THE LOWER DON RIVER AND PORT LANDS



9. PLANNING NATURE AND THE CITY: TORONTO'S LOWER DON RIVER AND PORT LANDS¹

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Introduction

The Don River begins its journey to Lake Ontario some 50 kilometres north of downtown Toronto in the Oak Ridges Moraine – an environmentally sensitive ridge of rolling hills, wetlands, kettle lakes, and woodlands. By the time the river exits its bucolic headwaters and reaches its mouth in Lake Ontario, it has been transformed from a slow moving stream into a reflection of Toronto's nineteenth-century industrialization. This transformation, typical of many North American and European urban rivers, has influenced not only the course of the city's development, but also Torontonians' understanding of the ways that nature and the economy are related. Indeed, the Don River has always been an iconic image within the city's environmental history.

In this chapter, our particular focus is on the history of nineteenth-, early twentieth-, and twenty-first-century plans for transforming Toronto's lower Don River (Map) and filling in Ashbridge's Bay (Map D). We seek to illuminate the ways development plans and planning processes have centrally involved societal transformations of 'nature' into commodities, infrastructure, and the urban form itself. Several sites along the river and the Port Lands are particularly illustrative of these dramatic changes in the relationship between the river, the marsh, and the city. Accessible by bicycle or on foot via the city's Lower Don Recreational Trail and the Waterfront Trail, these sites provide a companion to our discussion.

Our analysis begins with plans for improving the lower Don River in the nineteenth century that led to a straightening of the river and the construction of the Port Industrial District, and then moves to examine more recent plans that are attempting to re-naturalize or 'un-do' the effects of those earlier alterations. The nineteenth-century project, we suggest, simplified and regularized the river and thereby provided infrastructural support for a city bent on rapid industrialization. The twenty-first century plan for re-naturalization and re-inventing the mouth of the Don River area is intended to support the city's emerging post-industrial or knowledgebased economic mode of development. Central to both plans is the linking of nature with the urban space-economy.

While these plans share the linking of nature with urban development, the language they use to describe these relationships differs dramatically. Late nineteenth- and early twentieth-century city builders constructed plans for the Don River and Ashbridge's Bay that spoke ambivalently of nature: it was exalted, feared, and considered outside the bounds of human control. But nature also required improvement so as to unlock its productive capacity in support of urban growth. In contrast, contemporary plans for reinventing and transforming the Don use language and images that emphasize sustainability, recognize the importance of promoting and maintaining healthy urban ecosystems, and expound solutions by which both the economy and nature are positioned as winners.

In our historical comparison of change along the lower Don River, we identify four specific ways that relationships between nature and society influence the urban space-economy. First, they underpin urban growth or decline as imbricated components of physical form; second, they are centrally involved with ongoing biophysical processes, such as, in our case, flooding and siltation; third, they are a key aspect of political processes that influence the conditions and institutions of urban development policy formation; and, fourth, they alter spatial relations in the city – by, for example, making some areas more desirable, and consequently marketable, as accessibility is increased to 'nature', employment centres, and recreational spaces.

We situate our specific historical changes along the lower Don River within a broader context in which cities are understood as centres of modernization. Within this context, urban planners, engineers, politicians and other place entrepreneurs² have consistently had prominent positions in discursive and material processes for modernizing cities. And these city builders frequently took their cues from modernity's principles, stressing the virtues of civilization through reason, progress and profitability. In the western world, modernity's approach to urbanization has been largely based on the notion that progress could be achieved through the logic of the Enlightenment and scientific procedures.³ The Enlightenment's approach rests on scientific experimentation leading to new knowledge about a nature that is largely

divorced from human systems. With such knowledge, society is able to dominate an external nature through control and manipulation. Plans to modernize the design, use and signification of cities have drawn on this framework, envisioning societal institutions and organizations that could transform nature into new urban spaces in a relatively straightforward way.

Clearly, however, the transformation of nature into urban spaces has been in many cases less than successful because it has been based on partial or imperfect knowledge of a complex array of biophysical and social processes – that is, knowledge of both the purportedly distinct biophysical and social processes and the inter-relationships between these worlds is fragmentary and, in important instances, oversimplified. In such cases, the production of new urban spaces has tended to lead to unpredictable results and unintended consequences. Though modernity portrays a rationalized, predictable, and controllable nature, history is replete with examples of catastrophes resulting from city-building predicated on human domination of a well-behaved nature. We associate our historical analysis of change along the lower Don River and Ashbridge's Bay with recently emerging literatures from a variety of disciplines suggesting that nature and society are neither so well understood nor neatly distinct entities. Rather these multiple disciplinary perspectives have found that nature and society are highly entangled through biophysical and human processes, making it impossible to identify where the city begins and nature ends.

