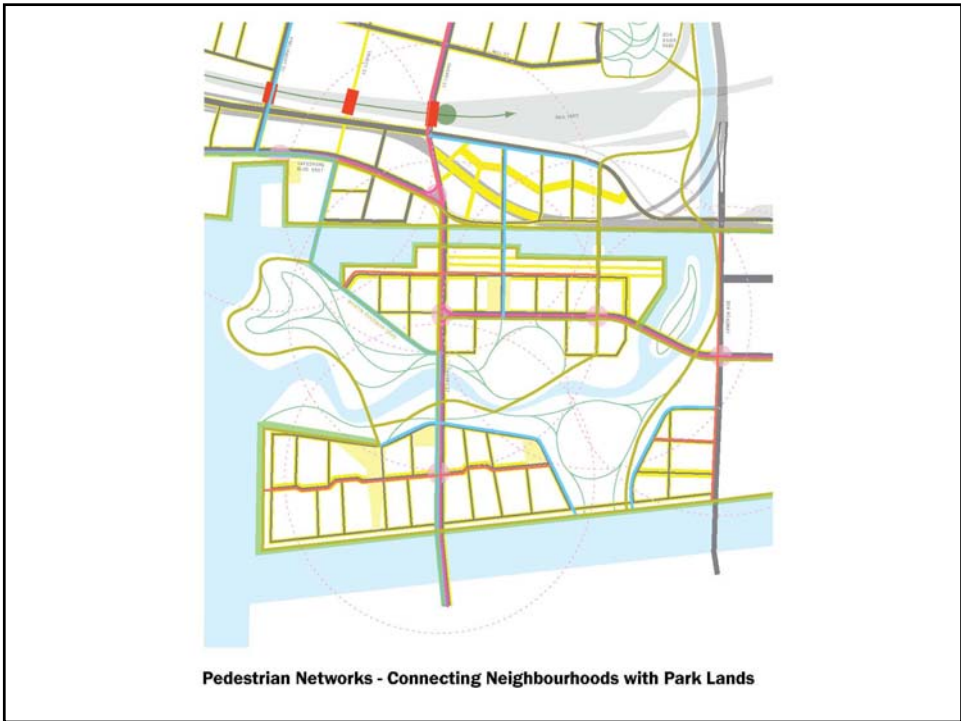
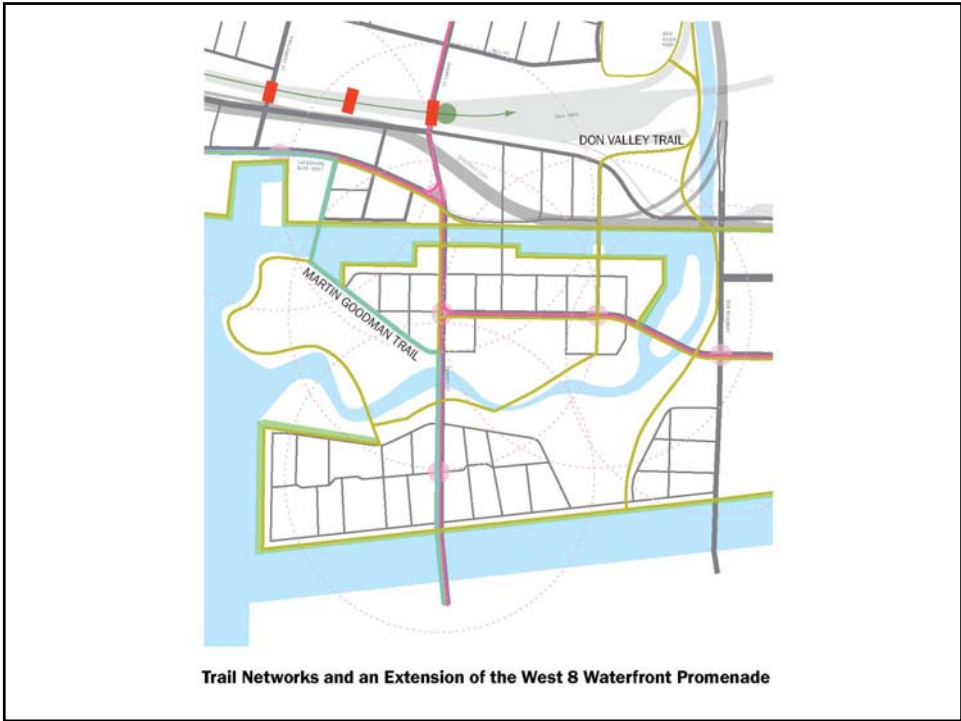
Rectangular	VS.	Organic
Withrow Park		Glen Stewart Park
Formed by City		Formed by Nature

