



# Toronto and Region Conservation Authority

## Board of Directors Meeting Agenda

#2/19

February 22, 2019

9:30 A.M.

HEAD OFFICE, 101 EXCHANGE AVENUE, VAUGHAN

Pages

1. **ACKNOWLEDGEMENT OF INDIGENOUS TERRITORY**
2. **MINUTES OF MEETING #1/19, HELD ON FRIDAY, JANUARY 25, 2019**  
Minutes [Link](#)
3. **BUSINESS ARISING FROM THE MINUTES**
4. **DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF**
5. **DELEGATIONS**
  - 5.1 **LARRY NOONAN, CHAIR, ALTONA FOREST STEWARDSHIP COMMITTEE**  
re. Item 9.1. TORONTO ZOO: update to the tripartite agreement; comments on the location of the new Visitor Centre for the Rouge National Urban Park.
  - 5.2 **PAULINE BROWES, CHAIR, FRIENDS OF THE ROUGE NATIONAL URBAN PARK**  
re. Item 9.1. TORONTO ZOO: changes required to the tripartite agreement as a result of the proposed location of the Visitor Centre for the Rouge National Urban Park.
6. **PRESENTATIONS**
7. **CORRESPONDENCE**

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- 8.1 CONSTRUCTION FACILITIES VENDOR OF RECORD EXTENSIONS FOR 2019 RESTORATION AND INFRASTRUCTURE PROJECTS** 5
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- Award of Request for Proposal (RFP) No. 10009146 for engineering consulting services to update the Don River floodplain mapping and to investigate G. Ross Lord Dam's gate operation rules in order to reduce the risk of flooding along the West Don River.
- 8.4 TORONTO AND REGION CONSERVATION AUTHORITY ADMINISTRATIVE OFFICE BUILDING PROJECT UPDATE** 19
- Construction and Term Financing Update: authorization of the finance documents with respect to award of contract #10008935 for up to \$54 million in construction and term financing to support the construction of the new administrative office building for Toronto and Region Conservation Authority.

**9. SECTION III - ITEMS FOR THE INFORMATION OF THE BOARD**

- 9.1 TORONTO ZOO** 25
- Update on discussions relating to the tripartite agreement on the Toronto Zoo property and the Parks Canada process for determining the ultimate location of an orientation and education facility for the Rouge National Urban Park.
- 9.2 HUMBER BAY PARKS MASTER PLAN UPDATE** 37
- City of Toronto Park, Forestry and Recreation Capital Planning Team have been supported by the TRCA in the recent development of an updated Humber Bay Parks Master Plan. The Master Plan has been completed and is ready for Public Release.
- 9.3 TORONTO AND REGION CONSERVATION AUTHORITY RESPONSE TO ONTARIO'S CLIMATE CHANGE PLAN CONSULTATION** 42
- To provide the TRCA Board of Directors with a copy of staff comments on the Made-in-Ontario Environment Plan, released by the Province of Ontario which were submitted on January 28th, 2019 to meet the province's deadline for comment.

**10. MATERIAL FROM EXECUTIVE COMMITTEE MEETING**

Executive Committee Meeting #1/19, held on February 8, 2019 - [Meeting Minutes Link](#)

**10.1 SECTION I - ITEMS FOR BOARD OF DIRECTORS ACTION**

**10.1.1 GREENLANDS ACQUISITION PROJECT FOR 2016-2020**

Flood Plain and Conservation Component, Petticoat Creek Watershed 1815 Altona Road, Pickering. Rosemary Speirs Property Donation – Ecological Gift Program (CFN 55448). (Exec minutes p.2/56)

**10.1.2 GREENLANDS ACQUISITION PROJECT FOR 2016-2020**

Flood Plain and Conservation Component, Humber River Watershed. Ravines of Islington Encore Inc. (CFN 60967). (Exec minutes p.6/56)

**10.1.3 GREENLANDS ACQUISITION PROJECT FOR 2016-2020**

Flood Plain and Conservation Component, Humber River Watershed Country Wide Homes (Caledon) Inc. (formerly Villas Caledon corporation) (CFN 60531). (Exec minutes p.9/56)

**10.1.4 GREENLANDS ACQUISITION PROJECT FOR 2016-2020**

Flood Plain and Conservation Component, Humber River Watershed. Natalie Petrella (CFN 60737). (Exec minutes p.12/56)

**10.1.5 ENBRIDGE GAS DISTRIBUTION**

Request for Permanent Easement Required for Don River 30 Inch Natural Gas Pipeline Replacement Project. City of Toronto, Don River Watershed (CFN 60729). (Exec minutes p.15/56)

**10.1.6 VOLUNTARY PROJECT REVIEW**

Works Undertaken by Organizations Exempt from Ontario Regulation 166/06, As Amended. (Exec minutes p.18/56)

**10.2 SECTION IV - ONTARIO REGULATION 166/06, AS AMENDED**

Receipt of Ontario Regulation 166/06, as amended, for applications 11.1 - 11.3, which were approved at Executive Committee Meeting #1/19, held on February 8, 2019. (Exec minutes p.24/56)

**11. CLOSED SESSION**

The Board of Directors shall enter into closed session, pursuant to Section C.4. of the TRCA Board of Directors Administrative By-law, as the subject matter consists of (I) a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of TRCA (being to receive confidential financial documents pertaining to agenda item 8.4.)

**12. NEW BUSINESS**

NEXT MEETING OF THE BOARD OF DIRECTORS #3/10, TO BE HELD ON MARCH 29, 2019 AT 9:30 A.M. AT HEAD OFFICE, 101 EXCHANGE AVENUE, VAUGHAN

John MacKenzie, Chief Executive Officer

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### Section I – Items for Board of Directors Action

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Nick Saccone, Senior Director, Restoration and Infrastructure

**RE:** **Construction Facilities Vendor of Record Extensions for 2019 Restoration and Infrastructure Projects**  
Contract Numbers: 10006471-10006477

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#### KEY ISSUE

Extension of seven (7) construction facilities Vendor of Record (VOR) Agreements from 2018 to December 31, 2019 and associated increases to the contract values, with a recommended 2% increase to unit rates for service-related supplies.

#### RECOMMENDATION

**THAT Vendor of Record Contract #10006471 for Rental of Six Foot High Construction Fence, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$95,000 for a total cost not to exceed \$190,000 plus HST;**

**THAT Vendor of Record Contract #10006472 for Dyed Diesel Fuel Supply and Delivery, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$100,000 for a total cost not to exceed \$250,000 plus HST;**

**THAT Vendor of Record Contract #10006473 for Rental of Office Trailers and Storage Containers, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$40,000 for a total cost not to exceed \$110,000 plus HST;**

**THAT Vendor of Record Contract #10006474 for Rental of Steel Road Plates, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$40,000 for a total cost not to exceed \$105,000 plus HST;**

**THAT Vendor of Record Contract #10006476 for Rental of Site Toilets, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$50,000 for a total cost not to exceed \$130,000 plus HST;**

**THAT Vendor of Record Contract #10006475 for Street Sweeping and Flusher Truck Services, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$110,000 for a total cost not to exceed \$200,000 plus HST;**

**THAT Vendor of Record Contract #10006477 for Woody Debris Disposal, executed in January 2018, is extended to December 31, 2019 as per Section 3 of the agreement; and further that the value is increased by \$50,000 for a total cost not to exceed \$140,000 plus HST;**

## Item 8.1

**AND FURTHER THAT the extensions of Vendor of Record Contract #10006475 for Street Sweeping and Flusher Truck Services, and Vendor of Record Contract #10006477 for Woody Debris Disposal, include a 2% price increase to unit rates to address increased labour rates;**

**AND FURTHER THAT authorized TRCA officials be directed to take all necessary actions to implement the foregoing, including the signing and execution of any documents.**

### BACKGROUND

TRCA implements numerous habitat restoration, engineering, and trail building projects throughout TRCA's jurisdiction. The implementation of these projects regularly require the provision of several construction-related supplies and services as outlined above.

In previous years, construction services staff would undertake multiple procurement processes to source the supplies and deliveries required for its various projects. To work more efficiently, TRCA established a Vendor of Record list for the seven contracts outlined below in 2018. As per Section 3 of the agreements, TRCA has the right to extend the term for an additional year, which is being recommended in this report.

Contract	Vendor
Contract# 10006471 Construction Fence	Modu-Loc
	Sunbelt Rentals of Canada
Contract# 10006472 Supply and Delivery of Dyed Diesel	Alpha Oil
	Canada Clean Fuels
Contract# 10006473 Storage Containers and Office Trailers	Mobile mini
	ATCO Structures & Logistics
Contract# 10006474 Steel Road Plates	Cos Shore
	Sunbelt Rentals of Canada
	Superior Disposal
Contract# 10006475 Street Sweeping and Flusher Truck Services	A&G The Road Cleaners
	Durham Power Services
	Centennial Construction and Equipment
Contract# 10006476 Portable Toilets	K. Winter Sanitation
	Chantler's Env. Services Ltd.
	Ampot Portable Toilets
	Remediation Worx Env. Services Inc.
Contract# 10006477 Disposal of Woody Debris	Miller Waste Systems Inc.
	Draglam Waste
	Kirby Waste Transfer Solutions
	Public Disposal and Recycling Inc.
	Superior Disposal

### **RATIONALE**

Staff recommend extending the existing VOR contracts by one year under the original terms and conditions of the agreements signed by each vendor. By doing so, TRCA holds the vendors to their original competitive rates, with exception of the proposed 2% increase to service-related supplies, which remain more competitively priced than procuring these services on a project basis. The extension of the agreements will also continue to assist with timely project delivery. Furthermore, extending the original contracts allows TRCA to maximize the benefit of the initial effort of creating the VOR, while maintaining competitive rates. A new VOR is intended to be in effect for January 1, 2020. This VOR refresh will be achieved through a competitive procurement process that will give new and previously unsuccessful suppliers a chance to be a part of the VOR. This approach to procurement will provide staff with stable pricing for these commonly purchased construction supplies and services for a full calendar year.

Each vendor was notified of TRCA's decision to extend their contracts with at least 30 days prior notice prior to the end of the original December 31, 2018 expiration date. All vendors agreed, with the exception of Cos Shore and ATCO Structures and Logistics who did not acknowledge the extension and will be removed from the 2019 VOR term. Vendors within each contract agreed to the extension, with unit rate increase requests being received from vendors within the two service-oriented contracts for street sweeping/flusher truck services and woody debris disposal services due to rising labour costs. Following detailed consideration of these requests, staff negotiated a 2% increase to the unit rates for these contracts, which staff feel is fair and reasonable.

### **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**

The supplies and services outlined in this report are used to work in and near watercourses to mitigate flooding and erosion hazards, build waterfront parks as well as carry out a variety of habitat restoration projects.

#### **Strategy 7 – Build partnerships and new business models**

Many of the facilities procured under the VOR are used for assisting our municipal partners with a variety of environmentally sensitive projects.

### **FINANCIAL DETAILS**

In order to continue to use these vendors which have agreed to the extended term, the contract values must increase to allow for an additional year of construction supplies and services.

The following table illustrates the expenditures for each supply/service per annum from 2015-2018 and projected expenses for 2019. The values for 2019 have been estimated based on previous year's expenditures with consideration of increases to rates for service contracts (street sweeping/flusher truck and woody debris disposal) as well as known project specific needs for 2019.

## Item 8.1

Supplies/Services	Expenditures				
	2015	2016	2017	2018 (VOR)	2019 (Projected)
Rental of Six Foot High Construction Fence	\$54,745	\$52,565	\$94,880	\$70,863	<b>\$95,000</b>
Dyed Diesel Supply and Delivery	\$33,680	\$17,092	\$77,956	\$154,901	<b>\$100,000</b>
Rental of Steel Road Plates	\$20,000	\$19,977	\$44,449	\$7,323	<b>\$40,000</b>
Street Sweeping and Flusher Truck Services	\$15,216	\$2,442	\$31,342	\$47,247	<b>\$110,000*</b>
Rental of Site Toilets	\$47,779	\$39,988	\$67,626	\$27,408	<b>\$50,000</b>
Woody Debris Disposal Services	\$50,048	\$54,214	\$88,104	\$47,086	<b>\$50,000</b>

\*Significant increase in expenditures for this contract expected in 2019 due to Lakeview Waterfront Connection Project, which will require street sweeping services at least 3 days a week for a minimum duration of 4 hours per day.

### DETAILS OF WORK TO BE DONE

Implementation of numerous habitat restoration, engineering, and trail building projects throughout TRCA's jurisdiction throughout 2019, utilizing supplies and services contained within the seven VOR lists detailed herein.

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Date: January 22, 2019

### Section I – Items for Board of Directors Action

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Nick Saccone, Senior Director, Restoration and Infrastructure

**RE:** **DON RIVER WATERSHED HYDROLOGY STUDY**

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#### KEY ISSUE

Approval to adopt the Don River Watershed Hydrology Study as prepared by Toronto Region Conservation Authority Engineering Services staff and AECOM Canada Limited.

#### RECOMMENDATION

**THAT the Don River Watershed Hydrology Study (December 2018) prepared by Toronto and Region Conservation Authority (TRCA) staff and AECOM Canada Limited be approved;**

**THAT staff be directed to disseminate the final hydrology study results and documentation to municipal staff, and stakeholders including the development industry;**

**THAT staff be directed to apply the results from the Don River Watershed Hydrology Study to update floodline mapping for regulatory purposes;**

**AND FURTHER THAT staff be directed to use the results of the Don River Watershed Hydrology Study as a foundation for conducting technical hydrologic assessments of the watershed as part of future watershed/subwatershed plans and flood remediation studies.**

#### BACKGROUND

The hydrologic model for the Don River watershed was previously updated in 2004 by Marshall Macklin Monaghan using the Visual OTTHYMO computer model. Results from the 2004 hydrology update have been used to conduct a number of high profile flood remediation assessments including the Don Mouth Naturalization and Port Lands Flood Protection Project, the Eastern and Broadview Flood Protection Environmental Assessment within the City of Toronto and the Municipal Class Environmental Assessment Flood Remediation Study Yonge and Elgin Mills Road – Flood Vulnerable Area within the Town of Richmond Hill. In order to ensure accurate and reliable flow data is used for the design component of these studies, TRCA staff undertook a thorough assessment of the hydrologic processes of the Don River and developed a new updated Hydrology model. The updated model leverages new data including meteorological and stream flow information, LiDAR topography and state of the art modeling techniques.

