

Conservation Halton Board of Directors Agenda - 08 21






Zoom Webinar:

<https://us02web.zoom.us/j/87807704517?pwd=UnBmN1ZVMWJFaGtzeW5EMXFGa1pGZz09> / Passcode
794301



Start: Thursday, November 25, 2021 - 3:00pm

End: Thursday, November 25, 2021 - 5:30pm

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1. Roll Call
 2. Disclosure of Pecuniary Interest for Conservation Halton Board of Directors
 3. Acceptance of Agenda
 4. CEO Verbal Update
 5. Consent Items
 - 5.1. Approval of Conservation Halton Board of Directors DRAFT Meeting Minutes - October 21, 2021
 Conservation Halton Board of Directors DRAFT Meeting Minutes - October 21, 2021
 - 5.2. Approval of Governance & Risk Committee DRAFT Meeting Minutes - November 4, 2021
 Governance & Risk Committee DRAFT Meeting Minutes - November 4
 2022 DRAFT Board Meeting Schedule
 - 5.3. CH Transition Plan Update on CA Act Changes (CHBD 08 21 01)
 CH Transition Plan Update on CA Act Changes (CHBD 08 21 01)
 - 5.4. Purchasing Memo - August 1, 2021 to October 31, 2021 (CHBD 08 21 02)
 Purchasing Memo - August 1, 2021 to October 31, 2021 (CHBD 08 21 02)
 - 5.5. Health & Safety Update (Q2 - Q3 2021) (CHBD 08 21 03)



Health & Safety Update (Q2 - Q3 2021) (CHBD 08 21 03)

5.6. Permits & Letters of Permission issued under Ontario Regulation 162/06 from July 1 to September 30, 2021 (CHBD 08 21 04)



Permits & Letters of Permission issued under Ontario Regulation 162/06 from July 1 to September 30, 2021 (CHBD 08 21 04)



Appendix A

5.7. Budget Variance Report for the Period Ended September 30, 2021 and December 31, 2021 Projected Year End Amounts (CHBD 08 21 05)



Budget Variance Report for the Period Ended September 30, 2021, and December 31, 2021 Projected Year-End Amounts (CHBD 08 21 05)



Appendix B - Budget Variance Report



Appendix C - Capital Project Summary



Appendix D - Reserve Continuity

5.8. Momentum Progress Report: April – November 2021



Momentum Progress Report: April - November 2021



Appendix N - Momentum Progress Report: April - November, 2021

6. Action Items

6.1. Amendments to Halton Region Conservation Authority General Membership By-law 2018-01 (CHBD 08 21 06)



Amendments to Halton Region Conservation Authority General Membership By-law 2018-01 (CHBD 08 21 06)



Appendix E - Amended Halton Region Conservation Authority General Membership By-law

No. 2018-01

6.2. Corporate Purchasing Policy Update (CHBD 08 21 07)



Corporate Purchasing Policy Update (CHBD 08 21 07)



Appendix F - Corporate Purchasing Policy Update

6.3. Interim Service Delivery Agreement for Ecological Review Services in Halton/CH File No. ADM 362 (CHBD 08 21 08)



Interim Service Delivery Agreement for Ecological Review Services in Halton/CH File No. ADM 362 (CHBD 08 21 08)



Appendix G - Interim Service Delivery Agreement HR CH

6.4. Conservation Halton Mapping Proposed Transition and Implementation Protocol (CHBD 08 21 09)



Conservation Halton Mapping Proposed Transition and Implementation Protocol (CHBD 08 21 09)



Appendix H - *DRAFT* Conservation Halton Mapping Implementation and Transition Protocol

6.5. Morrison-Wedgewood Diversion Channel Updated Flood Hazard Mapping/CH File: ADM 346 (CHBD 08 21 10)



Morrison-Wedgewood Diversion Channel Updated Flood Hazard Mapping/CH File: ADM 346 (CHBD 08 21 10)

6.6. Water Quality Habitat Improvement Program (WQHIP) Guidelines (CHBD 08 21 11)



Water Quality Habitat Improvement Program (WQHIP) Guidelines (CHBD 08 21 11)



Appendix I - Agricultural Properties Financial Incentive Program Guidelines



Appendix J - Urban Properties Financial Incentive Program Guidelines

6.7. Proposed 2022 Plan Review and Permit Application Fees CH File Number: ADM 049 (CHBD 08 21 12)



Proposed 2022 Plan Review and Permit Application Fees CH File Number: ADM 049 (CHBD 08 21 12)