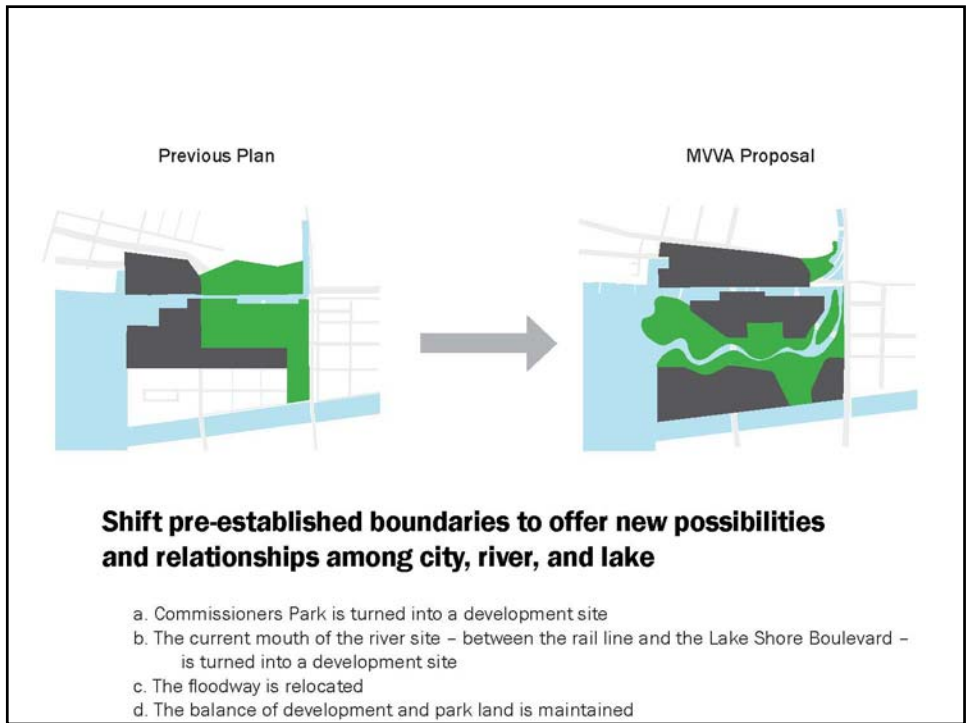


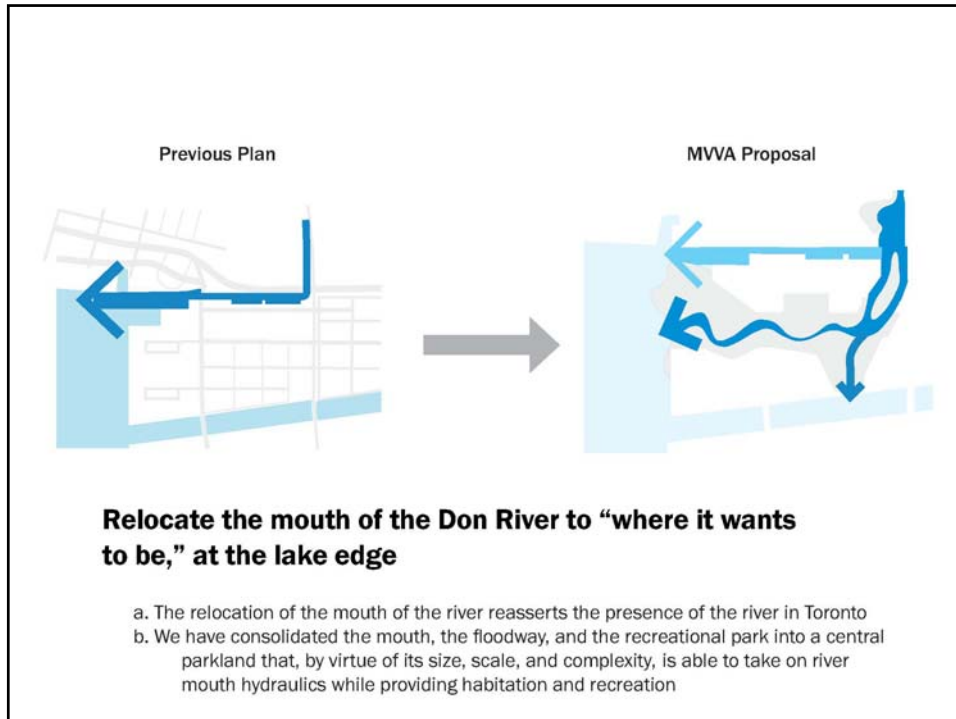


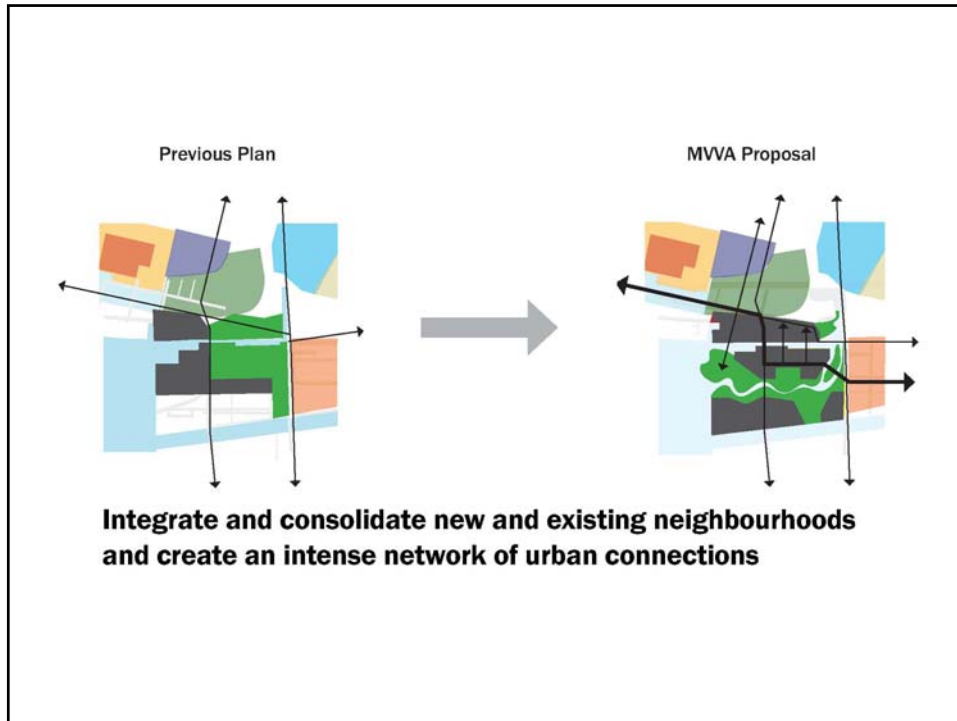


Improved Streets, Pedestrian Links Under Train Corridor, LRT and Future GO Train





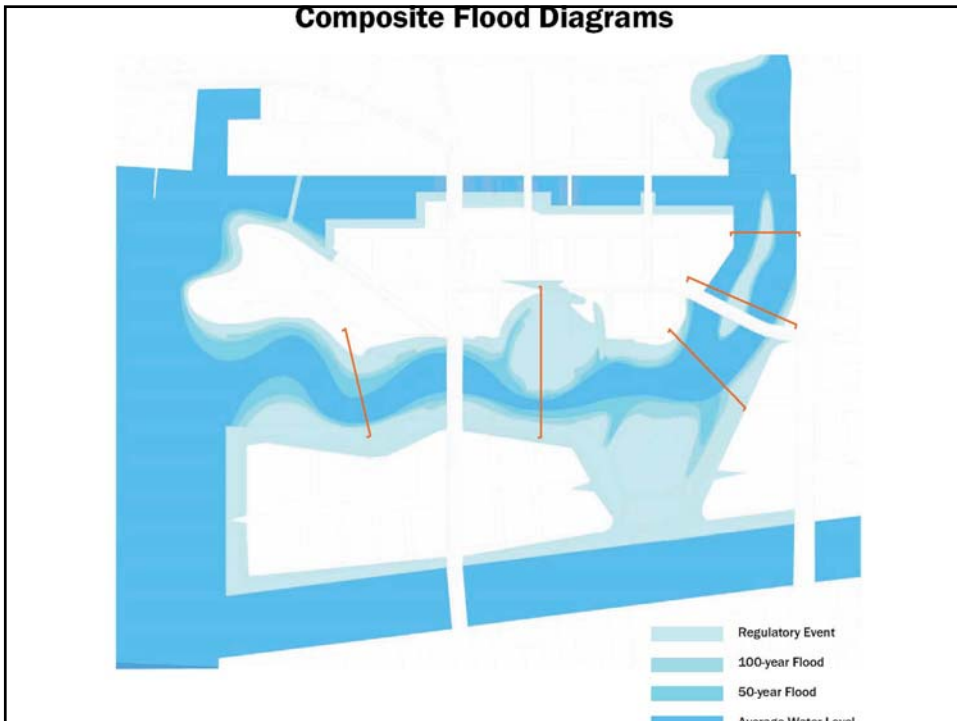




Urban Hydrology & Flood Control



