

## **Toronto Island's Environmentally Significant Areas**

Date: November 13, 2024

To: Infrastructure and Environment Committee

From: General Manager, Parks, Forestry and Recreation

Wards: Spadina-Fort York - 10

### **SUMMARY**

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Environmentally Significant Areas (ESAs) and Provincially Significant Wetlands (PSWs) are the highest quality ecological assets of Toronto's Natural Heritage System and on Toronto Island. Parks, Forestry and Recreation (PFR) and Toronto and Region Conservation (TRCA) have a long history of investment in the natural environment of Toronto Island that continues today through ongoing investment in infrastructure to manage impacts of erosion and park use, as well as management of invasive plant species and planting of native species, within and adjacent to ESAs and PSWs.

The Toronto Island Park Master Plan (TIMP), adopted by City Council on July 24, 2024, has nature at its core and recognizes a need for continued and enhanced investment in these significant spaces. The TIMP outlines a vision and identifies investment and programmatic priorities over the next 25 years and beyond. As part of the adoption of the TIMP, City Council requested the relevant City divisions and agencies to report on a work program to develop management plans to protect and enhance the Islands' wetlands and Environmentally Significant Areas and identify resources that would be required in the 2025 Budget to advance protection and naturalization efforts in the short term. The TIMP is being implemented through a rolling workplan of ongoing and upcoming initiatives, including efforts to protect and restore the Island's ESAs and PSWs.

### **RECOMMENDATIONS**

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The General Manager, Parks, Forestry and Recreation recommends that:

1. The Infrastructure and Environment Committee receive this report for information.

### **FINANCIAL IMPACT**

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There are no direct financial implications resulting from the adoption of this report. The 2024-2033 Capital Budget and Plan for Parks, Forestry and Recreation includes \$0.500

million (M) in 2024 for Hanlan's Beach Habitat Protection Fencing; \$0.190 M in 2024 under the City-Wide Environmental Initiatives capital project, including \$0.100 M for Vegetation Sampling Protocol Monitoring sub-project and \$0.090 M for the Environmental Significant Areas (ESAs) Management Plan framework sub-project, which are both city-wide in nature and not specific to the Toronto Islands. The ESA project will continue into 2025 at a cost of \$0.040 M.

The 2024 Operating Budget includes \$0.040 M for natural area restoration activities on the Islands. A similar amount is planned for 2025.

Annual financial impacts and additional investments, including funding options, to advance projects identified through the Toronto Island Park Master Plan implementation will be submitted for consideration as part of future year budget processes.

Staff will also continue to identify funding opportunities through federal and provincial programs to raise external funds to advance this work.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial implications as identified in the Financial Impact section.

## **DECISION HISTORY**

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At its meeting on July 24, 2024, the Infrastructure and Environment Committee adopted the Toronto Island Park Master Plan and requested the General Manager Parks, Forestry and Recreation, in consultation with other Divisions and agencies as needed, to report back on a work program to develop management plans to protect and enhance the Islands' wetlands and Environmentally Significant Areas and identify capital and/or operating resources required in the 2025 Budget to advance protection and naturalization efforts in the short term.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.IE15.2>

At its meeting on March 20, 2024, City Council amended Parks, Forestry and Recreation's 2024 Capital Budget and 2025-2033 Capital Plan to create a number of sub-projects to advance Hanlan's Beach priority initiatives, including Hanlan's Beach Habitat Protection Fencing.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.MM16.25>

At its meeting on June 15, 2022, City Council adopted Official Plan Amendment 583 to add four new Environmentally Significant Areas, expand the boundaries of two existing ESAs and add two new Provincially Significant Wetlands (Maps 12A and 12B in Attachment 4), as well as remove Conlin's Pond from the ESA designation. These changes did not impact ESA or PSW designations on Toronto Island. OPA 583 is pending Ministerial approval and will come into effect upon Provincial approval.

<https://secure.toronto.ca/council/agenda-item.do?item=2022.PH34.1>

## COMMENTS

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Environmentally Significant Areas (ESAs) and Provincially Significant Wetlands (PSWs) are the highest quality ecological assets of Toronto's Natural Heritage System, supporting a rich diversity of plants and animals. They are protected through the policies of the Provincial Planning Statement and Toronto's Official Plan. ESAs are also protected by the Ravine and Natural Features Protection By-law (Municipal Code Chapter 658). PSWs and most ESAs are also within the Toronto and Region Conservation Authority regulated area (Ontario Regulation 41/24, formerly Ontario Regulation 166/06) which regulates activities within or near areas including wetlands, shorelines, watercourses, and natural hazard lands such as ravines.

The City of Toronto currently has 89 Environmentally Significant Areas and contains nine Provincially Significant Wetlands as identified in Maps 12A and 12B of Toronto's Official Plan, most of which are part of City-managed parkland. Six of these ESAs are found on Toronto Island: Centre Island Meadow/Wildlife Sanctuary, Hanlan's Beach, Muggs Island, Snake Island Area, Wards Island, and West Algonquin Island.

