

**Scarborough Waterfront Project
Environmental Assessment**

**ENVIRONMENTAL ASSESSMENT
COMPLIANCE MONITORING**

ANNUAL REPORT 2020

**Per Provincial Environmental Assessment
Notice of Approval Condition 4**

EA-03-02/14134

SUMMARY

This is the Scarborough Waterfront Project (SWP) Environmental Assessment (EA) Compliance Monitoring Program report for the September 13, 2019 to September 13, 2020 period. The results of the monitoring program are to be submitted on an annual basis, as per the EA Notice of Approval Condition #4. This report constitutes the first submission.

As described in the SWP EA Compliance Monitoring Program (TRCA, September 2020), Toronto and Region Conservation Authority (TRCA), in partnership with the City of Toronto, will be proceeding with the initiation of detailed design works for the SWP starting later in 2020. Detailed design and subsequent construction of the Project will be undertaken in phases. The West Segment will be the priority as there continues to be an increasing need to ensure safe access to and through Bluffer's Park for thousands of annual visitors. Following completion of the West Segment detailed design phase, it is expected that Central Segment detailed design will be completed while West Segment construction is underway.

As per the conditions stipulated as part of the Notice of Approval issued to TRCA by MECP, further consultation with key stakeholders and MECP will be required prior to the implementation of any works within the East Segment. As such, East Segment design and construction are not anticipated to commence for another seven to ten years.

A summary of the proposed project phasing for each Segment is available in **Section 6** of the SWP EA Compliance Monitoring Program.

To maintain alignment with project phasing, this report includes an overview of background information and a status update specific to the SWP West Segment (Bluffer's Park to Meadowcliffe) portion of the project only, as well as monitoring results available to date. Monitoring results available to date include the EA Compliance Monitoring. As detailed design has not yet formally been initiated, Baseline Condition Monitoring has not commenced but will begin later this year and continue through 2021.

For the September 13, 2019 to September 13, 2020 monitoring and reporting period, the following project activities were completed, in preparation of West Segment detailed design initiation in Fall 2020:

- Retention of a civil engineering consultant, with geotechnical and landscape architecture support, for completion of the Brimley Road Multi-use Trail Detailed Design, from Barkdene Hills to Bluffer's Park
- Release of the Request for Proposal for coastal, civil, and geotechnical engineering, as well as landscape architecture, support for completion of the SWP West Segment Shoreline and Multi-Use Trail Detailed Design process. Consultant retention is expected to be finalized by early October 2020.
- Access Agreements are to be issued in mid-September for private property access to complete required topography, tree inventory, and bat maternity roosting surveys, as well as a Stage 2 archaeology assessment, along the east side of Brimley Road

- South, to support detailed design of the multi-use trail.
- Bathymetry surveys are scheduled to commence mid-September for West Segment shoreline detailed design purposes.

TABLE OF CONTENTS

SUMMARY	i
1 PURPOSE	1
2 PROJECT OVERVIEW AND UPDATE.....	1
2.1 Overview.....	1
2.2 Project Vision and Objectives	1
2.3 Study Area.....	2
2.4 West Segment Overview – Bluffer’s Park to Meadowcliffe	4
2.5 West Segment Project Phases and Anticipated Timelines	7
3 REGULATORY OVERVIEW AND UPDATE.....	7
4 MONITORING PROGRAMS AND RESULTS.....	8
4.1 Overview.....	8
4.2 EA Compliance Monitoring.....	9
4.2.1 EA Compliance Monitoring Results.....	10
4.3 Baseline Conditions Monitoring.....	26
4.3.1 Baseline Conditions Monitoring Results	26
4.4 Environmental Performance Monitoring	26
4.4.1 Environmental Performance Monitoring Results	27

LIST OF FIGURES

Figure 1. Scarborough Waterfront Project Area and Shoreline Segment.....	3
Figure 2. West Segment from Bluffer’s Park to Meadowcliffe	5
Figure 3. West Segment from Bluffer’s Park to Meadowcliffe	6
Figure 4. SWP West Segment Project Phases.....	7

LIST OF TABLES

Table 1. West Segment: Monitoring Phases and Implementation Timelines	9
Table 2. Notice of Approval Conditions Fulfillment Status Monitoring – Checklist.....	11
Table 3. Mitigation Measures Fulfillment Status Monitoring – Checklist	12
Table 4. EA Commitments for Detailed Design, Construction and Establishment – Checklist ...	18
Table 5. EA Public Consultation Provisions Status Monitoring – Checklist	21
Table 6. Other EA Commitments, Additional Studies and Work Recommendations for Monitoring – Checklist.....	22

LIST OF APPENDICES

APPENDIX A – Notice of Approval.....	28
APPENDIX B – Condition 4 Approval Requirements.....	34
APPENDIX C – Baseline Conditions Monitoring	39

1 PURPOSE

The purpose of this report is to outline the results of the Scarborough Waterfront Project (SWP) Environmental Assessment (EA) Compliance Monitoring Program.

The results of the monitoring program are submitted on an annual basis, as per the EA Notice of Approval Condition #4. This report constitutes the first submission, covering the September 13, 2019 to September 13, 2020 monitoring and reporting period.

2 PROJECT OVERVIEW AND UPDATE

2.1 Overview

Toronto and Region Conservation Authority (TRCA), in partnership with the City of Toronto, undertook an Environmental Assessment for the Scarborough Waterfront Project (SWP), from Bluffer's Park east to East Point Park in the City of Toronto. This section of the Scarborough waterfront has been subject to many studies seeking to understand stressors on the ecosystem, public access issues and the nature of public safety and property risks posed by shoreline erosion. While the Scarborough Bluffs are an iconic feature of the Lake Ontario shoreline, due to limited public access and existing public safety hazards, the water's edge along this section of the waterfront is not formally accessible to the public. Ultimately, the SWP has the potential to create a regional destination park, which would provide formal public access along a currently inaccessible area of the Scarborough waterfront, while comprehensively addressing the risks to public safety and public property and enhancing the natural heritage system.

2.2 Project Vision and Objectives

The vision of the SWP is to create a system of greenspaces along the Lake Ontario shoreline which respect and protect the significant natural and cultural features of the Bluffs, enhance the terrestrial and aquatic habitat, and provide a safe and enjoyable waterfront experience.

The project objectives are as follows:

- 1) **Natural Environment:** Protect and enhance terrestrial and aquatic natural features and linkages.
- 2) **Risk:** Manage public safety and property risk.
- 3) **Experience:** Provide an enjoyable waterfront experience.
- 4) **Coordination:** Maintain consistency and coordinate with other initiatives.
- 5) **Value for Cost:** Maximize the benefits achieved through the Project in relation to the estimated Project cost.

Background information regarding the natural heritage elements and processes on adjacent lands can be found in the Scarborough Waterfront Project Environmental Assessment and Appendices (TRCA, 2018).

2.3 Study Area

Project works will be focused along the shoreline area, including both the toe and top of the Bluffs, and will include any identified access routes. This area is referred to as the Project Area (**Figure 1**). To help facilitate the Alternatives development and evaluation process, the Project Area was divided into three shoreline segments, recognizing the distinct characteristics along each:

- **West Segment – Bluffer’s Park to Meadowcliffe**
Bluffer’s Park is located at the foot of Brimley Road South and provides a range of active and passive recreational opportunities. A sand beach extends along the eastern portion of the segment but stops approximately 320m west of the Meadowcliffe Drive erosion control project to the east.
- **Central Segment – Meadowcliffe to Grey Abbey**
Shoreline protection works exist along the length of this segment. There is no formal public access along the base of the bluffs, although it is frequently used by the public.
- **East Segment – Grey Abbey to East Point Park/Highland Creek**
While some shoreline protection works exist, the majority of the shoreline consists of a sandy shoreline, a cohesive profile overlain by a veneer of sand. East Point Park is located along the tablelands near the eastern portion of the segment and provides a range of active and passive recreational opportunities.

TRCA, in partnership with the City of Toronto, will proceed with the initiation of detailed design works for the SWP starting in 2020. Detailed design and subsequent construction of the Project will be undertaken in phases. The West Segment will be the priority as there continues to be an increasing need to ensure safe access to and through Bluffer’s Park for thousands of annual visitors. Following completion of the West Segment detailed design phase, it is expected that Central Segment detailed design will be completed while West Segment construction is underway.

As per the conditions stipulated as part of the Notice of Approval issued to TRCA by MECP, further consultation with key stakeholders and MECP will be required prior to the implementation of any works within the East Segment. As such, East Segment design and construction are not anticipated to commence for another seven to ten years.

For the purposes of this Annual Monitoring Compliance Report, only the West Segment of the SWP project will be reported on until such date when the Central Segment, and the associated monitoring works, are underway.