Composite Flood Diagrams

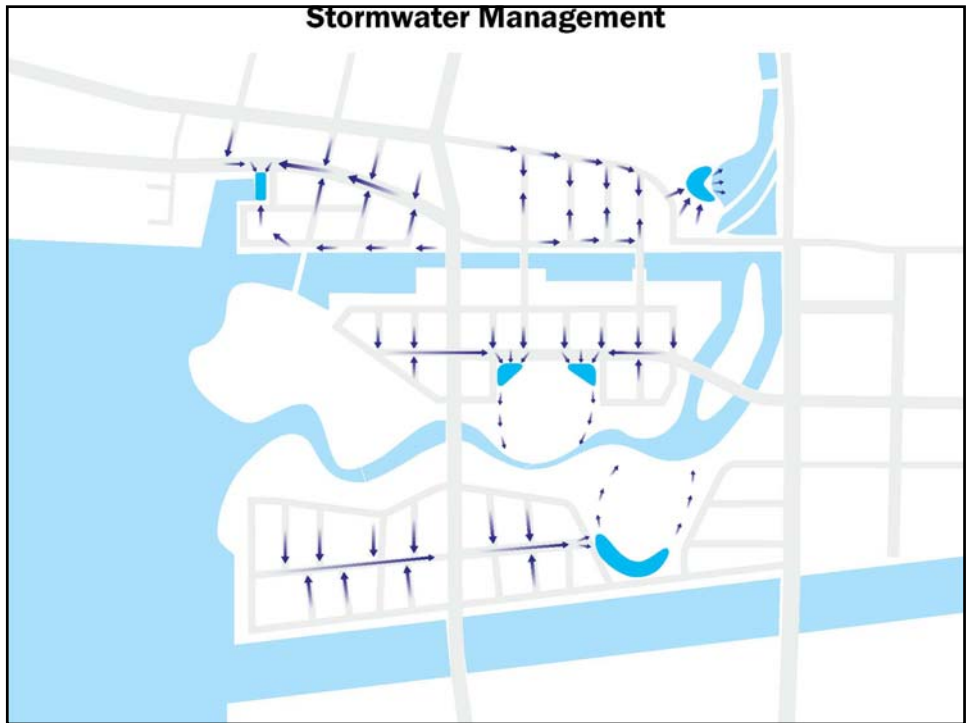


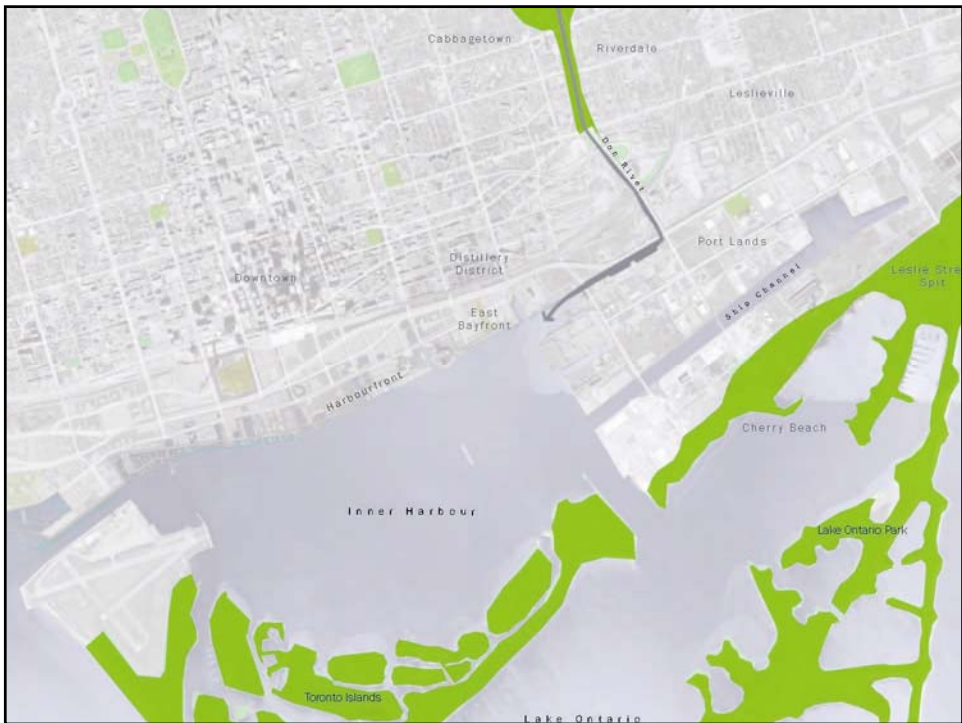


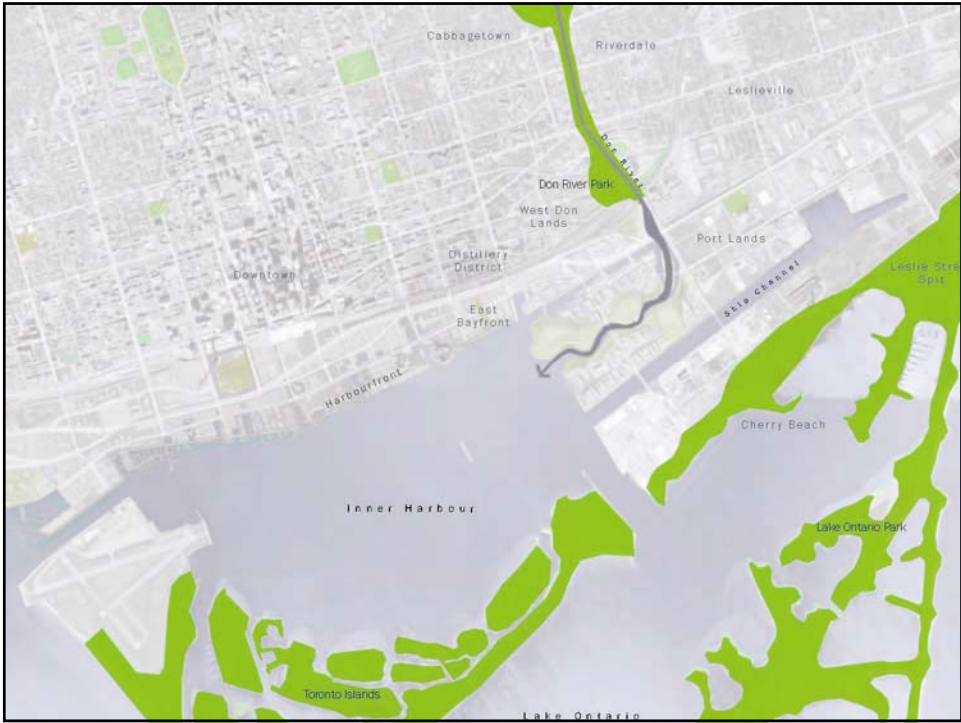
A Naturalized Don River Mouth with Diverse Ecologies



Stormwater Management







Applied Ecological Services, Inc.