The Island's ESAs and the Toronto Island Coastal Wetland Complex PSW have a combined area of close to 84 hectares, approximately 25 per cent of the total area of the Island including Billy Bishop Toronto City Airport, or 40 per cent of Island's parks and open space lands. Much of the Toronto Island qualified to be included in the Canadian Protected and Conserved Areas Database (CPCAD). These lands are part of Canada's international obligations for protected lands under the United Nations Convention on Biological Diversity. This commitment to protect 30 per cent of the world's lands and oceans by 2030 is now captured in the Kunming-Montreal Global Biodiversity Framework.

### **Investment in Toronto Island's Natural Environment and ESAs**

Parks, Forestry and Recreation (PFR) and Toronto and Region Conservation (TRCA) have a long history of investment in the natural environment of Toronto Island that continues today. For decades, PFR and TRCA, along with a variety of partners, have undertaken natural area protection and restoration across the Toronto Island, including through capital investments such as boardwalks and fencing, staff and contractor-led natural area management activities, community engagement and volunteer stewardship. This has primarily included infrastructure to manage impacts of erosion and park use, as well as management of invasive plant species and planting native species, within and adjacent to ESAs and PSWs. In recent years, efforts were ramped up through an increase in volunteer planting and large-scale events to plant thousands of trees and shrubs.

A number of activities to protect and improve the ESAs took place in 2024 or are planned for this fall. In June, 175 volunteers planted 2,500 trees and shrubs near Hanlan's Beach at an event hosted by Urban Forestry staff. An additional event in July at Ward's Island focused on removal of the invasive plant species common reed (*Phragmites australis*). This summer, contractors treated another invasive plant species, dog strangling vine (*Cynanchum rossicum*), in Hanlan's Point ESA. Activities planned

for this fall include a dune stewardship event at Hanlan's Point ESA with students from Fleming College as part of a long-term academic partnership, and management of woody invasive plant species within Wards Island ESA and adjacent to Hanlan's Beach ESA.

In 2022 a colony of double-crested cormorants, a native fish-eating bird, began to nest in numbers at Toronto Island Park. Cormorants are a concern since they kill the trees they nest in, and their large colonies create an unpleasant odour. PFR has contracted TRCA to manage the colony to limit nest numbers, and over time, eliminate this nesting colony. Once the colony has been successfully managed from this site, work can begin to restore the impacted portion of the ESA.

The nearshore reef and sand dune project led by TRCA at Gibraltar Point, near Hanlan's Beach ESA, was completed in 2023. The TRCA and City continue to collaborate on adaptive management initiatives informed by annual monitoring, including ongoing efforts to address sand migration and beach replenishment. The TRCA and City are pursuing the next phase of sand dune restoration along this shoreline at the 'Hanlan's gap' and will be pursuing expressions of interest in 2025 from coastal engineers to undertake nearshore analysis and detailed design.

As part of the projects initiated by direction from City Council on March 20, 2024 to advance Hanlan's Beach priority initiatives, PFR delivered a first phase of fencing bordering the Hanlan's Beach ESA and restricting access through the ESA from Beach Road. PFR is in the process of determining the layout and phased implementation of additional fencing, informed by priorities identified by staff and stakeholder input.

Protection and restoration activities for Toronto's ESAs, including those on Toronto Island, are guided by monitoring and planning activities that prioritize investment within an ESA, as well as within the larger context of the Island and the Natural Heritage System as a whole. In 2020, as part of the City of Toronto's ecological monitoring program, four permanent fixed-area monitoring plots were established on Toronto Island within two ESAs, Centre Island Meadow / Wildlife Sanctuary ESA and the Wards Island ESA. All plots are resampled every five years to establish baseline conditions, track ecological changes over time, and inform management decisions around ecosystem functioning.

PFR is also currently developing a management plan framework for ESAs located on City-managed parkland as part of implementation of Toronto's Ravine Strategy. The plan framework will provide a common vision for ESAs, as well as information and guidance for efforts that can benefit any ESA regardless of whether there is a site-specific management plan. The framework will guide and communicate decision-making for activities to protect and restore all ESAs on City-managed parkland, as well as include a template and process to support creation of management plans specific for individual ESAs. The work has benefited from input from Indigenous rights holders, local communities and the public and is anticipated to be complete in early 2025.

Site-specific management plans specific for ESAs across Toronto's Natural Heritage System will be developed in coming years, including for the six ESAs on Toronto Island, based on a prioritization tool also being developed as part of the framework. The

resources required to develop these plans are being identified through the creation of two site-specific plans this fall that will test the draft framework and public consultation process. It is important to note that site-specific management plans are not required to undertake management activities in ESAs and the absence of a site-specific management plan for the ESAs on Toronto Island does not preclude ongoing natural area management.

