

Waterfront Dockwalls and Western Beaches Breakwaters Action Plan Update

Date: April 28, 2026

To: Executive Committee

From: Chief Planner and Executive Director, City Planning, General Manager, Parks and Recreation and Executive Director, Corporate Real Estate Management

Wards: Ward 3 – Etobicoke-Lakeshore, Ward 4 – Parkdale-High Park, Ward 14 – Toronto-Danforth, Ward 10 – Spadina-Fort York, Ward 19 – Beaches-East York, Ward 20 – Scarborough Southwest, Ward 24 – Scarborough-Guildwood, Ward 25 – Scarborough-Rouge Park

SUMMARY

Toronto's waterfront infrastructure includes more than 37 kilometres of shoreline protection and marine structures, such as dockwalls, breakwaters, and revetments, many of which are approaching or over 100 years old. They serve critical functions including safeguarding vital waterfront areas and assets, providing stabilization for the shoreline and protecting the city from flooding and erosion, facilitating marine navigation including for industrial and recreational boating, and supporting vibrant public spaces along Toronto's waterfront.

This report provides an update on matters related to Toronto's shoreside infrastructure, including the Dockwall Resilience Program, the Western Beaches Breakwaters Action Plan, and the Eastern Gap Seawall.

Given the existing condition of dockwalls and breakwaters, and the known gaps in condition and ownership information, this report recommends a funding commitment of \$6.78 million with 2026 cash flow of \$2.7 million and 2027 commitments of \$4.08 million on an exceptional basis to accelerate the Dockwall Resilience Program. The recommended funding is required to support the time-sensitive development of a state of good repair (SOGR) program for this major asset. As this shoreside infrastructure ages and declines, it presents increasing risks related to public safety, liability, and the continued use of the waterfront for economic, recreational and commercial purposes, making it essential for the City to take the first step in developing a clear understanding of current conditions to set priorities, estimate costs, and identify areas of risk for all governments.

The report recommends this be included in the Corporate Real Estate Management budget. CREM has been identified as the Divisional lead for the dockwall work, including leading CreateTO agreements. CREM is the appropriate lead to inform lifecycle planning and a capital investment strategy for this City-wide strategic asset, particularly given the complicated nature of dockwall ownership and management along the waterfront and recognition that not all ownership is confirmed. As outlined throughout this report, CREM will work collaboratively with the Waterfront Secretariat and Parks and Recreation on the delivery of this work.

The work plan described in this report will inform capital prioritization, ultimately helping the City fully understand the pressure that this asset will place on the already constrained 10-year capital plan. It will also help advance discussions with other governments on roles and responsibilities for maintenance and long-term investment.

Dockwall Resilience Program

As directed by City Council, the Dockwall Resilience Program has been initiated on behalf of the City by CreateTO. The Dockwall Resilience Program will involve four phases including:

- Phase One: Background review and prioritization
- Phase Two: Engineering condition assessments, and subject to capital funding,
- Phase Three: Capital repairs
- Phase Four: Monitoring and maintenance.

The recommendations in this report, if approved, will advance the first two phases of the Dockwall Resilience Program which will include the development of a consistent assessment and prioritization methodology for repair and renewal needs, a systematic review of dockwall title and ownership, and the integration of this information into a database to collate the information in one organized location. The first phase will also include ownership verification for all known dockwalls. This will clarify who owns which dockwalls and will support the City and its government partners in understanding the true extent of the shared infrastructure challenges. It has been long-established that the current and future state of Toronto's shoreline infrastructure is not just a municipal issue but also a matter of provincial and federal concern, whether through ownership, regulation and/or policy direction.

An in-year adjustment to the 2026–2035 Capital Budget and Plan is recommended on an exceptional basis to allow work to begin and to ensure that preliminary findings are available to inform the City's next 10-year Capital Budget and Plan later this year. This work builds on an initial \$550,000 allocation previously approved as part of the Waterfront Revitalization 10-Year Capital Budget and Plan to support project start-up activities in 2026.

Western Beaches Breakwaters Action Plan

The Western Beaches Breakwaters Action Plan relates to the in-water assets between Ontario Place and the Humber River, creating locations for recreational activities and beach shoreline protections. City staff, in consultation with Toronto and Region Conservation Authority (TRCA), have been advancing short-term project specific

discussions in a coordinated manner with other orders of government. Staff have also consulted with stakeholders and community members within the Western Beaches and initiated discussions with government partners on historical records review and ownership.

A visual condition assessment, conducted by Baird Associates in 2026 has identified that over 60% of the Western Beaches Breakwaters system is in fair (20%) to poor (41%) condition, with approximately 14% in serious condition requiring intervention within one to five years to maintain the asset. 0% is in critical condition requiring immediate repairs. The assessment also identified priority repair areas and rough order of magnitude cost estimates to guide future discussions. System-wide repairs are estimated at approximately \$97 million, while full replacement of the 2,100 m breakwater system could cost up to \$180 million, highlighting the necessity of a phased investment approach rooted in intergovernmental partnership.

City staff have identified a need to prioritize discussions on the repair of the "deflector arm" section of the breakwater. The arm has failed and its rehabilitation is estimated to cost \$2.16 million. As the ownership review of the entire Western Beaches Breakwaters is ongoing, it is recommended that City Council direct staff to prioritize the deflector arm repairs in discussions with other governments.