Ecological Considerations at Don River Mouth

Ecological Considerations

[Our Team](#) [Our Relationships](#) [Our Projects](#) [Our Proposal](#) [Our Conclusion](#)



Applied Ecological Services, Inc.[®]

ORGANIZATIONS

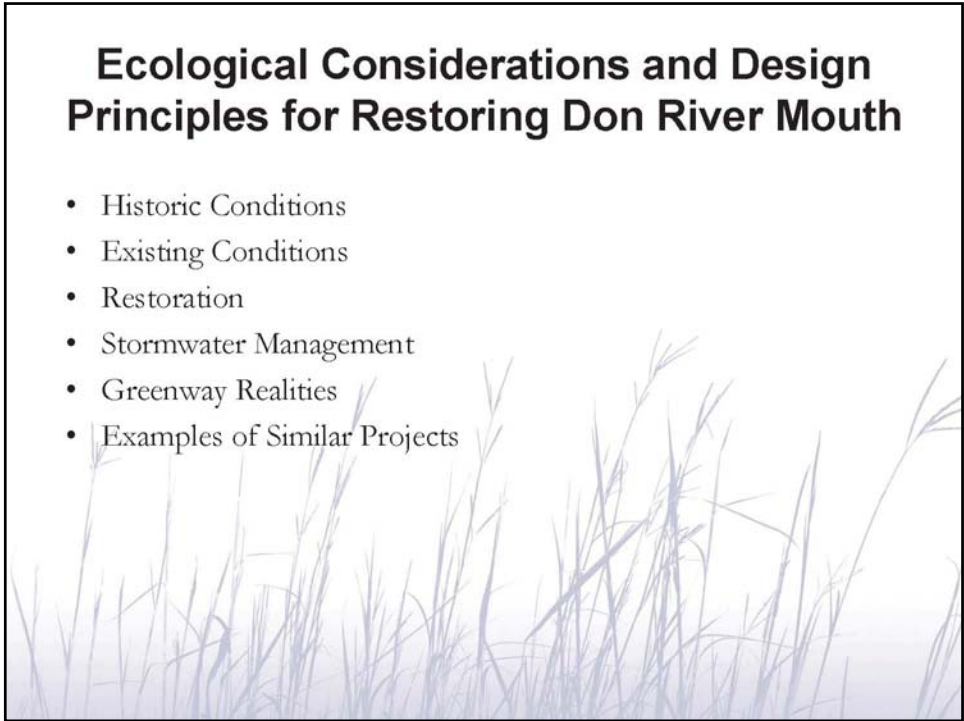
- AES consulting
- AES contracting
- Taylor Creek Restoration Nurseries

OFFICES

Brodhead, WI (MAIN)
East Dundee, IL
Prior Lake, MN
Kansas City, KS
Philadelphia, PA
Bucharest, Romania

Ecological Considerations and Design Principles for Restoring Don River Mouth

- Historic Conditions
- Existing Conditions
- Restoration
- Stormwater Management
- Greenway Realities
- Examples of Similar Projects



Ecological Considerations

Our Team | Our Relationships | Our Projects | Our Proposal | Our Conclusion

Restoring the Physiochemical and Biological Systems of a Great Lakes River Mouth



Historic Physical Systems of the Don River

- I. Long Shore Currents**
 - Deposited coarse sand materials to Barrier Islands
 - Maintained lakeward contact and alignment of marsh
- II. Growing Season Winds**
 - Cleared sand shoals annually
 - Moved floatable organic materials back into marsh
 - Sorted sediments
- III. River and Seasonal Runoff**
 - Delivered sediment
 - Provided foramen to harbor and marsh
 - Buffered hydrologic/hydraulic/chemistry from watershed
- IV. Lake Level Variation**
 - Redistributed sediments and accumulated organic materials in harbor and marsh
 - Re-worked beach strands and shoals
 - Re-defined geometry of ice thrust ridge and river mouth
- V. Ice Vaulting and Thrusting**
 - Formed and stabilized beach zones and downwind locations in harbor
 - During break up, winds forced ice masses against shoreline, formed steep ridges
- VI. Thermal and Nutrient Gradients**
 - High levels of macrobenthos burrows in marsh and shallow waters over fine sediments
 - Harbor was buffered by shoals creating warmer temperatures
 - Low albedo of the marsh created temperature gradient of 25-36° C
- VII. Biodiversity**
 - Fish spawned in river, wetlands, marsh and sandy shoals
 - Fish brooding/nursery in protected marsh and harbor
 - Large populations of macroinvertebrates in harbor and marsh
 - Year round and migratory bird populations
 - Prairie and swards created unique rume and shrub communities

Historic Conditions

Ecological Considerations

Our Team | Our Relationships | Our Projects | Our Proposal | Our Conclusion

Restoring the Physiochemical and Biological Systems of a Great Lakes River Mouth



Existing Physical Systems of the Don River

- I. Long Shore Currents**
 - Currents observed take west by east
 - Coarse material delivery attenuated
- II. Growing Season Winds**
 - Erodes Barrier Island and sand shoals
 - Blows floatables and fines downstream into Keating's Channel and Bay
 - Organic material build up in inner harbor
- III. River and Seasonal Runoff**
 - Flows, debris, sediments increasing with watershed development
 - Hydraulic variability, predictably unpredictable
 - As watershed stabilizes, increased runoff will erode river banks and channel
 - Increased fine sediments and floatables
 - Turbidity increases, reducing water quality and affecting aquatic life
- IV. Thermal/Nutrient/Contaminants**
 - Warmer runoff from developed watershed
 - Shallows poorly flushed, contaminants and nutrient loading restrict vegetation establishment and maintenance
- V. Biodiversity**
 - Loss/reducing presence of rare habitats and species
 - Species skewed towards those able to tolerate enriched and unpredictable hydrology
 - Disinverted rooted aquatic macrophyte populations collapsed
 - Turbidity restricts life systems
 - Fish spawning declines/depleted/eliminated in harbor