#### RATIONALE

As over 14 years have passed since the previous update to the Don River watershed hydrology model, an updated hydrology model is needed to reflect new meteorological and monitoring information and improved modelling approaches. The updated model will be used to inform the development of flood remediation plans as well as land use, emergency and municipal infrastructure planning within the watershed. Further, the results of the updated Don River watershed hydrology model will be used to update floodline mapping and flood remedial plans.

## Item 8.2

In addition, the updated hydrology modeling represents the first step in assisting our municipal partners and stakeholders through their planning process in response to the updates to the 2017 Provincial Plans, including the Growth Plan, Greenbelt Plan, and Oak Ridges Moraine Conservation Plan. The Don River Watershed Hydrology Study and subsequent floodplain mapping updates will provide a foundation for future watershed plans and studies that support our partner municipalities with their ongoing watershed planning and Official Plan conformity process, including the Municipal Comprehensive Reviews (MCR).

### MODEL DEVELOPMENT

Consulting services to undertake the Don River Watershed Hydrology Study Update was awarded to AECOM Canada Limited (AECOM). TRCA selected the PCSWMM computer model for use in this study based on the urban nature of the Don River Watershed. PCSWMM, or Personal Computer Stormwater Management Model, is a computer model used to calculate the hydrologic characteristics of a watershed or subwatersheds, including peak flow rates and runoff volume. The PCSWMM model represents a state-of-the-art computer modelling software for hydrologic assessments, capable of long-term continuous simulation for erosion assessments and flood forecasting and warning operations, or instantaneous design-storm assessments for specific event calculation. Further, the foundation of the computer model, EPA SWMM, is fully compatible with GIS software and is fully supported by the Province of Ontario for establishing peak flow rates for Floodline Mapping.

Over 890 individual catchment areas were delineated, each with unique subcatchment hydrology based on land use, imperviousness, soil conditions and physical catchment attributes, like slope and shape. Catchment boundaries were based on a combination of LiDAR and development drainage plans, which were reviewed in detail and confirmed by TRCA. Once the catchment areas were reviewed and confirmed, the existing condition parameters, including percent impervious and soils information were calculated, with impervious values based on 2015 high resolution aerial photographs. A total of 648 hydraulic elements have been incorporated into the PCSWMM model to represent open watercourses, 128 hydraulic elements have been incorporated into the model to represent water crossing structures, and 1 hydraulic element incorporating the G. Ross Lord Dam. Finally, a total of 109 stormwater management facilities were incorporated into the model to represent various stormwater management ponds located throughout the watershed.

As per standard hydrologic modelling approach, the existing conditions model was calibrated to match as closely as possible with flow monitoring information collected by TRCA and Water Survey Canada for monitored storm events. Model calibration is a key process in developing a hydrology model and assists in producing a reliable and representative model which accurately represents watershed characteristics. The calibration process includes adjusting specific parameters within acceptable tolerances in order for the model to match the existing instream responses as best as possible. Calibration was conducted in order to:

- Match the volume of runoff generated by the watershed;
- Match the timing of the peak runoff within the system; and
- Match the peak flows within the watercourses.

After model calibration was completed, the calibrated model was further validated by comparing the results against a different set of monitored storm events. The purpose of the model validation process is to further confirm that the final set of model parameters and results are within an acceptable range and meet standard engineering practice.

## Item 8.2

With the model calibrated and validated, peak flow values were generated to represent existing development conditions for the 2-year through 350-year design storms, and the Regional Storm event, based on Hurricane Hazel. Future land use peak flows were also generated. Given the urban nature of the Don River watershed, the future land use scenario was based on the existing condition land use scenario, with modifications made to represent Block 27 within the City of Vaughan, which is the last remaining large scale proposed greenfield development area within the watershed. The land use information for Block 27 was derived from the Secondary Plan which was collected from the development group and further reviewed by TRCA's Planning and Development division.

The final model was peer reviewed by Computational Hydraulics International (CHI) who is the developer of the PCSWMM model and has extensive water resources engineering history in the fields of hydrology and hydraulics. The peer review process included consultation between the study team and CHI. All comments provided by the peer reviewer were addressed, and CHI signed off on the updated model.

### RESULTS

The Don River Watershed Hydrology Study Update ultimately produces peak flow rates for the 2-year through 350-year design storms and the Regional Storm event for existing and future conditions as outlined in municipal Official Plans. **Table 1 and Table 2 in Attachment 1** summarizes the percent difference in peak flow rates associated with the 100-year design and Regional storm from the PCSWMM model at key locations in the watershed and compared the results to the 2004 Don River Watershed Hydrology Update. The majority of the flow node locations are showing consistently lower values for the 2018 study for Future Conditions scenario compared to the 2004 study. This is not unexpected and is consistent with past hydrology updates undertaken by TRCA staff where improved model parameterization based on physically derived parameter and improved model calibration lead to decreases in flows as watershed characteristics are fully understood. Past practice has been to use conservative estimates for model parameterization in lieu of insufficient watershed detail or physically based parameters for model development.

As displayed on Table 1, the results from the 2018 Don River Hydrology Update indicate a significant reduction in 100-year design storm estimates over the 2004 model. The reduction in peak flow estimates is attributed to a number of factors including: improved model calibration, a reduction in percent impervious values due to the improved model parameterization based on physically derived data, and the inclusion of stormwater management ponds as discrete elements within the updated model. In order to validate the modelling results, AECOM completed a flood frequency analysis based on monitored stream flow data and compared the modelled design storm peak flow estimates with the flood frequency analysis. The conclusion of the assessment was that the modelled peak flow values are well within the range of the values calculated through the flood frequency analysis.

As noted on Table 2, the reduction in flow values associated with the Regional storm peak flow estimates used for regulation are not as pronounced as the reduction in flows associated with the 100-year design storm. This is mainly attributed to the exclusion of stormwater management ponds and water crossings in the Regional storm model (237 hydraulic elements from the model), which is a hydrology modelling approach mandated by the Ministry of Natural Resources and Forestry (MNRF). MNRF requires storage elements like ponds and water crossings to be removed from the Regulatory model due to the fact that these structures were not designed to the Regional storm standard and may not withstand a Regional storm type event.

## Item 8.2

A good example of a water crossing that could not withstand a major storm is the Finch Avenue West failure during the August 19, 2005 storm event. Further the removal of these storage elements ensures Regional storm flow estimates are conservative and allows for modifications and enhancements to transportation infrastructure.

A particular area of interest within the Don River Watershed is the Lower Don River through the City of Toronto where the detailed design process for the Don Mouth Naturalization and Port Lands Flood Protection Project (DMNPFP) is on-going. The Environmental Assessment and Due Diligence process completed as part of the DMNPFP project utilized results from the 2004 Don River Watershed Hydrology Update which are approximately 11% higher than the values developed as part of the 2018 update. TRCA staff has been in constant communication with the various stakeholders within the Lower Don area including the City of Toronto and Waterfront Toronto throughout the hydrology update process and have provided the detailed design team with the updated flows for use in the design process.

In order to accurately assess the impacts of updated flows on floodplain mapping, TRCA staff plan to update river hydraulic models and floodplain mapping within the Don River Watershed. The floodplain mapping updates will be completed by March 2020 utilizing secured funding from the Federal National Disaster Mitigation Program (NDMP).

### **FINANCIAL DETAILS**

Financial contributions for the Don River Hydrology Study were provided through TRCA's Flood Line Mapping Program, account 127-90, TRCA's Flood Protection and Remedial Studies, account 107-02, York Region Stormwater Management Fund, account 107-15 and Don Mouth – TRCA DELFT Hydraulic Modelling Scenarios account, 191-22 at a cost of approximately \$195,237, which included staff time, consulting fees for the model development and the peer review process.

### **RESOLUTIONS**

TRCA staff will adopt the Don River Watershed Hydrology Study, using this model for all future studies and hydrologic analysis, including updating floodline mapping, flood remedial plans, emergency management and watershed studies. In addition, TRCA staff will begin to disseminate the final modeling results and documentation to municipal staff and the development industry. Further, TRCA staff will use the peak flow rates calculated as part of the study to update floodline mapping for the entire Don River Watershed.

**Report prepared by: Nick Lorrain, extension 5278, and Sameer Dhalla, extension 5350**

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**Date: February 22, 2019**



## Item 8.2

### Attachment 1

**Table 1– Summary of Don River Peak Flow Rates at Specific Subwatersheds – 100-year Design Storm**

Flow Node Location	2004 Future OP Peak Flows (cms)	2018 Current Peak Flows (cms)	2018 Future OP Peak Flows (cms)	% Change, 2001 to 2018 Future OPs
<b><i>West Don River</i></b>				
West Don @ Glen Shields Ave.	133.9	46.6	46.6	-65%
West Don @ Hoggs Hollow	119.9	101.3	101.3	-16%
West Don @ Confluence with East Don	489.9	388.9	388.9	-21%
<b><i>German Mills Creek</i></b>				
German Mills @ Confluence with East Don	287.8	134.8	134.8	-53%
<b><i>Taylor Massy Creek</i></b>				
Taylor Massy Creek @ Confluence with East Don	165.2	53.3	53.3	-68%
<b><i>East Don River</i></b>				
East Don River @ Duncan Mills	291.6	254.3	254.3	-13%
East Don River @ Confluence with West Don	343.6	269.9	269.9	-21%
<b><i>Lower Don River</i></b>				
Lower Don @ Brickworks	466.2	389.9	389.9	-16%
Lower Don @ Dundas St.	524.9	408.6	408.5	-22%
Don River @ Lake Ontario	494.9	402.8	402.6	-19%

## Item 8.2

**Table 2 – Summary of Don River Peak Flow Rates at Specific Subwatersheds – Regional Storm**

Flow Node Location	2004 Future OP Peak Flows (cms)	2018 Current Peak Flows (cms)	2018 Future OP Peak Flows (cms)	% Change, 2001 to 2018 Future OPs
<b><i>West Don River</i></b>				
West Don @ Glen Shields Ave.	402.3	366.6	365.4	-9%
West Don @ Hoggs Hollow	561.1	579.2	581.6	+4%
West Don @ Confluence with East Don	1860.1	1028.9	1029.1	-15%
<b><i>German Mills Creek</i></b>				
German Mills @ Confluence with East Don	782.7	670.3	670.3	-14%
<b><i>Taylor Massy Creek</i></b>				
Taylor Massy Creek @ Confluence with East Don	293.3	235.6	235.6	-20%
<b><i>East Don River</i></b>				
East Don River @ Duncan Mills	878.6	749.1	749.1	-15%
East Don River @ Confluence with West Don	1146.0	1028.9	1029.1	-10%
<b><i>Lower Don River</i></b>				
Lower Don @ Brickworks	1681.5	1497.6	1498.7	-11%
Lower Don @ Dundas St.	1644.7	1513.5	1515.29	-8%
Don River @ Lake Ontario	1694.3	1504.5	1506.4	-11%

### Section I – Items for Board of Directors Action

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Nick Saccone, Senior Director, Restoration and Infrastructure

**RE:** **REQUEST FOR PROPOSAL FOR DON RIVER FLOODPLAIN MAPPING  
UPDATE AND G. ROSS LORD DAM GATE OPERATION RULE  
OPTIMIZATION AND RISK STUDY**  
RFP No. 10009146

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#### **KEY ISSUE**

Award of Request for Proposal (RFP) No. 10009146 for engineering consulting services to update the Don River floodplain mapping and to investigate G. Ross Lord Dam's gate operation rules in order to reduce the risk of flooding along the West Don River.

#### **RECOMMENDATION**

**WHEREAS** Toronto and Region Conservation Authority (TRCA) is engaged in a project that requires engineering consulting services;

**AND WHEREAS** TRCA solicited proposals through a publicly advertised process and evaluated the proposals based on the criteria;

**THEREFORE LET IT BE RESOLVED THAT** Request for Proposal (RFP) No. 10009146 for the Don River Floodplain Mapping Update and G. Ross Lord Dam Gate Operation Rule Optimization and Risk Study be awarded to KGS Group Inc. at a total cost not to exceed \$169,775, plus applicable taxes to be expended as authorized by Toronto and Region Conservation Authority (TRCA) staff;

**THAT** TRCA staff be authorized to approve additional expenditures to a maximum of \$33,955 (20% of the project cost), plus applicable taxes, in excess of the contract cost as a contingency allowance if deemed necessary;

**THAT** should TRCA staff be unable to negotiate a contract with the above-mentioned proponent, staff be authorized to enter into and conclude contract negotiations with other Proponents that submitted proposals, beginning with the next highest ranked proposal meeting TRCA specifications;

**AND FURTHER THAT** authorized TRCA officials be directed to take whatever action may be required to implement the contract, including the obtaining of necessary approvals and the signing and execution of any documents.

#### **BACKGROUND**

TRCA, through the Conservation Authorities Act, has the mandate of reducing risk to life and property from flooding. Examples of undertakings that TRCA employs to achieve this mandate include regulating development, operating flood control infrastructure such as dams, channels and dykes and administering a flood forecasting and warning program.

## Item 8.3

The objective of this project is to update floodplain modeling and mapping for the Don River Watershed in the City of Toronto and to enhance the operating procedures of the G. Ross Lord Dam utilizing new climate information, updated hydrology modeling and new state of the art modeling tools. This project is in line with TRCA's Strategic Plan, specifically Strategy 2; manage our regional water resources for current and future generations and is comprised of two phases of work. The first phase of work will focus on updating floodplain mapping for the Don River Watershed and the second phase of work involves investigating the operating rules for the G. Ross Lord Dam to see if there is a more effective way of reducing flood risk by controlling flows from thunderstorm events and maintaining dam safety for extreme flood events. By splitting this project into two phases, efficiencies in project management costs will be realized and the development of the hydrologic and hydraulic models can be designed simultaneously for both the floodplain mapping component and the optimization of the dam.