Eastern Gap Seawall

The Eastern Gap seawall plays a critical role in protecting the Inner Harbour, supporting marine operations adjacent Toronto Island lands, and is also experiencing advanced deterioration and material loss. Transport Canada has confirmed that the seawall is under the ownership of the Toronto Port Authority. Early discussions have begun with the Toronto Port Authority on the need for additional safety fencing and signage to warn residents and visitors of its condition, and future discussions will be needed to identify long-term rehabilitation solutions.

Next Steps

Staff will report back on the Dockwall Resilience Plan by Q3 2027 including an update on condition assessments and ownership reviews. This report will include an update on the Western Beaches Breakwaters Action Plan. Technical updates will also be provided via the Annual Corporate Asset Management Plan (i.e., state of good repair reporting). Additional reports may be brought forward to City Council on specific assets should further approvals be required.

Ultimately the Dockwall Resilience Program, and its implementation as recommended to City Council, will allow for improved asset management, better capital budgeting and planning for state of good repair, and support a more comprehensive approach to discussions with government partners.

Toronto's dockwalls and breakwaters are owned by many agencies/governments, address various local, provincial and national objectives, and will require a collaborative approach to rehabilitation. As this shoreside infrastructure ages and declines, it presents increasing risks related to public safety, liability, and the continued use of the

waterfront for economic, recreational and commercial purposes, making it essential for the City to take the first step in developing a clear understanding of current conditions to set priorities, estimate costs, and identify areas of risk for all governments.

RECOMMENDATIONS

The Chief Planner and Executive Director, City Planning, General Manager, Parks and Recreation, and Executive Director, Corporate Real Estate Management, recommend that:

Dockwall Resilience Program

1. City Council increase the 2026-2035 Capital Budget and Plan for Corporate Real Estate Management by \$6.780 million, with 2026 cash flow of \$2.7 million and 2027 commitments of \$4.080 million, fully funded by debt, to accelerate Dockwall Resilience Program led by CreateTO.
2. City Council authorize the Director, Asset Management and Building Performance, Corporate Real Estate Management, in consultation with the Director, Waterfront Secretariat and the Director, Capital Projects Design and Delivery, Parks and Recreation, to negotiate and execute required delivery agreements and/or amendments for the Dock walls Resilience Program with CreateTO, Toronto Port Lands Company, Build Toronto Inc. or their respective subsidiary corporations on terms and conditions satisfactory to the Director, Asset Management and Building Performance, Corporate Real Estate Management and in a form satisfactory to the City Solicitor.

Western Beaches Breakwaters

3. City Council direct the Director, Waterfront Secretariat, to prioritize the Western Beaches Breakwaters deflector arm repairs as a part of discussions with the Province of Ontario and the Government of Canada.

Overall Work Program

4. City Council direct the City Manager to continue to engage federal and provincial officials to advance dockwall ownership, responsibility, and funding discussions.
5. City Council direct the Director, Waterfront Secretariat, in collaboration with the Director, Asset Management and Building Performance, Corporate Real Estate Management, the Director, Capital Projects Design and Delivery, Parks and Recreation, and the Vice President, Port Lands Asset Management, CreateTO, to report back in Q3 2027 on the overall Dockwall Resilience Program and the Western Beaches Breakwaters Action Plan.

FINANCIAL IMPACT

Dockwalls have been identified as a priority asset due to their age, deteriorating condition, unclear ownership, and risks to public safety. The City's dockwalls form a near-continuous system extending from Scarborough to Etobicoke, encompassing over 50 kilometres of shoreline infrastructure, the majority of which was constructed 70 to 112 years ago and is at or beyond its intended service life.

In response to this, City Council previously approved \$1.5 million for the Dockwall Prioritization Study in the Waterfront Revitalization's 10-Year Capital Plan through the 2025 budget process. This included initial funding of \$550,000 to advance the Dockwall Resiliency Program, as well as funding for urgent repairs to dockwalls as may be needed and identified including through the Resilience Plan.

This report recommends an additional \$2.7 million in 2026 and \$4.080 million in cash flow commitments in 2027, for a total of \$6.780 million, fully funded by debt, on an exceptional basis to Corporate Real Estate Management to further enable CreateTO to complete the Dockwall Resilience Program in an accelerated manner. This will enable further condition assessments and preliminary ownership verification for approximately 30 kilometres of priority dockwalls and is anticipated to conclude in 2027 with most critical segments in the central waterfront being completed in 2026. This work is crucial to inform future budgeting for state of good repair needs and intergovernmental engagement.

In addition to dockwalls, the condition assessment for the Western Beaches Breakwaters has also identified a need to prioritize the repair of the "deflector arm" section, with an initial cost estimate of \$2.16 million. Furthermore, preliminary analysis indicates that the full replacement of the Western Beaches breakwaters could cost up to \$180 million. Final costs and ultimate responsibility for these items are subject to confirmation of ownership and further intergovernmental discussions.

In addition to dockwalls and the breakwaters, this report also includes an update on the Eastern Gap Seawall. The Eastern Gap Seawall is a marine structure distinct from dockwalls and breakwaters. Ownership has been confirmed to rest with the Toronto Port Authority, and as such, there is no financial impact to the City associated with its rehabilitation or maintenance.