Existing Conditions

Restoration

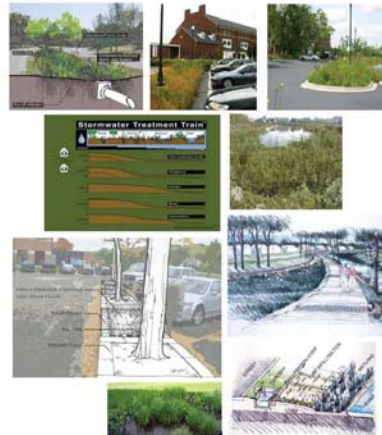


Stormwater Management

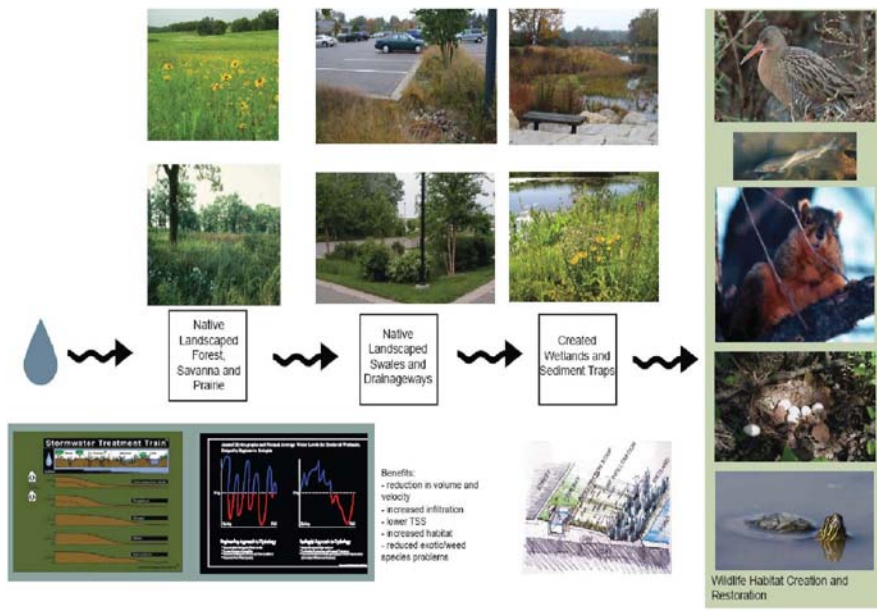
Conventional Design



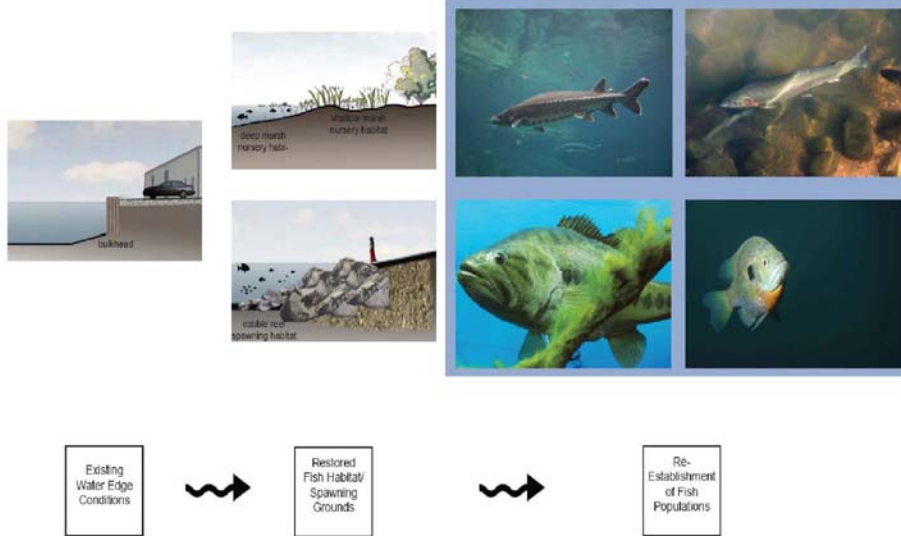
Alternative Stormwater Management



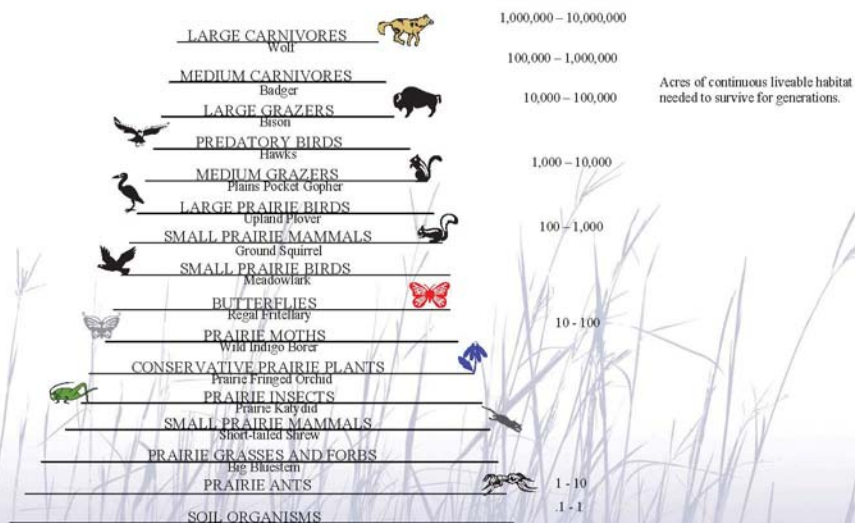
Water Quality Quantity and Volume Management: Stormwater Treatment Train



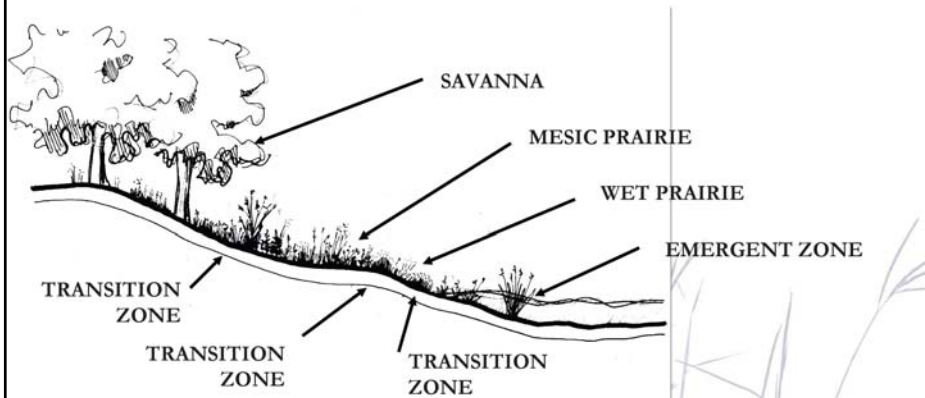
Fisheries System Restoration



Pyramid of Life—Scale Matters for Resident and Migratory Wildlife



Effective Greenways Establish Gradients of Life



In nature, a wetland community doesn't change to an upland prairie at a distinct edge. Wetlands overlap into wet prairies, which overlap into mesic prairies. Woodlands overlap into savannas, which overlap into prairies. These transition zones between communities are called ecotones, and they are among the most diverse areas of the natural world.