### Phase I

TRCA has identified the need to update the hydraulic modelling and floodplain mapping for the Don River watershed in the City of Toronto. The update is required for two reasons. The first is that TRCA considers it best practice to update hydraulic models and floodplain mapping every 10-15 years. The existing mapping for the Don River was developed between 1977 and 2008. Secondly, new hydrology data and digital mapping tools are available. The Don River Hydrology Update, completed in 2018, established new Regulatory storm flow values using the most up to date land use, meteorological and stream flow monitoring information. Additionally, TRCA has recently acquired new LiDAR topographic mapping information that will allow for the development of precise floodplain contours to delineate areas at risk.

The study area includes all watercourses within the Don River watershed south of Steeles Avenue. Approximately 38 floodplain map sheets will be updated and stamped by a professional engineer licensed to practice in Ontario. The project will involve developing a sub-watershed scale hydraulic model utilizing the HEC-RAS (Hydrologic Engineering Center River Analysis System) hydraulic modelling platform to determine flood elevation estimates for the 2 through 350 year and Regional design storms throughout the Don River watershed in the City of Toronto. HEC-RAS is well suited for this assignment as it is the industry standard for hydraulic modeling of river systems and is used broadly across Ontario. Once completed, the model will be used to update TRCA's floodplain mapping, flood forecasting and warning systems and flood emergency response plans.

### Phase II

G. Ross Lord Dam was constructed in 1973 on the West Don River to provide flood protection for downstream communities. The primary objective of G. Ross Lord Dam is to protect the community of Hoggs Hollow near Yonge Street and Wilson Avenue. The dam is located at 700 Finch Avenue West, east of Dufferin Street in the City of Toronto.

The dam is approximately 20m high and 350m long. It consists of a zoned earthen embankment with two concrete control structures. The first structure has two low level sluice gates (2mx2m) for small flows that are referred to as the low level gates. The second structure, referred to as the emergency gates, consists of two radial arm gates (10.3mx8.7m) for passing large flows. The dam was designed strictly for flood control and therefore the reservoir is maintained at a low level to create storage for flood events. The dam has a normal reservoir level of 172.3 MASL (metres above sea level) which corresponds to a storage capacity of approximately 400,000m<sup>3</sup>. The maximum level of the reservoir is 181.4 MASL which corresponds to approximately 5,500,000m<sup>3</sup> of storage and has a crest elevation of 183.0 MASL.

## Item 8.3

The G. Ross Lord Dam has a Hazard Potential Classification of 'Very High' as defined in the Classification and Inflow Design Flood Criteria Technical Bulletin under the Lakes and Rivers Improvement Act (LRIA) that is administered by the Ministry of Natural Resources and Forestry (MNRF). A Dam Safety Review in 2013 determined that a dam failure under extreme flood conditions would put approximately 3,000 persons at risk and cause approximately \$1.03 billion in property damage.

G. Ross Lord Dam has an Operations, Maintenance and Surveillance manual (OMS) that contains the operational rules for opening gates during storm events. The operational rules are based on the reservoir's rate of rise measured every 15 minutes. TRCA's current understanding of the operational rules is that they were developed primarily for large, long duration hurricane events with the objective of maximizing storage while preventing the dam from overtopping. The closer the reservoir is to the maximum operating reservoir level the smaller the rate of rise threshold for operating the gates.

The original 1975 OMS manual developed when the dam was constructed has a different operation regime than the current OMS. The 1975 OMS is vague regarding how gates are operated and it relied on an unspecified flood forecasting system. In 1982, TRCA initiated a study to develop specific criteria for operating the dam's gates which has been part of the OMS manual ever since. In 2008, TRCA undertook another review of G. Ross Lord Dam's OMS manual and operating rules. The results of the study recommended not changing gate operations; however, the study did not look specifically at optimization for thunderstorms.

TRCA's Engineering Services flood management staff are concerned that during high intensity, short duration thunderstorm events (such as the July 8, 2013 flood event), the rate of rise threshold could be reached and may cause flooding downstream without utilizing all the available storage in the reservoir under the current operating procedure. The primary objective of Phase II is to investigate the operating rules for the dam to see if there is a more effective way of reducing flood risk by controlling flows from thunderstorm events and maintaining dam safety for extreme flood events. Any new operations developed during this study will be incorporated into the OMS manual.

### **RATIONALE**

RFP documentation was posted on the public procurement website [www.biddingo.com](http://www.biddingo.com) on October 24, 2018 and closed on December 4, 2018. Five (5) addendums were issued to respond to questions received. A total of twenty-seven (27) firms downloaded the documents and six (6) proposals were received from the following Proponents:

- AECOM;
- AHYDTECH Geomorphic;
- Aquafor Beech Ltd.;
- Cole Engineering Group Ltd.;
- Golder Associates Inc.; and
- KGS Group Inc.

The proposal from AHYDTECH Geomorphic was disqualified because it was received after the deadline of 12:00pm on December 4<sup>th</sup>, 2018.

## Item 8.3

An Evaluation Committee comprised of staff from Engineering Services reviewed the proposals. The criteria used to evaluate and select the recommended Proponent included the following:

Criteria	Weight
Experience and Qualifications	20
Understanding of the Work	20
Proposed methodology	30
Proposed schedule	10
<b>Sub-Total</b>	<b>80</b>
Pricing	20
<b>Sub-Total</b>	<b>20</b>
<b>Total Points</b>	<b>100</b>

KGS Group Inc. was the lowest bidder and achieved the highest overall score based on the evaluation criteria. Therefore, it is recommended that contract No. 10009146 be awarded to KGS Group Inc. at a total cost not to exceed \$169,775, plus 20% contingency, plus applicable taxes, it being the highest ranked Proponent meeting TRCA specifications. Proponent's scores and staff analysis of the evaluation results can be provided in an in-camera presentation, upon request.

### **Relationship to Building the Living City, TRCA's 2013-2022 Strategic Plan**

This report supports the following strategic priorities set forth in TRCA's Strategic Plan:

**Strategy 7 – Build partnerships and new business models**

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

### **FINANCIAL DETAILS**

TRCA is funding 50% of this project through 107-03 (Dam and Flood Control Facilities Capital Works) and 107-37 (Don River Floodplain Mapping Update). The remaining 50% is being funded through a grant from the Federal National Disaster Mitigation Program (NDMP).

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**Date: January 15, 2019**

### Section I – Items for Board of Directors Action

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Michael Tolensky, Chief Financial and Operating Officer

**RE:** **TORONTO AND REGION CONSERVATION AUTHORITY ADMINISTRATIVE  
OFFICE BUILDING PROJECT UPDATE**  
Construction and Term Financing Update

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#### KEY ISSUE

Authorization of the finance documents with respect to award of contract #10008935 for up to \$54 million in construction and term financing to support the construction of the new administrative office building for Toronto and Region Conservation Authority.

#### RECOMMENDATION

**THAT the entering into, execution and delivery by Toronto and Region Conservation Authority (“TRCA”) of (i) the credit agreement between TRCA and Canadian Imperial Bank of Commerce (“CIBC”) (the “Credit Agreement”), (ii) the promissory note to be issued by TRCA in favour of CIBC (the “Promissory Note”), and (iii) the ISDA 2002 master agreement (the “Master Agreement”), including the schedule thereto and forming part thereof (the “Schedule”) and the confirmation supplemental thereto (the “Subject Confirmation”), each to be entered into between TRCA and CIBC (the Master Agreement, including the Schedule, and the Subject Confirmation are collectively referred to herein as the “ISDA Agreement”, and together with the Credit Agreement and the Promissory Note, collectively, the “Primary Finance Documents”), all substantially in the forms presented to the directors of TRCA, with such changes therein as any Authorized Officer (as defined herein) executing the same on behalf of TRCA may approve (such approval to be evidenced conclusively by the signature of any such Authorized Officer thereon), together with each additional agreement, instrument, certificate and other document from time to time required or desirable to be entered into by TRCA in connection with, or in order to consummate the transactions contemplated by the Primary Finance Documents (collectively, the “Ancillary Documents”, and together with the Primary Finance Documents, collectively, the “Transaction Documents”), all actions taken in connection therewith and the performance of TRCA’s obligations under the Transaction Documents be and are hereby authorized, approved, confirmed and adopted in all respects.**

**THAT any one director or officer of TRCA, including, without limitation, John MacKenzie, the Chief Executive Officer of TRCA, Michael Tolensky, the Chief Financial and Operating Officer of TRCA, and Jennifer Innis, Chair of the Board of Directors of TRCA (each, an “Authorized Officer”) is hereby authorized and directed, for and on behalf of TRCA to execute and deliver the Transaction Documents, and any amendments, supplements and restatements from time to time thereto on behalf of TRCA, and all such further agreements, instruments, amendments and other documents and to do or cause to be done all such other acts and things as such Authorized Officer shall determine to be necessary or desirable in connection with or in order to effect the transactions that are contemplated in the Transaction Documents and/or in order to carry out the intent of the foregoing resolutions and the matters authorized thereby, such determination to be conclusively evidenced by the execution and delivery by such Authorized Officer of such agreement,**

## Item 8.4

instrument, amendment or other document or the doing of any such act or thing by such Authorized Officer. Such authorization and direction shall be in addition to any authority expressly granted by any other paragraph of these resolutions or by any other resolution or by-law of TRCA.

**AND FURTHER THAT** the execution and delivery of any agreements or documents and any and all actions heretofore taken by any officer or director of TRCA for, in the name and on behalf of TRCA in connection with the Transaction Documents be, and the same hereby are, ratified, approved, confirmed and adopted in all respects.

### **BACKGROUND**

The purpose of the Long Term Office Accommodation Project and the Long Term Office Accommodation Working Group (LTOAWG), established on May 23, 2008 by Authority Resolution #A126/08, was to determine the office accommodation needs of TRCA over the next 30 years and recommend a comprehensive, cost effective solution. This process began prior to 2003 with the creation of a task group on office accommodation created by TRCA Management Committee. The task group's mandate was to research and report on options to serve TRCA office needs in the long term, the result of which led to Authority Meeting #2/15, held on February 27, 2015, in which Resolution #A23/15 was approved, selecting 5 Shoreham Drive as the preferred site for the new headquarters - 5 Shoreham Drive was the site of TRCA's previous head office, prior to moving to 101 Exchange Avenue. A more comprehensive background on the project as a whole can be provided upon request, however, the purpose of this report is to provide background primarily on the financing aspect of the project.

At Authority Meeting #5/15, held on June 24, 2016, Resolution #A85/16 was approved as follows:

*THAT the Project for the Construction of an Administrative Office Building for Toronto and Region Conservation Authority (TRCA) (Project), at a cost of \$70,000,000, be approved;*

*THAT the regional municipalities of Peel, York, Durham, the City of Toronto, the Town of Mono and the Township of Adjala-Tosorontio be designated as the benefiting municipalities on the basis as set out in the Project and that TRCA's member municipalities be requested to consider this matter as part of the budget deliberations at the earliest opportunity;*

*THAT the Minister of Natural Resources and Forestry be requested to approve the Project in accordance with Section 24 of the Conservation Authorities Act (Act), and the application to the Project of the provincial share of land disposition proceeds on the basis as set out in the Project;*

*THAT pursuant to Section 3(5) of the Conservation Authorities Act (Act), the Minister be requested to approve an interest rate on funds borrowed to finance the Project not to exceed 3.75% for the life of the Project;*

*THAT pursuant to Section 24 of the Act, the Ontario Municipal Board be requested to approve the Project, if required;*

*THAT staff be authorized and directed to take the necessary action to complete the Project, including obtaining any additional approvals which may be deemed necessary and the execution of any necessary documents;*



## Item 8.4

*THAT staff explore, in a rigorous nature, the pursuit of funding for the Project for the Construction of an Administrative Office Building for TRCA from the federal and provincial governments, and public-private partnerships;*

*THAT if TRCA staff is required to utilize funds from the existing City of Toronto erosion control funding, then TRCA staff work with local TRCA board members to identify priority restoration projects;*

*AND FURTHER THAT staff be directed to report to the Authority upon response from the Province of Ontario and the participating municipalities.*

On February 25, 2017, at Authority Meeting #1/17, staff reported that all six of TRCA's participating municipalities, by way of their respective Councils, approved the project and the allocation of \$60,000,000 in new and existing capital funding toward the project. This included \$10,500,000 of existing capital funding - \$500,000/year over 21 years, commencing in 2015 and ending 2035, in addition to \$49,500,000 of new capital funding. For all municipalities excluding Toronto, this cumulative annual payment of \$540,000/year over 33 years commencing in 2017 and ending in 2049. Toronto chose to reduce their number of payments to 27 and defer their first payment until 2023, meaning that the City will be paying \$1,173,333/year until 2049. The total annual payments are as follows:

2015 – 2016:	\$500,000 Annually (2 Years)
2017 – 2022:	\$1,040,000 Annually (6 Years)
2023 – 2035:	\$2,213,333 Annually (13 Years)
2036 – 2049:	<u>\$1,713,333</u> Annually (14 Years)
TOTAL:	\$60,000,000

In making the decision to defer payments, the City of Toronto also agreed to pay TRCA an annual interest penalty payment, to account for the fact that TRCA will need to carry additional unanticipated debt for the project, which is excluded in the table above.

On March 27, 2017, subsequent to budgetary conversations with our partner municipalities, TRCA staff submitted a formal request to the Minister of Natural Resources and Forestry (MNRF) for approval of the rate of interest and the project. Minister's approval, pursuant to the requirements of Section 3(5) and 24 of the Conservation Authorities Act, was required in order to satisfy the lending conditions of a financial institution for funds borrowed for the project and to allocate approximately \$10,000,000 to the project from existing and future land sale disposition proceeds.

On September 22, 2017, TRCA staff reported at Authority Meeting #07/17, that an interest rate not to exceed 3.75% on the funds to be borrowed to finance the construction of the building was approved by the Chief Administrative Officer of MNRF on August 14, 2017. TRCA staff also reported that TRCA received correspondence from MNRF on August 28, 2017 advising that it was the Minister's decision to not grant an exemption to the Ministry's Generated Revenue Policy to enable the use of funds from land dispositions in support of TRCA's project. Please note that subsequent to this approval, Section 3(5) of the Conservation Authorities Act has been amended, removing the need to receive Minister's approval for the rate of interest on borrowings, in case a rate greater than 3.75% is required.