Appendix K - DRAFT Conservation Halton Permit Fees 2022



Appendix L

6.8. Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021 /CH File No.: ADM 363 (CHBD 08 21 13)



Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021/CH File No.: ADM 363 (CHBD 08 21 13)



Appendix M - Conservation Halton Guidelines for Stormwater Management Engineering Submissions

6.9. Re-appointment of Members to the Conservation Halton Foundation Board of Directors (CHBD 08 21 14)



Re-appointment of Members to the Conservation Halton Foundation Board of Directors (CHBD 08 21 14)

7. CHF Update (Jim Sweetlove)

8. In Camera

8.1. Personnel Matter (CHBD 08 21 15)

8.2. Legal Matter (CHBD 08 21 16)

8.3. Legal Matter (CHBD 08 21 17)

8.4. Personnel Matter (CHBD 08 21 18)

9. Other Business

10. Adjournment

MEETING NO: Conservation Halton Board of Directors Meeting # 07 21

MINUTES

The Conservation Halton Board of Directors Meeting was held on Thursday, October 21, at 3:00 p.m. via Zoom Webinar.

Members Present:

Rob Burton
Mike Cluett
Joanne Di Maio
Cathy Duddeck
Allan Elgar
Steve Gilmour
David Gittings
Zeeshan Hamid
Zobia Jawed
Moya Johnson
Gordon Krantz
Bryan Lewis
Marianne Meed Ward
Rory Nisan
Gerry Smallegange
Jim Sweetlove
Jean Williams

Absent:

Hamza Ansari
Rick Di Lorenzo

Guests:

Rachel Baptiste, CEO, Lumen Consulting Group Inc.

Staff present

Kim Barrett, Associate Director, Science & Partnerships
Hassaan Basit, President & CEO/Secretary-Treasurer
Garner Beckett, Executive Director, Conservation Halton Foundation
Adriana Birza, Manager, Office of the President & CEO
Craig Machan, Director, Parks and Operations
Kellie McCormack, Associate Director, Planning & Regulations
Marnie Piggot, Director, Finance
Plezzie Ramirez, Director, Human Resources
Josh Reid, Coordinator, Forestry
Jill Ramseyer, Director, Corporate Compliance
Barb Veale, Director, Planning & Watershed Management
Mark Vytvytskyy, Chief Operations Officer

Chair Gerry Smallegange called the meeting to order at 3:00 p.m.

1. Roll Call

2. Disclosure of Pecuniary Interest for CHF Board of Directors

There were **NONE**.

3. Acceptance of Agenda

CHF 07 01

Moved by: Cathy Duddeck

Seconded by: Zeeshan Hamid

THAT the Agenda be **accepted as distributed**.

Carried

4. CEO Verbal Update & Presentation

5. Presentations:

5.1 Equity, Diversity & Inclusion (Rachel Baptiste, CEO Lumen Consulting Group Inc.)

5.2 Tree Plotter Application (Josh Reid, Coordinator, Forestry)

6. Consent Items

6.1 Approval of Conservation Halton Board of Directors DRAFT Meeting Minutes – September 23, 2021

6.2 Approval of Conservation Halton Finance & Audit Committee DRAFT Meeting Minutes – October 7 2021

6.3 Update on the Reid Road Reservoir Quarry and Designation of Undertaking under the Environmental Assessment Act CH File No.: PQ 018 (CHBD 07 21 01)

6.4 Update on applications to expand Burlington Quarry Nelson Aggregates Co. CH File No. PQ 20 (CHBD 07 21 02)

The consent items **were adopted**.

7. Action Items

7.1 Conservation Halton Hearing Procedures as amended, October 2021 CH File No.: ADM 261 (CHBD 07 21 04)

CHBD 07 02

Moved by: Rob Burton
Seconded by: Allan Elgar

THAT the Conservation Halton Board of Directors **approves the Conservation Halton Hearing Procedures as amended, October 2021;**

And

THAT the Conservation Halton Board of Directors **directs staff to update the corporate website by posting the Conservation Halton Hearing Procedures as amended, October 2021 and removing the 2019 version.**

Carried

- 7.2 Authorization Request for Award Approval Contract:
Supply & Delivery of Food Products RFP # CH-220721
(CHBD 07 21 05)