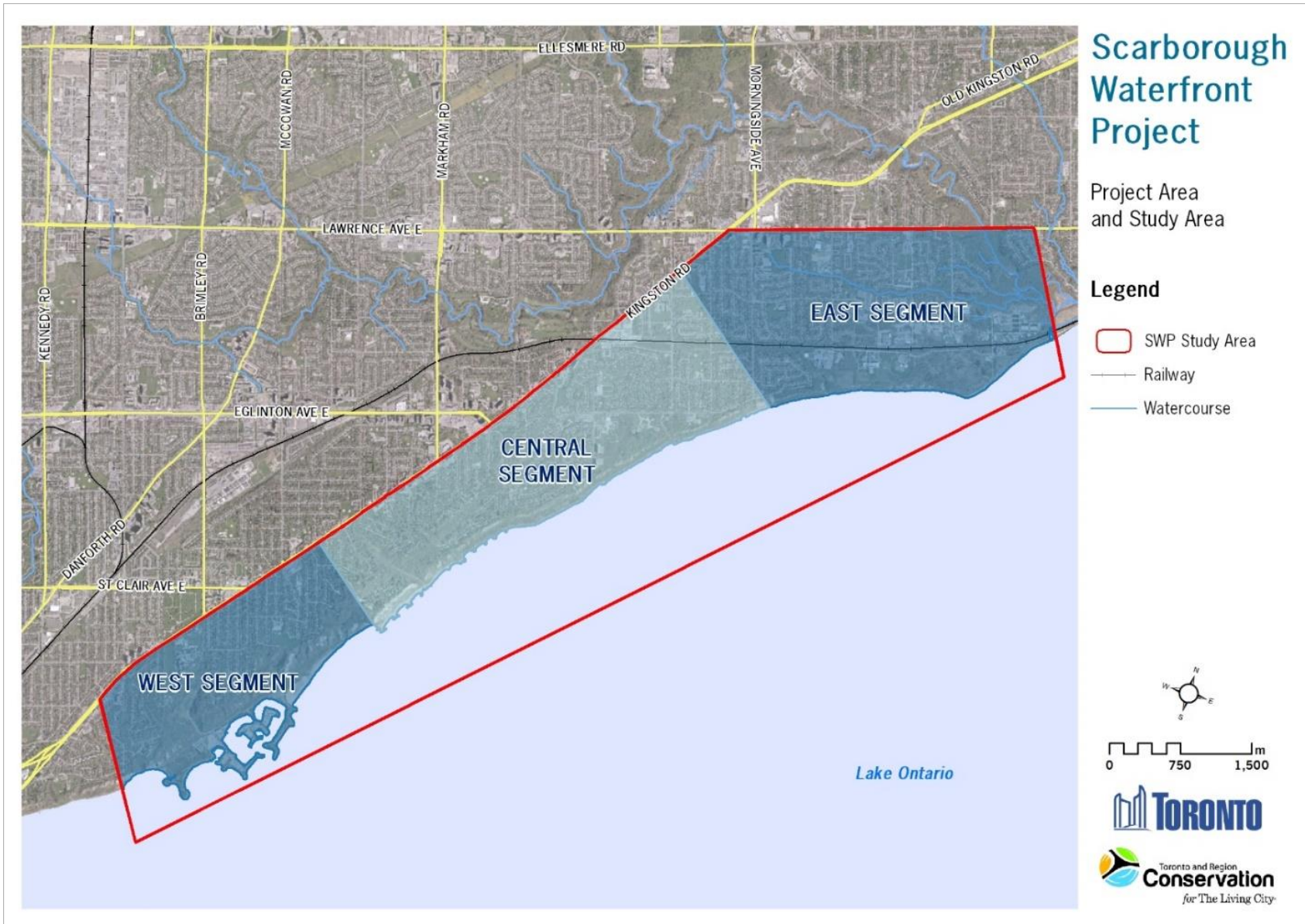


Figure 1. Scarborough Waterfront Project Area and Shoreline Segment

2.4 West Segment Overview – Bluffer’s Park to Meadowcliffe

Bluffer’s Park is a dominant physical feature and located at the foot of Brimley Road South on the Lake Ontario shoreline. The boat basin and headlands constructed for the Park in the 1970s have contributed to the stabilization and vegetation of the Bluffs located behind the Park and the accumulation of the sand beach to the east, which is designated as a Blue Flag Beach. The implementation of a berm and wetland along the backshore of this area in 2009 contributed to local water quality and habitat improvements, conditions which must be maintained or improved through the SWP.

The Wide Beach concept will be completed as the preferred alternative for the West Segment of the SWP as depicted in **Figure 2**. It involves lakeward extensions of both the east headland at Bluffer’s Park and the west headland at Meadowcliffe Drive to allow for the accumulation of sand along Bluffer’s Park Beach. This involves the development of an interim groyne mid-way along the beach, in addition to a raised berm to allow for the collection of beach sand. The expansion of Bluffer’s Park Beach has been designed to blend easily with the existing headland beach system at Meadowcliffe, closing the 320 m gap below Cudia Park and providing a continuous connection between the West and Central Segments of the SWP.

The current access to Bluffer’s Park is via Brimley Road South, which is steep and provides limited safe access for pedestrians and cyclists along this roadway. While a separated informal off-road path does exist on the east side of the road for the lower third of the ravine, pedestrians and cyclists need to walk along the road shoulder above this section without adequate separation from traffic. Pedestrian usage of the roadway can be significant during the summer when Bluffer’s Park parking spaces are all occupied.

Given the identified constraints, the construction of an at-grade path adjacent to Brimley Road with a signed downhill cyclist route has been deemed to be the most viable improvement. A new 1,030± m trail is proposed to the east of the existing roadway, at existing grades, from Barkdene Hills to Bluffer’s Park (**Figure 3**).

A multi-use trail along Brimley Road South would improve the safety of pedestrians and cyclists who currently access Bluffer’s Park along a narrow roadway with a steep grade. City of Toronto Council has directed that the timing of the Brimley Road South multi-use trail project be assessed as part of the Cycling Network Plan update, which was reported to Council on June 13, 2019. The Cycling Network Plan update will review opportunities to include this project within the Transportation Services Capital Program, subject to the approval of the detailed design and taking into account capital budget coordination opportunities.



Figure 2. West Segment from Bluffer's Park to Meadowcliffe

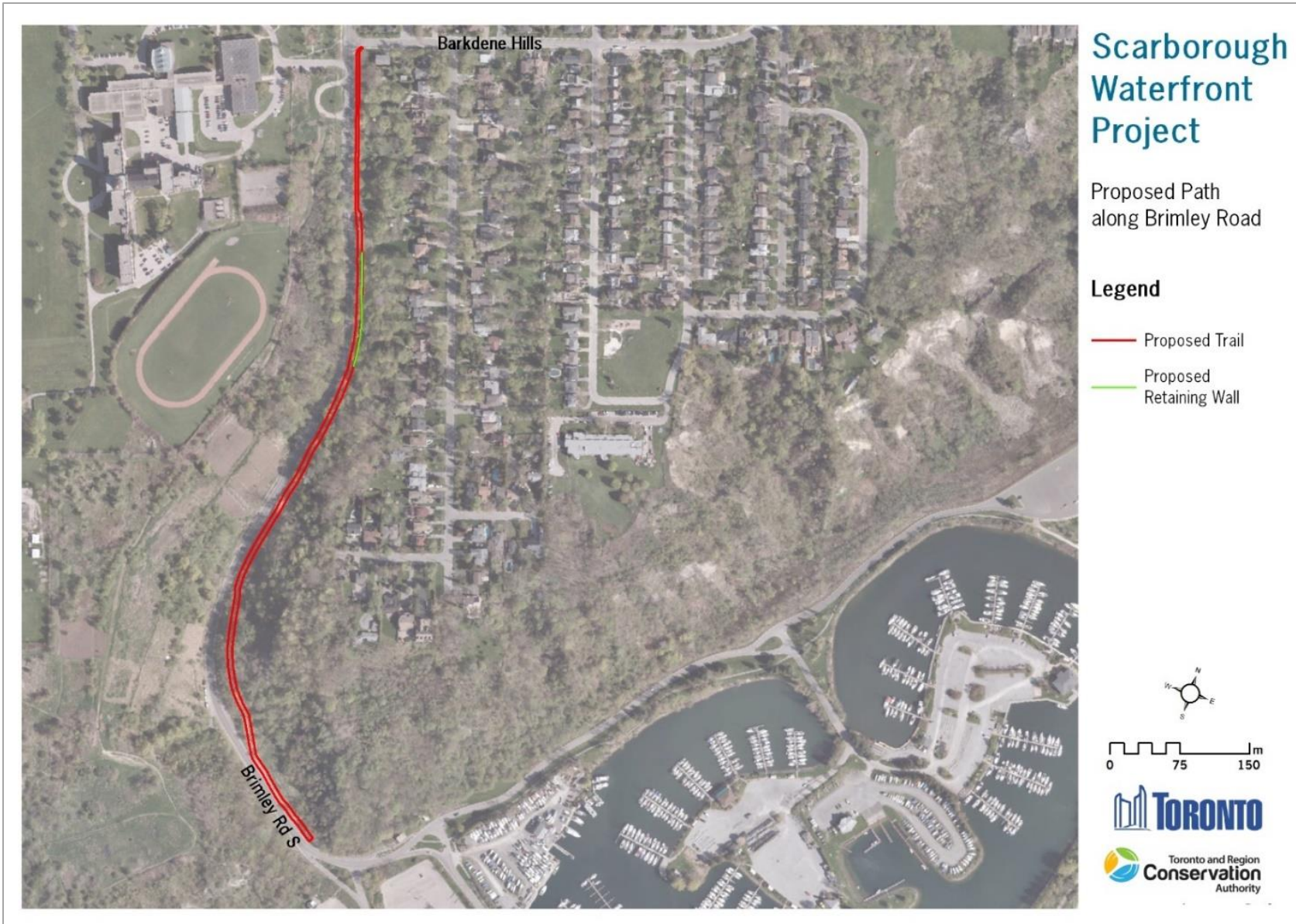


Figure 3. West Segment from Bluffer's Park to Meadowcliffe

Completion of the Brimley Road South multi-use trail would address concerns with pedestrian and cyclist safety that currently exist along Brimley Road South, in alignment with the goals and objectives detailed in the Vision Zero Road Safety Plan. As road safety for pedestrians and cyclists is a key priority for the City, the first efforts of the Scarborough Waterfront Project will be to start design and construction on the Brimley Road South multi-use trail project to provide safe access down to Bluffer's Park.