## Item 8.4

TRCA submitted an urgent financial appeal to the Minister on December 12, 2017. A response from the Minister was received on February 15, 2018, indicating that Ministry staff had been asked to explore enabling the use of existing land sale generated revenue conditional upon the requirement that TRCA repay those funds from other revenue sources back into the reserve within a determined timeframe.

On May 8, 2018, the Minister granted approval to use \$3,538,000 in disposition proceeds from land sales associated with provincial grants (as identified in TRCA 2016 audited financial statement) with no required repayment and confirmed approval of the project under Section 24 of the Conservation Authorities Act – This was reported at Authority Meeting #4/18, held on May 25, 2018. These funds will be applied to the project to ensure that TRCA's future proofing, sustainability and office modernization objectives are met as the design evolves or to reduce the overall term of the required financing.

As a result of the funding reduction, TRCA staff challenged the integrated design team, to realize a highly efficient, cost effective building that could be achieved within the available \$60,000,000 budget. This included taking measures to reduce the scope of the project, such as the elimination of underground parking and an overall reduction in the size of the building based on a refined building program. TRCA staff presented an updated budget at Authority Meeting #6/18, held on July 20, 2018, which provided approval to modify the \$70,000,000 project to adhere to the available project funding.

As a result of this approval, Request for Proposal #10008935 to provide project financing from a qualified financial institution for TRCA's New Administrative Office Building Project was publicly advertised on the electronic procurement website Biddingo ([www.biddingo.com](http://www.biddingo.com)) on August 8, 2018. The proposal from CIBC was the highest ranking proposal and best aligned with TRCA's objectives and evaluation criteria and was selected as the lender for the new administration office building project.

CIBC provided TRCA an analysis of the loan mechanics, loan options and a forecasting of interest rates and outlined the advantages to using an Interest Rate Swap process, in order to:

- Offer interest rate certainty
- Offer the lowest cost option for required funding
- Customize quarterly payments to meet TRCA's requirements over a long term

At Board of Directors Meeting #10/18, held on January 4, 2019, Resolution #A214/18 was approved as follows (This resolution amended Resolution #A171/18, which was approved at Board of Directors Meeting #8/18, held on October 26, 2018), in order to support the usage of an interest rate swap:

*THAT Contract #10008935 be awarded to Canadian Imperial Bank of Commerce ("CIBC" or the "Lender") to provide construction and term financing for Toronto and Region Conservation Authority's (TRCA) New Administrative Office Building Project in the City of Toronto, it being the highest ranked proposal that best meets TRCA's requirements as stipulated in the Request for Proposal;*

## Item 8.4

*THAT authorized officials be directed to take the necessary action to execute International Swaps and Derivatives Association (ISDA) documentation, for the purpose of entering into interest rate swap agreements, as necessary, for the construction and term financing. The term financing swap facilities shall be for a period not to exceed 30 years from the conversion date from construction financing to term financing with a mutual put at the ten-year mark and every 5 years thereafter, as per CIBC's standard credit practice. The stamping fee for these swap facilities shall be 74 basis points per annum;*

*AND FURTHER THAT authorized officials be directed to take the necessary action to implement credit agreements including the signing and execution of documents with the Lender.*

### **RATIONALE**

As TRCA negotiated the agreements with CIBC, with the help of our lawyers (Fasken) and financial advisors (KPMG), it was determined that a more robust resolution was required by the Board of Directors, in order to support the approval of the financing – The new resolution is included at the outset of this report.

In order to support such a resolution, TRCA staff have provided in-camera copies of the confidential documents that the Board of Directors are being asked to approve and parties from CIBC, Fasken and KPMG have been asked to attend the meeting to answer any questions that the Board may have, prior to signing the documents.

### **FINANCIAL DETAILS**

Although total funding available for the project totals \$63,538,000, TRCA continues to work towards a budget of \$60,000,000. In order to determine how much money is required for the term loan commencing in January 2022, TRCA calculated the following:

Anticipated Project Cost:	\$60,000,000
Less:	
Ministry Funding	(\$3,538,000)
Municipal Funding (2015 – 2021)	(\$6,200,000)
Reserves	<u>(\$ 262,000)</u>
Anticipated Term Loan Amount:	\$50,000,000

TRCA staff anticipate that the organization will pay \$262,000 out of reserves between 2015 - 2021, which will be recovered over the life of the partner municipality repayments.

TRCA and CIBC staff worked together to develop a quarterly amortization schedule for the \$50,000,000 term loan that best reflects the payment schedule from TRCA's partner municipalities, commencing on January 4, 2022 and ending on January 2, 2047, a period of 25 years.

The quarterly principal payments are as follows:

Periods 1 – 4: \$258,750 (\$1,035,000 Annually for 1 Year)

Periods 5 – 60: \$553,750 (\$2,215,000 Annually for 14 Years)

Periods 61 – 100: \$428,500 (\$1,714,000 Annually for 10 Years)

After the 100th payment, the remaining debt will be \$1,243,500. with the expectation that TRCA will pay this balance out of cash on hand as of Jan 2, 2047, and will then receive the outstanding balance from its partner municipalities later in the year, in accordance with the payment schedule.

## Item 8.4

Although it is possible that the term loan actually required will exceed \$50,000,000, TRCA is being conservative in its calculation by reducing the project costs by the ministry funding, in order to determine the anticipated term loan amount. If \$60,000,000 of funding is not required from TRCA's partner municipalities, then the amount/term of their obligations will be reduced accordingly. Further to this point, TRCA staff continue to review and apply for provincial, federal and other funding opportunities through various grants and programs.

### **DETAILS OF WORK TO BE DONE**

Upon approval of this resolution, TRCA staff will finalize the required documents. Our lawyers will then issue legal opinions on both the credit and ISDA agreements to CIBC and TRCA staff will sign an officer certificate to support the legal opinions. Further to signing these documents, TRCA will complete supplementary CIBC forms to validate the financial relationship.

For the Board of Director's reference, the key remaining phases of the project are as follows:

#### *Project Phases / Duration*

Site Plan Approval	June, 2018 – July, 2019
Building Permit	February, 2018 – October, 2019
Tender Contract Documents	July, 2018 – March, 2019
Award Construction Contract	March, 2019 – July, 2019
Construction (assumes partial bldg. permits)	April, 2019 – June, 2021
Occupancy	March, 2021 – June, 2021

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**Date: February 22, 2019**

**In Camera Attachments: 3**

CONFIDENTIAL Attachment 1: Credit Agreement and Promissory Note (Schedule D)

CONFIDENTIAL Attachment 2: ISDA Master Agreement and Schedule

CONFIDENTIAL Attachment 3: Officer Certificate for agreements

### Section III – Items for the Information of the Board

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Michael Tolensky, Chief Financial and Operating Officer

**RE: TORONTO ZOO**  
Update on discussions relating to the tripartite agreement on the Toronto Zoo property and the Parks Canada process for determining the ultimate location of an orientation and education facility for the Rouge National Urban Park

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#### KEY ISSUE

Update on discussions with the Toronto Zoo, City of Toronto and Parks Canada relating to the tripartite agreement and the Parks Canada process for determining the ultimate location of an orientation and education facility for the Rouge National Urban Park in the City of Toronto.

#### RECOMMENDATION

**THAT this staff report regarding an update on discussion with the Toronto Zoo, City of Toronto and Parks Canada relating to the tripartite agreement and other Zoo related matters be received.**

**THAT staff be directed to continue working with the Toronto Zoo, City of Toronto and Parks Canada to finalize the tripartite agreement taking into account the updated Parks Canada position on the Toronto 'Gateway' and Learning and Welcome Facility and to report back for any required direction to enter into a lease with the Toronto Zoo for another more suitable site for browse purposes.**

#### BACKGROUND

At Authority Meeting #5/18, held on June 22, 2018, amended Resolution #A86/18 was approved as follows:

*WHEREAS Toronto and Region Conservation Authority (TRCA) is the owner of certain lands containing 182 hectares (449 acres), more or less and being Part of Lots 4, 5, 6, 7, 8 and Part of Road Allowance between Lots 6 and 7, Concession 3, Part of Lots 5 and 6 Concession 4, City of Toronto (TRCA Lands);*

*AND WHEREAS the TRCA Lands have been turned over to the City of Toronto for management, in accordance with the terms of an agreement dated June 14, 1961;*

*AND WHEREAS City of Toronto and TRCA entered into a tripartite agreement with the Board of Management of the Toronto Zoo (Board) dated April 28, 1978 for use of TRCA Lands as part the Toronto Zoo;*

*AND WHEREAS TRCA is in receipt of a request from City of Toronto Council and the Toronto Zoo Board to update the tripartite agreement and the boundaries of the Toronto Zoo;*

*AND WHEREAS any TRCA land not included in the boundary to the Toronto Zoo will be transferred to Parks Canada (PC) for Rouge National Urban Park (RNUP) purposes;*

## Item 9.1

*AND WHEREAS there is interest in ensuring that any transfer of lands for Toronto Zoo or RNUP purposes be subject to certain conditions to ensure best management practices of ecological integrity and restoration opportunities;*

*THEREFORE, LET IT BE RESOLVED THAT TRCA enter into an updated tripartite agreement with City of Toronto and the Toronto Zoo Board for the use of the TRCA Lands for Zoo purposes subject to the following amendments:*

- 1. Removal of the Finch Meander from the lands to be added to the tripartite agreement subject to Parks Canada entering into a lease with the Toronto Zoo for the Finch Meander area south of Old Finch Avenue;*
- 2. Removal of the browse garden use from the lands being added to the tripartite agreement north of Finch Avenue with the understanding that the Zoo and PC shall work together in partnership toward an agreement for a new browse location;*
- 3. Any development proposed on the lands north of Finch Avenue be restricted to the areas highlighted in blue on Attachment 2 with the access to the conservation breeding facility highlighted in red on Attachment 2 and be subject to City of Toronto approval processes;*
- 4. That the tripartite agreement be amended so that the clause relating to TRCA and PC staff being allowed access to the lands north of Finch Avenue as required in order to undertake environmental monitoring and restoration activities also apply to lands on the east side of Meadowvale Road;*
- 5. That a clause be added to the tripartite agreement to ensure that Valley Halla is restored and maintained in a condition that protects the heritage value of the buildings subject to Toronto Zoo Board approval;*
- 6. That a clause be added to the tripartite agreement that the parties may agree to amend the boundary at a future date to accommodate the outcome of the PC lead process for determining the ultimate location of an orientation and education facility;*
- 7. That a clause be added to the tripartite agreement to ensure cooperation on requests to PC and other bodies to support the restoration and maintenance of built heritage assets in the RNUP including but not limited to Valley Halla and the Pearse House;*
- 8. That the Zoo work with PC and community groups to provide periodic access to Valley Halla allowing small groups the opportunity observe the rich historical architecture and craftsmanship subject to Toronto Zoo Board approval, and report back in two years on progress of implementation*

*THAT TRCA urge Parks Canada, the City of Toronto and the Toronto Zoo to develop, as soon as possible, a long-term fencing and security agreement to protect the Zoo and implement improvements as required;*

*THAT Parks Canada be requested to remove informal trails in Area #1 and develop a trail system in that area on the table lands only;*

*THAT Parks Canada be requested to grant an easement over the mono – rail line to the Zoo at a minimal cost and that, if the Zoo decides to reinstitute the service, that TRCA's approval be required;*

*THAT Parks Canada be requested to remove informal trails in Area #2;*

*THAT staff ensure that there are no fences on the outer perimeter of Area #3;*

## Item 9.1

*THAT TRCA staff, the Toronto Zoo and Parks Canada be requested to investigate security fencing and monitoring options for the immediate Valley Halla property and report back to the Authority as soon as possible;*

*THAT the City of Toronto be requested to transfer its lands along Meadowvale Road south of the Zoo to Parks Canada;*

*THAT the City of Toronto be encouraged to apply for an infrastructure grant for Valley Halla to restore the building in a reasonable timeframe;*

*THAT staff report back annually on the state of the tripartite agreement;*

*THAT staff report back to a future Executive Committee meeting within the next year on the status of the tripartite agreement and the PC lead process for determining the ultimate location of an orientation and education facility;*

*AND FURTHER THAT authorized TRCA officials be directed to take the necessary action to finalize the tripartite agreement, including obtaining any necessary approvals and the signing and execution of documents.*

### **Tripartite Agreement – Update**

The resolution from the Authority was circulated to the City of Toronto and the Zoo for review and comment. Attached is a copy of City of Toronto and the Zoo's joint response (Attachment 1). Both the City of Toronto and the Zoo supported the amendments proposed by TRCA, subject to a number of conditions identified in the letter. The following is an update on discussions related to these conditions:

- 1.1 Finch Meander (Area 2): The Zoo and PC are currently working on the terms and conditions of a lease. This is an outstanding matter that requires further negotiation.
- 1.2 Browse: A site has been located in another location that is satisfactory to both the Zoo and PC. The Toronto Zoo has agreed to the removal of the browse site from Zoo leased lands north of Finch Avenue effective immediately. TRCA staff are also working with the Zoo and Parks Canada on the alternative browse site to achieve lease wording that is acceptable to all parties.
- 1.3 Development north of Finch (Area 3): The tripartite agreement has been amended to restrict development north of Finch Avenue.
- 1.4 Written notice: The tripartite agreement has been amended to provide access to the lands north of Finch (Area 3) and east of Meadowvale (Area 4 & Area 8) subject to providing the Zoo with 48 hours written notice.
- 1.5 Protection of the Heritage Value of Valley Halla (Area 8): The tripartite agreement has been amended to include a condition that the Zoo manage historically significant buildings, structures and facilities in a manner that protects and promotes heritage value and to actively facilitate appropriate levels of community access.
- 1.6 Future amendment to the Tripartite Agreement: A clause has been added to the tripartite agreement allowing for future amendments to the boundary following final determination of the location of the proposed RNUP orientation and education facility. On February 5, 2019 TRCA received a letter from Trevor Swerdfager Senior Vice President of Operations of PC pertaining to the Toronto 'Gateway' Learning and Welcome Facility. The letter from PC (attachment 3) states that PC would like to move ahead with pursuing a location on the east side of Meadowvale Road in the vicinity of Toronto Zoo parking lot 3 on the lands north of the Beare Road Sanitary Landfill road.