The outcomes of the Resilience Program will be critical to refining cost estimates and informing future capital investment to address urgent capital repairs. These requirements are anticipated to exceed current planned expenditures in the 10-year Capital Budget and Plan, which as outlined in the 2025 Corporate Asset Management Plan, allocates approximately \$2 million annually on average for dockwall state of good repair work across multiple Divisions, including Corporate Real Estate Management, Waterfront Revitalization, and Parks and Recreation. Future capital works have yet to be determined and budgeted, however it is important to note that the Corporate Asset Management plan estimates a replacement value of \$1.2 billion for ~25 kilometres of dockwalls and breakwaters.

A whole-of-government approach and intergovernmental funding support will be required given the complexity and scope of Toronto's shoreside infrastructure. City staff will continue to advance engagement and discussions with other orders of government

and will report back by Q3 2027 on the findings and outcomes following the engineering condition assessments. These findings will inform next steps, including stage-gating execution and phased investments for priority repair areas of the dockwalls, and will be considered within the capital prioritization framework as part of the future budget process.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information as presented in the Financial Impact Section.

DECISION HISTORY

2025 Western Beaches Breakwaters Action Plan Progress Update

At its meeting on October 8 and 9, 2025, City Council adopted EX26.8 - Western Beaches Breakwaters Action Plan Progress Update with amendments including direction to develop recommendations related to a repair/rehabilitation program for the high-risk Western Beaches breakwater locations and form a working group with Western Beaches stakeholders and community members interested in breakwater repair and rehabilitation. [Agenda Item History - 2025.EX26.8](#)

2025 Western Beaches Breakwaters Action Plan

At its meeting on June 25 and 26, 2025, City Council adopted EX24.5 - Western Beaches Breakwaters Action Plan with amendments, including direction to implement the Western Beaches Breakwaters Action Plan and consult with other levels of government on ownership, rehabilitation funding and coordinated investment. It also requested the CreateTO Board to direct the Chief Executive Officer to act as the executive lead to coordinate the management of City-owned dockwalls. The CreateTO Board did so at their October 15, 2025 meeting via Item [2025.RA21.4](#)) [Agenda Item History - 2025.EX24.5 \(toronto.ca\)](#)

2022 Western Waterfront Master Plan - Update

At its meeting on May 25, 2022, Infrastructure and Environment Committee considered a staff report that intended to update the Western Waterfront Master Plan (2009) in response to changing realities and current priorities that have emerged in the last 15 years. [Agenda Item History - 2022.IE30.15](#)

2009 Western Waterfront Master Plan

At its meeting on August 5, 2009, City Council adopted the Western Waterfront Master Plan. [Agenda Item History - 2009.EX33.20 \(toronto.ca\)](#)

2006 Western Beaches Breakwall ownership staff report

In April 2006, City staff provided a report to City Council on the ownership, usage and condition of the Western Beaches Breakwall. The 2006 report detailed the evolution of the Western Beaches including the construction of the breakwalls by the federal government and the resulting uncertainty regarding long-term ownership and

responsibility for same given the subsequent demarcation of the boundaries of Provincial and Federal ownership of Lake Ontario.

[Agenda Item History - March 28, 2006](#)

Eastern Gap

At its meeting on April 9, 2018, the Parks and Environment Committee considered a report on Establishing Ownership of the Eastern Gap Seawall and Adjacent Lands on the Toronto Islands. The Committee referred the item back to staff for further consultation and study, including with the Federal Government, the Toronto Port Authority and the Provincial Government.

<https://secure.toronto.ca/council/agenda-item.do?item=2018.PE26.6>

COMMENTS

The Importance of Dockwalls and Breakwaters

Much of Toronto's shoreline is engineered, built on lakefill, and features structural waterfront works constructed in the early 1900s, when marshes and the natural shoreline were filled to create port and industrial lands intended to support rail and shipping. Over time, the waterfront gradually shifted toward a more diverse mix of public, commercial and recreational uses, and these waterfront structures including dockwalls, revetment and breakwaters play a critical role in:

- safeguarding vital waterfront areas and assets;
- stabilizing the shoreline;
- providing mooring for vessels;
- supporting economic development, including industry, which relies on marine access including in the Port Lands;
- protecting the city from flooding and erosion; and,
- enabling tourism, recreation, and providing vibrant public spaces along Lake Ontario.

Background and Context

A significant portion of Toronto's waterfront is comprised of an extensive system of dockwalls and shoreline retaining structures. Most of these dockwalls are between 70 and 112 years old.

Toronto's dockwalls are concentrated along the Central Waterfront and Western Beaches, extending from the Don River in the east to the Humber River in the west comprising approximately 23 kilometres of constructed dock walls (see Attachment 1). Additional dockwall infrastructure exists beyond the central waterfront and supports significant infrastructure such as Ashbridges Bay Water Treatment Plant and R.C. Harris Water Treatment Plant. City dockwalls also extend along the Toronto Islands and Scarborough and Etobicoke waterfronts and will be included in the program. The total

length of the dockwalls across the entire City limits will be confirmed as part of the Dockwall Resilience Program. CreateTO's study area is outlined below in Figure 1.

Additional information and context related to Toronto's dockwalls and breakwaters can be found in Attachment 1 and in the June 2025 staff report to City Council as part of [Item EX24.5](#).