2.5 West Segment Project Phases and Anticipated Timelines

Project phases following the EA approval include detailed design, construction, and operation/establishment. The relationship between and timing of individual project phases are shown in **Figure 4**. Currently, the West Segment portion of the SWP is transitioning into the detailed design phase (Phase II). Central Segment is anticipated to move into Phase II in early 2022, while East Segment is expected to transition into Phase II in approximately seven to ten years, due to the necessary stakeholder consultation requirements stipulated by the Notice of Approval.



Figure 4. SWP West Segment Project Phases

3 REGULATORY OVERVIEW AND UPDATE

TRCA, on behalf of and in co-operation with the City of Toronto, undertook an EA for the SWP. The EA was completed in two stages as required by the *EA Act*. Stage one included the completion and approval of a Terms of Reference by the Ministry of Environment and Climate Change (MOECC) on December 15, 2015. Stage two of the Project included the completion of the EA planning process and preparation of the EA Report in accordance with the approved Terms of Reference.

TRCA received approval for the Final EA from the Minister of MECP on November 5, 2019. The Notice of Approval can be found in **Appendix A**.

TRCA, in continued partnership with the City of Toronto, will proceed with the initiation of detailed design works for the SWP starting in 2020. Detailed design and subsequent construction of the Project will be undertaken in phases. Design of the West Segment will be completed first, and it

is expected that Central Segment detailed design will be completed while West Segment construction is underway.

As per the conditions stipulated as part of the Notice of Approval issued to TRCA by MECP, further consultation with key stakeholders and MECP will be required prior to the implementation of any works within the East Segment. As such, East Segment design and construction are not anticipated to commence for another seven to ten years.

Permits and approvals acquisition processes for West Segment are expected to be initiated and/or completed in 2021 during the detailed design phase, in preparation for anticipated construction in late 2021 or early 2022.

4 MONITORING PROGRAMS AND RESULTS

4.1 Overview

A comprehensive monitoring program is a critical element of the SWP from the planning phase through to operation/establishment. The monitoring program is carried out throughout the life of the project and consists of three monitoring programs:

- 1) EA Compliance Monitoring;
- 2) Baseline Environmental Conditions; and,
- 3) Environmental Performance Monitoring.

The relationship between monitoring program components and high-level anticipated schedule for the West Segment are illustrated in **Table 1**. Similar tables for the Central and East Segment are available in the SWP EA Compliance Monitoring Program, and will be included in subsequent Annual Compliance Monitoring reports once detailed design for each respective Segment has been initiated.

EA Compliance Monitoring for West Segment will commence in the detailed design project phase and will continue until the successful end of construction. See **Section 4.2** for more information.

Baseline Conditions Monitoring was carried out prior to and during the planning and EA approvals phase, with a brief hiatus during the SWP EA Ministry Review period. Baseline Conditions Monitoring will be re-initiated in early 2021, and will continue through to the end of the detailed design phase, and into the early construction phase for West Segment. Central and East Segment Baseline Conditions Monitoring programs will follow the same phasing once the applicable detailed design phase has commenced. See **Section 4.3** for more information.

Environmental Performance Monitoring will commence at the conclusion of the construction phase (final grading and as-built documentation) and will continue during the establishment periods to track project success. See **Section 4.4** for more information.

Table 1. West Segment: Monitoring Phases and Implementation Timelines

West Segment	Project Planning & EA Approvals (2015 – 2019)	Detailed Design (2020 – 2021) & Construction (2021 – 2027)	Operation/ Establishment (2027 – 2032)
EA Compliance Monitoring		—————→	
Baseline Conditions Monitoring	—————→		
Environmental Performance Monitoring		—————→	

4.2 EA Compliance Monitoring

EA compliance monitoring will ensure compliance with commitments made in the EA, including the EA approval conditions.

In fact, undertaking a Compliance Monitoring Program is in itself a condition of the SWP EA approval. As per the EA Notice of Approval Condition #4, a Compliance Monitoring Program will:

- a) *monitor implementation of the undertaking in accordance with the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out;*
- b) *monitor compliance with the conditions in this Notice of Approval; and*
- c) *monitor compliance with all commitments made in the environmental assessment with respect to mitigation measures, public consultation, Indigenous consultation, and additional studies and work to be carried out.*

To meet these objectives, the compliance program has the following components:

- 1) Notice of Approval conditions fulfilment status monitoring;
- 2) Mitigation measures EA provisions fulfilment status monitoring;
- 3) Consultation EA provisions fulfilment status monitoring;
- 4) Detailed design, construction and establishment EA commitments fulfilment status monitoring; and,
- 5) Additional studies and work EA provisions fulfilment status monitoring.

For clarity and reporting purposes, a series of checklists of commitments/EA provisions for each program component was prepared and presented in the SWP EA Compliance Monitoring Program. There are five checklists:

- 1) Checklist to monitor Notice of Approval conditions fulfilment. This checklist is based on the EA Notice of Approval conditions. The full list of Notice of Approval Conditions is found in **Appendix B**.
- 2) Checklist to monitor mitigation measures fulfilment. This checklist is based on the mitigation measures identified in Chapter 7 of the EA, and may be modified as more information becomes available following the completion of additional studies and work, as well as detailed design progression. Mitigation measures are categorized according to the effect they are intended to address as well as the EA project objectives. This framework will allow continuous monitoring of the EA objectives achievement as the project progresses.
- 3) Checklist to monitor consultation EA provisions fulfilment. This checklist is based on the post-approval recommendations made in the EA.
- 4) Checklist to monitor fulfilment of EA commitments for detailed design, construction and operation/establishment project phases
- 5) Checklist to monitor completion of additional studies and work identified or recommended in the EA.

The checklists are presented in **Section 4.2.1** along with the monitoring results. Should any checklist component(s) be modified, removed or added, an explanation will be provided.

4.2.1 EA Compliance Monitoring Results

The following five EA Compliance Monitoring checklists are provided:

- 1) **Table 2** – Checklist to monitor Notice of Approval conditions fulfilment.
- 2) **Table 3** – Checklist to measure mitigation measures fulfilment.
- 3) **Table 4** – Checklist to monitor fulfilment of EA commitments for detailed design, construction and establishment project phases.
- 4) **Table 5** – Checklist to monitor EA public consultation provisions fulfilment.
- 5) **Table 6** – Checklist to monitor completion of additional studies and work identified or recommended in the EA.

Table 2. Notice of Approval Conditions Fulfillment Status Monitoring – Checklist

Notice of Approval Condition	Status (Not Started/In Progress/Complete)	Comments
Public Record	In Progress	All documents required for public record are available on the project website, with appropriate EA reference number and file numbers documented, as per the Notice of Approval. All documents submitted to-date identify which condition of approval the document is meant to fulfill.
Compliance Monitoring Program	In Progress	A Compliance Monitoring Program has been submitted for MECP Director review and approval, and will be made available to public record once approved.
Compliance Reporting	In Progress	This first Compliance Monitoring Report is being submitted to the MECP Director review within one year following the Date of Approval, and will be made available for the public record. A copy will be retained at TRCA's head office and will be posted on the project website, pending Director approval.
Complaint Protocol	Not Started	Pending the initiation of detailed design for each respective Segment. West Segment detailed design is to be initiated in Fall 2020.
Consultation During the Detailed Design Phase	Not Started	Pending the initiation of detailed design for each respective Segment. West Segment detailed design is to be initiated in Fall 2020.
Change Process	Not Started	Noted. TRCA will notify the MECP Director in writing of any proposed change to the undertaking that could result in greater adverse environmental effects than were identified in the EA, as required. TRCA will follow the amendment procedure as set out in Chapter 9 of the EA, if required.
Duration of Approval	Not Started	Noted. If construction of the undertaking has not commenced within 10 years of the Date of Approval, TRCA acknowledges that the Notice of Approval shall expire, unless otherwise extended by the Minister.