## Item 9.1

TRCA staff will be working with PC, City of Toronto and Toronto Zoo staff to define their land requirements for the Gateway Learning and Welcome Facility. This effort will take into account Toronto Zoo and City of Toronto operational needs and the potential negative financial and operational impacts to the existing Zoo operations and facilities arising from the location of the facility in this area currently leased to the Toronto Zoo. TRCA will also be reviewing the proposed design of the PC facility to determine opportunities for the implementation of restoration, accessibility improvements and sustainability measures. TRCA staff are also interested in working with PC to determine if TRCA programming including education, training and outreach could be incorporated into the design and operations of the future Gateway, Learning and Welcome Facility.

TRCA is working with stakeholders to ensure a timely update of the tripartite agreement to facilitate timely transfer of TRCA lands to PC for the RNUP at the earliest opportunity in 2019. TRCA, the City of Toronto, and Toronto Zoo are currently working through title issues including encumbrances requiring resolution to achieve the timely transfer of lands to PC.

### **Valley Halla Security**

As a result of numerous discussions about security for Valley Halla and surrounding lands, the Zoo and their Security & Safety staff agreed to take the lead on completing an assessment of security measures that may be required in the vicinity of the Valley Halla buildings. The option of fencing the area was assessed and deemed to be ineffective and too costly. Additional security measures have been examined and accepted by the Zoo. These improvements include signage, lighting, as well as other additional confidential security measures.

### **NEXT STEPS**

TRCA Staff will continue to work with all parties to facilitate the timely transfer of lands to PC for the RNUP currently subject to the tripartite agreement taking into account the issues outlined in this report.

**Report prepared by: Brandon Hester, extension 5767, Mike Fenning, extension 5223**

**Emails: [bhester@trca.on.ca](mailto:bhester@trca.on.ca), [mfenning@trca.on.ca](mailto:mfenning@trca.on.ca)**

**For Information contact: Brandon Hester, extension 5767, Mike Fenning, extension 5223**

**Emails: [bhester@trca.on.ca](mailto:bhester@trca.on.ca), [mfenning@trca.on.ca](mailto:mfenning@trca.on.ca)**

**Date: January 4, 2019**

**Attachments: 3**

Attachment 1: City of Toronto and Toronto Zoo response to the Board of Directors resolution #A86/18

Attachment 2: Toronto Zoo Land Transfer Study Map

Attachment 3: Letter to John MacKenzie, CEO, TRCA, from Trevor Swerdfager, Senior Vice President Operations, Parks Canada, dated February 5, 2019, re. Rouge National Urban Park and Tripartite Agreement.





**Chris Murray, MCIP RPP**  
City Manager

**City Hall**  
100 Queen Street West  
East Tower, 11<sup>th</sup> Floor  
Toronto, Ontario M5H 2N2

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[www.toronto.ca](http://www.toronto.ca)

August 30, 2018

Mr. John MacKenzie  
Chief Executive Officer  
Toronto and Region Conservation Authority  
101 Exchange Avenue  
Vaughan, ON L4K 5R6  
[John.Mackenzie@trca.on.ca](mailto:John.Mackenzie@trca.on.ca)

Dear Mr. MacKenzie:

**Re: July 25, 2018 letter regarding TRCA Resolution #A86/18 (Toronto Zoo – Updated Tripartite Agreement)**

This letter is the City of Toronto and Toronto Zoo's joint response to your letter dated July 25, 2018 regarding Resolution #A86/18 adopted by the TRCA at its June 22, 2018 meeting (the "Resolution"). There are several key issues identified in the Resolution that extend beyond the Tripartite Agreement (the "Agreement") and are related to Zoo operations or the broader establishment of the Rouge National Urban Park (RNUP). As such, our response, which is summarized below and detailed in Attachment 1 is being provided in two sections:

- Section 1.0 - Issues related to the terms of the Agreement
- Section 2.0 - Operational and other matters

*Issues related to the Agreement*

As you know, negotiations have been underway for several years between the City, Zoo, and TRCA staff to update the terms of the Agreement to advance the strategic vision of the Toronto Zoo and facilitate establishment of the RNUP. City staff have been working closely with the Zoo, TRCA, and Parks Canada to implement City Council's direction adopted at its February 19, 2014 meeting: *2014.EX.38.4 Rouge National Urban Park: Transfer of Lands to Parks Canada*.<sup>1</sup> Per Council's direction, finalizing the Agreement is a key condition prior to the transfer of TRCA-owned lands in the vicinity of the Zoo to Parks Canada for establishment of the RNUP.

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<sup>1</sup> <http://app.toronto.ca/trmmis/viewAgendaItemHistory.do?item=2014.EX38.4>

The City and the Zoo can support the amendments proposed by the TRCA, subject to the conditions identified in Attachment 1. We would be pleased to discuss these conditions with your representatives.

### *Operational and Other Matters*

There are several other items that were identified in the Resolution that relate to the ongoing / daily operations of the Zoo and the RNUP, and as such are beyond the scope of the Agreement. However, the City and the Zoo would like to take this opportunity to stress the importance placed on ensuring the historical value of its assets are maintained to City standards. We work very closely on defining these requirements and will continue to welcome the perspectives of TRCA and other stakeholders in ensuring the protection of these assets.

As the process to establish the RNUP proceeds, including the transfer of lands to Parks Canada, there will be several areas where further discussion is required to more clearly define the relationship among the parties to this Agreement and with Parks Canada. This will include issues such as clarification of security and fencing agreements, as identified in the Resolution. We look forward to continuing to work closely on these various pieces to ensure timely resolution of emerging requirements and needs.

Our response to other items identified in the Resolution is summarized in Section 2.0 of the Attachment.

### *Implementation and Next Steps*

Finalizing this Agreement is a key priority for the City and the Zoo and one of City Council's conditions to be fulfilled prior to the transfer of TRCA-owned lands in the vicinity of the Zoo to Parks Canada for the establishment of the RNUP. To expedite this process, the City's Legal Services Division will update the draft terms to the Agreement to reflect our joint response to the Resolution. This will be provided to TRCA for review and approval.

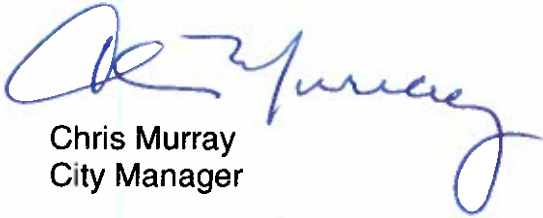
Beyond settling the terms of the Agreement there are several other issues raised in the Resolution that will require further discussion and negotiation between the Zoo and Parks Canada, including:

- Finalizing terms of lease agreements for the Finch Meander south of Old Finch Avenue and alternate Browse Garden location; and
- Defining the Parks Canada and Zoo relationship, including items such as ownership and easement requirements of zoo monorail line, and security and fencing requirements.

Lastly, we'd like to thank you and your staff for the extensive work to-date on advancing this important project. Completion of this agreement is a milestone step towards advancing the Zoo's Strategic Plan, and our mutual interests in establishment of the RNUP.

We look forward to continuing this collaborative relationship.

Sincerely,



Chris Murray  
City Manager



Robin Hale  
Interim Chief Executive Officer  
Toronto Zoo

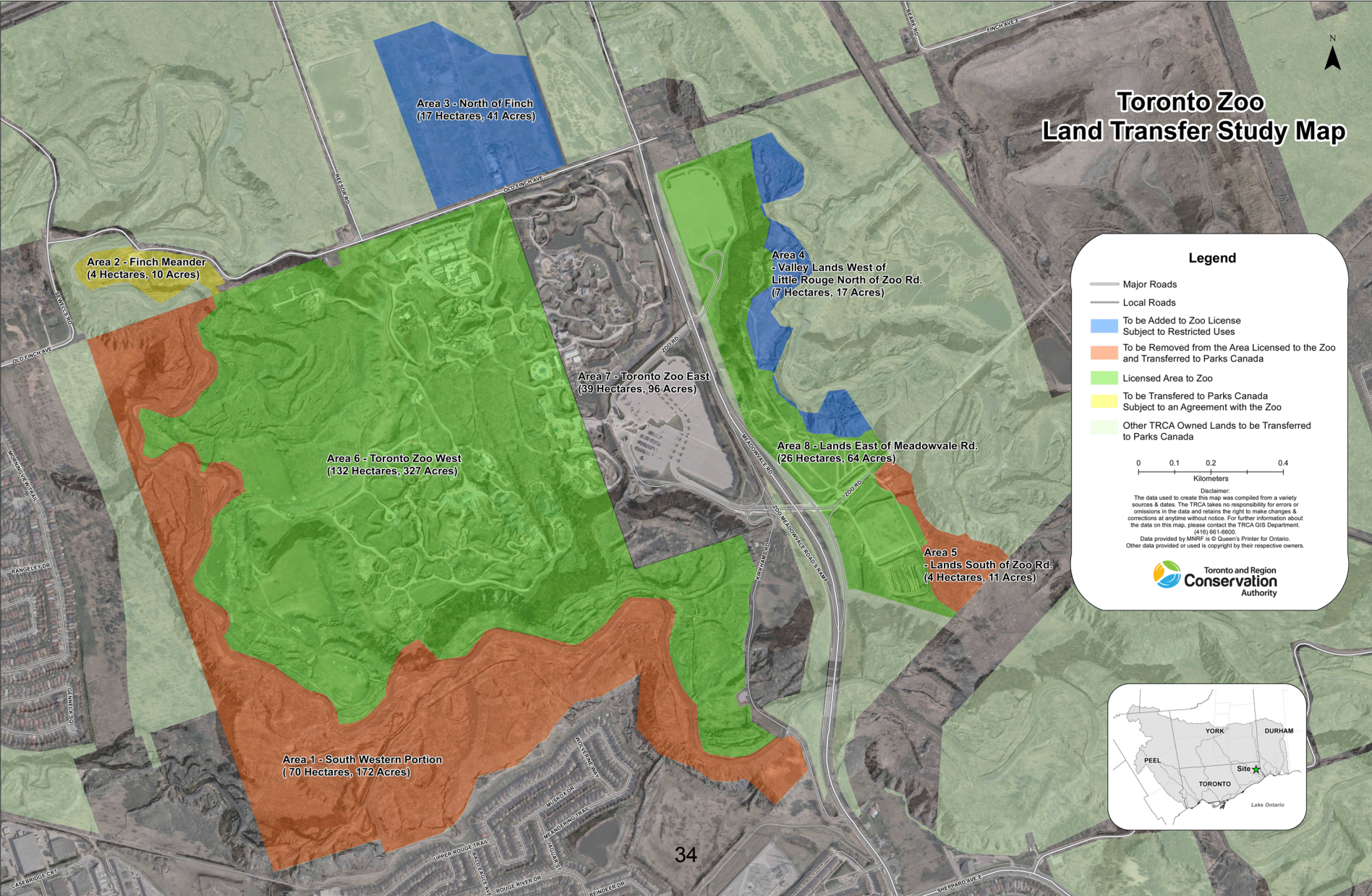
- c. Kathy Stranks, Clerk and Senior Manager, Corporate Records, TRCA  
Mike Fenning, Associate Director, Property and Risk Management, TRCA  
Brandon Hester, Senior Property Manager, Property Services, TRCA  
Michael Tolensky, Chief Financial and Operating Officer, TRCA

## Attachment 1 – City/Zoo Response

Item	TRCA Request	Joint City and Zoo Response
<b>Section 1.0 -Tripartite Agreement-Related Requests</b>		
1.1	Removal of the Finch Meander from the lands to be added to the tripartite agreement subject to Parks Canada entering into a lease with the Toronto Zoo for the Finch Meander area south of Old Finch Avenue;	City and Zoo agree with this request, subject to agreement that the terms of a lease with Parks Canada and the Zoo for the Finch Meander be confirmed prior to signing the tripartite agreement.
1.2	Removal of the browse garden use from the lands being added to the tripartite agreement north of Finch Avenue with the understanding that the Zoo and PC shall work together in partnership toward an agreement for a new browse location;	City and Zoo agree with this request, subject to agreement that the terms of a lease with Parks Canada and the Zoo for the location of new browse garden be confirmed prior to signing the tripartite agreement.
1.3	Any development proposed on the lands north of Finch Avenue be restricted to the areas highlighted in blue on Attachment 2 with the access to the conservation breeding facility highlighted in red on Attachment 2 and be subject to City of Toronto approval processes;	City and Zoo agree with this request.
1.4	That the tripartite agreement be amended so that the clause relating to TRCA and PC staff being allowed access to the lands north of Finch Avenue as required in order to undertake environmental monitoring and restoration activities also apply to lands on the east side of Meadowvale Road;	City and Zoo agree with this request, subject to TRCA and PC staff providing the Zoo Board with 48 hours written notice of intent to access the lands.
1.5	That a clause be added to the tripartite agreement to ensure that Valley Halla is restored and maintained in a condition that protects the heritage value of the buildings subject to Toronto Zoo Board approval;	City and Zoo agree to add clause to tripartite agreement that reflects the importance of historical City assets on Zoo Lands included in the tripartite agreement and that the assets will be managed accordingly.
1.6	That a clause be added to the tripartite agreement that the parties may agree to amend the boundary at a future date to accommodate the outcome of the Parks Canada-led process for determining the ultimate location of an orientation and education facility	Tripartite agreement may be amended at any time subject to agreement of all three parties. A clause will be added to this effect.
<b>Section 2.0- Operational and Other Matters</b>		
2.1	That a clause be added to the tripartite agreement to ensure cooperation on requests to PC and other bodies to support the restoration and maintenance of built heritage assets in the RNUP including but not limited to Valley Halla and the Pearse House	Response reflected in 1.5 above.
2.2	That the Zoo work with PC and community groups to provide periodic access to Valley Halla allowing small groups the opportunity observe the rich historical architecture and craftsmanship subject to Toronto Zoo Board approval, and report back in two years on progress of implementation	City and Zoo agree to this, subject to approval of Zoo Board.