CHBD 07 03

Moved by: Moya Johnson
Seconded by: Steve Gilmour

THAT the Conservation Halton Board of Directors **approves the award recommendation of the Supply & Delivery of Food Products contract to Sysco South Ontario Region based on “Highest Overall Scoring Proponent” in alignment with the Conservation Halton Purchasing Policy Section 2.3.2 b) requiring RFP award recommendations that exceed \$100,000 to require Board approval.**

Carried

- 7.3 Regulatory Status of the Lower Rambo and Lower Hager Creeks, City of Burlington

CHBD 07 04

Moved by: Rory Nisan
Seconded by: Gordon Krantz

THAT the Conservation Halton Board of Directors **receives for information the Staff report entitled “Regulatory Status of the Lower Rambo and Lower Hager Creeks, City of Burlington”**

And

THAT the Conservation Halton Board of Directors **repeals the existing Policy 2.34 “Site Specific Policy – Hager and Rambo Creeks” contained in “Conservation Halton Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document (April 27, 2006, as amended November 26, 2020)”.**

Carried

- 7.4 Conservation Halton 2022 Budget & Business Plan

CHBD 07 05

Moved by: Mike Cluett
Seconded by: Jim Sweetlove

THAT the municipal funding of \$10,795,636 in the 2022 budget **be approved by a weighted vote by the Conservation Halton Board of Directors at the October 21, 2021, meeting;**

And

THAT transfers to and from Reserves in the 2022 budget **be approved as outlined in this report;**

And

THAT the 2022 Budget & Business Plan **be approved as presented.**

All in Favour

All opposed

Rob Burton

Mike Cluett

Joanne Di Maio

Cathy Duddeck

Allan Elgar

Stephen Gilmour

Dave Gittings

Zeeshan Hamid

Zobia Jawed

Moya Johnson

Gordon Krantz

Bryan Lewis

Marianne Meed Ward

Rory Nisan

Gerry Smallegange

Jim Sweetlove

Jean Williams

Carried

8.0 Conservation Halton Foundation Update (Jim Sweetlove)

9.0 In Camera

CHBD 07 06

Moved by: Jean Williams

Seconded by: Dave Gittings

THAT the Conservation Halton Board of Directors **move In Camera.**

9.1 Confidential Matter (Hassaan Basit, President & CEO)

CHBD 07 07

Moved by: Marianne Meed Ward

Seconded by: Jean Williams

THAT the Conservation Halton Staff **reconvene in Public Forum**

Carried

10. Other Business

There was **NO** other business.

11. Adjournment

CHBD 07 08

Moved by: Moya Johnson

THAT the Conservation Halton Board of Directors meeting **be adjourned at 5:13 p.m.**

Carried

Signed by: Hassaan Basit, President & CEO

Date: November 25, 2021

DRAFT

MEETING NO: # Conservation Halton Governance & Risk Committee 02 21

MINUTES

A meeting of the Conservation Halton Governance & Risk Committee was held on Thursday, November 4 at 3:00 p.m. Via Zoom Video Conference.

Members Present: Rick Di Lorenzo
Cathy Duddeck (Chair)
Gordon Krantz
Rory Nisan (Vice Chair)
Jean Williams

Absent with regrets: Bryan Lewis
Gerry Smallegange

Staff Present: Hassaan Basit, President & CEO/Secretary-Treasurer
Niamh Buckley, Administrative Assistant, Office of the President & CEO
Jill Ramseyer, Director, Corporate Compliance
Mark Vytvytskyy, Chief Operating Officer

Chair Cathy Duddeck called the meeting to order at 3:05 p.m.

1. **Roll Call**
2. **Disclosure of Pecuniary Interest for Governance & Risk Committee Members**

There were **NO** disclosures of Pecuniary Interest.

3. **Acceptance of Agenda**

GC 02 01 Moved by: Gordon Krantz
Seconded by: Jean Williams

THAT the Agenda **be accepted as distributed.**

Carried

4. **Consent Items**

4.1 Corporate Policy Program Update
(GC 02 21 01)

The Consent Item **was adopted.**

5. Action Items

5.1 Board of Directors 2022 DRAFT Meeting Schedule (GC 02 21 02)

GC 02 02 Moved by: Rory Nisan
Seconded by: Jean Williams

THAT the Conservation Halton Governance & Risk Committee **recommends to the Board of Directors the approval of the Board of Directors 2022 Draft Meeting Schedule and the 2022 Board Work Plan.**