Table 3. Mitigation Measures Fulfilment Status Monitoring – Checklist

Project Objective	Effect(s)	Mitigation Measure(s)	Status (Not Started/In Progress/Complete)	Comments
Project and Enhance Terrestrial and Aquatic Natural Features	Alteration and loss of aquatic habitat	Incorporate a diversity of shoreline substrate types and increased shoreline irregularity into the Preferred Alternative Detailed Design, employing a variety of aquatic habitat enhancement techniques, including retrofitting existing revetment shoreline structures, and development and implementation of a compensation program.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design phase to be initiated in Fall 2020.
	Disruptions to fish and fish habitat	Examples of mitigation measures to minimize negative effects associated with fish and fish habitat disruptions include: <ul style="list-style-type: none"> • Use of Project-specific restricted activity timing windows for in-water works to be set in consultation with MNRF • Construct containment berm prior to placing any fill, which will minimize sedimentation • Remove any fish potentially trapped in a cell prior to commencement of filling • Sediment and erosion controls • Ensure equipment is free of leaks and fluids containing deleterious substances 	Not Started	To be implemented during applicable construction phase. Appropriate construction BMPs to be re-confirmed during applicable detailed design phase.

Table 3. Mitigation Measures Fulfilment Status Monitoring – Checklist

Project Objective	Effect(s)	Mitigation Measure(s)	Status (Not Started/In Progress/Complete)	Comments
	Nuisance effects on wildlife	Adhere to BMPs as outlined in Appendix H of the EA to minimize disturbance, noise and dust. In addition: <ul style="list-style-type: none"> • Avoid construction activities at East Point Park during the spring migration and breeding bird period (late April to late May) • Where Bank Swallow colonies are located within 50 m of active construction ensure works are underway prior to Bank Swallows return in spring (~May) so they become habituated to the disturbance 	Not Started	To be implemented during applicable construction phase. Appropriate construction BMPs to be re-confirmed during applicable detailed design phase.
	Removal and disturbance of terrestrial habitat	Salvage plants, including sea rocket, for replanting, where appropriate	Not Started	To be implemented during applicable construction phase. Plant salvage and relocation/restoration plans to be developed during applicable detailed design phase.
		Where appropriate, vegetation communities will be restored	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design phase to be initiated in Fall 2020.

Table 3. Mitigation Measures Fulfilment Status Monitoring – Checklist

Project Objective	Effect(s)	Mitigation Measure(s)	Status (Not Started/In Progress/Complete)	Comments
		Any habitat features (e.g., cavity trees) that will be impacted will be replaced with an artificial or constructed habitat (e.g., bird nesting boxes)	Not Started	To be implemented during applicable construction phase. Plant salvage and relocation/restoration plans to be developed during applicable detailed design phase.
		Relocation and expansion of artificially created wetland at base of the Guild construction access route	Not Started	Pending the initiation of the detailed design phase for each respective Segment. Central Segment detailed design phase anticipated to commence in early 2022.
	Area of habitat created	Development of an Operations and Maintenance Plan collaboratively with the City of Toronto to address inappropriate use and promote community stewardship	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design phase to be initiated in Fall 2020.
Manage Public Safety and Property Risk	Safety associated with potential conflict between pedestrian/ cyclists and vehicles	Coordination with City of Toronto to evaluate necessary changes required to ease the traffic, congestion and resultant conflict in the Brimley Road area	Not Started	Pending the initiation of the detailed design phase for West Segment. West Segment detailed design phase to be initiated in Fall 2020.
Provide an Enjoyable	Changes to access to and	Timing of restrictions to periods of lower use. Opening of access points where and	Not Started	Pending the initiation of the detailed design phase

Table 3. Mitigation Measures Fulfilment Status Monitoring – Checklist

Project Objective	Effect(s)	Mitigation Measure(s)	Status (Not Started/In Progress/Complete)	Comments
Waterfront Experience	along the shoreline as a result of construction activities	when possible on weeknights and weekends.		for each respective Segment. Construction access and management plans to be developed during detailed design.
	Potential for dust, vehicle emission and noise from construction activities including traffic to affect use and enjoyment	Use of BMPs for dust, emissions and noise associated with construction activities and vehicles	Not Started	To be implemented during applicable construction phase. Appropriate construction BMPs to be re-confirmed during applicable detailed design phase.
	Potential for change to character and use of existing sand beaches/shoreline	Areas of beaches/shoreline closed will be limited to only those areas under construction to minimize effects to users	Not Started	Pending the initiation of the detailed design phase for each respective Segment. Construction access and management plans to be developed during detailed design.
	Potential for impact to water quality at Bluffer's Park Blue Flag Beach	BMPs will be used to reduce turbidity. Construction around Bluffer's Park Beach will likely occur outside of the summer months.	Not Started	To be implemented during applicable construction phase. Appropriate construction BMPs to be re-confirmed during applicable detailed design phase.

Table 3. Mitigation Measures Fulfilment Status Monitoring – Checklist

Project Objective	Effect(s)	Mitigation Measure(s)	Status (Not Started/In Progress/Complete)	Comments
	Potential to maintain navigation along the shore	Appropriate warnings and signage to be implemented	Not Started	Pending the initiation of the detailed design phase for each respective Segment. Appropriate signage and signage locations to be developed in consultation with City of Toronto and other key stakeholders.
	Potential to meet AODA grade standard for access to and along the shoreline	Provision of level rest areas on access trails to the shoreline to meet AODA	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design phase to be initiated in Fall 2020.
	Potential to maintain navigation along the shore	Users of small watercraft will need to adapt to the new shoreline configuration and presence of new landforms. To mitigate these effects, navigation maps will be updated based on new shoreline configurations so that users are aware of any new potential hazards.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. Appropriate regulatory agencies will be engaged.
Consistency and Coordination with other initiatives	Potential impact to known or potential archaeological resources	Stage 2 assessments will be undertaken during Detailed Design where physical works are planned, prior to any ground disturbing activities where past soil disturbance has not previously been documented. In the event a land-based	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design phase to be initiated in Fall 2020,

Table 3. Mitigation Measures Fulfilment Status Monitoring – Checklist

Project Objective	Effect(s)	Mitigation Measure(s)	Status (Not Started/In Progress/Complete)	Comments
		archaeological resource is found, avoidance of the resource will be practiced when determining final tableland trail alignment.		where Stage 2 archaeology works are scheduled along Brimley Road South.
	Potential for disturbance effects to residents from construction related traffic	BMPs, such as well-maintained vehicles, adherence to construction traffic routes and minimal use of air brakes, will lessen the effects of construction traffic noise. In order to address issues and concerns throughout construction TRCA will have a dedicated community liaison officer who will respond to all community concerns and issues and seek resolution where possible.	Not Started	To be implemented during applicable construction phase. Appropriate construction BMPs to be re-confirmed during applicable detailed design phase.
	Potential disturbance effects to residents from construction activity	Construction activities will adhere to the City of Toronto Noise By-Law with respect to the hours of construction and all equipment will be kept in proper operating condition to minimize effects. All construction activities will use BMPs to minimize the disturbance effects of construction on local residents.	Not Started	To be implemented during applicable construction phase. Appropriate construction BMPs to be re-confirmed during applicable detailed design phase.
Achieve Value for Cost	Amount of water lot and private property acquisition required	Acquisition at market-based compensation.	Not Started	Property acquisition discussions to commence during applicable detailed design phase.

Table 4. EA Commitments for Detailed Design, Construction and Establishment – Checklist

EA Section Reference	EA Commitment	Status (Not Started/In Progress/Complete)	Comments
Detailed Design			
6.2.2	Ensure minimum habitat recommendations are either maintained or enhanced as refinements are made through the Detailed Design process.	Not Started	West Segment detailed design to be initiated in Fall 2020.
6.2.2	Establish site-level details and specific habitat components for terrestrial habitat features.	Not Started	West Segment detailed design to be initiated in Fall 2020.
7.3.1	Develop aquatic habitat compensation plan and mitigation in consultation with DFO and MNRF.	Not Started	West Segment detailed design to be initiated in Fall 2020.
6.2.2	Establish site-level details for aquatic habitat features along the newly created shoreline.	Not Started	West Segment detailed design to be initiated in Fall 2020.
7.3.4	Explore options to mitigate traffic effects during construction on the Guildwood and Brimley Road communities.	Not Started	Traffic Impact Assessment to be completed during West and Central Segment detailed design processes.
6.5	Develop a fill tracking system to account for and audit all fill coming into the site.	Not Started	West Segment detailed design to be initiated in Fall 2020.
8.2	Establish specific triggers for potential adjustments, refinements or modifications that could occur as part of the adaptive management program.	Not Started	West Segment detailed design to be initiated in Fall 2020.
7.3.3	Undertake a Revitalization Plan for Bluffer's Park and East Point Park in co-ordination with the City of Toronto.	Not Started	West Segment detailed design to be initiated in Fall 2020, with East Segment detailed design not anticipated to commence for another 7-10 years.