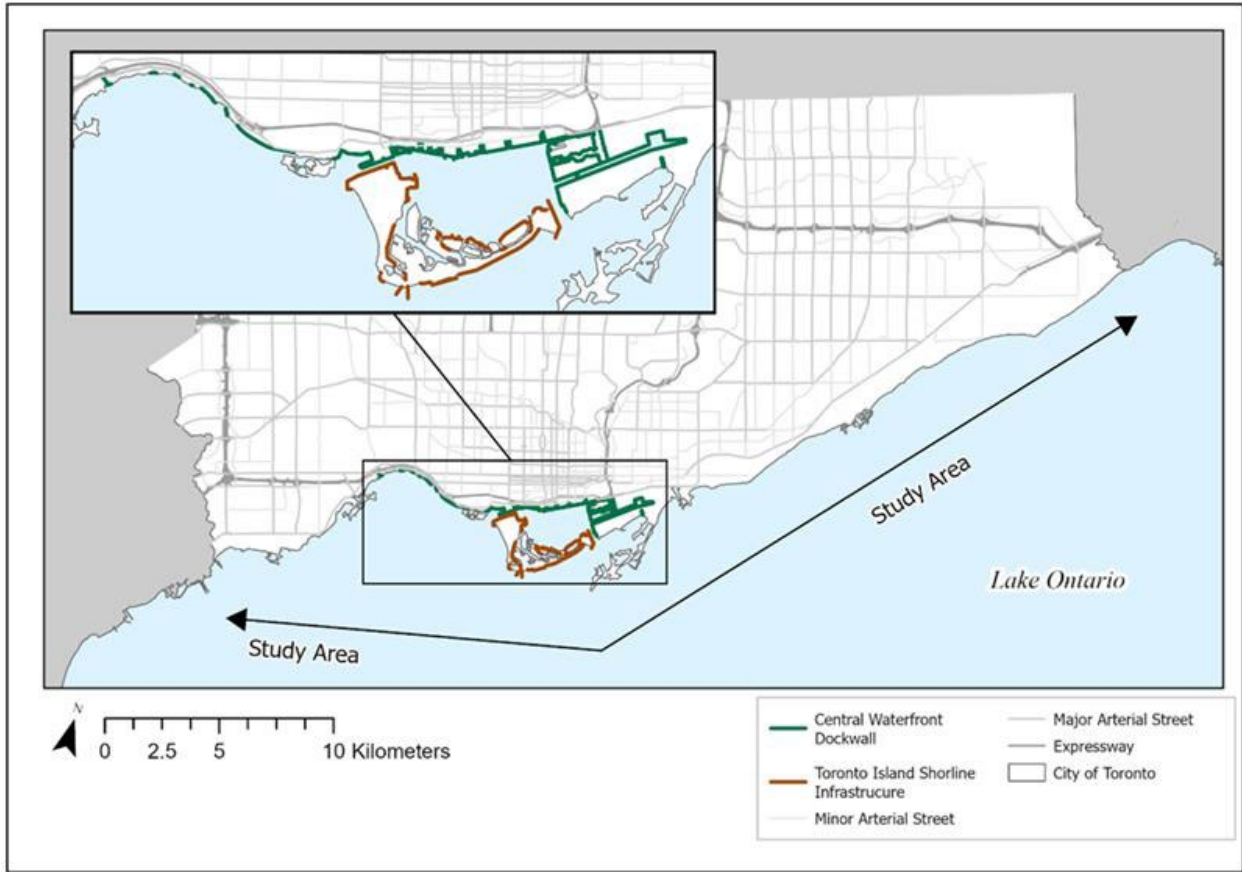


Figure 1: Map of Toronto's Shoreline Infrastructure - Study Area

Current Condition, Unresolved Ownership Status and Asset Management Considerations

As identified in the [City of Toronto's 2025 Corporate Asset Management Plan](#), Toronto's central waterfront dockwalls (total replacement value of over \$1.2 billion) are overall in poor condition and require significant investment above existing planned budgets to address the backlog of infrastructure needs. The plan indicates that 84% of these dockwalls are currently in poor or very poor condition with a note that data is preliminary, requires further verification, and may not completely quantify the overall needs. This does not include the wider waterfront, where this work is at a preliminary stage and further investigation is needed to identify dockwall and breakwater assets and their conditions.

A better understanding of key components of Toronto's dockwalls, including legal ownership and condition assessments, is critical to inform the dockwall program under development.

There is currently no complete and confirmed understanding of who owns each segment of dockwall. While some portions are clearly owned by the City, others have complicated or uncertain ownership histories involving former federal, provincial, or private industrial lands. Due diligence needs to be undertaken to clarify ownership of each dockwall; where dockwalls are determined to be under Provincial or Federal ownership, engagement with the appropriate level of government will need to occur to coordinate a rehabilitation and maintenance plan as required.

There are also considerations related to the asset condition. Full condition assessments have not yet been completed across the entire waterfront, and the information that does exist varies in age and quality. Condition assessments require both visual and in-water inspections to assess these structures. Without a clear picture of current structural conditions, it is difficult to set priorities, estimate repair costs, or understand areas of highest risk.

Further, marine assets across the waterfront were built using a wide range of construction methods, which means repair and replacement approaches vary. Establishing common standards for assessing condition and selecting appropriate repair strategies will allow the City to define program boundaries, plan future investments, and support a coordinated and sustainable approach to managing dockwalls.

Dockwall Resilience Program

The Dockwall Resilience Program will establish a comprehensive citywide framework and supporting database to enable the coordinated management, risk mitigation, and capital planning of dockwalls along the waterfront. Overall, it will develop a consolidated database to centralize technical information, ownership records, inspection data, and legal documentation related to dockwalls. The Program will ultimately help long-term investment decision making.