## **Incorporating Indigenous Ways of Knowing**

Relationship-building, trust-building and collaboration takes time. It also takes time to have conversations, identify barriers and needs, and find solutions to help strengthen those relationships. The Toronto Island Park Master Plan involved an extensive Indigenous engagement process that included meeting with the Mississaugas of the Credit First Nation, Rights Holders and the local Indigenous community. This resulted in a number of specific Indigenous design interventions including a priority project for establishing space for Indigenous Ceremony at Snake Island. Snake Island is part of an existing ESA. Any steps towards realizing this recommendation of the TIMP will require future Indigenous engagement and discussion to assess options for next steps and developing a work plan. This will provide an opportunity to complete a more localized plan for invasive species removal, planting and will be an opportunity for discussing an approach to using Indigenous management practices that can help inform a future management plan for the Toronto Island ESAs. The work plan towards next steps and these important discussions are currently being worked through.

The City of Toronto's prescribed burn program is an example where Indigenous knowledge informs practices in ESA management. This practice has been used by PFR to preserve and restore fire-dependant ecosystems, like Toronto's rare Black Oak savannah and woodlands. Before colonization, the practice of cleansing the land with controlled fire had been an Indigenous tradition for millennia. With this knowledge, the burn program has evolved through years of conversation, relationship-building, supporting opportunities, and navigating barriers. Indigenous ways of knowing shared by Indigenous collaborators inform the burn program through their involvement in the planning and execution of the burn, which has been given the Ojibwe name "Biinaakzigewok Anishnaabeg" by Elder Henry Pitawanakwat.

Supporting the inclusion of Indigenous ways of seeing in the management of Toronto Islands natural areas will be an opportunity to grow on these initial collaborations and continue exploring the inclusion of Indigenous ways of knowing in a good way. It is important that it is collaborative at the onset by supporting conversation around how they wish to share and have Indigenous ways of knowing incorporated into the management plan to protect and enhance the Islands' wetlands and Environmentally Significant Areas. This will include understanding the level of involvement, knowledge, time, and compensation to incorporate Indigenous ways of knowing in this project.

## **Coordination and integration of work guided by Toronto Island Park Master Plan**

The TIMP, adopted by City Council on July 24, 2024, has nature at its core and recognizes a need for continued and enhanced investment in these significant spaces. The TIMP outlines a vision and identifies investment and programmatic priorities over

the next 25 years and beyond. The plan provides high-level guidance for parks operations and natural area restoration and protection with the objective of achieving better outcomes for the Island's natural spaces. The TIMP is being implemented through a rolling workplan of ongoing and upcoming initiatives. This includes consideration of the future outcomes of the Toronto Island Flood Mitigation Environmental Assessment (EA) that is anticipated to be complete by year-end. Future collaboration on the recommendations from this EA will present important opportunities for shoreline naturalization and expanded habitats both on land and in-water. As well, protection and restoration will be an on-going discussion that expands as additional areas are identified and prioritized in a coordinated PFR workplan and budget currently underway as part of TIMP implementation.

While this work is under development, PFR will continue efforts to protect and restore the Island's ESAs and PSWs, through the 2025 Parks, Forestry and Recreation Operating Budget and the 2025-2034 Parks, Forestry and Recreation Capital Budget and Plan currently under development by staff. Plans for these activities are underway and currently include expansion of the areas managed for woody invasive species, continued treatment of dog strangling vine and community stewardship and/or planting events, with partners such as Friends of Hanlan's and Fleming College. Staff will also continue to explore opportunities for naturalization and infill planting at Hanlan's Point.

In addition, TRCA will be undertaking the Lagoon Road Shoreline Restoration Project in winter-spring 2025, which will restore approximately 110 meters of degraded shoreline and enhance habitat for fish and wildlife. This project is supported by Environment and Climate Change Canada and will help advance the delisting of the Toronto and Region Area of Concern (AOC) in the Great Lakes Water Quality Agreement.

The ongoing attention to and investment in Toronto Island is producing positive results, including recent nesting by provincially and federally endangered piping plovers and Toronto's first ever pair of bald eagles in modern history, with more work to come. Guided by ongoing monitoring and the framework established through the Toronto Island Park Master Plan and an integrated and coordinated workplan under development, the efforts of the City, along with partners such as the TRCA, will continue to protect and enhance this special natural space.

## CONTACT

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Wendy Strickland, Project Manager, Urban Forestry, Parks, Forestry and Recreation,  
Tel: 416-392-3349, Email: [Wendy.Strickland@toronto.ca](mailto:Wendy.Strickland@toronto.ca)

Ray Vendrig, Acting Director, Urban Forestry, Parks, Forestry and Recreation  
Tel: 416-392-5378, Email: [Raymond.Vendrig@toronto.ca](mailto:Raymond.Vendrig@toronto.ca)

Paul Farish, Director, Parks Planning and Strategic Initiatives, Parks, Forestry and Recreation, Tel: 416-392-8705, [Paul.Farish@toronto.ca](mailto:Paul.Farish@toronto.ca)

Karen McDonald, Senior Manager, Ecosystem Management - Restoration and Resource Management, Toronto and Region Conservation, [Karen.McDonald@trca.ca](mailto:Karen.McDonald@trca.ca)

**SIGNATURE**

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Howie Dayton  
General Manager, Parks, Forestry and Recreation

**ATTACHMENTS**

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