Table 4. EA Commitments for Detailed Design, Construction and Establishment – Checklist

EA Section Reference	EA Commitment	Status (Not Started/In Progress/Complete)	Comments
6.3	Develop an Operations and Maintenance Plan for the SWP in co-ordination with the City of Toronto.	Not Started	West Segment detailed design to be initiated in Fall 2020.
7.3	Undertake an updated Traffic Impact Assessment (TIA).	Not Started	TIA to be completed during West and Central Segment detailed design processes.
7.3.3 and 10.9	Continue to engage with the surfing community regarding the Detailed Designs for the West Segment.	Not Started	West Segment detailed design to be initiated in Fall 2020.
7.3.1	Undertake the HEAT model on the final detailed designs.	Not Started	West Segment detailed design to be initiated in Fall 2020.
7.3.1	Assess effects to the cultural meadow on the industrial property east of Grey Abbey Ravine.	Not Started	East Segment detailed design not anticipated to commence for another 7-10 years.
7.3.4	Undertake appropriate archaeological recordings of marine resources S76 and S56, as recommended by the marine archaeologist as part of the mitigation measures.	Not Started	Central Segment detailed design not anticipated to commence until 2022.
6.1.7	Ensure detailed engineering design takes into account extreme weather events.	Not Started	West Segment detailed design to be initiated in Fall 2020.
10.9	On-going consultation with stakeholders throughout the detailed design period.	Not Started	West Segment detailed design to be initiated in Fall 2020.
10.9	Commitment to discussions with Rohm and Haas Canada LP/Dow Chemical Company to address safety concerns east of Grey Abbey Ravine.	Not Started	East Segment detailed design not anticipated to commence for another 7-10 years.

Table 4. EA Commitments for Detailed Design, Construction and Establishment – Checklist

EA Section Reference	EA Commitment	Status (Not Started/In Progress/Complete)	Comments
10.9	On-going consultation with Stakeholders in the East Segment throughout the detailed design period, with respect to refinements.	Not Started	East Segment detailed design not anticipated to commence for another 7-10 years.
Construction			
7.3.1	Develop tree removal (include plant salvage and relocation) and compensation/restoration plan.	Not Started	To be developed during the respective Segment's detailed design phase, prior to construction.
6.5	Monitoring of environmental site controls and mitigation measures during construction.	Not Started	Pending the completion of detailed design for each respective Segment.
6.5	Obtain all relevant municipal, provincial, federal and/or regional occupancy permits.	Not Started	Anticipated initiation during the detailed design phase for each respective Segment.
7.3.4	Retain a dedicated community liaison staff as a direct line of contact between the local communities and the Project Team.	Not Started	Pending the completion of detailed design for each respective Segment.
10.9	On-going consultation with stakeholders throughout the construction period.	Not Started	Pending the completion of detailed design for each respective Segment.
Operation/Establishment			
8.1.3	Monitor environmental performance to measure desired outcomes; determine if they have been achieved; and trigger adaptive management where necessary.	Not Started	Pending the completion of detailed design and construction for each respective Segment.

Table 5. EA Public Consultation Provisions Status Monitoring – Checklist

Consultation Mechanism	Status (Not Started/In Progress/Complete)	Comments
During the formal detailed design process for each Segment, a public open house be held to review the SWP and seek public input on any new information that is available to feed into the process, including similar engagement with other agencies, Indigenous communities and landowners.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design to be initiated in Fall 2020. Anticipated timeline for a public event related to West Segment design is Summer or Fall 2021.
Discussions with Rohm and Haas Canada LP/Dow Chemical Company to address safety concerns east of Grey Abbey Ravine during the detailed design phase of the West Segment.	Not Started	Pending the initiation of the detailed design phase for East Segment. East Segment detailed design is not anticipated to commence for another 7-10 years.
Regular project updates continue to be posted to the project webpage.	In Progress	Website updates have continued since submission of the Final EA to MECP for the Ministry Review. Updates will continue through all phases of the project for all three Segments.
SWP newsletter updates to be provided summarizing progress on Detailed Design and construction-related work.	Not Started	West Segment detailed design to be initiated in Fall 2020. Newsletter circulations will begin at initiation and continue through the detailed design and construction phases for all three Segments.
A working group composed of key stakeholders who will be involved during the detailed design and construction phases of each Segment.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design to be initiated in Fall 2020. A working group will be assembled early in the detailed design process.

Table 6. Other EA Commitments, Additional Studies and Work Recommendations for Monitoring – Checklist

Type of Study/Work	EA Report Reference	Study/Work Purpose and Other Details	Status (Not Started/In Progress/Complete)	Comments
Traffic Impact Assessment (TIA)	Section 7.3	An updated TIA will be completed through detailed design to incorporate new and available information for other projects in the area to ensure impacts to residents and users are reduced when construction access routes are defined.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design to be initiated in Fall 2020.
Source Water Protection	Appendix N	Document and discuss how project adheres to policies in CTC Source Protection Plan, as applicable.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. To be completed at the end of detailed design when construction methodologies and associated BMPs are confirmed.
Archaeology Stage 2	Section 7.3.4 and Appendix E	Potential for artifacts in West and East Segments (Appendix E, Map 22 and 23). Stage 2 assessments will be conducted prior to any ground disturbing activities.	Not Started	To be initiated in Fall 2020 as part of the West Segment detailed design process. Pending the acquisition of required Permission to Enters on private property.

Table 6. Other EA Commitments, Additional Studies and Work Recommendations for Monitoring – Checklist

Type of Study/Work	EA Report Reference	Study/Work Purpose and Other Details	Status (Not Started/In Progress/Complete)	Comments
Minimal Archaeological Recordings of Marine Resources	Section 7.3.4	A marine archaeology assessment of the resources located in Central Segment will be required to identify impacts associated with natural elements and create an appropriate buffer to capture the resultant debris field.	Not Started	Pending the initiation of the detailed design phase for Central Segment. Central Segment detailed design anticipated to commence in early 2022.
Geotechnical Studies	Appendix B	Additional studies for: <ul style="list-style-type: none"> • Brimley Rd South multi-use trail for retaining wall(s) design and slope stability assessments. • In-depth slope stability assessments along the Bluffs in each Segment to refine the erosion hazard risk line at the top and toe of the Bluffs, to aid in multi-use trail design and positioning outside of the risk areas. 	Not Started	To be initiated in Fall 2020 as part of the West Segment detailed design process. Pending the acquisition of required Permission to Enters on private property.
Bat Maternity Roosting Surveys	N/A	Prior to vegetation removal and clearing, leaf on/off surveys will be conducted to verify presence of bats and/or bat maternity roosts and reported to MECP for compensation advice.	Not Started	To be initiated in Fall 2020 as part of the West Segment detailed design process. Pending the acquisition of required

Table 6. Other EA Commitments, Additional Studies and Work Recommendations for Monitoring – Checklist

Type of Study/Work	EA Report Reference	Study/Work Purpose and Other Details	Status (Not Started/In Progress/Complete)	Comments
				Permission to Enters on private property.
Bathymetry Surveys	N/A	Updated bathymetry survey along the shoreline in each Segment to inform detailed design of the shoreline erosion protection works.	Not Started	Scheduled to commence on September 14, 2020.
Tree Inventory and Survey Works	N/A	Tree inventory and survey works to inform multi-use trail design and alignment and to support the tree removal permit process prior to implementation.	Not Started	To be initiated in Fall 2020 as part of the West Segment detailed design process. Pending the acquisition of required Permission to Enters on private property.
Aquatic Habitat Compensation Plan	Section 7.3.1	To be completed in consultation with DFO as part of the <i>Fisheries Act</i> Authorization process.	Not Started	Anticipated initiation in mid-2021 when the West Segment detailed design phase is nearing 90% completion.
Revitalization Plan for Bluffer's Park and East Point Park	Section 6.2.2 and 7.3.3	To be completed in partnership with the City of Toronto to support trail management objectives and other habitat restoration and management opportunities.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. The Bluffer's Park Revitalization Plan will be completed, in partnership with

Table 6. Other EA Commitments, Additional Studies and Work Recommendations for Monitoring – Checklist

Type of Study/Work	EA Report Reference	Study/Work Purpose and Other Details	Status (Not Started/In Progress/Complete)	Comments
				the City of Toronto, during the West Segment detailed design phase (late 2020 to late 2021).
Plant Salvage Plan	Section 7.3.1	For the necessary removal of regionally rare species prior to construction.	Not Started	Pending the initiation of the detailed design phase for each respective Segment. West Segment detailed design to be initiated in Fall 2020.
Operations and Maintenance Plan	Section 6.3	To be completed in partnership with the City of Toronto for post-construction management of the park, trail and shoreline erosion protection infrastructure created as part of the SWP.	Not Started	Pending the initiation of the detailed design phase for reach respective Segment. West Segment detailed design to be initiated in Fall 2020. Operations and maintenance discussions with City of Toronto are anticipated to commence later in the detailed design phase and through early construction.

4.3 Baseline Conditions Monitoring

Baseline Conditions Monitoring provides data to inform detailed design elements and identify changes to the existing environment that may affect project outcomes. Any changes identified through Baseline Conditions Monitoring will be incorporated into the detailed design as necessary and will inform the potential need for EA amendments, if required.

As Baseline Conditions Monitoring is one of the EA commitments, its status will be reported on as part of the EA Compliance Monitoring Program, with the Baseline Conditions Monitoring report providing the details.

TRCA is responsible for the completion of the Baseline Conditions Monitoring. TRCA may retain qualified parties to carry out specific tasks included in monitoring, where necessary.

Detailed information will be provided in the Baseline Conditions Monitoring report(s) submitted as part of the Annual EA Compliance Monitoring reports. The Baseline Conditions Monitoring plan is based on the environmental monitoring that was undertaken during the planning and EA phases project study area (**Appendix C**). The majority of parameters monitored are (or have been) part of existing monitoring programs (e.g., TRCA waterfront monitoring program). Please note that this plan, including data collection methodology, may be modified or enhanced (e.g., monitoring locations or sampling methods added) as the Environmental Performance Monitoring plan is developed. The Baseline Conditions Monitoring plan will be used as the basis for developing the Environmental Performance Monitoring plan (to be completed during each respective Segment's detailed design phase).