As directed by City Council, this work is being undertaken to improve the asset management of City-owned dock walls and breakwaters and is led by CreateTO on behalf of the City and will leverage their prior expertise of dockwall asset management work in the Port Lands (as undertaken by the Toronto Port Lands Company, CreateTO's affiliate corporation). The Toronto Port Lands Company owns and actively manages approximately 9 kilometres of dockwalls primarily located in the Port Lands area. CreateTO has undertaken extensive investigation and monitoring work and delivered tens of millions of dollars worth of capital repairs and upgrades to these dockwall assets.

The Dockwall Resilience Program is focused on background review and prioritization, engineering condition assessments, capital repairs, and maintenance. Phase 1, as noted below in Table 1, has begun through initial funding of \$550,000 which was provided by the City to CreateTO in early 2026. Additional phases can now get underway subject to City Council approval. Some condition assessments will be

completed in 2026-2027 to inform budget submissions for capital works to commence in 2027 and 2028 subject to future budget approvals.

The program will align with City objectives related to public safety, climate resilience, and economic development. It will also advance relevant strategies, including the [Marine Use Strategy](#), and inform the development of a 10-year maintenance and renewal plan to guide capital investment decisions and support long-term asset sustainability.

Program Phasing

The phasing of the program is outlined below in Table 1. All phases would be led by CreateTO, in partnership with City divisions. Note that additional funding as recommended in this report would allow phases one and two to occur in parallel.

Table 1: Anticipated phased approach to implementing Dockwall Resilience Program

Phase	Details
<p>Phase One: Background Review, Analysis and Prioritization</p> <p>In Progress</p>	<p>Phase one includes a background review, a technical study of available information, and a prioritized list of dockwalls requiring engineering condition assessments and repairs. It will also include stakeholder management with divisions and agencies.</p> <p>Prioritization will be based on public safety and risk mitigation; structural condition and state of good repair; operational and marine use importance (including economic development); ownership and leasing considerations; alignment with Council direction and policy; opportunities for capital program coordination and delivery efficiency; and climate resilience and environmental stewardship.</p>
<p>Phase Two: Engineering condition assessments</p> <p>Starting 2026 Q3, subject to Council approval</p>	<p>Phase two includes engineering condition assessments to evaluate each section of dockwall and establish a clear understanding of the structural condition, performance, and associated risks of these assets.</p> <p>The assessments will be completed based on the criteria identified in Phase One to ensure that, to the extent possible, the highest-priority locations are reviewed first.</p> <p>The findings will provide the information needed to update the City’s Asset Management Plan, including condition ratings, remaining useful life, and lifecycle planning assumptions, and will help inform State of Good Repair (SOGR) needs and future capital planning.</p>

Phases that are dependent on future Capital Funding	
<p>Phase Three: Capital repairs</p> <p>2027 and onwards</p>	<p>Subject to future capital funding Phase Three will focus on advancing capital works and rehabilitation, including recommendations for the capital budget process.</p> <p>This phase will translate assessment findings into targeted capital projects and lifecycle interventions, ensuring that investments align with the City's Asset Management Plan and focus on maintaining the long-term performance and reliability of waterfront infrastructure. It will identify works required to maintain dockwalls in a State of Good Repair (SOGR) or alternative solutions such as naturalization.</p> <p>Future work would be subject to the asset owner securing necessary funding. For example, City owned dockwalls would require city budget approvals while other government owned dockwalls would require intergovernmental discussions and investments.</p>
<p>Phase Four: Maintenance</p> <p>2027 and onwards</p>	<p>Subject to future capital funding, Phase Four will focus on the ongoing maintenance of dockwalls to preserve asset condition and extend service life following capital repairs.</p> <p>This phase will establish a proactive maintenance approach informed by the findings of the condition assessments and completed rehabilitation works. Routine inspections, preventative maintenance activities, and minor repairs will be carried out to address emerging issues early, reduce the likelihood of larger failures, and support the long-term performance of the dockwall system.</p> <p>The maintenance program will also support the City's Asset Management Plan by providing updated asset information and helping sustain dockwalls in a State of Good Repair (SOGR).</p>

Capital Works

The Dockwall Resilience Program will finalize the inventory of dockwall assets, confirm ownership and responsibility on an as-needed basis, and complete the prioritization framework for ranking assets for detailed engineering review. It does not include funding for capital works.

As noted in the phasing plan in Table 1, CreateTO will work with the City on phases three and four which are to plan for and execute capital works. It will develop a funding strategy aligned with the City's capital planning and State of Good Repair (SOGR) programs. This work will include refining capital cost estimates, identifying funding requirements over the short, medium, and long term, and supporting the preparation of future capital budget submissions.

Naturalization

The program will consider opportunities to naturalize shoreline edges where feasible. Naturalized shorelines support erosion control, provides enhanced environmental performance, and in many cases, are less expensive to install and have lower maintenance costs, particularly long-term state-of-good-repair costs, when compared to dockwall infrastructure. It is recognized that naturalized shorelines do not offer marine use such as mooring, so this will be considered when evaluating each section of the dockwall.

Ownership Verification

As noted above CreateTO will take the initial steps in phase one and two to verify dockwall ownership and responsibilities. Ownership verification can be a complex endeavour and generally encompasses three elements:

- 1) Title search to establish property ownership (including adjacent parcels).
- 2) Where ownership is unclear or more detail is required, surveys to determine alignment of dockwalls with property boundaries.
- 3) A review of historical records and archives on past construction and rehabilitation works.