The narrative begins by examining nineteenth- and early twentieth-century plans for straightening the lower stretches of the Don River and filling in Ashbridge's Bay. As the force of these plans dwindled and was superseded by the influences of global economic restructuring, manufacturing and other industrial-oriented activities began moving out or closing down on the central waterfront. By the late twentieth century, Toronto's waterfront landscape was of little consequence to an emerging post-industrial economy, and needed to be reinvented for the twenty-first century. And thus we see that current plans for transforming the Don, discussed in the latter parts of the chapter, speak of establishing a re-naturalized mouth of the Don, an "urban estuary," constructed around a rerouted meandering river and intermingling sustainable mixed-use neighbourhoods with entertainment, recreational and cultural facilities.

The Industrial Waterfront and the Language of Improvement

Straightening the Don River in the Nineteenth Century

Looking south along the river from the Riverdale Park footbridge (Map A), one can see the effects of late nineteenth-century efforts to straighten the river. Here the river loses its gentle meanders and soft edges to form a wide, straight channel bounded on either side by transportation corridors of road and rail. Below the bridge, on the east bank of the river, the Don Valley Parkway enters its final leg into the city, spewing some two hundred thousand commuters onto city streets each day. On the opposite bank, the Canadian Pacific rail line follows the straightened course of the river to the waterfront and into the city. Until the late 1880s, the river south of Winchester Street (which terminated at the western bank of the river roughly in line with the footbridge) slowed into a series of wide, meandering oxbows (see figure 1). Remnants of the first oxbow are still evident in the gentle bend in the river north of the bridge.

The river's meandering form and shallow waters, however, presented problems. By the 1870s, the lower Don River was widely recognized as a menace to public health. Years of waste and sewage disposal by local industries and municipal authorities, combined with changes in the river's hydrology caused by deforestation, soil erosion, and water diversion for agricultural and industrial purposes, contributed to highly-polluted conditions in the slow-moving, serpentine reaches of the lower river and the massive reach of marshlands at its mouth. As one area resident commented in a letter to the Daily Globe in 1874, "the water and marsh [at the mouth] of the Don continues to be filled with a foul combination of [wastes]...so that whenever the wind sets to a particular guarter, and agitates the water, the result is [an] abominable smell...injurious to the comfort [and] the health of all within its reach."⁴ From the perspective of ship captains and harbour officials, even more significant than the problem of filth and disease was the costly and pernicious problem of siltation. Each spring, harbour-minding officials cursed the river for depositing large guantities of silt and detritus in Toronto Harbour, creating hazards for shipping traffic. Damage to property caused by seasonal flooding presented yet another complaint that area landowners and civic representatives directed at the river.

The river's bending lower reaches also constrained other possibilities – specifically, visions of the lower river as a corridor for transportation and



The Lower Don River before and after straightening, 1882 and 1894. Shoreline data courtesy of the University of Toronto Map and Data Library. Road map data courtesy of Byron Moldofsky, GIS and Cartography Office, Department of Geography, University of Toronto.

industrial development at the city's eastern perimeter. In response to these problematic 'natural' processes, and in accordance with visions of industrial prosperity along the Lower Don, civic politicians forwarded a plan in the early 1880s to "widen, deepen, and straighten" the Lower Don River in accordance with four central objectives: i) to improve the sanitary condition of the area; ii) to make the Don a navigable stream for large vessels; iii) to accommodate rail traffic into the City; and, iv) to create new lands for industrial purposes.⁵ The plan sought to alter the river to create a new urban form, thereby serving the city's urbanization interests.

For residents of Toronto's east end, the idea of the improvement project conjured images of prosperity and revitalization for an area that had long been relegated to the margins of the city. Throughout the early 1880s, they petitioned Council to take action to implement this ambitious river improvement scheme. At a public meeting to discuss the project in October 1881, for example, land owner J.P. Doel "pleaded on behalf of the health of the neighbourhood and city for the straightening and deepening of the Don," imagining a future where the Don would become "the great shipping centre for Toronto."⁶ Alderman Thomas Davies, who owned a manufacturing firm along the river, expressed the vision of area residents in his submission to the City's Committee on Works in early January 1882:

This great scheme... will afford sites and facilities for all kinds of manufacturing enterprises, coal yards, lumber yards, and many factories we may not now think of, the establishment of which will most assuredly go far towards making Toronto, what I believe it is destined to become, a great manufacturing as well as a business centre...The miasmatic atmosphere with which this locality is too often troubled will be dispelled and the healthfulness greatly increased. Freshets and ice-jams will be things of the past, and the current in the River unobstructed...⁷

Visions for the Don River also appeared in real estate broadsides for the period, which referred potential east-end buyers to the proximity of the improvement project and its potential to "materially advance the value of surrounding districts." As one 1887 advertisement read, "that hitherto despised stream" will soon become "the commercial shipping centre of Toronto, not only for lake and river, but for railway commerce as well." ⁸The improvement plan, in sum, would turn a stigmatized and peripheral area into a productive district of the city, producing profits for the city and local landowners alike.