4.3.1 Baseline Conditions Monitoring Results

Baseline Conditions Monitoring took place during project planning and EA preparation, with a brief hiatus during the Ministry Review period. Baseline Conditions Monitoring for the West Segment will be re-initiated in 2021, and will continue through to the end of the detailed design phase and into the early construction phase to ensure that the most up-to-date and relevant information is used to develop the design for the SWP in each Segment. Therefore, the first Baseline Conditions Monitoring report will be submitted as part of the 2021 SWP EA Compliance Monitoring Program report.

4.4 Environmental Performance Monitoring

The purpose of the Environmental Performance Monitoring is to ensure the approved project is performing as intended, as indicated in the EA. Monitoring results may lead to adaptive environmental management (AEM) of the project, as described in Chapter 8 of the EA, in order to optimize performance and meet performance targets. The monitoring plan may also be modified in order to address design changes made through the AEM process, or to address new needs as the project progresses.

The SWP Environmental Performance Monitoring program development will be carried out by Segment in the later stages of each Segment-based detailed design phase. West Segment detailed design is to be initiated in Fall 2020; therefore, it is expected that the West Segment Environmental Performance Monitoring program will be developed in mid-2021, for inclusion in the 2021 SWP EA Annual Compliance Monitoring Program report.

The monitoring itself will commence at the end of the construction phase (following final grading and as-built documentation). While not included in the EA Compliance Monitoring, Environmental Performance Monitoring results will be submitted to MECP in the form of a monitoring results report. Reporting frequency will be determined at the time of program development during the applicable detailed design project phase.

Monitoring results will be compared to the performance indicators (to be developed as part of the Environmental Performance Monitoring plan). The comparison of performance indicators to monitoring results is the key driver of the AEM process, which will be applied to continually adjust project components and ensure long-term project success and desired environmental performance.

4.4.1 Environmental Performance Monitoring Results

West Segment detailed design is to be initiated in Fall 2020; therefore, it is expected that the West Segment Environmental Performance Monitoring program will be developed in mid-2021, for inclusion in the 2021 SWP EA Annual Compliance Monitoring Program report.

APPENDIX A

Notice of Approval

ENVIRONMENTAL ASSESSMENT ACT

SECTION 9

NOTICE OF APPROVAL TO PROCEED WITH THE UNDERTAKING

RE: An Environmental Assessment for the Scarborough Waterfront Project

Proponent: Toronto and Region Conservation Authority

EA File No.: 03-02

EA Reference No.: 14134

Take notice that the period for requesting that the application or matters related to the application be referred to the Environmental Review Tribunal for a hearing and decision expired on March 29, 2019. I received no submissions requesting a hearing by the Environmental Review Tribunal before the expiration date.

Having considered the purpose of the Environmental Assessment Act, the approved terms of reference, the environmental assessment, the ministry review of the environmental assessment and submissions received, I hereby give approval to proceed with the undertaking, subject to the conditions set out below.

REASONS

My reasons for my decision are:

- (1) The proponent has complied with the requirements of the Environmental Assessment Act.
- (2) The environmental assessment has been prepared in accordance with the approved Terms of Reference.
- (3) On the basis of the proponent's environmental assessment and the ministry review, the proponent's conclusion that, on balance, the advantages of this undertaking outweigh its disadvantages appears to be valid.
- (4) The proponent has demonstrated that the environmental effects of the undertaking can be appropriately prevented, changed, mitigated or remedied.
- (5) The proponent has demonstrated that the preferred alternative achieves the most appropriate balance of advantages to disadvantages.
- (6) On the basis of the proponent's environmental assessment, the ministry review and the conditions of approval, the construction, operation and maintenance of the undertaking will be consistent with the purpose of the Environmental Assessment Act (section 2).
- (7) The ministry's review of: the government, public and Indigenous community submissions on the environmental assessment and the ministry review has indicated no outstanding concerns that have not been addressed or that cannot be addressed through commitments made during the environmental assessment process, through the conditions set out below or through future approvals that will be required.
- (8) I am not aware of any outstanding issues with respect to this undertaking which suggest that a hearing should be required; as such, a hearing is unnecessary and would cause undue delay to the implementation of the undertaking.

CONDITIONS

The approval is subject to the following conditions:

1. Definitions

1.1 For the purposes of these conditions:

"construction" means physical construction activities, including site preparation works, but does not include the tendering of contracts.

"Date of Approval" means the date on which the Order in Council pertaining to the approval of the environmental assessment was signed by the Lieutenant Governor in Council.

"Director" means the Director of the Environmental Assessment and Permissions Branch of the ministry.

“environmental assessment” means the document titled Scarborough Waterfront Project Environmental Assessment, as amended in September 2018.

“ministry” means the Ministry of the Environment, Conservation and Parks.

“proponent” means Toronto and Region Conservation Authority, its agents, successors, and assigns.

“Regional Director” means the Director of the ministry's Central Regional Office.

“undertaking” means the design, construction, and maintenance of a continuous multi-use trail along and near the waterfront, improved pedestrian access to the waterfront, and erosion control works to address risk to public safety and increase natural habitats, along approximately 11 kilometres of shoreline from Bluffer's Park east to East Point Park/Highland Creek in the City of Toronto, as described in the environmental assessment.

2. General Requirements

- 2.1 The proponent shall implement the undertaking in accordance with the environmental assessment, which is hereby incorporated into this Notice of Approval by reference, except as provided in the conditions of this Notice of Approval and as provided in any other approval or permit that may be issued for this undertaking.
- 2.2 Should the proponent wish to make changes to any document required by these conditions after the document has been accepted or approved by the ministry, the proponent shall obtain the written approval for the proposed changes from the ministry decision-maker in the condition requiring the document.
- 2.3 For any document required by these conditions to be prepared, submitted and/or posted publicly by the proponent, the Director may determine that the proponent is no longer required to prepare, submit or post the document. The Director shall provide written notice of the decision to the proponent. Until such time as the proponent has received written notice from the Director, the proponent must continue to prepare, submit and/or post the document as required by the conditions.
- 2.4 The proponent shall fulfill all commitments made in the environmental assessment.
- 2.5 The conditions of the Notice of Approval do not prevent more restrictive conditions being imposed under other statutes.

3. Public Record

- 3.1 Where a document is required for the public record, the proponent shall post the document on the proponent's website and shall provide one hardcopy and one electronic copy of the document to the Director.
- 3.2 The environmental assessment Reference Number 14134 and File Number 03-02 shall be quoted on all documents submitted to the ministry pursuant to this Notice of Approval.

- 3.3 For every document submitted to the ministry, the proponent shall clearly identify which condition of approval the document is meant to fulfill.

4. Compliance Monitoring Program

- 4.1 The proponent shall prepare and submit to the Director for approval and for the public record an environmental assessment compliance monitoring program.
- 4.2 The compliance monitoring program shall be submitted to the Director within 60 days of the Date of Approval or such other date agreed upon by the Director in writing.
- 4.3 The compliance monitoring program shall include a description of how the proponent will:
- a. monitor implementation of the undertaking in accordance with the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out;
 - b. monitor compliance with the conditions in this Notice of Approval; and
 - c. monitor compliance with all commitments made in the environmental assessment with respect to mitigation measures, public consultation, Indigenous consultation, and additional studies and work to be carried out.
- 4.4 The compliance monitoring program shall include an implementation schedule for monitoring activities to be completed.
- 4.5 The Director may require the proponent to amend the compliance monitoring program at any time. Should an amendment be required, the Director will notify the proponent in writing of the required amendment and the date by which the proponent must complete and submit the amendment to the Director.
- 4.6 The proponent shall submit the amended compliance monitoring program to the Director within the time period specified by the Director in the written notice.
- 4.7 The proponent shall implement the compliance monitoring program, including any amendments to it.

5. Compliance Reporting

- 5.1 The proponent shall prepare an annual compliance report outlining the results of the compliance monitoring program (Condition 4).
- 5.2 The first compliance report shall be submitted to the Director for review and for the public record one year following the Date of Approval. Each subsequent annual compliance report shall be submitted on the date that is the anniversary of the Date of Approval thereafter. Each report shall cover the previous year.

- 5.3 The proponent shall submit annual compliance reports until all conditions in this Notice of Approval are satisfied or the proponent is instructed otherwise in writing by the Director.
- 5.4 The proponent shall notify the Director in writing when the final annual compliance report is being submitted. The ministry will confirm whether the annual compliance reporting requirements in Conditions 5.1-5.3 have been fulfilled and the Director will confirm this in writing to the proponent.
- 5.5 The proponent shall retain, either in the proponent's office or in another location approved by the Director, copies of the annual compliance reports for each reporting year and any associated documentation of compliance monitoring activities. The proponent shall post the annual compliance reports for each reporting year on its website.
- 5.6 The proponent shall make the compliance reports and associated documentation available to the Director or a designate in a timely manner when requested to do so by the ministry.