Together, this information informs the determination of ownership and associated roles and responsibilities. It is important to note that each segment of dockwall may require different approaches and that in most cases, it may make sense to only do surveys at the time of capital works.

CreateTO's Dockwall Resilience Plan takes a prudent approach by including budget for surveys when and as required for the initial phases. Additional funding may be required for surveys and other legal verification at the time of construction.

City-Wide Coordination

The Dockwall Resilience Program that CreateTO is leading on the City's behalf will establish a structure for the City to monitor, maintain, and complete capital repairs necessary to bring the City-owned and controlled dockwalls into a state of good repair in a coordinated way. The program does not include any changes in ownership of the City's dockwalls or breakwaters or change responsibilities for these City assets. Similarly, CreateTO, through its affiliate Toronto Port Lands Company, will continue to hold title to its approximately 9 kilometres of dockwalls in the Port Lands.

This ensures that the City maintains oversight and decision-making related to the maintenance of City-owned key shoreside infrastructure, while enabling CreateTO to act as Project Manager for dockwall maintenance, at the direction of the City and subject to securing sufficient funding approval from the City to advance this work.

CreateTO will continue to work collaboratively with all City divisions that own, manage, or support the City's dockwall infrastructure including Corporate Real Estate Management, Economic Development and Culture, Engineering and Construction Services, Financial Planning, Legal Services, Parks and Recreation, and City Planning (Waterfront Secretariat). External partners will continue to be engaged including the

Toronto and Region Conservation Authority, Toronto Port Authority, and Waterfront Toronto, as well as the Government of Ontario and the Government of Canada.

Next Steps

Subject to Council approval, CreateTO and the City will advance required delivery agreements and procurement documents. As initial funding was provided in early 2026, the Dockwall Resilience Program is underway, and phase one work will continue while the remaining program is procured to allow both phase one and two to proceed.

Western Beaches Breakwaters

The Western Beaches breakwaters, extending approximately 4.1 kilometres from the Humber River to Ontario Place, were constructed in the 1920s and are mostly over 100 years old. Aside from a 600 metres section rebuilt in 2006, many of the breakwater structures have deteriorated, with partial failures that occurred in 1990, 2006, and 2011.

Since the last report to City Council in October 2025, City staff have begun discussions with federal and provincial staff on ownership and with Toronto and Region Conservation Authority on the next steps related to the condition assessment of the structures.

Final Condition Assessment Summary Findings

The Toronto and Region Conservation Authority, in partnership with the City of Toronto, retained a consultant to undertake a condition assessment of the Western Beaches breakwaters due to its visibly deteriorating condition.

The assessment identified widespread deterioration of sections of breakwater. Field investigations, supported by imagery, bathymetric and sonar surveys, and site inspections, confirmed collapsed concrete caps, displaced or deteriorated timber cribs, and reduced crest elevations. These conditions have diminished the effectiveness of the breakwaters during high water levels and increased exposure of shoreline and waterfront assets to wave action and erosion.

Using a standardized condition rating system, the study found that the majority of the breakwater system is in fair (20%) to poor (41%) condition, with 14% in serious condition requiring near-term intervention. Priority repair areas are identified, and rough order-of-magnitude cost estimates have been developed for a range of repair and replacement options. The rough order-of-magnitude cost for repair-in-place of all breakwaters is estimated at approximately \$97 million, including \$79 million for structures in serious or poor condition. Full replacement of the entire 2,100 m of breakwater would cost up to \$180 million. This underscores the need for phased investments and intergovernmental collaboration.

Attachment 2 to this staff report includes a figure showing condition assessment ratings and preliminary ownership findings. Priority repair areas were identified, and rough order of magnitude cost estimates were developed for a range of repair and replacement options, from localized repairs to full reconstruction.

Deflector Arm

An immediate-term pressure exists to rehabilitate a section of the Western Beaches Breakwater called the deflector arm. The deflector arm plays an important role in reducing wave agitation within the nearshore area and supports the flat-water paddling course.

The condition assessment by Baird identified the deflector arm structure (noted as WB08.03a in the bottom right map in Appendix 2) as having collapsed and now being fully submerged and in serious condition. Its current condition presents a potential navigational hazard. Replacement and removal options were evaluated, with a rubble mound replacement identified as the preferred approach.

A rough order of magnitude cost estimate of approximately \$2.16 million was developed by Baird as a part of the condition assessment to inform future capital planning. Ownership of the entire breakwater is still to be determined, and this will be required before any further design and rehabilitation can occur. Recognizing this, it is recommended that City staff, led by the Waterfront Secretariat, prioritize deflector arm repairs in discussions with other governments.

Alignment with the Western Beaches Public Realm Plan

The breakwaters are being and will continue to be considered in alignment with the Western Beaches Public Realm Plan. Through the public consultation undertaken for this plan, it has been identified that there are a wide variety of ideas for how the breakwaters could be improved, altered or redesigned as part of a bigger long-term improvement to the Western Beaches area. A separate report to City Council is planned for later in 2026 on the Western Beaches Public Realm Plan.

Intergovernmental Discussions

City staff have reached out to Federal and Provincial officials to begin a new series of discussions on ownership and responsibility on the breakwaters. Ownership and responsibility of the breakwaters is a complicated matter as the City's best available evidence is that the structures were built by the Federal government and its agencies within what is now widely understood to be Provincially owned portions of Lake Ontario.