Item	TRCA Request	Joint City and Zoo Response
2.3	THAT TRCA urge Parks Canada, the City of Toronto and the Toronto Zoo to develop, as soon as possible, a long-term fencing and security agreement to protect the Zoo and implement improvements as required;	Security/fencing is an operational matter, delegated to Zoo Board. City suggests a meeting between the Zoo, TRCA and Parks Canada be held to discuss these needs.
2.4	THAT Parks Canada be requested to remove informal trails in Area #1 and develop a trail system in that area on the table lands only;	Defer to Parks Canada. These lands will not be within City or Zoo jurisdiction.
2.5	THAT Parks Canada be requested to grant an easement over the monorail line to the Zoo at a minimal cost and that, if the Zoo decides to reinstitute the service, that TRCA's approval be required;	Parts of Zoo monorail lie in lands that are proposed to be transferred to Parks Canada. Further discussion is needed to identify the Zoo's rights to changes or development of mono-rail lands. An easement over the subject lands, being Parts 11, 13-14 on 66R-29657 is one option.
2.6	THAT Parks Canada be requested to remove informal trails in Area #2;	Does not pertain to the City. The Zoo has agreed this is ok as lands will be leased to them.
2.7	THAT staff ensure that there are no fences on the outer perimeter of Area #3;	The Zoo has previously agreed to this.
2.8	THAT TRCA staff, the Toronto Zoo and Parks Canada be requested to investigate security fencing and monitoring options for the immediate Valley Halla property and report back to the Authority as soon as possible;	Security fencing and monitoring options are an operational matter and will be identified by the Zoo Board.
2.9	THAT the City of Toronto be requested to transfer its lands along Meadowvale Road south of the Zoo to Parks Canada;	City requires further information regarding this request.
2.10	THAT the City of Toronto be encouraged to apply for an infrastructure grant for Valley Halla to restore the building in a reasonable timeframe;	City may investigate opportunities to apply for appropriate federal heritage funds, providing the funding/grant program is suitable and Council has not already identified priority projects for the program.
2.11	THAT staff report back annually on the state of the tripartite agreement;	TRCA staff may report back to Authority when requested.
2.12	THAT staff report back to a future Executive Committee meeting within the next year on the status of the tripartite agreement and the PC lead process for determining the ultimate location of an orientation and education facility;	The City and Zoo may also report back to respective Board and Committees as required.
2.13	AND FURTHER THAT authorized TRCA officials be directed to take the necessary action to finalize the tripartite agreement, including obtaining any necessary approvals and the signing and execution of documents.	City and Zoo staff have the delegated authorities to finalize tripartite agreement. Once changes are made to reflect City and Zoo responses in 1.1 to 1.6 above, agreement can be finalized and executed.









February 5, 2019

John MacKenzie  
Toronto and Region and Conservation Authority  
101 Exchange Ave  
Concord, ON L4K 5R6

Dear Mr. MacKenzie,

Further to our recent conversation, I am writing today to confirm our interests and priorities in working with the Toronto and Region Conservation Authority to advance the completion of the establishment of Rouge National Urban Park.

As a preliminary point however, I would like to express our deep and sincere appreciation for the work that you and your team have done to help to make the vision for the Rouge ever closer to reality. A clear commitment to getting the job done and a firm spirit of collaboration have been the hallmark of the work of your team over the last eight years and the Parks Canada Agency deeply appreciates it.

A key recent accomplishment has been the approval of the inaugural management plan for the park. As you know, the Rouge National Urban Park Management Plan has now been tabled in the House of Commons (<https://www.pc.gc.ca/en/pn-np/on/rouge/info/gestion-management>) and Parks Canada is keen to move forward with the TRCA in completing land assembly for the park and in protecting and celebrating its amazing natural, cultural, and agricultural heritage.

In this context, I would like to commend and thank the TRCA for the November 1, 2018 transfer of more than 190 hectares (470 acres) of land to Parks Canada in the Bob Hunter Memorial Park area for inclusion in Rouge National Urban Park. With the management plan now complete we are eager to build on the momentum this transfer creates. Our top priority in the coming weeks is to finalize the park's remaining land transfers, with the additional 2060 hectares (5090 acres) of TRCA land being the highest priority on the list for land transfer.

The TRCA lands remaining to transfer include approximately 166 individual parcels of property (see attachment); 118 in the City of Toronto, 30 in the City of Pickering and 18 in the City of Markham. Our teams continue to work with our respective legal counsels, and surveyors from the Legal Surveys Branch of Natural Resources Canada, to secure the requisite authorities, prepare legal descriptions and complete the documentation required to effect the transfer. Given that completing the transfer of these lands is of the greatest urgency to Parks Canada, my team is prepared to do whatever is necessary to assist the TRCA in order for us to successfully complete the transfer of lands as soon as possible. It is our strong hope that we can wrap these transactions up this spring and shift gears to fully implementing the management plan. I look forward to working with you in this regard and to identifying and resolving any issues that may be preventing our achievement of this collective goal.

On a related note, I would like to update you regarding Parks Canada's plans for a Toronto 'Gateway' Learning and Welcome Facility in the Scarborough area of Rouge National Urban Park, an initiative Parks Canada has publicly committed to in the recently released park management plan. Parks Canada's intention is to ensure the facility's location and design provide the greatest educational and interpretive value to the park, its partners, and the public.

As you know, Parks Canada recently completed a feasibility assessment of nine locations in the Toronto area of the park to determine the best location for a learning and orientation facility to act as a gateway to discovering RNUP and as a community hub in Scarborough. Parks Canada agreed to conduct this assessment based on feedback from partners and stakeholders in the summer of 2018.

After careful analysis, which factored in technical environmental and cultural heritage criteria along with Indigenous and stakeholder feedback, Parks Canada would like to move ahead with pursuing a location on the east side of Meadowvale Road, which is also the preferred location and recommendation of Mayor John Tory and the Friends of Rouge National Urban Park. As Parks Canada's preferred location is currently part of the Toronto Zoo's leasehold on land owned by the TRCA, a final location decision is subject to further discussions with the TRCA, Toronto Zoo and City of Toronto.

In order for the facility to be viable and best serve the needs of the public, the park's Indigenous partners, neighbouring Scarborough communities, and park visitors, the lands in question would need to be transferred to Parks Canada for inclusion in RNUP. This request is consistent with a TRCA Executive Board Tripartite resolution 2.2 ratified at the June 2018 meeting, which stated:

That a clause be added to the Tripartite Agreement that the parties may agree to amend the [Tripartite] boundary at a future date to accommodate the outcome of the Parks Canada-led process for determining the ultimate location of an orientation and education facility.


To this end, we appreciate that the Toronto Zoo has expressed an openness to negotiate a mutually beneficial outcome and preliminary discussions are now underway. It is my hope and expectation that, to avoid further delays in bringing Rouge National Urban Park to full operations, we can collectively confirm the facility's final location by spring of 2019, at the latest, with public engagement to follow and construction phases occurring from 2020 to 2022.

We look forward to working with the TRCA, Toronto Zoo, and City of Toronto to facilitate a mutually beneficial outcome for all parties involved at the earliest opportunity.

To this end, Parks Canada has already committed to working with the TRCA to make agricultural park lands available to the Zoo to sustainably grow browse foods for Zoo wildlife as well as the provision of 41 acres of former 'Rouge Park' land that Parks Canada and the TRCA agreed to provide the Zoo to manage as conservation lands and a future location for their species-at-risk breeding facilities.

In closing, I would like to reiterate our appreciation for TRCA's work as a central partner in Rouge National Urban Park. I look forward to working with you and your team as we move the land transfer process across the finish line this spring!

Sincerely,

A handwritten signature in black ink, appearing to read 'Trevor Swerdfager', with a large loop at the start and a long horizontal stroke at the end.

Trevor Swerdfager  
Senior Vice President Operations



### Section I – Items for Board of Directors Action

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Chandra Sharma, Director, Community Engagement and Outreach

**RE:** **HUMBER BAY PARK MASTER PLAN UPDATE**

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#### KEY ISSUE

City of Toronto Parks, Forestry and Recreation Capital Planning Team have been supported by the TRCA in the recent development of an updated Humber Bay Parks Master Plan (2018).

#### RECOMMENDATION

WHEREAS as exemplified in the Waterfront Agreement of October 11, 1972 the City of Toronto and TRCA are to create and develop waterfront lands which will enable public access to water oriented recreational facilities.

AND WHEREAS TRCA staff worked with City of Toronto Parks, Forestry and Recreation staff to prepare the Humber Bay Park Master Plan.

THEREFORE, BE IT RESOLVED THAT the Humber Bay Master Plan 2019 be received by TRCA Board of Directors for information;

AND FURTHER THAT staff be directed to work with the City of Toronto to advance and initiate projects to implement Master Plan priorities.

#### BACKGROUND

##### A Changing Waterfront

Opened in 1984, the 43-hectare Humber Bay Park is owned by the Toronto and Region Conservation Authority (TRCA) and operated by the City of Toronto Parks, Forestry & Recreation Division. The park is located south west of the intersection of Parklawn Avenue, Lake Shore Boulevard West and Marine Parade Drive. Humber Bay Park was created through lakefilling during the 1970s and early 1980s. The landmass was gradually formed from construction fill in the mid-to late 80's. Part of the Mimico Creek watershed, the park exists as two large peninsulas that flank the mouth of Mimico Creek where it discharges into Lake Ontario. Although the landmass of Humber Bay Park is entirely man-made, it has become a naturalized green space that contains a diversity of vegetation communities that provide important habitat for seasonal resident wildlife species and migrating species (e.g. stopover habitat for birds).

The original master plan for this new land called for a highly programmed park space. However, over time, the park has evolved into a natural and quiet refuge for both people and wildlife. Located in close proximity to a well-established residential community and an evolving high rise neighbourhood, the park and its infrastructure are under new pressure to meet the demands of an increasing population, while maintaining their highly valued naturalized character.

## Item 9.2

The park has been the subject of a series of master plans for site specific areas in the vicinity including Humber Bay Park East, Humber Bay Park West, Humber Bay Shores Park. This updated master plan would be the first that consolidates all of the site specific plans and addresses the park in its complete physical formation.

### **Ongoing Development**

Currently, there is considerable development taking place adjacent to the park within the existing community. The number of residents in this area has significantly increased over the last 5 years with numerous towers being developed along Lake Shore Boulevard, Park Lawn Road and Marine Parade Drive. The Humber Bay & Humber Bay Shores area is one of the fastest growing new communities in Toronto, with approximately 12,000 current residents and an anticipated 10,000 more residents by 2020. New development has attracted a new demographic of residents to the area. As such, there has been keen interest in the redevelopment of the public realm of this new high density node adjacent to Humber Bay Park. The recent redevelopment of the public realm along Marine Parade Drive, directly adjacent to Humber Bay Park is an important influencing factor. Previous implemented projects include the redevelopment of Humber Bay Shores Park and the Butterfly Garden and Trail Improvements which will be completed in 2018.

### **The Revitalized Master Plan**

Humber Bay Park, with its system of trails, rugged shoreline and dramatic views, offers a unique and rare waterfront experience within the larger metropolitan Toronto area. Defined by two separate peninsulas, the park is comprised of a collection of spaces, each with its own distinct character, function, form and sense of place. The park has been loved by the community for decades and is now showing signs of wear and tear, deterioration and decay.

The vision for Humber Bay Park is one of greater integration. The Revitalized Master Plan proposes a new comprehensive design approach that will enhance the valued naturalized landscape, habitat and recreational uses in the park, while identifying new opportunities for improvements that will respond to both the existing and future needs of the community. The proposed plan is based on the following guiding principles:

- The design will celebrate and enhance the existing natural beauty and sense of respite from the urban city, while accommodating the growing number of park users and addressing existing user conflicts.
- The existing flora and fauna of value be protected, while providing opportunities for interpretation and appreciation of the park's natural heritage attributes.
- The park continues to be a local park for nearby residents while embracing its place in the larger network of open spaces along Toronto's waterfront. The park should accommodate a diversity of park users and needs.
- The design capitalizes upon new opportunities for recreational activities and new programmable social spaces while maintaining and protecting the natural and ecological attributes of the park.
- The design is flexible, resilient, adaptive and able to evolve and respond to the current needs as well as the future needs of the community.

This Master Plan strives to provide a new perspective, one that will achieve a strong vision that will balance the preservation and enhancement of while identifying areas for improvement, establishing a larger framework that will unify and protect areas of the park. This vision is based on the following objectives:

## Item 9.2

1. Improve overall connectivity, unifying the overall park, establishing a hierarchy of routes, trails and pathways that meet AODA criteria. The design involves adjusting the existing layout, eliminating areas of conflict between cyclists and pedestrians and creating new connections with the goal of improving pedestrian and cyclist movement.
2. Improve parking and vehicular circulation in order to address existing and future parking requirements, while reducing the extent of paved surfaces and the quantity of storm water run-off.
3. Protect and enhance existing natural environment by creating new aquatic and terrestrial habitat areas that enhance biodiversity and ecological functions.
4. Improve water quality and function of the ponds and water channel to support ecological and recreational functions while reducing the resources required for maintenance and operation.
5. Identify opportunities for improved park programming, including redefining existing spaces and the introduction of new seating and lookouts, while protecting sensitive habitats. Park programming is intended to be flexible, catering to the adjacent growing community.
6. Integrate architectural improvements within Humber Bay Park with adjacent landscape, to meet ecological, regulatory and overall site enhancement objectives.
7. Improve the lighting strategy, to ensure public safety, while achieving the highest standard of habitat protection, the reduction of light pollution and enhanced energy efficiency.

### **Public Consultation Process**

#### *Public Meetings:*

As part of the master planning process, members of the public were invited to 3 public meetings. The input from these informal sessions was used to establish immediate and long-term objectives for the park.

#### *Community Resource Group:*

The Community Resource Group (CRG) was established to provide input, guidance and advice during the design phase of the Project. The CRG met 5 times over the course of the project.

Additional Consultation Comments and suggestions about the content of the Master Plan were welcomed throughout the process. Questionnaires were distributed at public meetings and surveys were available on the City's project website, affording additional opportunities for input.