Scale and Gradients for Plants, Populations and Habitats



Prairie blazing star
Liatris pycnostachya
2-4' High, Blooms July-Sept



River bulrush
Scirpus fluviatilis
3-5' High, Blooms June-Aug

Appropriate Plants



Spotted Joe-pye weed
Eupatorium maculatum
2-5' High, Blooms July-Sept



Stiff goldenrod
Solidago rigida
1-4' High, Blooms July-Oct

Scale, Appropriate Habitat to Address Pests in Design



The mosquito

- Produce a new generation in about 2 weeks
- Generally need stagnant shady water to breed
- Prime breeding habit includes storm sewers, bird baths, old tires, and anywhere water pools and sits protected from wind
- Freshened Water supply

Natural Enemies of Mosquitoes

Bt (*Bacillus thuringiensis*
subsp. *israelensis*)

- Naturally occurring bacterial disease of insects
- Commercial products include Mosquito Dunks and Mosquito Bits

- Are encouraged by maintaining diverse plant species
- Can be attracted by building houses for them



Bat



Dragonfly

- Nymphs are voracious aquatic predators
- Feed mainly on aquatic insects like mosquito larvae



Purple Martin
and Feeding
Swallows

APPENDIX 6. Table reports

Table 1 – Nicole Swerhun

Uses by wildlife

- Has to be terrestrial and aquatic function
- Passage for deer to lake/connection to hinterland (Oak Ridges Moraine and beyond)
- Place for bird flight, stepping stone for wildlife
- Sanctuary (although some disagreement about this, some participants said there are more appropriate places for a sanctuary)
- Habitat use by wildlife – the infrastructure can itself be habitat, if you make it right
- Maximize diversity, maximize number of plants, number of species
- Attract indicator species (turtles, frogs, fish, migratory birds, wood ducks, etc.)
- Use design to create the function you want. Size is not a surrogate for quality (lots of examples where small pieces of habitat work – e.g. Spadina Quay). Also, vertical relief can be extremely effective at effectively separating wildlife from people
- Interesting fact – reason birds come to Toronto is the magnetic properties of the rock under Toronto. Another interesting fact – one of the most important “downing” areas for birds in Toronto is Coronation Park because of the connected canopy cover
- Need some marshes elevated so they don’t get damaged by flooding
NO MAJOR DISAGREEMENT ON ANY OF THIS

Uses by people

- A place to integrate with biodiversity (enables integration of people and ecology) – “What kind of uses by wildlife would I like to take my kids to go see?”
- Enhance human interaction with neat stuff
- Series of habitats and places that provide different experiences – marsh, woodland
- Relief from sun, access, viewing points
- Trails that don’t destroy the wildlife corridor function
- Bike trails separate from pedestrian trails – some feel it’s critical that these trails go right through the middle of the greenway
- The primary functions of the Greenway should be habitat/naturalization related, and active recreation (if there at all) should be secondary. The main top-of-mind human uses were related to the Greenway’s wildlife habitat values (being in a natural setting, watching wildlife, etc.)
NO MAJOR DISAGREEMENT ON ANY OF THIS

Playing fields

- Some feel playing fields are NOT consistent with a greenway. They are especially not appropriate in the southern part of the Port Lands. Suggestion was made to split the Port Lands into 3 core areas: Cherry (tourist corridor), Don Greenway (green space), Carlaw/Leslie (can put playing fields here, along with green industry)
- Others feel it’s important not to exclude one use for another (TRCA uses “A, B, C” **A**biotic, **B**iotic, and **C**ultural when planning conservation areas), and therefore playing fields could be considered. Reference was made to the importance of cultural component of green spaces, as well as the huge demand for recreational outlets in Toronto and the importance of having sports fields close to where people live (e.g. thousands of people that are drawn to Sunnybrook Park and others because of the sports fields, picnic areas, etc.). Also flat areas of a flood plain lend themselves to use by sports fields

- Answer may lie in focusing on criteria which would make people “most able to live with” playing fields in the greenway. Advice on what to consider when making a decision re: playing fields included: need buffer between people and wildlife. Use design to accomplish this; push playing fields to the edge (don't locate in the core of the greenway); nuisance wildlife – use design to minimize impact of geese (e.g. use smaller fields, don't put them side-by-side, line with high trees that impede their flight path); need fences/controls for dogs (strong on leash policy)

Table 2 – Anneliese Grieve

Uses by wildlife

- Create large masses of natural habitat (MVVA concept didn't do this)
- Connected environments
- Animals need habitat they can live and pass through safely.

Uses by people

- Tension between human and natural habitat.
- Important role of human access to achieve environmental stewardship.
- Sustainability for active recreation – maintenance is more expensive than for passive recreation.
- Green character is important.
- Create balance of experiences between people and appreciation of nature.
- Discourage inappropriate uses.
- Continuation of uses existing in the lower Don Valley
- Importance of year round uses.
- Playing fields – if have to be located in greenway they should become a buffer. Not put in middle of greenway as the dominant use.

Table 3 - Tanya Bevington

Uses by wildlife

- Allow for movement for existing species.
- Don't want to create a barrier but embrace the Greenway
- Greenway should be functioning part of a web of inter-connected spaces (Tommy Thompson Park, Lake Ontario Park, small neighbourhood parks, Don Valley Parks)
- Tommy Thompson Park has incredible species diversity already. Greenway shouldn't duplicate this, but provide important connections.
- Reduce high level predators.
- Food source for wildlife – want species to come.
- Allow for safe movement of species.

Uses by people

- People – variety of modes.
- Spillway - don't sterilize the land.
- Look at passive recreation.
- Any playing fields should provide local recreation opportunities
- Active recreation facilities – 600% deficiency in this part of the city
- Local playing fields can accommodate stormwater storage (people don't use the fields when it's “raining cats and dogs”)

- Greenway should accommodate large numbers of people – there will be high density neighbourhoods
- Include drinking fountains and washrooms
- Passive and active
- Create “wow” places
- Don’t over-program it

Environmental functions

- Connect other elements of the urban green infrastructure
- Exciting opportunities
- Abate noise and dust
- Environment - managing storm water
- Dark place – don’t light sports fields
- Apply “audobon for parks” principles
- A web of connected features

Table 4 – Elaine Baxter-Trahair

Uses by wildlife

- Opportunity for animals and fish habitat as well as people
- Migrating more than residential wildlife
- Staging for migratory birds
- Self sustaining
- Terrestrial and aquatic diversity

Uses by people

- People – look at edge of greenway and the opportunities there
- Passive recreation and cycling and pathways
- Healthy communities
- Thought be given for educational purposes
- Should include some amenities – green benches
- Lighting in some areas
- Destination nodes
- Sense of being in wilderness and out of the city

Environmental functions

- Environment – floodway is high priority
- Use a resilient design, allow habitats to evolve
- Low maintenance
- Naturally sustainable balances in natural habitat so that one species does not crowd out others
- Provide shade
- Limit dust and noise
- Dark place – recreation places in daylight only
- Organic and rectangular