6. Complaint Protocol

- 6.1 The proponent shall prepare and implement a complaint protocol for dealing with and responding to inquiries and complaints during all stages of the undertaking. The complaint protocol shall include a procedure for notifying the Regional Director of any complaints received by the proponent.
- 6.2 The proponent shall submit the complaint protocol to the Director for approval and for the public record at least 30 days before the start of construction or such other date that is agreed upon by the Director in writing.
- 6.3 The Director may require the proponent to amend the complaint protocol at any time. Should an amendment be required, the Director shall notify the proponent in writing of the amendment required and when the amendment must be completed.
- 6.4 The proponent shall submit an amended complaint protocol to the Director within the time period specified by the Director.
- 6.5 The proponent shall implement the complaint protocol and any amendments to it.
- 6.6 The proponent shall include a summary of the complaints received and how they were addressed in each of the annual compliance reports required by Condition 5.

7. Consultation During the Detailed Design Phase

- 7.1 During the detailed design phase of the undertaking, the proponent shall consult with the Ministry of Natural Resources and Forestry and the Ministry of the Environment, Conservation and Parks on the following: mitigation and timing window for in-water works; shoreline treatments; multi-use trail and land requirements for permanent

infrastructure; and, restoration works, prior obtaining any necessary approvals and/or permits.

- 7.2. During the detailed design phase of the undertaking, the proponent shall consider maximizing, maintaining or creating new sandy shorelines, consistent with the undertaking's objectives as described in the environmental assessment.
- 7.3. Prior to any construction of the trail through the East Segment of the undertaking on Dow Chemical Canada ULC's ("Dow Chemical") land as described in the environmental assessment, the proponent shall:
 - (a) consult with Dow Chemical on the impacts of the trail on the company's operations;
 - (b) address public safety and site security concerns identified by Dow Chemical related to its operations and advise the company in this regard; and,
 - (c) report to the Director about how concerns in clause (b) will be addressed.

Any refinements that may be required to the trail shall be carried out in accordance with the amending procedures in the environmental assessment.

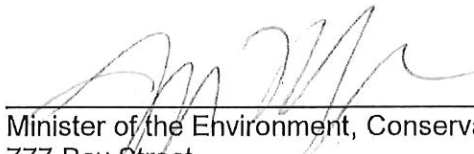
8. Change Process

- 8.1 The proponent shall notify the Director in writing of any proposed change to the undertaking that could result in greater adverse environmental effects than were identified in the environmental assessment. The proponent shall follow the amendment procedure as set out in Chapter 9 of the environmental assessment.

9. Duration of Approval

- 9.1 If construction of the undertaking has not commenced within 10 years of the Date of Approval, this Notice of Approval shall expire, unless otherwise extended by the Minister.

Dated the 5th day of Sept 2019 at TORONTO.


Minister of the Environment, Conservation and Parks
777 Bay Street
College Park 5th Floor
Toronto, Ontario
M7A 2J3

Approved by O.C. No. 1340/2019

Date O.C. Approved September 13, 2019

APPENDIX B

Condition 4 Approval Requirements

Table 1. Detailed Notice of Approval Conditions Fulfillment Status Monitoring – Checklist

Condition #	Condition 4 Approval Requirement	Status (Noted/Complete/On-going/Not Started)
3.0 – Public Record		
3.1	Where a document is required for the public record, the proponent shall post the document on the proponent's website and shall provide one hardcopy and one electronic copy of the document to the Director.	Noted / On-going
3.2	The environmental assessment Reference Number 14134 and File Number 03-02 shall be quoted on all documents submitted to the ministry pursuant to this Notice of Approval.	Noted / On-going
3.3	For every document submitted to the ministry, the proponent shall clearly identify which condition of approval the document is meant to fulfill.	Noted / On-going
4.0 – Compliance Monitoring Program		
4.1	The proponent shall prepare and submit to the Director for approval and for the public record an environmental assessment compliance monitoring program.	Complete
4.2	The compliance monitoring program shall be submitted to the Director within 60 days of the Date of Approval or such other date agreed upon by the Director in writing.	Complete
4.3	The compliance monitoring program shall include a description of how the proponent will: <ul style="list-style-type: none"> a) monitor implementation of the undertaking in accordance with the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out; b) monitor compliance with the conditions in this Notice of Approval; and c) monitor compliance with all commitments made in the environmental assessment with respect to mitigation measures, public consultation, Indigenous consultation, and additional studies and work to be carried out. 	Complete
4.4	The compliance monitoring program shall include an implementation schedule for monitoring activities to be completed.	Complete

Table 1. Detailed Notice of Approval Conditions Fulfillment Status Monitoring – Checklist

Condition #	Condition 4 Approval Requirement	Status (Noted/Complete/On-going/Not Started)
4.5	The Director may require the proponent to amend the compliance monitoring program at any time. Should an amendment be required, the Director will notify the proponent in writing of the required amendment and the date by which the proponent must complete and submit the amendment to the Director.	Noted
4.6	The proponent shall submit the amended compliance monitoring program to the Director within the time period specified by the Director in the written notice.	Noted
4.7	The proponent shall implement the compliance monitoring program, including any amendments to it.	Noted
5.0 – Compliance Reporting		
5.1	The proponent shall prepare an annual compliance report outlining the results of the compliance monitoring program (Condition 4).	On-going – First annual report submitted on September 13, 2020
5.2	The first compliance report shall be submitted to the Director for review and for the public record one year following the Date of Approval. Each subsequent annual compliance report shall be submitted on the date that is the anniversary of the Date of Approval thereafter. Each report shall cover the previous year.	Complete
5.3	The proponent shall submit annual compliance reports until all conditions in this Notice of Approval are satisfied or the proponent is instructed otherwise in writing by the Director.	Noted / On-going
5.4	The proponent shall notify the Director in writing when the final annual compliance report is being submitted. The ministry will confirm whether the annual compliance reporting requirements in Conditions 5.1-5.3 have been fulfilled and the Director will confirm this in writing to the proponent.	Noted / Not Started
5.5	The proponent shall retain, either in the proponent's office or in another location approved by the Director, copies of the annual compliance reports for each reporting year and any associated documentation of compliance monitoring activities. The proponent shall post the annual compliance reports for each reporting year on its website.	Noted / On-going
5.6	The proponent shall make the compliance reports and	Noted / On-going

Table 1. Detailed Notice of Approval Conditions Fulfillment Status Monitoring – Checklist

Condition #	Condition 4 Approval Requirement	Status (Noted/Complete/On-going/Not Started)
	associated documentation available to the Director or a designate in a timely manner when requested to do so by the Ministry.	
6.0 – Complaint Protocol		
6.1	The proponent shall prepare and implement a complaint protocol for dealing with and responding to inquiries and complaints during all stages of the undertaking. The complaint protocol shall include a procedure for notifying the Regional Director of any complaints received by the proponent.	Not Started – The Complaint Protocol will be developed during the Detailed Design phase for each Segment
6.2	The proponent shall submit the complaint protocol to the Director for approval and for the public record at least 30 days before the start of construction or such other date that is agreed upon by the Director in writing.	Noted / Not Started
6.3	The Director may require the proponent to amend the complaint protocol at any time. Should an amendment be required, the Director shall notify the proponent in writing of the amendment required and when the amendment must be completed.	Noted
6.4	The proponent shall submit an amended complaint protocol to the Director within the time period specified by the Director.	Noted
6.5	The proponent shall implement the complaint protocol and any amendments to it.	Noted
6.6	The proponent shall include a summary of the complaints received and how they were addressed in each of the annual compliance reports required by Condition 5.	Noted / Not Started
7.0 – Consultation During the Detailed Design Phase		
7.1	During the detailed design phase of the undertaking, the proponent shall consult with the Ministry of Natural Resources and Forestry and the Ministry of the Environment, Conservation and Parks on the following: mitigation and timing window for in-water works; shoreline treatments; multi-use trail and land requirements for permanent infrastructure; and restoration works, prior to obtaining any necessary approvals and/or permits.	Noted / Not Started
7.2	During the detailed design phase of the undertaking the	Noted

Table 1. Detailed Notice of Approval Conditions Fulfillment Status Monitoring – Checklist

Condition #	Condition 4 Approval Requirement	Status (Noted/Complete/On-going/Not Started)
	proponent shall consider maximizing maintaining or creating new sandy shorelines consistent with the undertakings objectives as described in the environmental assessment.	
7.3	<p>Prior to the construction of the trail throughout the East Segment of the undertaking on Dow Chemical Canada ULC's ("Dow Chemical") land as described in the environmental assessment the proponent shall:</p> <ul style="list-style-type: none"> a) consult with Dow Chemical on the impacts of the trail on the company's operations; b) address public safety and site security concerns identified by Dow Chemical related to its operations and advised the company in this regard; and, c) report to the director about how concerns in clause (b) will be addressed. <p>Any refinements that may be required to the trail shall be carried out in accordance with the amending procedures in the environmental assessment.</p>	Noted / Not Started
8.0 – Change Process		
8.1	The proponent shall notify the Director in writing of any proposed change to the undertaking that could result in greater adverse environmental effects than were identified in the environmental assessment the proponent shall follow the amendment procedure as set out in Chapter 9 of the environmental assessment. If construction of the undertaking has not commenced within 10 years of the date of approval this notice of approval shall expire unless otherwise extended by the Minister.	Noted
9.0 – Duration of Approval		
9.1	If construction of the undertaking has not commenced within 10 years of the date of approval, this notice of approval shall expire, unless otherwise extended by the Minister.	Noted

APPENDIX C

Baseline Conditions Monitoring

The baseline conditions monitoring components described herein include the following:

1. Turbidity Sampling
2. Fish Community Assessment
3. Terrestrial Biological Inventory

1. TURBIDITY SAMPLING

Turbidity is the cloudiness of water resulting from suspended material in the water column. This suspended material decreases the ability of light to pass through the water column. Reduced light penetration can limit plant growth. This in turn affects the fish and invertebrate communities which feed on and live in the plants. Turbidity may be caused by silt, micro-organisms and plant material. However, the most frequent causes of turbidity in water bodies are algae and inorganic material from soil weathering, erosion and construction activities.