While area landowners and industrialists sought to remove the uncertainty and unhealthiness of their surroundings, city council members saw the improvement project as an opportunity to augment paltry assessment revenues and to address flooding and health concerns that carried the threat of litigation. Toronto City Council resolved in 1880 to form a Special Committee to report "upon the state and condition of the Don River…from a sanitary point of view" and to develop a scheme to abate the nuisance. Alderman Davies, a vocal proponent of the improvement plan, argued that "every manufactory brings with it assessable property, and when numbers of them are located on the River, it will become a paying work and a profitable undertaking to the City."⁹

Little action seems to have followed from this resolution until six years later when the Canadian Pacific Railway Company finally propelled the project out of Council chambers. In the spring of 1886, the railway, which had attempted since 1881 to improve connections to Toronto from their east-west lines, succeeded in winning the support of city officials to create an eastern entrance to the city along the 'improved' west bank of the Don. The powerful railway company did much to secure project fortunes, and in March 1886 the Don Improvement Act was passed by the provincial legislature, empowering the city to borrow funds and expropriate lands to complete the project (figure 2).

Work began in the fall of 1886, but the completion of the improvement project was anything but straightforward. The magnitude and ambitiousness of the project were soon apparent in a series of unforeseen problems and associated setbacks. Problems with contractors, disputes with area residents and industrialists, protracted negotiations with the railway companies, and unanticipated problems with the biophysical elements of the site all contributed to delay project progress and increase the amount of funds required.¹⁰ By 1891, the lower river had been straightened from Winchester Street south to the Grand Trunk Railway bridge near today's Eastern Avenue crossing (figure 1). New industrial lands had been created, and the banks of the straightened waterway provided a natural corridor for rail traffic into the city. Nature, transformed, fueled the industrial development of the city. Seventy years later, the builders of the Don Valley Parkway would further capitalize on this corridor function by extending a six-lane highway through the lower and eastern valleys of the Don to connect with highway 401 north of the city.



River Don Straightening Plan, showing lands to be expropriated. Unwin, Browne and Sankey, Surveyors. May 7, 1888. Reduced copy of plan referred to in City By-Law No. 2005. Courtesy of City of Toronto Archives, Series 725, File 12.

For all of its successes, however, the Don improvement project failed in important ways. Pollution continued unabated. Chronic problems with flooding, ice jams, and siltation also persisted, making mockery of Alderman Davies' 1882 prediction that "freshets and ice-jams will be things of the past, and the current in the River unobstructed." An ice jam that formed near the river mouth in late February 1902 caused considerable flooding along the lower river, submerging cellars, washing out roads and temporarily blocking the railway lines.¹¹ Finally, for harbour officials the project remained frustratingly incomplete: it failed to divert the mouth of the Don, and its problematic deposits of silt and detritus, away from Toronto Harbour and into the lake.

The Toronto Harbour Commission's 1912 Waterfront Development Plan and the Port Industrial District

Standing on the Cherry Street bridge at the north-western edge of the Port Lands (Map B), it is difficult to imagine the vast marsh that once occupied this site. Below the bridge lies Keating Channel, constructed in the 1910s to divert the mouth of the Don River west into Toronto harbour. To the south and east are the Port Lands, a 400-hectare infilled area used today primarily for shipping, industrial, and film production purposes. Before the completion of the Don improvement project in the 1890s, and the initiation of waterfront reclamation activities in the early twentieth century, this site supported one of the largest wetlands on Lake Ontario. Over five square kilometres in size, Ashbridge's Bay Marsh extended as far east as today's Leslie Street, and supported large populations of migratory waterfowl and other wildlife. The Don entered the harbour several hundred metres to the north, around the site of the Gardiner Expressway overpass over Lake Shore Boulevard and Cherry Street. A second, lesser channel of the Don moved south through the marsh roughly along the alignment of Cherry Street Bridge, curving west into the harbour near the intersection of Polson and Cherry Street (figure 3). Today, none of the original marshlands remain, and only a small remnant of Ashbridge's Bay exists at the eastern end of the waterfront, a popular site for boaters and beach-goers.