Attachment 2 is a map of the current breakwaters ownership by government based on City staff review. Provincial officials at the Ministry of Natural Resources and Forestry are engaged. Federal support is currently being led by Public Services and Procurement Canada which is conducting a review of property, legal, engineering and architectural records including an archival and legislative search. It is anticipated that this due diligence will take several months and findings will lead to further discussions amongst staff. Verification of ownership and responsibility will be a key step needed before any capital improvements can be made. An update on these discussions will be provided in the recommended report back in Q3 2027 to inform critical repairs that will be needed within the next five years as outlined in the condition assessment.

Funding Strategy and Intergovernmental Partnerships

As noted above, a review of ownership is the first step towards a comprehensive approach to rehabilitation. Following this, detailed recommendations for repairs or rehabilitation, and the associated costs for the serious condition locations will need to be identified.

It is recommended that staff report back in Q3 2027. This will be prepared in consultation with other government partners to inform a shared understanding of the ownership and management needs for these assets.

Eastern Gap Seawall

The Eastern Gap is one of two navigable entrances to Toronto Harbour and was created in the 1890s following major storm events that permanently breached the Toronto Islands sand spit, prompting subsequent construction of breakwaters and seawall infrastructure to stabilize the channel and support safe navigation. The Eastern Gap Seawall (or pier) was largely constructed by the federal government and continues to play a critical role. The Eastern Gap protects the Inner Harbour, adjacent Toronto Island lands, and is critical for marine operations including serving as the primary entry point for marine industry into the Inner Harbour from Lake Ontario and the St. Lawrence Seaway.

The seawall was originally 165 metres in length. The northern 123 metres was demolished and removed in 2018 because of a failure. This work was done by the Toronto Port Authority including removal of debris. At the time, the Toronto Port Authority submitted correspondence to City Council that it did not own the seawall (pier) but undertook the work to support navigation and safety of the harbour as per its mandate.

The remaining 40 metres supports the east extent of Ward's Island, but now appears to be in poor condition, with visual observation identifying advanced deterioration and material loss reflecting its age and the fact that it has exceeded its original design life. Over the years, many stakeholders have presented ideas on how to improve the remaining seawall including for public access.

City staff have been able to confirm with Transport Canada that Eastern Gap seawall is owned by the Toronto Port Authority. City staff have initiated discussions with the Toronto Port Authority on short term safety improvements in the area (fencing, signage, etc.) and further discussions are needed between staff and with stakeholders to determine a long-term approach which could include rehabilitation.

Next Steps

Subject to City Council approval, staff at the City and CreateTO will advance the Dockwall Resilience Plan and Western Beaches Breakwaters Plan and report back by Q3 2027. Further technical updates will be provided in the context of the Asset Management Plan. The findings of the Resilience Plan will inform future capital prioritization and the City's approach to rehabilitation.

CONTACT

Annely Zonena, Director, Waterfront Secretariat, City Planning, 416-392-8113,
Annely.Zonena@toronto.ca

Jeff Downs, Interim Director Asset Management & Building Performance, Corporate Services, 416-392-3581, Jeff.Downs@toronto.ca

Prapan Dave, Director, Capital Projects Design & Delivery, Parks and Recreation, 416-629-2361, Prapan.Dave@toronto.ca

SIGNATURE

Jason Thorne, MCIP, RPP
Chief Planner and Executive Director, City Planning Division