High levels of turbidity can have the following effect on water:

- The loss of water clarity affects its ability to support a large variety and number of aquatic organisms. Where there is less light penetrating the water, there will be less photosynthesis occurring and this reduces the level of oxygen in the water.
- The water will also become warmer because any suspended material absorbs heat from the solar influences. This also decreases the amount of oxygen dissolved in the water.

Turbidity is normally measured by an instrument called a nephelometer. This instrument determines the scattering of light and is measured in standard Nephelometric Turbidity Units (NTU). Normal levels of turbidity can vary from less than one in clear pristine streams to very much greater than 200 NTU in murky rivers after flood events.

Methodology

Turbidity readings will be acquired by a TRCA technician using a HACH 2100Q Portable Turbidimeter. Readings will be collected at 0m, 100m and 200m from the shoreline at predefined locations within each of the West, Central and East Segments. Baseline turbidity sampling locations will be defined during the Detailed Design phase for each Segment.

2. FISH COMMUNITY ASSESSMENT

Seasonal fish surveys are conducted to collect samples of the fish community within the study area to determine composition, abundance and significant fisheries. These investigations are also used to track any potential changes in the fish community.

Understanding fish community characteristics is necessary for regulatory requirements, approvals and to measure success. Data analysis will determine annual changes within the fish community structure related to the effectiveness and utilization of new shoreline and habitat compensation features.

Appendix C

Collected fish community information will be used as to evaluate the design features and structures within the construction project and provide insight and information about existing conditions. This in turn can be compared to historical data to provide a better understanding of trends and possible impacts. This information will inform the continuous fisheries monitoring program for the pre-, during- and post-construction process.

Methodology

Fish community data will be collected via a standardized electrofishing survey method conducted seasonally (spring through fall) each year at ~8 sites along the SWP Study Area shoreline (note: total number of sites will be subject to refinement during Detailed Design). Fish will be sampled using an SR-18EH Smith-Root Electrofishing Boat equipped with a 7.5 kW pulsed DC electrofishing unit. Sampling time is 1,000 seconds per transect (site). Boat speed is kept as constant as possible depending on wind, current strength, and netting activity.

Netted fish will be temporarily held in an onboard livewell to allow for recovery prior to processing. Fish processing includes the identification of each individual to species, total length measurement to the nearest millimeter, and weight measurement to the nearest gram. Where the number of individuals of a given species exceeds 20, the remaining fish of that species will be processed as a batch: smallest and largest individuals' lengths taken, number of individuals in a batch noted, and combined weight measured.

Collected fish data, in addition to air temperature (°C), water temperature (°C), current, water colour, bottom type, and aquatic vegetation, will be recorded on Ministry of Natural Resources and Forestry Fish Collection Record forms. Fish are to be released immediately after processing.

3. TERRESTRIAL BIOLOGICAL INVENTORY

To assess and monitor the condition of the natural system the TRCA gathers information about the region through two main survey methods: remote-sensing (patch level data collected from the air by plane or satellite and interpreted on desk top) and field data collection (vegetation community and species data collected from the ground). Field data collection occurs in two ways, through systematic inventories and through fixed sites.

An updated biological inventory of the Project Area will be conducted in 2027 (15 years after the original 2012 inventory) at the levels of habitat patch (landscape analysis), vegetation community, and species (flora and fauna) according to the TRCA methodologies for landscape evaluation and field data collection. Habitat patch mapping will excerpted from the most current regional mapping of broadly-defined patch categories (forest, wetland, meadow and coastal) and digitized using ArcView GIS software.

Methodology

Desktop Study

Natural cover data in the TRCA jurisdiction is captured using digital ortho-rectified aerial photography at a scale of 1:4000. This data is collected as a shape file using Geographical Information System (GIS) software 'on screen'. All natural cover is characterized into discreet polygons of habitat patches of beach/bluff, forest, meadow, successional, and wetland; and anthropogenic cover is categorized into urban or agricultural uses. Patches are generally defined by obvious changes in habitat or land use. Main roads and wide trails are considered as boundaries to habitat patches, and a width of 25 m was used to define breaks in habitat patches, or if an obvious split in the canopy could be detected at a scale of 1:2000 on the aerial photos. Wide rivers were also considered to be separate habitat patches; where rivers or creeks created an obvious break in the canopy, polygons were divided.

The first step in evaluating a natural system or an individual habitat patch is to interpret and map land cover using aerial photographs. The basic unit for the evaluation at all scales is the habitat patch in the region, which are then combined and evaluated as a system at any scale. A habitat patch is a continuous piece of habitat, as determined from aerial photo interpretation. The TRCA maps habitat according to four broad categories: forest, wetland, meadow, and coastal (beach, dune, or bluff). At the regional level, the TRCA jurisdiction is made up of thousands of habitat patches. This mapping of habitat patches in broad categories is conducted through remote-sensing and is used in the evaluation of quality, distribution and quantity of natural cover. It should not be confused with the more detailed mapping of vegetation communities obtained through field surveys and that is used to ground-truth the desktop interpretation.

A key component of data collection and analysis is the scoring and ranking of vegetation communities and flora and fauna species to generate local "L" ranks (L1 to L5); this process was undertaken in 1996-2000 and ranks are reviewed regularly. Vegetation community scores and ranks are based on two criteria: local occurrence and the number of geophysical requirements or factors on which they depend. Flora species are scored using four criteria: local occurrence, population trend, habitat dependence, and sensitivity to impacts associated with development. Fauna species are scored based on seven criteria: local occurrence, local population trend, continent-wide population trend, habitat dependence, sensitivity to development, area-sensitivity, and patch isolation sensitivity. With the use of this ranking system, communities or species of regional concern, ranked L1 to L3, now replace the idea of rare communities or species. Rarity (local occurrence) is still considered, but is now one of many criteria that make up the L-ranks, making it possible to recognize communities or species of regional concern before they have become rare. In addition to the L1 to L3 ranked species, a large number of currently common or secure species at the regional level are considered of concern in the urban context. These are the species identified with an L-rank of L4. Although L4 species are widespread and frequently occur in relatively intact urban sites, they are vulnerable to long-term declines. Communities and species that are ranked L5 are considered

Appendix C

to be generally secure, while a sixth rank exists – L+ – which denotes vegetation communities dominated by non- native species, or indicates a species non-native in origin.

Field Study

The system used to delineate the vegetation communities contained within the Project Area was a modified version of the Ecological Land Classification (ELC) for Southern Ontario. A full ELC survey to the level of vegetation type is a very detailed and time-consuming process. The TRCA protocol for surveying vegetation communities strikes a balance between giving enough detail to provide meaningful descriptions of vegetation communities and the constraints of time and funding. For example, resources are unlikely to be available to pursue detailed soil analysis (as outlined in the ELC field guide) in every patch surveyed in the TRCA jurisdiction. Gathering detailed vegetation community data using the ELC protocol for Southern Ontario provides the information needed in order to track community diversity throughout the region, to assess community sensitivity to development and ecological needs, and to determine what that means to the health of the region. Species data are used to determine how species needs are being met in the region relative to their sensitivity to development, mobility (fauna), area-sensitivity (fauna), and habitat requirements.

Vegetation community and flora and fauna species data will be collected through field surveys. These surveys are done during the appropriate times of year to capture breeding status in the case of amphibians and birds, and during the optimal growing period of the various plant species and communities. Vegetation communities and flora species were surveyed concurrently.

Vegetation community designations are based on the ELC and determined to the level of vegetation type. Community boundaries will be outlined onto printouts of the most current digital ortho-rectified photographs (ortho-photos) to a scale of 1:2000 and then digitized in ArcView. Flora species of regional and urban concern (species ranked L1 to L4) will be mapped as point data with the approximate number of individuals seen. A list of all other species observed will be documented for the site.

As per the TRCA data collection protocol, breeding bird surveys will be carried out by visiting all parts of the site at least twice during the breeding season (last week of May to mid-July) to determine the breeding status of each mapped point. The methodology for identifying confirmed and possible breeding birds follows Cadman et al. (2007). All initial visits will be completed by the end of the third week of June. The field-season is to be organized so that by late June only repeat visits are being conducted. It is imperative that any visit made in the first half of June is subsequently validated by a second visit later in the season. Fauna regional species of concern (species ranked L1 to L3) will be mapped as point data with each point representing a possible breedingbird.