The story of the reclamation of Ashbridge's Bay Marsh picks up where the Don improvement project left off. The development of Toronto's waterfront figured prominently in visions for an extensive industrial expansion of Toronto that began taking hold by the early twentieth century. Ambitious industrialization plans led to a search for new sites on which to locate manufacturing plants, expand transportation routes, store coal and other



Detail from J.O. Browne and J. Ellis, Map of the Township of York in the County of York, Upper Canada, 1851. Courtesy of Toronto Public Library, 912.71354 B68.

energy supplies, and build commercial facilities.

A vision for industrial-based urbanization in Toronto set in motion not only a search for new sites, but also the need for new forms of governance to regulate and support this mode of production with its particular spatial ordering of the city. One such organization, which governed over the largest single reshaping and restructuring of Toronto's waterfront in the city's history, was the Toronto Harbour Commission. In May 1911, the Dominion Government of Canada adopted legislation establishing the Toronto Harbour Commissioners and six months later its development policy was adopted in *Toronto Waterfront Development, 1912-1920*.¹² This plan guided the production of approximately 800 hectares of solid land and deep water, primarily by filling in Ashbridge's Bay and the central harbour area.

Following its establishment, the Harbour Commission quickly turned its attention to formulating plans to meet its dual mandate of, on the one hand, waterfront land development and, on the other, port and harbour

minding. Central to these plans was the construction of the Port Industrial District, a massive undertaking based primarily on lakefilling. An article in one of Toronto's dailies, *The Globe*, reveals not only the language used to represent the "despised" Ashbridge's Bay and marsh, but also the wonders of what would result from Toronto's industrial ambitions:

Toronto is to become the Pittsburg of Canada. That heretofore despised region known as 'The Marsh' is to be the site of one of the great iron and steel plants in America, the headquarters of the manufacturing industries that will supply the cars and the equipment for the Canadian Northern [Railway], and the pig iron for the foundries and factories of the city. Toronto has been a city of light manufacturing up till the present time. It will soon be the biggest producer in Ontario of the basic material of twentieth-century prosperity – iron and steel.¹³

While the Harbour Commission's ambitious 1912 waterfront development plan (figure 4) intended to catapult the city into a leading industrial centre, it relied on some very tricky business – what we call a 'walking on water' strategy. It was tricky for two main reasons. First, the logic of development was highly speculative: a major industrial district for manufacturing and warehousing firms would be constructed; firms located on this land would generate a need for more shipping and an expanded harbour; and increased shipping tolls and land rents would repay the expense of constructing the industrial land. The newly-created land was intended to be a hive of industrial activity linked to modern rail, road and water transportation facilities, and, as was noted some decades earlier, was expected to "well repay the projectors" for their \$25 million investment (figure 5).¹⁴

Second, lakefilling – that is, the filling in of Ashbridge's Bay and marsh – required an understanding of both biophysical and social processes and the highly inter-related socio-ecological dynamics embedded in city-building generally, and particularly in constructed land. The Harbour Commission's development strategy, we argue, is tricky because the socio-ecological processes by which it was to be built were, at best, incompletely understood and the inter-relationships among those processes not adequately acknowledged. Lakefilling weaves together a hybrid landscape through chemical, littoral, biological, cultural, economic, political and spatial processes. Such a landscape is neither entirely socially constructed nor within the control of society. Despite attempts to make it manageable by and subordinated to social processes, it escapes full social, political and economic control.



Toronto Harbour Commission plans for an industrial district in Ashbridge's Bay, 1912. Map by Carolyn King, Cartographic Lab, Department of Geography, York University.



Figure 5

Lakefill and erosion in Toronto's central waterfront, 1834-1988. Adapted from Toronto Harbour Commission drawing 15879 by C. Blundell, Department of Geography, University of Toronto. Although an industrial district had been long envisioned for the area, realizing the massive development scheme for filling in Ashbridge's Bay – and, most importantly, creating the new institution that would be mandated to carry it out – ultimately required a major campaign on the part of its proponents.¹⁵ That campaign derived much of its power from Toronto's boosterish political and economic elite who were anxious to propel the city forward, particularly in relation to Montreal, and who saw the waterfront as strategic in this effort.

They argued that bringing in and transporting out goods in the service of the city and industry required major improvements to transportation facilities. The earlier straightening of the lower Don River had created solid land that served as a foundation on which to lay railway tracks, thereby giving the railways a significant locational advantage. Businesses complained bitterly about the high transport rates stemming from the railroads' monopoly on transport facilities, and many central areas of the waterfront saw major battles among residents, shipping interests and the railroad companies for valuable locations and strategic sites.¹⁶

Industrialists and commercial interests took note of the opportunities these investments in transportation infrastructure projects presented for Toronto. If significant new port facilities, built on solid land and giving access to deep water, were constructed, then Toronto's position in Great Lakes shipping would be enhanced. To achieve this goal, industrial interests and city boosters rallied around the filling in of Ashbridge's Bay and marsh.