#### *Architectural Community Resource Group Meetings:*

The Architectural Community Resource Group (ACRG) was convened on 3 occasions and 2 public meetings were held for the Humber Bay Park East Building Project. The public consultation for the new building in Humber Bay Park East was conducted in coordination with the Master Plan.

Each of the public meetings was well attended and resulted in important discussions regarding the parks assets, issues and opportunities. Various components of the Master Plan were presented at each meeting and were all generally supported by the public. For a more fulsome overview of the public consultation and the comments received from the public, see Attachment 1 to this report.

### **RATIONALE**

The revitalization and update of the Humber Bay Park Master Plan exemplifies the partnership and process set out in the 1972 Waterfront Agreement where: *“In the course of implementing the Metropolitan Toronto and Region Waterfront Plan the Authority has been and will be acquiring, creating and developing waterfront lands which will enable public access to water oriented recreational facilities. Metro will contribute to such acquisition, creation and development. Metro is desirous of using the lands so acquired, created or developed within the Municipality of Metropolitan Toronto for park and recreational purposes.”*

### **FINANCIAL DETAILS**

At its meeting on February 17, 2016, City Council approved the 2016 Parks, Forestry and Recreation Capital Budget which included a project budget of \$7.0 million for a new building located within Humber Bay Park East. TRCA staff participated throughout the Master Plan process through funding provided through City of Toronto municipal levy. Cost estimates for the build out of various components of the Master Plan will be undertaken in 2019 and will be reported back to the Board of Directors.

Implementation of individual projects is contingent on TRCA and City priorities, approvals, additional consultation process (if required), funding and budget approvals from the City and its partners. Potential funding or implementation partners have been identified for each project. These include TRCA, City departments, other public agencies and private or volunteer organizations.

The Master Plan process identified a preferred location for this building located centrally within the park, near the reconfigured ponds with direct access to parking and drop-off. Architectural services for design of this building were retained and design development is in progress. A Request for Proposals for detailed design of the associated pond reconfiguration has been initiated by the City of Toronto. Specific timelines for final design and construction are being discussed and will be coordinated with TRCA. It is proposed that the maintenance of any newly created naturalized areas will be managed by TRCA.

### **DETAILS OF WORK TO BE DONE**

#### **Master Plan Implementation**

The projects identified for implementation in the Master Plan are divided into three categories: small-scale or incremental projects, medium-scale projects and large-scale projects.

*Small-scale or incremental projects* - These are improvements that are not site specific and that can be implemented strategically over time throughout the entire park. Some of these projects have previously been identified by the TRCA and /or the City and could be funded through Parks and Capital Projects annual Parks Plan and state of good repair budgets.

*Medium-scale projects* - These projects are those that will require project-specific funding as well as some coordination to ensure that they are staged to have minimal impact on the operation of the park. Cost sharing, partnership funding or resource sharing for implementation of these projects may be required.

*Large-scale projects* - These improvements include most of the Master Plan's most significant and substantial recommendations. These projects will go the furthest in defining the future character of Humber Bay Park and include the implementation of the redefined West Market

## Item 9.2

Area, the Humber Bay Park East Building Project and the Ponds & Linear Wetland Reconfiguration and Improvements, among others. These projects would require significant funding and coordination.

TRCA will also continue to work with the City to identify the opportunities where implementation can be performed by TRCA staff. This implementation work could be accomplished through our existing Service Agreements with the City.

City of Toronto Parks Forestry and Recreation and TRCA will be working together to find where economies of scale can be achieved, such as ensuring related projects are implemented in close succession, reducing the duration of disturbance within the Park, and minimizing costs for mobilization, materials and labour. The Master Plan identifies projects that could benefit from concurrent implementation.

**Report prepared by: Nancy Gaffney, extension 5313 and Jill Attwood, extension 5916**

**Emails: [nancy.gaffney@trca.on.ca](mailto:nancy.gaffney@trca.on.ca) and [jill.attwood@trca.on.ca](mailto:jill.attwood@trca.on.ca)**

**For Information contact: Jill Attwood, extension 5916**

**Emails: [jill.attwood@trca.on.ca](mailto:jill.attwood@trca.on.ca)**

**Date: February 7, 2019**

**Attachments: 1**

Attachment 1: Humber Bay Park Master Plan (attachment to be provided with added agenda)

### Section III – Items for the Information of the Board

**TO:** Chair and Members of the Board of Directors  
Meeting #2/19, Friday, February 22, 2019

**FROM:** Chandra Sharma, Director, Community Engagement and Outreach

**RE:** **TORONTO AND REGION CONSERVATION AUTHORITY RESPONSE TO  
ONTARIO'S CLIMATE CHANGE PLAN CONSULTATION**

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#### KEY ISSUE

To provide the TRCA Board of Directors with a copy of staff comments on the *Made-in-Ontario Environment Plan*, released by the Province of Ontario which were submitted on January 28<sup>th</sup>, 2019 to meet the province's deadline for comment.

#### RECOMMENDATION

**IT IS RECOMMENDED THAT the staff report, highlighting TRCA staff comments on Ontario's Made-in-Ontario Environment Plan, be received.**

#### BACKGROUND

On November 29, 2019 the Province of Ontario released a proposed *Made-in-Ontario Environment Plan* with four areas of focus:

1. Protecting our Air, Lakes and Rivers
2. Addressing Climate Change
3. Reducing Litter and Waste in Our Communities & Keeping Our Land and Soil Clean
4. Conserving Land and Greenspace

This proposed plan was released following an initial online consultation process which was active between October 24, 2018 and November 16, 2018. TRCA staff submitted comments in response to this initial consultation, which were included in the [Board of Directors Meeting #9/18 agenda, held on November 30, 2018](#). At that meeting, Board of Directors requested that staff provide an update once the proposed *Environment Plan* had been released.

This report provides a copy of comments submitted by TRCA staff via the Ontario Environmental Registry on January 28<sup>th</sup>, 2019.

#### RATIONALE

#### SUMMARY OF TRCA COMMENTS AND RECOMMENDATIONS TO THE PROVINCE

##### 1. General Comments

The proposed Environment Plan sets out areas of potential action related to many of the programs and services delivered by TRCA. In turn, TRCA and other CAs can play essential roles in supporting the Province in implementing many objectives and actions of the Plan. Through long-term partnerships with municipalities, numerous local community leaders and groups, TRCA and other CAs are uniquely positioned to enable local networks to engage in collaborative action.

**Recommendation 1.1: TRCA recommends that the MECP work with Conservation Ontario and other CAs to:**

- **Take advantage of the success of Ontario's CA program and close to 70 years of unique experience, technical expertise, and collaborative approach to engaging diverse stakeholders and communities in dealing with the most pressing issue of our times - climate change.**
- **Leverage the importance of watershed-based governance model that has enabled innovation to develop practical solutions to current and emerging issues (e.g., flood management, drinking water and Great Lakes water quality, climate change, rapid urbanization/growth); and**
- **Leverage CA programs to achieve multiple provincial priorities.**

In its current form, the Environment Plan is focused on the MECP. However, many other Ministries have responsibilities to ensure a healthy and sustainable environment. Many of the actions identified in the Environment Plan will require support from other Ministries for implementation success. While the Province has committed to make climate change a cross-government priority, we recommend that this approach be extended to all other areas identified in the Environment Plan. A whole-of-government approach is necessary to effectively address our pressing environmental challenges and move communities towards sustainability and long-term prosperity.

**Recommendation 1.2: TRCA recommends that a cross-government approach be extended to all areas of the Environment Plan to bring environmental protection and climate change to the forefront of all government decisions and contribute to the effective implementation of the Plan.**

## ***2. Protecting our Air, Lakes, and Rivers***

### **Great Lakes Health**

The Great Lakes are the primary source of drinking water to millions of Ontarians. As indicated in the most recent Minister's Annual Drinking Water Report, Ontario has a comprehensive Drinking Water Source Protection (DWSP) Program to protect municipal sources of drinking water, including the Great Lakes. Continued improvement to the initial technical work that was completed to prepare source protection plans will be necessary as more information becomes known about the impact of emerging influences such as blue-green algae and Cladophora, road salt, increased development, and flooding caused by severe weather events.

Through the DWSP, the Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Committee (SPC) investigated the impact of spills on municipal drinking water systems drawing water from Lake Ontario. A number of policies are set out in the Approved CTC Source Protection Plan (SPP), addressing spill prevention, contingency planning, and emergency response. The proposed online platform for reporting incidents, commitment to improve the complaint response system, and a goal to improve transparency between stakeholders will all lead to collaborative and consistent emergency response.

**Recommendation 2.1: TRCA recommends that the MECP continue to support the Drinking Water Source Protection Program and continue to build on the technical studies and analyses completed for source protection planning to protect water quality and the Great Lakes ecosystem.**

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As the lead for the Toronto and Region Remedial Action Plan (RAP), TRCA plays a key role in leading collaborations for Lake Ontario initiatives. The Toronto and Region RAP recognizes the influence of watersheds on nearshore lake health. Any updates to the Great Lakes Strategy will need to continue to recognize the significant influence local watersheds have on nearshore lake health. Integrated watershed management is critical to managing pollutant loads and protecting spawning habitats. A more explicit link between watershed planning and management and nearshore lake health should be established in the proposed Environment Plan.

**Recommendation 2.2: TRCA recommends that the Environment Plan be strengthened to establish a stronger, more explicit connection between watershed planning and management and nearshore lake health.**

TRCA is pleased to see the Province's continued commitment to restoring the Great Lakes. Executing on-the-ground restoration projects will be critical to mitigate and adapt to the impacts of climate change. In order to deliver on resiliency objectives and achieve measurable impact in a cost-effective manner, it is important to deliver restoration at a large scale and in strategic areas where multiple objectives can be realized (e.g., water quality, water quantity, erosion and sedimentation remediation, natural cover, and connectivity, etc.) to maximize the value on investment. For example, TRCA has completed a jurisdiction-wide Integrated Restoration Prioritization (IRP) process, which directs site selection to provide the maximum benefit to natural system function on a watershed basis.

**Recommendation 2.3: TRCA strongly encourages that the MECP adopt a strategic approach to restoration and focus available resources on areas where multiple objectives can be achieved, based on the latest science and real monitoring data pertaining to ecosystem health and integration of climate resilience measures to address vulnerability and risk to ecosystems and communities.**

### **Vulnerable Waterways and Inland Waters**

TRCA agrees with the importance of protecting Ontario's water resources, which are essential to long-term sustainability of our environment, economy and communities. Monitoring the quality of our lakes, rivers, and aquifers is necessary to understand the impact of our everyday activities on these dynamic systems. Although we agree that increasing sodium and chloride from the application of road salt is a stressor to our source water, monitoring efforts should not be restricted to this activity. The Province must work with its stakeholders and partners to promote best management practices to reduce the impact of all land use activities on all sources of drinking water. Effective watershed management and continued water quality monitoring of lakes, rivers, and aquifers will allow us to evaluate the implementation success of initiatives such as source protection planning which employ best management practices. Conservation Authorities and municipalities can be essential partners in protecting additional vulnerable waterways and inland waters through effective implementation of the provincial planning and water policy framework (e.g., the Growth Plan for the Greater Golden Horseshoe, and *Clean Water Act*, etc.).

**Recommendation 2.4: TRCA welcomes the MECP's commitment to supporting effective watershed management and recommends continued support for water quality and quantity monitoring of lakes, rivers, and aquifers conducted by Conservation Authorities and municipalities.**

TRCA can also provide support in understanding vulnerabilities of waterways and inland waters based on a watershed perspective. TRCA has been piloting a "next generation" approach to watershed planning in the development of an updated watershed plan for Carruthers Creek in



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partnership with the Region of Durham. This “next generation” approach will help to better consider climate change vulnerabilities and ecological connectivity, and green infrastructure planning for improved community resilience, among other benefits. Watershed planning can bring a solid foundation of science to inform many key community planning issues such as: identifying and enhancing natural heritage systems; providing guidance to manage stormwater using green infrastructure and low-impact development (LID) techniques; managing the risk to property and infrastructure from natural hazards, and assessing the impact of potential future climate change, among others.

**Recommendation 2.5: TRCA recommends that the MECP provide clear direction on how the goals of watershed and subwatershed planning should relate to existing provincial or other legislation, policies and guidelines for watershed and environmental protection.**

### **Water Use, Conservation and Security**

The understanding of how water cycles through watersheds in southern Ontario, obtained through the DWSP Program, was a strategic investment by the Province. This knowledge can inform water management decisions being made by the Province in the issuance of Permits-To-Take-Water and Environment Compliance Approvals. TRCA strongly supports the Province’s goal of ensuring that the knowledge gained through the DWSP Program is applied to other provincial program areas.

The proposed Environment Plan identifies the need to manage water takings to ensure we have sustainable water resources in the face of a changing climate and continued population growth. The premise of evaluating cumulative water takings in the context of overall water management is vital to ensuring that water resources are adequately protected and used sustainably. Therefore, TRCA supports the review of current water taking policies, programs and science tools. The extensive technical work which has been completed, peer-reviewed, and approved by the Minister of the Environment, Conservation and Parks through the DWSP Program will be invaluable in completing this review.

The tiered water budget studies completed under the *Clean Water Act* have identified current and projected future water takings in each watershed or subwatershed in Ontario in an effort to evaluate the vulnerability to municipal drinking water supplies. Where the potential for stress to a particular drinking water system was identified during these assessments, more elaborate drought and climate change scenarios were considered in an effort to ensure the sustainability of the water resource over the long-term. This technical work provides a solid foundation for identifying sustainable approaches to managing our water for the future, including the adoption of water conservation practices and technologies.

Effective water management requires strong coordination and collaboration across multiple stakeholders. Watershed Plans are prime examples of a collaborative process that brings together a comprehensive understanding of water (quantity, quality, uses, etc.) under present and future timeframes, as the basis for developing management strategies that may include allocation guidelines. It is important that the Province continues to support and enable these and other forms of collaborative water management.