Table 5 - Michael Van Valkenburgh

Uses by wildlife

- Philosophically the group felt the greenway should be primarily for wildlife
- Go back to the original - it is about nature and enjoy four-legged creatures and butterflies. No skate boards – unless they're for fish!
- Needs to be planned and legislated with a permanent way to ensure protection long term

Uses by people

- If there is circulation in greenway it is for people (not vehicles)
- Grading from edges – most wild in middle and most accessible areas at the edges
- The portion of the greenway in the Lower Don is only a small part of the overall greenway from the Don River to the Lake
- The greenway should feel like a ravine – separate from the city – although it won't have a regular stream in the middle
- No picnicking
- Vandalism is reduced if people feel empathy with the place
- Recognition of playfields; need to think about where fields will go
- Meditative space where one can feel “mind-less in a green way”

Environmental functions

- Essentially a place to experience the water and lake - greenway is conduit
- Less lighting it interrupts bugs
- Inspiring for a place that is quiet
- Don't be ashamed of an idea of beauty

Table 6 – Ken Greenberg

Uses by wildlife

- Incredibly diverse group and difficult to summarize
- Wildlife – saw potential for migratory and conveyance habitats and residential habitats for smaller creatures
- Fisheries opportunities
- Mid point in Steve's pyramid
- Small mammals and insects that don't require large areas
- Green spaces part of a web and not an isolated entity
- Great piece of “protected” wilderness in the city

Uses by people

- All ways for people to engage with nature
- Skiing, biking organized sports
- Human species part of natural order
- Integration and non exclusivity
- How can it make contribution to healthy lifestyles?
- “A golf course without golf”
- Demonstration as an example of river mouth
- Educational
- Space where people can feel they are not imposed by city
- Strolling in the evening

Environmental functions

- Environmental issues – greenway
- Working with nature
- Conveyance of storm water
- Low maintenance
- Low energy use
- Other functions: neighbourhoods expressing ideas
- Adjacent development should be off-grid with energy use based on renewables
- Emissions and effluents of better quality than the receiving air, water and soil
- The development should improve our city's environment from any further degradation
- A new model of local, decentralized sustainability
- Broaden the senses of quality of natural space, rather than ranking high med low
- If you start with natural place you can fit in and not compromise integrity of natural space
- Some active recreation would fit, some would not, depending on the requirements for quality of natural space
- Everyone felt reasonably comfortable with this paradigm

Table 7 – Gwen McIntosh

Uses by wildlife

- Wildlife corridor highest priority
- Residential wildlife habitat including mammals high priority
- Bird migration medium priority

Uses by people

- Co-existence with industry high priority
- Primarily passive uses
- Locally based active recreation medium priority
- Regional sport facility low priority, if at all
- Interpretive opportunities medium priority
- Trail – walking and bikes
- Balance the active/passive
- Balance the people/wildlife

Environmental functions

- Soft bank at Ship Channel
- Stormwater retention and quality control

What kind of place should the greenway be?

- Floodway with shrubs and trees
- Localized areas for recreation

APPENDIX 7. Individual comment sheets

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
Ecological regeneration is primary core strategy			
Should have lacustrine marsh on north and south sides of Ship Channel (must reserve space and assemble the properties; see map on file for lot numbers).			
Broad water swales with gently sloping sides can form aquatic linkages throughout the area			
Big green "S" will connect the hinterland at the Oak Ridges Moraine, to the Don Watershed ecosystem, to the Don Greenway, to the Don Greenway, to Lake Ontario Park, to the Base of the Spit, to the top of the Leslie St Spit. This is an opportunity that far exceeds Stanley Park, Central Park or the Boston Common			
Deer can come down to the lake for a drink of water			
Species list to be assembled: fish, mammals, plants, birds, invertebrates, with help from Toronto Field Naturalists			
See Chester Springs Marsh for an example of ecological design and species list			
Uses by people?			
Greenway should be road free, with gateways at the Lower Don, Portland at Cherry St, and Leslie St			
Economic development zones on west and east of Greenway			
Filmport should have its own exit off the Don Valley Parkway southbound. Other traffic needs can be met through a reconfiguration of the Cheery Street-Lakeshore intersection. The Don Roadway can be closed.			
Environmental functions?			
Must deal with toxic soils – should bioremediate; do not cap. Capping is not adequate because of the costs to the City and to the ecosystem at a later date.			
Other functions?			
Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?			

Question 4: What other advice do you have regarding the Greenway?

Public input at focused (guided) public meetings, where options (eg A, B, C, or D) are presented.

Give credit where credit is due – some people have “been in the trenches” for a decade or more. People with a “black belt in environmentalism” need to be recognized, and separated from beginners and intermediates to get away from the bureaucratic response that “if we do that for you, we have to do it for everybody.”

Jane Jacobs quote: “administrators always take over from the doers”.

Success triangle has (A) citizens (B) politicians (C) staff-bureaucrats.

Quote: “The human imagination leaps to form the whole (Gestalt) to complete the scene in order to make sense of it....To fill the gaps is essential if the scene is to have meaning” pg 158 on “Passion for Form” in “The Courage to Create” by Rollo May.

We need both revitalization (economic development) and regeneration (environmental health) at the water’s edge. It’s not either/or!

Your name: Dalton Shipway

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
The fundamental function is that it is "all about nature".....a safe and supportive corridor and habitat for various species of all types who choose to use the area.	√		
Safe space for a diversity of wildlife, where green space is connected and ensuring that they are the prime focus. ---provide habitats for resident and breeding wildlife, ---trees	√ √ √		
Uses by people?			
No time need be spent thinking of special attractions. It's HUMAN NATURE TO BE IN NATURE. Manicured space should be non-existent.	√		
Environmental functions?			
It is crucial that the Don River and Lake Ontario be connected and that the Don River be given the space it needs to expand---be what it is suppose to be.	√		
There should be a wetland/marshland as part of this. ---masses of functional habitats, ---no dogs as they will run through wetlands and destroy ---avoid open expanses of mown grass to minimize Canada geese ---no need for energy use ---minimal to no maintenance ---no lighting needed as this is not what is found in nature and is unnecessary for insects and animals whose habitat this will be	√		
Other functions?			
Not a place for sport facilities of any sort. This is a space for nature, wildlife and the river.	√		

Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?

The Greenway should be a place of 'passive' recreation---a place to "BE"
HIGH PRIORITY

Question 4: What other advice do you have regarding the Greenway?

The key to success of the Don Greenway project is that any adjacent development must support the goals of clean water, breathable air and clean soil in which to grow food. With this always in the forefront, any notion of development adjacent to the Greenway must be totally sustainable. For example, any development would be built to LEED standards and be self-sustaining in energy production and waste treatment.

Sustainable development is not just a catch-phrase. It is a real tool through which our community can affect positive change not only for our lives, but for future generations.