The Toronto Harbour Commission undertook and managed an impressive socio-ecological production system that began in 1913 and lasted for the better part of two decades.¹⁷ It was guided by its chief engineer, E.L. Cousins, in planning, organizing and implementing a highly capital-intensive and mechanized process intended to closely control production and dominate nature. The processes and labour relations that constructed the land, as well as the form and function of the landform itself, reflected industrial capitalism. Dock walls outlined linear boundaries creating regular geometric shapes consistent with the proposed grid pattern of streets. Behind these walls, solid land was to be created to facilitate manufacturing, warehousing and commercial sites all supported by piped infrastructure, accessible to electricity and connected to railroad sidings. The dock walls were constructed by using fir trees that had been harvested in British Columbia, transported more than 3,000 kilometres, machined into "tongue and

grooved close sheet piling," and reinforced with concrete.¹⁸ The Commission also committed capital-intensive equipment to hydraulically dredge the lake bottom, both to raise much-needed material for filling in the lake and to create a navigable depth of nine metres in the harbour. The largest dredge on the Great Lakes at the time churned its huge blades to stir up the lake bottom, and powerful pumps moved this dredgeate through an extensive system of pipes to its desired location. In addition to the approximately twenty-seven million cubic yards of dredged material, earth was hauled from outside the city and dumped behind the dock walls.

Although the Commission was quite successful in producing industrial land, its track record in attracting firms to locate on the Port Industrial District was less impressive. Throughout the first decades of the century, the number of industrial firms that located there was considerably less than what the Commission had predicted. Indeed, the Commission resorted to selling land, instead of leasing it, to meet its financial obligations and to attract firms. With the exception of two major sales of land for industry in 1949, the industrial wave of waterfront land development that had begun with the 1912 plan was largely spent by the end of the 1940s.

Before ending our discussion of the industrial waterfront, we want to briefly focus on that section of the Don River that connected directly to Toronto Bay – for it is this section more than any other that has given rise to both historical and contemporary calls for change. Work on this section began in September 1908 and, by mid-July 1909, the river had been diverted from its curving westerly course into Toronto Bay to run instead directly south to meet up with an outlet known as Keating's Channel. Final adjustments to the mouth of the river occurred within the context of the Harbour Commission's 1912 Waterfront Plan. Under Chief Engineer Cousins' leadership, a series of studies through 1912 presented different alternatives for the creation of new industrial land within Ashbridge's Bay Marsh. The Harbour Commission decided that the river would curve southwest, then south to meet with a widened and reinforced Keating Channel before entering the harbour. Objections by the British American Oil Company, whose property lay along the line of the proposed diversion, led to the final amendment in the long history of plans to alter the river mouth. Rather than curving through British American Oil's property, the river would continue straight south to connect at a right angle with Keating Channel – the same jarring alignment that persists today.

The Post-Industrial Waterfront and the Language of Sustainability

The Lower Don River and the Port Lands remain places in flux, and they continue to fuel visions for the future prosperity of the eastern waterfront, and the city as a whole. Looking out at Toronto Harbour from Polson Pier (Map C), with the Port Lands stretching out behind you, it is possible to imagine a different future for this relict of Toronto's industrial waterfront. Across the harbour to the south-west, the Toronto Islands are a popular destination for picnickers, boaters and artists. Polson Pier itself lies within the centre of proposed plans to re-naturalize the mouth of the Don and redevelop the Port Lands into a series of mixed-use, high-density residential neighbourhoods. Should these plans be carried out, future residents would look north from this site towards the rerouted mouth of the Don River. edged with wetlands, parkland, and recreational space. Like the nineteenthand early twentieth-century plans for the Lower Don and the Port Lands, however, plans to transform an industrial landscape into one that might be characterised as post-industrial have been very contentious, and repeatedly stalled by shortages of funds and political will.

Twenty-first Century Plans for the Re-naturalization of the Mouth of the Don River

On February 2, 2007, Waterfront Toronto, currently the city's lead waterfront development corporation, announced an international design competition intended to secure a world-class plan for developing forty hectares of land at the mouth of the Don River. The task given to firms selected for the competition was an ambitious one: they were to envision the re-naturalizing and revitalization of an area that has been marginalized for years. Waterfront Toronto had called for a plan for the Lower Don Lands that would establish a "common vision for this area" and would construct an "iconic landscape" to bring new urban life to the area.¹⁹ The initiative of Waterfront Toronto to reinvent the mouth of the Don River marks a major reversal in changes to the Don that began in the late nineteenth century. It is part of an ongoing process aimed at reimagining, reconfiguring and reshaping a problematic area of the waterfront.

