

Item 9.2.

Section I – Items for Board of Directors Action

TO: Chair and Members of the Board of Directors
Meeting #7/19, Friday, July 26, 2019

FROM: Moranne McDonnell, Director, Restoration and Infrastructure

RE: **VALLEY EROSION HAZARDS PROJECTS – 2019**
Proposed 2019 Workplan to Address Erosion and Slope Instability Hazards
Arising from Severe Weather Events in the City of Toronto

KEY ISSUE

Submission of TRCA's proposed 2019 workplan for Valley Erosion Hazards Projects in accordance with the City of Toronto's Coordinated Watercourse Management Plan (2014) to address erosion damage to private and public lands arising from the July 8, 2013 storm and subsequent severe weather events in the City of Toronto.

RECOMMENDATION

WHEREAS Toronto and Region Conservation Authority (TRCA) staff has reported to the Authority Board at least annually on the management of erosion and slope instability hazards related to the July 8, 2013 storm and subsequent severe weather events since Authority Meeting #6/13, held on July 26, 2013, and most recently at Authority Meeting #4/18, held on May 25, 2018;

AND WHEREAS staff was directed at Authority Meeting #5/17 by Resolution #A101/17 to pursue additional sources of funding from the Province of Ontario and federal government for erosion control works;

AND WHEREAS staff was directed at Authority Meeting #4/18 by Resolution #A74/18 to allocate 5% of the funding to lower priority sites where proactive and/or minor works may prevent significant future damage to, or loss of, property;

THEREFORE LET IT BE RESOLVED THAT staff continue to pursue additional sources of funding from the Province of Ontario and federal government for erosion control works;

THAT staff continue to allocate approximately 3 to 5% of the available funding for 2019 to lower priority sites where proactive and/or minor works may prevent significant future damage to or loss of property;

THAT staff proceed with the new and ongoing projects as outlined in the proposed 2019 workplan described in Attachment 1;

THAT staff be permitted to make in-year adjustments to the workplan as required as more information is received from geotechnical investigations, engineering analyses, or in response to delays due to negotiations with landowners and other factors, or should subsequent storm events worsen conditions at certain sites;

AND FURTHER THAT a copy of this report be provided to Toronto Water in compliance with the City of Toronto's 2014 Coordinated Watercourse Management Plan.

Item 9.2.

BACKGROUND

TRCA has been inventorying, assessing and remediating erosion hazards for more than 30 years under various program names and special projects. In recent years, intensifying storm events such as the July 8, 2013 severe storm, the May 2017 severe rain event, and the high Lake Ontario water levels along the waterfront in 2019 have resulted in more frequent widespread flooding, surcharges of water infrastructure, debris jams, damage to river & valley systems including extensive damage to park trails and pedestrian bridges, and an unprecedented number of slope failures on hundreds of private properties that border these natural areas. The result of these intensifying and more severe weather events has been a significant increase in the number of erosion hazard sites in the City of Toronto which are awaiting assistance through TRCA's Erosion Risk Management Program (ERMP). Through this long-standing program, TRCA supports its municipal partners to more effectively deal with the effects of climate change by mitigating past development decisions with cost-effective solutions to protect essential infrastructure.

On July 26, 2013, staff brought the first post-storm erosion damage report to Authority Meeting #6/13, providing an overview of the information collected to date with recommendations for further action. Staff has continued to submit mid-year and/or annual reports to the Authority Board since 2013. Staff will continue to provide mid-year and/or annual updates to the Board of Directors as appropriate in order to communicate TRCA's proposed workplan for Valley Erosion Hazards Projects using Critical Erosion and Floodworks funding in the City of Toronto.

RATIONALE

The 2019 workplan outlines the status of each project currently in progress or proposed with 2019 funding. Project specific details are described in Attachment 1. As in previous years, some in-year adjustments to the workplan may be required as more information is received from geotechnical investigations, engineering analyses, delays due to negotiations with landowners and other factors, or should subsequent storm events worsen conditions at certain sites.

As the primary objective of TRCA's Erosion Risk Management Program is to reduce risk to life and property from the hazards of erosion, the majority of funding continues to be allocated to sites where significant damage has already occurred. Staff received direction from the Authority Board at Meeting #4/18, held on May 25, 2018 to allocate 5% of each year's funding to lower priority sites where proactive and minor works may prevent future failures. As illustrated in Attachment 1, the proposed allocation to proactive and minor works in 2019 is approximately 5% of the total available budget for valley erosion hazards in 2019, as the remainder of the budget is needed to complete works at higher risk sites. The proposed 5% budget allocation is approximate and subject to securing all necessary landowner agreements prior to proceeding with work.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 2 – Manage our regional water resources for current and future generations

Strategy 7 – Build partnerships and new business models

FINANCIAL DETAILS

All funding for this portfolio of work is provided by the City of Toronto within account 133-01 as outlined in Attachment 1 except where noted otherwise. Some funding is expected to be received from benefiting landowners on select projects in accordance with TRCA's Private Landowner Contribution for Erosion Control Works policy.

Item 9.2.

Additionally, TRCA has been awarded \$22 million over the next 10 years from Infrastructure Canada (INFC) through the Disaster Mitigation and Adaptation Fund Program (DMAF). DMAF funding has been allocated on a project-by-project basis as part of TRCA's Erosion Hazard Mitigation Strategy. TRCA's application for funding under DMAF was approved in March of 2019 and this funding will help to accelerate critical erosion control works under the Valley Erosion Hazard portfolio. A total of 66 projects in the City of Toronto will be receiving funding under DMAF over the next 10 years at a total cost of \$48 million with \$14 million being the share provided by the federal government. Forty-five of these projects are funded under the Valley Erosion Hazards portfolio with the remainder being major maintenance projects to repair TRCA's existing erosion control infrastructure that are nearing the end of their lifespan.

The total budget for Valley and Erosion Hazards in 2019 is 5.13 million, which includes 3.5 million in 2019 capital funding, forecasted DMAF funding on a project by project basis based on eligible expenditures after March 31, 2019, and approximately \$18,000 in funds carried forward from 2018 to continue with projects already in progress. Attachment 1 shows how the total budget is allocated across the priority projects.

Some adjustments to individual projects funded under this capital works program may be proposed by funding partners including INFC and Toronto Water, and it is noted that the allocations are subject to revision as the work progresses. With the potential delays and other unknown factors associated with landowner negotiations, staff may make in-year adjustments to project allocations as required. In the case where landowner negotiations stall on an approved project, staff will reassign the available budget to an approved alternate project.

DETAILS OF WORK TO BE DONE

Refer to the Proposed 2019 Workplan (Attachment 1) for the details of work to be done for each project.

Report prepared by: Courtney Rennie, extension 5523

Email: courtney.rennie@trca.ca

Report approved by: Ashour Rehana and Moranne McDonnell, extensions 5524 & 5500

Emails: ashour.rehana@trca.ca & moranne.mcdonnell@trca.ca

Date: July 26, 2019

Attachments: 3

Attachment 1: Proposed 2019 Workplan

Attachment 2: Proposed Project Locations

Attachment 3: Valley Erosion Hazards 2019 Master Budget