Patrick Matozzo
Executive Director, Corporate Real Estate Management

Terry Ricketts
General Manager, Parks and Recreation

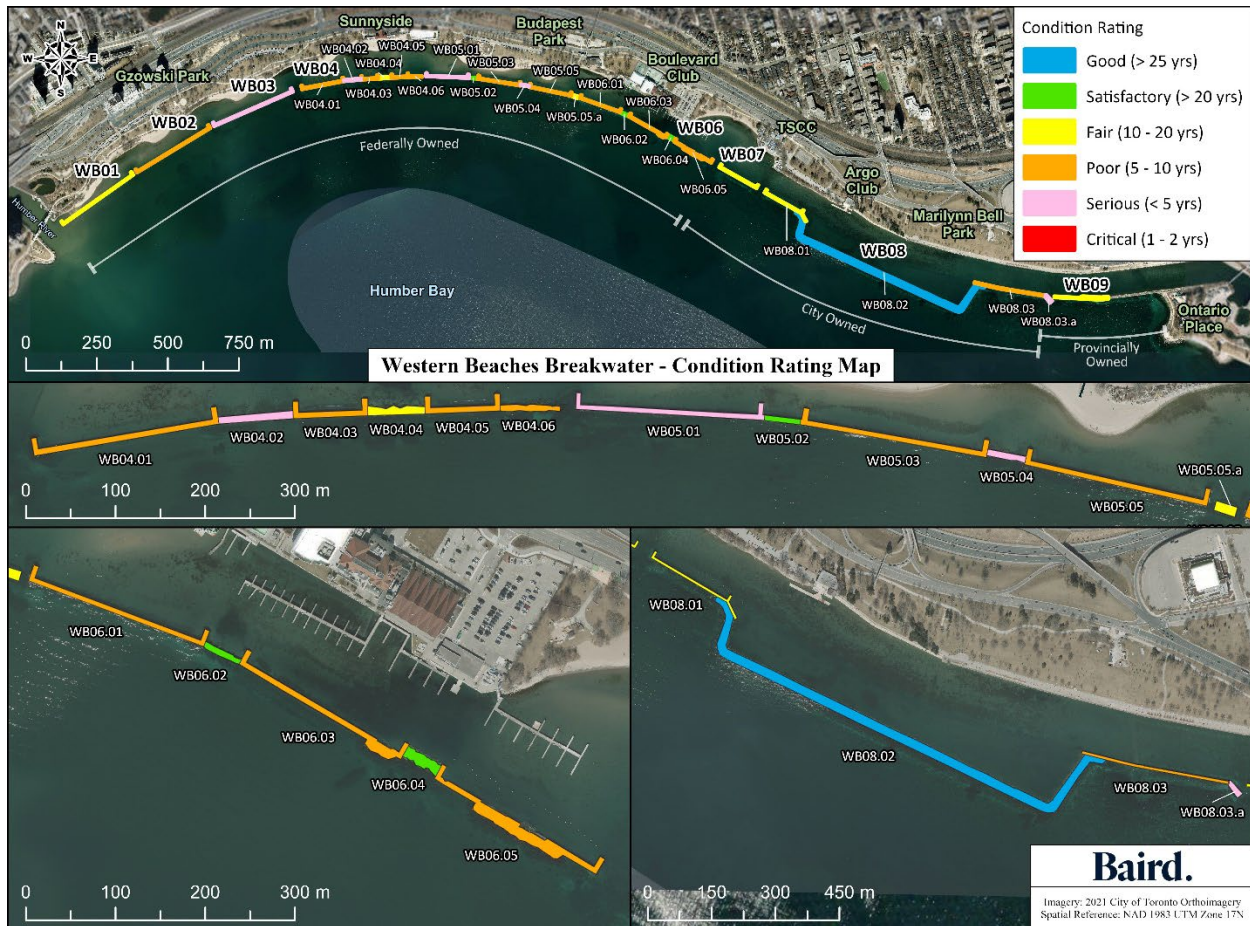
ATTACHMENTS

Attachment 1 - Central Waterfront Dockwalls Preliminary Condition and Ownership maps

Attachment 2 - Western Beaches Breakwaters Condition Assessment Ratings and Preliminary Ownership Map and Table

Attachment 3 - Photographs of Recent Dockwall Projects

Attachment 2 - Western Beaches Breakwaters Condition Assessment Ratings and Preliminary Ownership Map and Table



Federal		Provincial		City		All %	Breakwater Length (m)*	Breakwater Condition Rating	Timeline*** (years)
0	0.0%	0	0.0%	695	16.8%	16.8%	695	Good	>25
90	2.2%	0	0.0%	0	0.0%	2.2%	90	Satisfactory	> 20
380	9.2%	192	4.6%	306	7.4%	21.2%	877	Fair	10 - 20
1405	34.0%	0	0.0%	218	5.3%	39.3%	1623	Poor	5 - 10
546	13.2%	32	0.8%	0	0.0%	14.0%	579	Serious	< 5
0	0.0%	0	0.0%	0	0.0%	0.0%	0	Critical	1 - 2
85	2.1%	153	3.7%	30	0.7%	6.5%	269	Not Applicable**	-
2507	60.7%	377	9.1%	1249	30.2%	100.0%	4134	Total	

* "Breakwater Length" measured along alignment of original breakwaters

** "Not Applicable" includes gaps between breakwaters without structures and portion within Ontario Place

***"Timeline" is estimate of when repair/rebuild work should be completed by

Attachment 3 - Photographs of Recent Dockwall Projects



Bathurst Quay Common - New Dockwall (2019-2024)

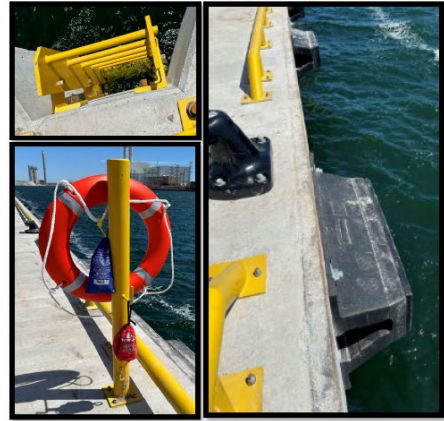
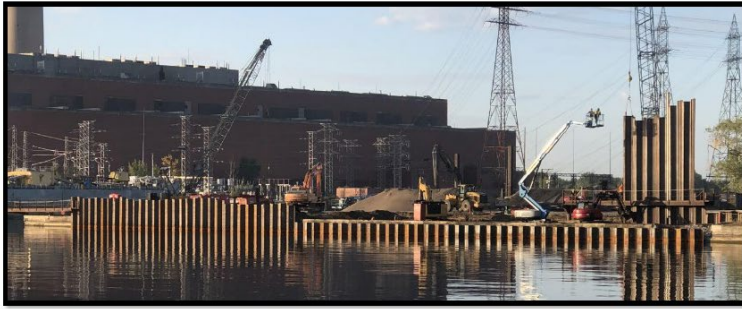


Before

During Construction (2023)



Ship Channel Dockwall Emergency Repairs, Port Lands – Berth 456 (2023)



CREATE TO

Ship Channel Dockwall and Promenade, Port Lands - New Dockwall (2024)