The winner of Waterfront Toronto's international design competition was a consortium headed by Michael Van Valkenburgh, Professor of Landscape Architecture at the Harvard Graduate School of Design. The interdisciplinary planning team used what it called ecological and sustainable strategies to "re-integrate strategically important post-industrial landscapes while re-

framing their interactions with the natural environment."²⁰ The Michael Van Valkenburgh & Associates (MVVA) proposal has won a number of prizes that commend it not only for its urban design but also for articulating new relationships between nature and urban development. The American Society of Landscape Architects presented it with its 2008 Award of Honor, celebrating the way it "heralds a new relationship between the urban and the natural" and praising the plan for its reinvention of the Don River "as an agent of urbanism."²¹ The plan also received the Best Futuristic Design Award at the 2009 Building Exchange Conference in Hamburg, Germany where an international panel noted its contribution to sustainability, efficiency and "collaboration with the built environment."²²

Central to the MVVA proposal is the creation of a new type of territory – an "urban estuary". According to the plan (figure 6), this new territory is to be constructed so that "the city, lake and river interact in a dynamic and balanced relationship," becoming "a place of exchange, where urban and natural systems intermingle."23 The MVVA's urban estuary extends the conventional geologic definition of an estuary as a partly enclosed coastal body of water into which flow one or more rivers or streams. The urban estuary becomes a metaphor for the coming together of two disparate systems – the urban and the natural – which overlap and interact with each other but maintain their distinct identities. We, however, prefer a conceptualization of 'urban' and 'natural' in which they are not seen to be in opposition, as though they are separate worlds. Rather, 'urban' and 'natural' are fused together as a dense network of interwoven human, biophysical, cultural, discursive, spatial, and, of course, material processes.²⁴ In this conceptualization, David Harvey's contention that there is nothing especially unnatural about New York City becomes clear.²⁵ We suggest that MVVA's proposed urban estuary should be understood as a hybrid landscape, or what Swyngedouw calls "socio-nature."²⁶ For us, socio-nature is a concept that indicates a deep intertwining of biophysical and societal networks that are effectively inseparable.

According to MVVA, its plan makes the site more natural, creating the potential for new networks of biophysical relationships within a more complex river mouth. The three most prominent features in the MVVA proposal, from our perspective, are the reconfiguration of the mouth of the river, the creation of new parkland, and the construction of five mixed-used neighbourhoods (figure 6). The plan shifts the river's mouth so that it winds south of its current right-angle turn at the Keating Channel and



"Urban Estuary," from the plan for the Lower Don Valley by Michael Van Valkenburgh and Associates, 2010. Image courtesy of Waterfront Toronto.

then empties into the harbour. It envisions a curvilinear river with multiple outlets to the lake – the main flow emptying into the harbour after moving south of the Keating Channel and winding its way through the port lands. MVVA underscores the naturalization aspects of its plan for the mouth of the river. For us, the naturalized Don River is best understood as a new form of socio-nature that unites various biophysical functions (e.g., flood protection) and has the social purpose of producing waterfront property and residential neighbourhoods supporting urban development. Surrounding the river, a newly-created landscape is to be devoted to parkland – the second prominent feature of the plan. This new parkland serves to bring together a more naturalized river mouth, a floodway, and new neighbourhoods into a single landscape "that supports and becomes the generator of new urban life."²⁷ The proposed "berm park" is intended to simultaneously provide a central design feature and serve a key ecological function; that is, according to the plan, the "central parkland...by virtue of its size, scale, and complexity, is able to take on river-mouth hydraulics while providing habitation and recreation...."'[N]aturalization of the mouth of the river,' furthermore, is not a token gesture, but a sustainable urban estuary in the functional and social sense."²⁸

While the primary focus for the estuarine functions of the reconfigured river is to provide protection against flooding, its new entrance-way will, without a doubt, provide a splendid view of the harbour and central waterfront. Five mixed-used neighbourhoods, the third major element of the plan, integrate the urban with the natural to take advantage of the amenities afforded by these harbour views, a closeness to 'nature', and a central waterfront location. Land values around the river mouth, and other sites at the water's edge will be very high, we expect, and have already sparked struggles to redesign the course of the river to enable residential and commercial development.

Since 2007, the MVVA design has been subject to considerable reworking and refining. These changes have occurred in response to market signals and as part of the public and stakeholder consultations required by provincial and federal environmental assessment processes. The core vision, however, of an "urban estuary" incorporating a naturalized river mouth, mixed-use neighbourhoods, and cultural and recreational facilities, remained intact until recently.

Conclusion

We have sought to better understand Toronto's changing waterfront by comparing nineteenth-, twentieth-, and twenty-first-century plans for reshaping the lower stretches of the Don River. Within a relatively short historical period, city builders decided first to straighten and encapsulate the river and then to reverse course and naturalize the river's mouth.

The Don improvement plan, the 1912 Waterfront Development Plan, and the twenty-first century MVVA plan for an urban estuary and berm-park all support economic development in the city. In the earlier period, the Don improvement plan was part of city-building for an industrial era; whereas the twenty-first century plan aims to enhance post-industrial development. It does this by reducing the risk of flooding, revitalizing a marginalized waterfront area, constructing new urban neighbourhoods in which both nature and society are seen to function for their mutual benefit, and producing an urban lifestyle that appeals to a sophisticated and cosmopolitan (and, some would say, 'creative') population. For us, MVVA's urban estuary is an exciting concept that opens up new possibilities for acknowledging a fusion between the urban and the natural. But the concept as described in the MVVA proposal does not resolve a fundamental problem – it fails to acknowledge the ideological positions and social relations that are embedded within such an urban landscape, and thus does not adequately recognize the economic and political struggles and societal tensions that will inevitably arise.

While both plans aim to transform socio-natures, they contain some important distinctions. The nineteenth-century plan is replete with the language of 'improvement.' Nature was regarded as both an asset and an obstruction to the city: an asset, as the foundation for large infrastructure projects; an obstruction, for its perceived inefficiency, its unpredictability, and its destructive potential. As nineteenth-century Toronto historian Henry Scadding wrote of harbour improvements in the 1870s, nature could be improved by diligent human action: "when at length the proper hour arrived, and the right men appeared, possessed of the intelligence, the vigour and the wealth equal to the task of bettering nature by art on a considerable scale, then at once the true value and capabilities of the Don were brought out into view."²⁹

Contemporary plans for an urban estuary, by comparison, harness the language of 'sustainability' and ecological modernization. Sustainability differs from 'improvement' in its fundamental recognition that economic growth will be undermined unless society pays special attention to the ecological systems that underlie that growth – and that their unlimited exploitation is understood as a threat to both economic production and human well-being. As the MVVA plan indicates, "Our proposal embraces the use of sustainable materials and energy savings, but also goes beyond this to encompass sustainability on multiple levels: sustainable communities that provide a broad range of housing, employment, and recreation; a sustainable lifestyle that encourages pedestrian use and public transportation; a sustainable real estate value with structures that are well built and elevated above the regulatory flood levels."³⁰

Finally, we recognize that current plans for the Lower Don Lands continue to change despite Waterfront Toronto's international competition, an award-winning plan, and extensive environmental assessment analyses already completed. In late 2008, Waterfront Toronto seemed to have shifted course by delaying implementation of its plans for the Lower Don Lands. This decision was connected not only to current political and economic situations but also to a proposal, once again, to link the future of the Lower Don Lands to a major international sporting event – this time the 2015 Pan Am Games. The Lower Don Lands is being planned as the site for a number of athletic facilities for these games and the West Don Lands, the adjoining neighbourhood, is scheduled to be the home of the Athletes' Village.

The extent to which MVVA's award-winning plan "heralding a new relationship between nature and the urban" will be implemented remains highly uncertain. The greatest uncertainty for the plan's completion in the near future is the precarious financial situation of Waterfront Toronto. This guasi-governmental organization reports that it lacks the funding, as well as many of the usual statutory powers to raise funds, to implement the naturalization project. Making the situation more complex, in the fall of 2011 Mayor Rob Ford, his brother Councillor Doug Ford, their right-wing allies, and competing development agencies, attempted to hijack current waterfront planning processes and radically alter plans for the Port Lands. Those sympathetic to Mayor Ford's vision see these lands primarily as a way to ease budget woes by selling prime waterfront property to international developers. As the Toronto Star editorialized, "The Fords' ludicrous vision for the future – complete with a megamall, monorail and giant Ferris wheel was so abysmal that a tide of Torontonians rose up in protest. Most city councillors broke with the mayor's program and quashed the takeover [of Waterfront Toronto]."³¹ At the time of writing, a political solution is being sought in which Waterfront Toronto, the City, and various special purpose government organizations are working to design a compromise between Ford's "ludicrous vision" and the plan based on the MVVA proposal.

Endnotes

1 This chapter draws upon material from Gene Desfor, Lucian Vesalon, and Jennefer Laidley, "Establishing the Toronto Harbour Commission and Its 1912 Waterfront Development Plan," and Gene Desfor and Jennifer Bonnell, "Socio-ecological Change in the Nineteenth and Twenty-first Centuries: The Lower Don River," in *Reshaping Toronto's Waterfront*, ed. Gene Desfor and Jennefer Laidley (Toronto: University of Toronto Press, 2011), 49-74, 305-325.

2 Harvey Molotch, "The City as a Growth Machine," *American Journal of Sociology* 82 (1976): 309–311.

3 See, for example, Maria Kaika, *City of Flows: Modernity, Nature, and the City* (New York and London: Routledge, 2005); David Harvey, "On Planning the Ideology of Planning," in *Readings in Planning Theory*, ed. Scott Campbell and Susan S. Fainstein (Oxford: Blackwell, 1996), 176–197.

4 "Eastern smells," Anonymous letter to the Editor, *The Globe*, June 16, 1874, 2.

 5 City of Toronto, Mayor's Inaugural Address, Council Minutes, 1889, Appendix, 14-15.
 6 "Don River improvement," The Globe, February 19, 1881, 7.

7 City of Toronto, Report No.56 of the Committee on Works, *Council Minutes*, 1881, Appendix, line 1082, pp. 888-890.

8 Armstrong and Cook, Choice Building Lots for Sale, Registered Plan No. 709, November 1, 1887, Fonds 79, Series 343, File 6, Item 32, City of Toronto Archives.

9 City of Toronto, Report No. 56 of the Committee on Works, *Council Minutes*, 1881, Appendix, line 1082, pp. 888-890.

10 For a more complete history, consult Jennifer Leigh Bonnell, "Imagined Futures and Unintended Consequences: An Environmental History of Toronto's Don River Valley" (Ph.D. Dissertation, University of Toronto, 2010).

11 Toronto Mail & Empire, March 1, 1902. 12 Canada, Toronto Harbour Commissioners Act 1-2 George V, Chapter 26, Canada Marine Act, R.S.C. 1998, 1911, c. 6-7; Toronto Harbour Commissioners, Toronto Waterfront Development, 1912-1920 (Toronto: Toronto s Harbour Commissioners, 1913).

13 "Moose mountain furnaces will make a Canadian Pittsburg in Toronto's marsh," *The Globe*, October 12, 1907, 1.

14 Sir Richard H. Bonnycastle, "Report on the Preservation of the Harbour of York, Upper Canada, January 14, 1834," in *Memorandum with Accompanying Plans and Documents Relative to the Past and Present State of the Harbour of Toronto*, ed. H.L. Langevin (Ottawa: Department of Public Works, 1881), Appendix, pp. 10–17.

15 Gene Desfor, "Planning Urban Waterfront Industrial Districts: Toronto's Ashbridge's Bay, 1889-1910," *Urban History Review* 17, no. 2 (1988): 77–91.

16 For a thorough analysis of the first railway penetration in the mid-1880s, see Frances N. Mellen, "The Development of the Toronto Waterfront During the Railway Expansion Era, 1850-1912" (Ph.D. Dissertation, University of Toronto, 1974).

17 Canada, Report of the Commission to Examine and Investigate the Transactions of the Toronto Harbour Commissioners, Chair: James Herbert Denton (Toronto: Toronto Port Authority Archives, 1927).

18 E.L. Cousins, "The Port of Toronto: The development of a major port of the Lakes of Canada," *The Dock and Harbour Authority*, September 1948, n.p.

19 Waterfront Toronto, Annual Report 06/07 (Toronto: Waterfront Toronto, 2007), 7. Formed in 2001 with representatives from the federal, provincial, and municipal governments, the Toronto Waterfront Revitalization Corporation (TWRC) later changed its name to Waterfront Toronto. We have used the name "Waterfront Toronto"

throughout, to avoid confusion.

20 American Society of Landscape Architects, "Analysis and planning honor award," 2008, http://www.asla.org/ awards/2008/08winners/013.html, accessed April 21, 2009.

21 Ibid.

22 CNW, Waterfront Toronto's Lower Don Lands Wins International Best Futuristic Design Award, 2009, http://www.cnw.ca/en/ releases/archive/June2009/16/c7024.html, accessed June 16, 2009.

23 Michael Van Valkenburgh Associates
(MVVA), Port Lands Estuary, May 2007, 42.
24 Erik Swyngedouw, Social Power and the Urbanization of Water: Flows of Power (Oxford: Oxford University Press, 2004).

25 Harvey, "On Planning the Ideology of Planning."

26 Erik Swyngedouw, "The city as a hybrid: On nature, society and cyborg urbanization," *Capitalism Nature Socialism* 7 (1996): 68.

27 MVVA, Port Lands Estuary, 6.

28 Ibid., 10.

29 Henry Scadding, Toronto of Old: Collections and Recollections Illustrative of the Early Settlement and Social Life of the Capital of Ontario (Toronto: Adam, Stevenson & Co., 1873), 559–560.

30 MVVA, Port Lands Estuary, 3.

31 "Bad news for Ford: It gets harder", *Toronto Star*, October 24, 2011, Editorial: A-14.

Suggested Readings

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