**Recommendation 2.6: TRCA recommends that the MECP establish a stronger, more explicit commitment to enabling collaboration across various agencies responsible for aspects of water management.**

### **Municipal Wastewater and Stormwater Management and Reporting**

TRCA supports efforts to improve municipal wastewater and stormwater management and reporting, which if properly managed can significantly benefit the health of our watersheds. TRCA leads watershed hydrology studies and integrated watershed plans which provide the basis for effective stormwater management criteria and inform municipal decision-making regarding new development and priorities for urban retrofits. TRCA also plays a role in the implementation of these projects. With additional resources, we could assist in strategic planning and implementation of green infrastructure designed to reduce flood risk, improve stormwater management and achieve numerous social and economic co-benefits for communities. Policies established at the Provincial level are important to guide science-based wastewater and stormwater management at the municipal level, with priority given to LID and green infrastructure. Provincial support for incentive programs related to Stormwater innovation and infrastructure grants for green infrastructure could also be used to leverage municipal wastewater and stormwater management initiatives.

**Recommendation 2.7: TRCA recommends that the MECP support incentive programs related to stormwater, implementation of LID and green infrastructure.**

### ***3. Addressing Climate Change***

#### **Understanding Climate Change Impacts**

TRCA recognizes that adapting to climate change impacts is a critical natural resource management issue. Through the Ontario Climate Consortium (OCC), TRCA has developed expertise to respond to issues of climate adaptation and mitigation across both technical and policy fronts. OCC also commonly partners with municipalities in TRCA's jurisdiction on climate change initiatives such as vulnerability assessments, workshops on climate risks, and various research projects. TRCA offers a range of expertise in climate change mitigation and adaptation that could be used to help the Province develop and deliver policies and actions to achieve its goals in addressing climate change.

While TRCA supports the commitment to undertake a provincial climate change impact assessment, we suggest that any such impact assessment must inform local and regional decision-making. For example, balance between a high-level, broad-scale approach and a regional-scale assessment that considers spatial detail (e.g., the Great Lakes), local land use and sector interdependencies will be key to addressing local risks.

Further, while provincial and municipal scale sector-based vulnerability assessments are important, certain aspects of their implementation ultimately happens at the ground level by residents, businesses and other groups. TRCA's Sustainable Neighbourhood Action Program (SNAP) is piloting a neighbourhood-based vulnerability assessment and adaptation planning process in the City of Brampton, which is bringing different levels of information together with local knowledge to develop a shared action plan. The process is building capacity in local stakeholders to lead implementation actions that will address multiple urban renewal objectives and deliver greater impact. This model is expected to be transferable to other communities and could harness additional local resources for action.

**Recommendation 3.1: TRCA recommends that the provincial-level climate change impact assessment must inform local or regional decision-making in the Greater Toronto Area, to inform Great Lakes concerns or sector-based risks. This can be achieved by scaling some systems or sectors down to a more local or regional level where more detailed research and engagement work is conducted;**

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As the largest conservation authority in Ontario serving the most urbanized region, TRCA has played a critical role in addressing climate change risks and the impacts of rapid growth and urbanization within our area of jurisdiction, which supports the Province's and municipalities' efforts to address pressing environmental issues such as Lake Ontario water quality, flood and erosion hazard management, stormwater, natural heritage systems planning, and source water protection. An important component of this work has been collecting climate and other environmental data while undertaking various types of vulnerability and risk assessments, including:

- Hydrologic modeling (2D, LiDar) for enhanced riverine flood risk assessment and floodplain mapping delineation;
- Dual drainage modeling in case study areas to estimate and consider the interactions and extent of urban and riverine flooding;
- Stream erosion assessments and prioritization for erosion control works, monitoring and reporting through key performance indicators;
- Vulnerability and risk assessment of TRCA flood control infrastructure;
- Natural system vulnerability assessment to climate change in Peel Region.

**Recommendation 3.2: TRCA recommends that the proposed provincial impact assessment incorporate existing information from CAs and other organizations at the local and regional scales; and include case studies of small, medium, and large municipalities where growth pressures are expected, under both greenfield and redevelopment / intensification scenarios, and may exacerbate climate change impacts.**

**Recommendation 3.3: TRCA recommends that where climate change vulnerabilities and risks are already well known, funding for adaptation actions should be applied in high priority areas regardless of province-wide impact assessment processes occurring in the coming years.**

### **Government Policies Update**

TRCA strongly agrees with the Province that a cross-government approach to addressing climate change is essential for Ontario to successfully respond to the all-encompassing nature of climate change. Coordination and partnership building are extremely important to managing climate change risks and developing policies, programs, and services. Municipalities, utilities and other broader public sector organizations need to be included in cross-governmental coordination efforts, particularly at the local and regional scale where expertise and resources can be shared to help build joint-capacity for effective decision-making. Conservation Authorities, as regional environmental agencies, can play a critical role in regional coordination and providing guidance to local government and other public agencies operating on-the-ground. CAs can also play a critical role in encouraging local environmental leadership through partnerships with community groups and business associations. As the Province moves forward with updating government policies to update policy direction on climate resilience, TRCA would welcome the opportunity to support the government with technical expertise and insights gathered through decades of climate change work at the local level.

**Recommendation 3.4: TRCA recommends that the Province work with CAs to enhance regional coordination and provide guidance to municipalities on climate action, while also encouraging local leadership through partnerships with community groups and local businesses.**

### **Local Climate Resilience**

TRCA is pleased to see the commitment to empower effective local leadership on climate change and improve local climate resilience. We know that left unaddressed, climate risks pose significant threats to population health and economic prosperity in the future. Community-led initiatives and programs, which use innovative means of engaging citizens in personalizing their connection with the future climate, are more effective in raising awareness and helping individuals determine the actions they need to take. TRCA has been very active in this area with sector specific on-the-ground mobilization through initiatives around climate change mitigation and adaptation such as our Sustainable Neighbourhood Action Program (SNAP), Ontario Climate Consortium (OCC), and Partners in Project Green (PPG): a Pearson Eco-Business Zone. TRCA will continue to support efforts by member municipalities and senior levels of government to respond to climate risks by helping to build infrastructure that is more resilient to flood and erosion hazards, providing expertise in predicting the effects of climate on watersheds and communities, and connecting stakeholders with the knowledge and technologies that they require.

**Recommendation 3.5: TRCA recommends that the MECP identify the essential role of community-led actions, and role of regional organizations such as TRCA in providing the necessary support and guidance to local communities, business, and municipalities in building local climate resilience.**

### **Green Infrastructure**

Watershed planning assists municipalities and their partners and stakeholders in integrating greenspace and green infrastructure into new and existing communities. TRCA has supported initiatives such as retrofitting existing stormwater management ponds, terrestrial natural heritage system design, urban forest management and facilitating LID. TRCA has expertise in LID and urban forest strategies, and experience in engaging private and public landowners and municipalities in the planning, design and implementation of green infrastructure plans on public and private property. There are significant environmental benefits that accrue from this work, as well as numerous social and economic co-benefits. TRCA's integrated planning processes bring a multi-objective lens to the design of green infrastructure systems, which is necessary to optimize designs for greatest impact. These multi-objective projects are low-regret actions that offer the opportunity to leverage planned infrastructure renewal to achieve cost-sharing opportunities and the basis for innovative funding sources. This work should be a priority implementation program due to its multiple benefits. TRCA is well positioned with completed plans and established partnerships available to advance implementation quickly.

**Recommendation 3.6: TRCA recommends that the MECP make multi-objective green infrastructure projects a priority implementation program of the Environment Plan.**

## ***4. Reduce Litter and Waste and Keep our Land and Soil Clean***

### **Waste Reduction**

TRCA supports the focus on food and organic waste, which represents 6% of Ontario's greenhouse gas emissions. TRCA also supports efforts to reduce plastic waste that ends up in our lakes and rivers, which support clean watersheds and conservation areas. Efforts to prevent waste from entering these areas is consistent with the mandate of CAs.

Since its inception, TRCA's Partners in Project Green has supported thousands of businesses and facilitated the completion of hundreds of green projects in Canada's two largest employment areas, the Pearson Eco-Business Zone and the City of Toronto. As an example, business in these employment areas diverted more than 4,000 tonnes of materials away from landfill using circular

economy principles. TRCA commonly engages community members to participate in a variety of education, training and outreach initiatives such as cleanups, including shoreline cleanup events along Lake Ontario to raise awareness of the waste we generate, get people outside to appreciate nature, and save our wildlife.

### **Excess Soil Management and Brownfield Redevelopment**

TRCA is a commenting agency under both the *Planning Act* and the *Environmental Assessment Act*, and a regulatory agency under the *CA Act*. We work to ensure that new development or redevelopment is not at risk from flooding or erosion, as well as encourage the conservation and restoration of natural resources. While we welcome the clean-up of contaminated lands in Ontario, we would like to be further engaged as the Province sets out to revise the brownfields regulation and record of site condition guide to ensure that proper protections are in place to facilitate brownfield redevelopment while protecting the public and the environment.

**Recommendation 4.1: TRCA would like to recommend that MECP engage CA's to support the revision of brownfield regulations and the record of site condition to ensure that the environment and the public is protected while reducing barriers to the redevelopment of brownfield sites.**

TRCA supports the Province's intention to set clear rules to support the beneficial reuse of safe soils and work with stakeholders to increase enforcement on illegal dumping of excess soil. TRCA has developed a number of guidelines to protect soils, including "Preserving and Restoring Healthy Soil: Best Practices for Urban Construction" (2012). TRCA could provide support to the Province in setting clear rules to allow industry to reuse excess soils.

**Recommendation 4.2: TRCA would like to engage with the MECP to support the establishment of clear rules to support the beneficial reuse of safe soils and enable strong enforcement on illegal dumping.**

### **Management of Hauled Sewage**

TRCA supports the consideration of approaches for the management and spreading of hauled sewage. It is our understanding that the Source Protection Programs Branch is reviewing current circumstances under which this activity could be a significant drinking water threat to municipal sources of drinking water. We agree that there is still much to understand with respect to how these materials could impact the environment. Therefore, a more comprehensive understanding of their behaviour and management is warranted.

## **5. Conserving Land and Greenspace**

### **Natural Ecosystems**

Conservation Authorities play a central role in improving the resilience of natural ecosystems, which in turn help to increase the resilience of communities within the province to flooding, erosion, and climate change. For example, TRCA and partners developed the targeted terrestrial natural heritage system, which is necessary to support regional biodiversity and contributes significantly to water management as well as other social and economic co-benefits within the region. We also play a key role in restoring natural ecosystems (e.g. wetlands, woodlands, and streams) and supporting habitat quantity as well as quality. We welcome provincial support on the accelerated securement, protection and restoration of the natural heritage system. TRCA and

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other CAs can be essential partners in land and water conservation to preserve areas of significant environmental and ecological importance. Further, CAs are provincially mandated to be able to enter into agreements for land conservation.

**Recommendation #5.1: TRCA recommends provincial investment to accelerate and scale-up the securement, protection and restoration of the natural heritage system.**

**Recommendation #5.1: TRCA recommends that the Province identify specific targets or thresholds for protecting and restoring natural ecosystems based on the latest science provided through watershed and subwatershed planning, to enhance the ability for municipalities and CAs to implement actions to meet ecological targets.**

### **Conservation and Environmental Planning**

TRCA appreciates the Province's support for conservation and environmental planning and the Province's intention to work with municipalities and stakeholders to improve the delivery of the mandate of CAs. As indicated above, TRCA delivers a broad range of programs and services in fulfilling our mandate under the *CA Act*, which contribute to many of the objectives and actions identified in the Plan. We would highly welcome the opportunity to remain engaged and work collaboratively with the Province and other stakeholders to continuously improve our programs and services, and ensure that an appropriate level of funding and resources is in place to sustain them moving forward.

TRCA would also like to be engaged as the Province looks to modernize Ontario's environmental assessment process as the review of environmental assessments is an integral part of our work at the TRCA.

**Recommendation 5.3: TRCA would like to engage further to support the Province in delivering the mandate and objectives of CAs as set out in the *Conservation Authorities Act* and in modernizing Ontario's Environmental Assessment processes.**

### **Parks and Forests**

TRCA is improving and expanding trail systems across our area of jurisdiction. We have improved public access to greenspace by acquiring nearly 700 acres of new public greenspace and partnered with government agencies, municipalities and NGOs to formalize over 800 km of the regional trail system throughout our jurisdiction. In addition, TRCA has developed a Regional Trail Strategy to guide our work with partners to develop a 1,100-km network of regional trails that will create opportunities for people throughout the Greater Toronto region to explore and enjoy natural greenspace. In 2017, TRCA Parks and Culture facilities attracted over 1 million visitors to experience nature and cultural heritage. Conservation Authority operated recreation infrastructure adds immense economic (tourism) and public health value to the residents of Ontario. Currently with population growth in the Greater Golden Horseshoe, these important assets are facing pressures and challenges. Provincial investment in these assets is critical.

**Recommendation 5.4: TRCA would like to work with the Province and other partners to explore innovative investment opportunities to support the continued growth of and enhanced access to the parks and trails infrastructure network in the Greater Golden Horseshoe Region;**

### **Species Protection**

TRCA will soon complete our invasive species strategy to strategically address the growing threat of invasive species in urban and near-urban areas. A regionally coordinated approach to invasive species detection and management will be the most efficient and cost-effective way to achieve meaningful gains. Similarly, a coordinated approach to species-at-risk that includes a holistic view of the natural system will achieve greater benefits to ecological communities and wildlife, including species-at-risk. We would welcome the strengthening of this action area to include commitment to the timely completion of Species Recovery Plans.

**Recommendation 5.5: TRCA recommends that this area of the Environment Plan be strengthened to include a commitment to the timely completion of Species Recovery Plans.**

### ***6. Next Steps Implementation***

TRCA would like to be further engaged with the Province as the proposed Environment Plan is finalized and implemented. CAs already work in many areas of the Plan and are uniquely positioned to enable local networks to enrich the engagement and coordination of environmental protection and stewardship. Additionally, TRCA offers a range of climate change expertise which can be leveraged through the proposed advisory panel on climate change to support implementation and further development of climate change actions.

### **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 8 – Gather and share the best sustainability knowledge**

**Strategy 12 – Facilitate a region-wide approach to sustainability**

### **FINANCIAL DETAILS**

Staff is engaged in this policy analysis work as per the normal course of their duties. No additional funding is proposed.

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