Solving the Climate Crisis is humankind's biggest challenge. Every possible means must be taken to reduce our impact on the planet. The Don Greenway project is just such a project. Governments must lead the way and set a positive example for industry and people to show how sustainable development can be properly done.

EXTREMELY HIGH PRIORITY

Question 5: Do you know of good examples of greenways in other places? If so, where?

- Kortright Centre's Marshland area (the boardwalk in attached picture can probably only be suitable if the area was bigger)
- Spadina Quay Wetland on a much larger scale (picture attached)
- Stanley Park, Vancouver

Your name: Sharon Howarth

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
Ensure that the green spaces are part of a web and not an isolated entity.	√		
Uses by people?			
Human use should be a secondary focus to wildlife and nature, and the Greenway should strike a stronger preference for nature which is struggling for its “survival” in many of the nearby neighbourhoods. My preference for sports fields with respect to their location is that they be within the “peopled” portion of the waterfront plan. I agree that they should cater to local not regional needs.	√		
Environmental functions?			
Other functions?			

Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?
It should be a great piece of “protected” wilderness in the City.
Question 4: What other advice do you have regarding the Greenway?
It may be questionable to develop communities in a flood plain. It is important to ensure that if there is development that it be a workable off-grid development whose energy use is based on renewables and whose emissions and effluents are of better quality than the receiving air, water and soil. The development should improve our city’s environment from any further degradation.

Your name: Karen Buck

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
A migratory corridor for birds & butterflies with native plants for food & shelter	√		
Uses by people?			
Passive recreational only. A walking path with benches for relaxation. Perhaps something like the Music Garden	√		
Environmental functions?			
Other functions?			
Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?			
It should be a quiet place for walking and relaxing. Something like the music garden – a winding path with native flowers, shrubs and trees. No bikes, roller blades, skateboards or dogs off leash – a welcoming space for birds and butterflies.			
Question 4: What other advice do you have regarding the Greenway?			
Question 5: Do you know of good examples of greenways in other places? If so, where?			

Your name: Margaret McRae

These are my own responses. The Toronto Field Naturalists will send in an additional response form.

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
There should be a high priority given to providing protected habitat for a broad spectrum of wildlife: mammals, amphibians, reptiles, fish, birds; and trees, plants and fungi. Grass should be allowed to grow long to discourage Canadian Goose populations.			
Uses by people?			
Low impact, recreational use which should NOT include playing fields, buildings, structures. Crushed gravel paths for walking and bicycling should be kept to a minimum, and they should be designed to steer people away from natural areas. Small signs should help people understand the significance of the natural environment they are enjoying.			
Environmental functions?			
Habitat...as wild as possible...along with flood control function. Natural species should be encouraged. Norway maples extirpated.			
Other functions?			
NO!			
Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?			
It should be primarily natural habitat for wildlife and a natural corridor for the movement of wildlife between the Oak Ridges Moraine and the waterfront. It should look "green"; it should natural rather than urban.			
Question 4: What other advice do you have regarding the Greenway?			
Keep it as wild as possible! Naturalization of the shoreline should be a key objective and have the highest priority.			
Question 5: Do you know of good examples of greenways in other places? If so, where?			
Not really. One assumes that there are some major American city and I have read that some of the newly-built cities in China have incorporated large natural areas.			

Your name: Toronto naturalists re Don Greenway

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
Migratory Functions (Birds)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wildlife corridor – have to understand Greenway is a critical landscape	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildlife habitat – land base & mammals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses by people?			
Co existence with industry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primary passive	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Active – locally based recreation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Regional Sports Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Interpretative	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Trail (walking & bikes)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Environmental functions?			
Storm water quality control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other functions?			
Balance the active/passive; people/wildlife	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?			
Floodway with shrubs, trees for recreational area			
Question 4: What other advice do you have regarding the Greenway?			
Maximize use as a laboratory (back drop) for film studios Maintain shipping use in ship canal & build fish habitats, structure in ship canal Low maintenance requirements Maximize the integrity of the 'Natural Place'			
Question 5: Do you know of good examples of greenways in other places? If so, where?			
Sunnybrook Farms part of the Don Valley. MVVA's summary provided a Terms of Reference for moving forward			

Your name: WJ Snodgrass - Scrib

Phone number:

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
Allow for the safe movement of existing species Provides a food source for existing species	√		
Uses by people?			
Safe movement of people Full size sports fields/active recreation Spillways shouldn't sterilize land	√ √		
Environmental functions?			
Manages storm-water Links to other environmental features Improve on quality Abate noise and dust	√ √ √		
Other functions?			
Connects other elements of the urban green infrastructure	√		
Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?			
Wow places Dark place (don't light sport fields)			
Question 4: What other advice do you have regarding the Greenway?			
Audobon for Parks It's a web of connective features – don't be literal about it Don't over program and under design it			
Question 5: Do you know of good examples of greenways in other places? If so, where?			

Your name: Jeff Evenson

DON GREENWAY DISCUSSION QUESTIONS

Question 1: What functions should the Greenway perform, in addition to flood conveyance?	Question 2: How important are these functions? Place a check mark in the appropriate box		
	High	Medium	Low
Uses by wildlife?			
Migratory Habitats plant small species: piping plovers Fisheries – aquatic transition terrestrial small insects generalists species of birds			
Uses by people?			
Engage/not exploration/enjoy habitat/walking/hiking/bike For sports/pick up sports (M) Human species – org sport. Integration (not exclusionary) Mixed use Create a great space Demonstration Restoration – nature and people as a model policy Create a great space Not contradictory – baseball/soccer/cricket Contribute to healthy communities – fitness Golf course – no golf Educational Public space - gathering events Feeling of not being in city Strolling in the evening			
Environmental functions?			
Energize in river/storm water Plant communities/ flood protection/nature works Sports people also environmentalists Flood proofing comp in naturalization Interaction in water Low – maintenance – low energy			
Other functions?			
Residential –off line waste Alternate energy source Get energy sources (solar) Not separate – neighborhoods Use of buildings – basketball in fabric Fit frontier – Balance and imbalance – what works with ecological perspective – if all natural does it achieve the objectives – to integrity what can fit. Branch toward low maintenance naturalized river.			

Question 3: Based on these functions and priorities, what kind of place should the Greenway be? What it should look like/feel like?

All be it to evolve in a natural way. 'Not in City' experience
Small scale intimacy high quality vs. quantity
Historical recall (fidelity) – half close eyes experience what native people experience –
contracted out of centre (going forward) ed component.
'Distance' million miles away

Question 4: What other advice do you have regarding the Greenway?

Demonstration. Hydrology & Natural systems
Commitment to Don Watershed
Greenway catalyst for other natural system improvements

Question 5: Do you know of good examples of greenways in other places? If so, where?

Music Garden
7th Hole of Don Valley Golf Course – sense of trees
Below Science Centre
Highland Great Valley
Ravine Bayview South of York Mills

Your name:

Phone number: