

(Clarkin 1991), soil samples from more than 250 places in Ataratiri showed that about half the area does not currently meet guidelines for housing, commercial or industrial uses. Pollutants include metals, organic compounds such as polychlorinated biphenyls (PCBs), and coal tar. The highest levels of contamination occur in the western part of the area, where a coal gasification plant operated until the 1950s.

As in any industrial area, several thousand hazardous materials are used, stored or transported in the Lower Don Lands. Although there is insufficient information available to assess risks posed by these hazardous materials, the environmental audit showed that, in the past two years alone, 73 spills and fires involving hazardous materials were recorded in the East Bayfront/Port Industrial Area.

Because the area is dominated by industry and transportation, air quality is poor in the Lower Don Lands. Odours from industry and the sewage treatment plant are a problem for nearby residents, and fugitive emissions of dust, volatile organic compounds, and metals from industry and traffic are a concern. Near the Gardiner/Lakeshore Corridor and the Don Valley Parkway, preliminary modelling indicates that exceedances of provincial guidelines are likely for carbon monoxide, suspended particulates, and dustfall. Little is known about emissions or levels of trace organic compounds in the air.

Smog, including ground-level ozone, is a problem in the Lower Don Lands, as it is across southern Ontario, especially on sunny days in the late spring and summer.

In both Ataratiri and the Port Industrial area, noise is high enough to be a concern for residential use, but can

be reduced to acceptable levels through building design and other measures. The major sources of noise are the traffic in the transportation corridors and, in the Port area, take-offs and landings from the Toronto Island Airport.

The levels of dust, odours, and noise along the north shore of the Outer Harbour are lower than in the industrial areas because so much of it is in recreational land uses.

In the Lower Don, Keating Channel, Inner Harbour, Ship Channel, and Turning Basin, water quality is poor and bottom sediments are contaminated with nutrients, heavy metals, and organic chemicals. Few fish can live in these waters, although overwintering waterfowl congregate there because the water is warmer than elsewhere.

The water quality in the Outer Harbour is generally better than in the Inner Harbour, and sediments are cleaner. Unlike other Toronto beaches, Cherry Beach is rarely "posted", warning people not to swim.

Toxic chemicals are found in aquatic biota including benthic organisms, fish, and aquatic birds. There are restrictions on eating some sizes of eight species of fish found in the Lower Don Lands.

On land, the north shore of the Outer Harbour, the Leslie Street Spit, and several vacant lots in the industrial area have a variety of natural and semi-natural areas including beach and gravelly shorelines, wet meadows, open fields, willow thickets, stands of cottonwoods, and other habitats.

Thanks mostly to benign neglect, these areas have evolved to contain a mosaic of habitats in different stages of succession, providing excellent areas for breeding and migrating wildlife. Information collected for the environmental audit shows that they

support a fairly complex food web: in the north shore area alone, there are some 330 species of plants, 260 of birds, 19 of fish, 12 of mammals, two of amphibians, one of snake, and 27 of butterflies. Similar numbers have been recorded for the Leslie Street Spit.

In contrast, the industrial areas of Ataratiri and the East Bayfront/Port Industrial Area are characterized by few kinds of habitats. Most are poor-quality — the occasional field between roads, parking lots, and industrial or commercial buildings. As a result, they support limited wildlife and a simple food web.

Moreover, although there is good-quality wildlife habitat, particularly in the southern parts of the Lower Don Lands, the spatial connections among habitats are poor. This is the case in east-west connections and, even more, in north-south connections with the important Don Valley corridor.

Links for human movement in the Lower Don Lands are just as poor as the wildlife habitat connections. The Gardiner/ Lakeshore Corridor effectively severs lands to the south from residential areas to the north. The Port Industrial Area is further cut off from the City by the Keating Channel. The Ataratiri area is effectively a cul-de-sac, constrained on three sides by the railway lines, the Don River, and the Adelaide Street ramps to the Don Valley Parkway.

Much of the land in the Lower Don Lands is publicly owned. The major landowners in the Port Industrial Area are the THC, Metro Toronto, and Ontario Hydro. The Liquor Control Board of Ontario and the Ontario Provincial Police are landowners in the East Bayfront; CN and CP own the railway corridor and the yards south of

Ataratiri. Ataratiri lands are now owned entirely by the City of Toronto.

In summing up the ecosystem health of the Lower Don Lands, it is fair to say that the area poses both significant challenges and opportunities for regeneration. The serious problems of contaminated soil and groundwater, air and water pollution, flood potential, dust, and noise must be addressed if the ecosystem is to be restored to health.

There are still significant gaps in our understanding of the environmental conditions in the area — gaps that must be filled. Moreover, jurisdictional, regulatory, and planning issues include a number of institutional obstacles that have contributed to environmental degradation and are road-blocks to remediation.

AN INTEGRATED PLAN FOR THE LOWER DON LANDS

In light of the challenges and opportunities in the Lower Don Lands, and the many studies and plans for individual parts of the area, it became obvious to the Royal Commission that an integrated plan is needed; piecemeal planning cannot deal effectively with issues such as flooding and soil contamination, rehabilitation of the Don River, access, and the need to stimulate economic recovery. An integrated plan would make it possible to:

- retain and enhance natural and built heritage;
- increase the diversity and intensity of uses;
- reduce the risk of flooding;
- share technologies for soil cleaning;
- share programs to monitor air pollution;
- improve links to the rest of the City;



Marsh and woodland habitat along the north shore of the Outer Harbour

- ensure that publicly owned lands are used for the maximum benefit of society;
- integrate the various planning exercises now under way; and
- assist economic recovery in the region.

Such an integrated approach would allow effective (and cost-effective) solutions that might not be appropriate or possible in planning for only one part of the Lower Don Lands. Integrated planning for the area allows consideration of the whole, rather than of a number of disjointed parts, by multiple agencies with different agendas and priorities.

The Ataratiri project is an illustration of the pitfalls of starting with a chunk of land and setting out to create a “project” on it — without integrated urban planning and in the absence of a sound initial understanding of environmental conditions. Ataratiri is economically handicapped,

encumbered by the costs of land purchased at the peak of the real estate boom; in addition, before it can proceed, millions of dollars will have to be spent for soil clean-up and flood-proofing. The greatest encumbrance, however, may well be the “mega-project” mentality: the inflexible, “all or nothing”, predominantly single-use approach to development.

It may be tempting to view the Ataratiri site as if a single industry were simply being removed from an area that never had an urban pattern. But this land was once a piece of the city: it had streets, uses, activities, and history. Therefore, it makes little sense to treat it all at once and comprehensively. It would be better to develop housing in the area in a flexible, evolutionary way, as the “renovation” of an existing neighbourhood. Using this approach, changes would occur and improvements would be made, but the existing fabric would not be entirely eradicated. Life in the area would go on,

while regeneration took place. Such gradualism may be frustrating to those who have a strong desire to see everything done “up front” but it does get the job done, in a more organic and economical way.

Such a flexible and incremental approach to development should be applied throughout the Lower Don Lands, within an overall framework that includes:

- improvements to environmental health, including a “green infrastructure” of civilized streets, parks, squares, recreational facilities, and green links; a flood management strategy; and remediation of air, water and soil;
- a transportation plan that provides for the needs of those outside the area while respecting the needs of those inside it (i.e., provides a balance between “corridor” and “place”);
- a balance of land uses — residential, industrial, commercial, passive and active recreational — that integrates work and living places;
- a shared vision for economic development of the area, including clearly identified opportunities for private-sector participation and investment; and
- an integrated review and approval system.

ENVIRONMENTAL HEALTH

Given the environmental problems in the area, and current understanding of the need for a healthy environment, planning for the Lower Don Lands should begin with a strategy to restore environmental health. It would have four primary purposes: to lay out a “green infrastructure” of parks, open spaces, and green links; to address the

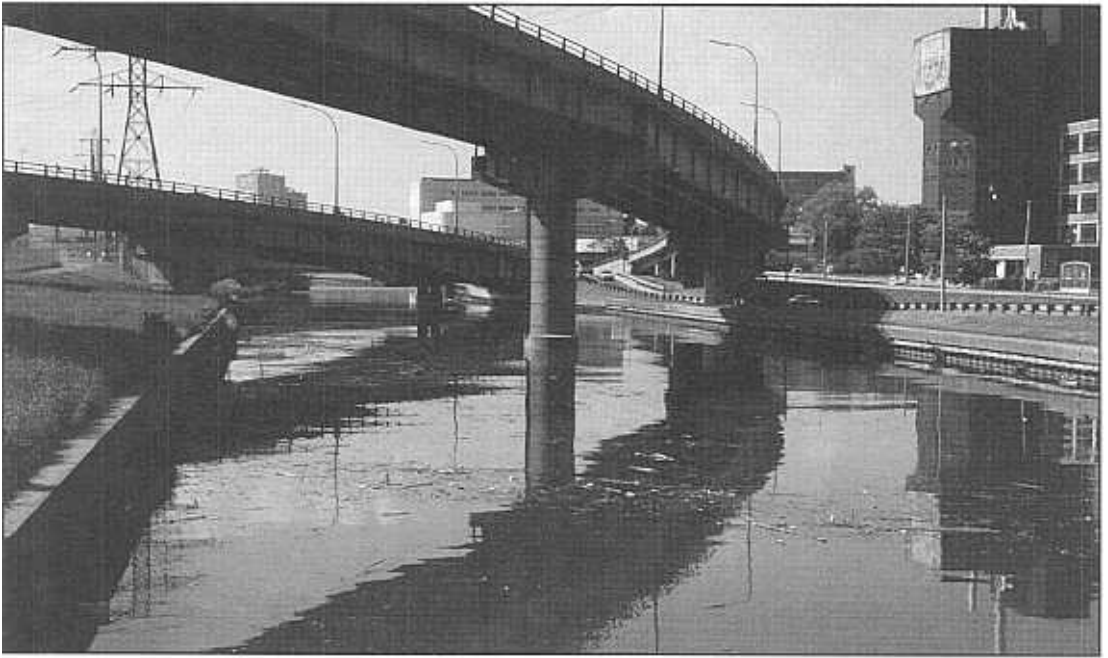
environmental problems facing the area; to minimize the impact of development on the environment; and to retain the area’s natural and built heritage. A plan can be built on the knowledge accrued in the many studies and planning processes that have taken place in recent years.

A restored, cleaner Don River is central to this green framework; many of the water quality improvements will come from work to be carried out throughout the watershed under the Metro Toronto Remedial Action Plan; the Task Force to Bring Back the Don has laid the groundwork for physical changes that would improve access, aesthetics, and habitat, and contribute to improved water quality. (They are described in “Healing an Urban Watershed: The Story of the Don”.)

In the Task Force’s plan, the upper reaches of the Lower Don would become the Rosedale marshes; a small stone weir would create a marsh headpond; side ponds would be dredged to create marshlands for fish habitat. The floodplain would include a

The city contains in its form and functioning the traces of our history and of our collective memory; it holds the potential through which we can shape visions of our future. The strength of networks and partnerships lies in their potential to step outside the structures of conventional wisdom and the pattern of standard problem solving to formulate new problems and to articulate new opportunities.

Jacobs, P. 1991. *Sustainable urban development*. Montreal: Third Summit of the World’s Major Cities.



The Lower Don

mixture of wetlands, meadows, and forested slopes. Revegetation of the side ravines would improve wildlife habitat, and trails would encourage passive recreational uses such as hiking and nature study. South of the new marshes would be the more formal, urban character of the channelized river: the water's edge would be richly landscaped with trees; stairs and ramps would provide access to widened pathways, separated from the railways by dense plantings.

The improved Lower Don would get a new mouth, in the Port lands south of the one that exists, with a gradual curve opening up to a re-created estuary. The delta and marsh would provide new habitat for aquatic life, passive recreational and educational attractions for people, and a wonderful setting for other uses. A wildlife corridor would continue south from the Don's new mouth to link with natural areas along the north shore of the Outer Harbour. Varied habitats there would

be protected and enhanced, and would be linked to the extensive natural areas on the Leslie Street Spit.

Green corridors would be wide enough to provide buffers between wildlife and human uses, and native plantings would be used to encourage ecological development of vegetation. Newly linked parks and green spaces in the East Bayfront would provide western connections between Harbourfront's public areas and the Don River green corridor. On the Lower Don Lands' eastern side, green links would improve what is now an unsatisfactory tie to the lovely recreational areas of Ashbridge's Bay Park and the Eastern Beaches beyond it.

One of the major environmental problems affecting almost the entire Lower Don Lands area is the potential for flooding. While it is hardly a new concern, attempts to deal with it over the years have been "band-aid" solutions: encasing the river in concrete (to reduce erosion and speed the flow of