Carried

5.2 Amendments to Halton Region Conservation Authority General Membership By-law 2018-01

GC 02 03 Moved by: Jean Williams
Seconded by: Gordon Krantz

THAT the Conservation Halton Governance Committee **recommends to the Conservation Halton Board of Directors approval of the amendments to the Halton Region Conservation Authority General Membership By-law 2018-01 which reflect the February 2, 2021, proclamation of a number of governance-related clauses in the Conservation Authorities Act.**

And

THAT the Conservation Halton Governance Committee **recommends to the Conservation Halton Board of Directors approval of the amendments to the Halton Region Conservation Authority General Membership By-law 2018-01 under Section 9. Signing Officers to reflect administrative updates to the titles of authorized signatories within Conservation Halton.**

Carried

6. In Camera

GC 02 04 Moved by: Jean Williams
Seconded by: Mayor Krantz

That the Conservation Halton Governance & Risk Committee meeting **move In Camera.**

6.1 Consent Item

GC 02 05 Moved by: Jean Williams
Seconded by: Mayor Krantz

That the Conservation Halton Governance & Risk Committee meeting **reconvene in public forum.**

7. Adjournment

GC 02 06

Moved by: Rory Nisan

THAT the Conservation Halton Governance & Risk Committee meeting **be adjourned at 3:50 p.m.**

Carried

Signed by: Hassaan Basit, President & CEO

Date: November 25, 2021

DRAFT

BOARD OF DIRECTORS 2022 DRAFT MEETING SCHEDULE

Location: Zoom Videoconference until further notice

Thursday	Time	Meeting
February 17	1:00 – 4:00	Board Meeting/Inaugural Meeting
March 24	10:30 – 11:30	Governance & Risk Committee
	1:00 – 4:00	Board Meeting
April 7	9:30 – 11:00	Finance & Audit Committee
April 21	1:00 – 4:00	Annual General Meeting/ Board Meeting
May 19	TBD	
June 9	9:30 – 11:00 A.M.	Finance & Audit Committee Meeting
June 30	1:00 – 4:00	Board Meeting
September 22	1:00 – 4:00	Board Meeting
November 3	9:30 – 11:00	Finance & Audit Committee Meeting
November 3	1:30 – 2:30	Governance & Risk Committee Meeting
November 10	1:30 – 2:30	President & CEO Compensation Committee
November 17	1:00 – 4:00	Board Meeting

REPORT TO: Conservation Halton Board of Directors

MEMO NO: CHBD 08 21 01

FROM: Hassaan Basit, President and CEO

DATE: November 25, 2021,

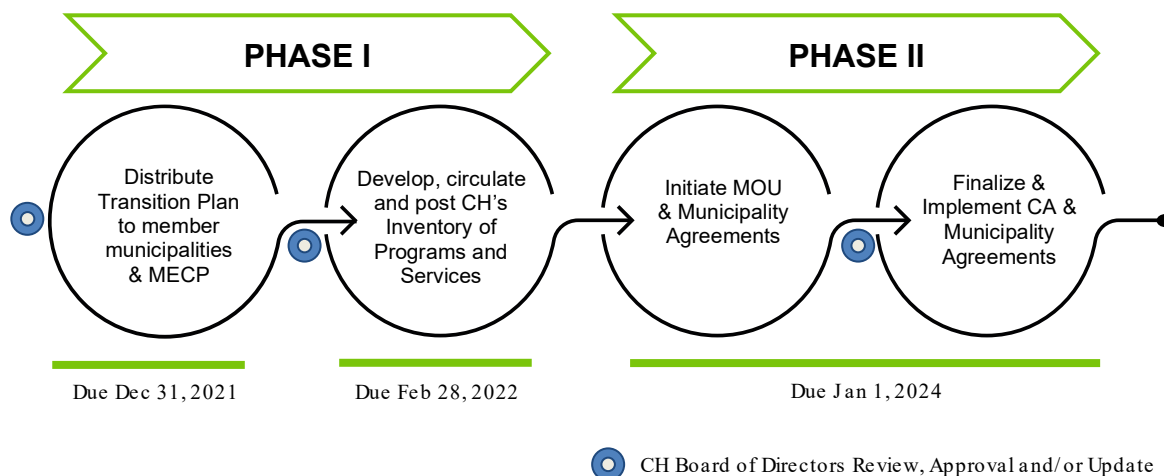
SUBJECT: Conservation Halton's CA Act Transition Plan

MEMO

The passage of [Regulation 687/21](#) "Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the Act" requires the development of Transition Plans by each Conservation Authority. Transition Plans should outline the approach and timelines for the development of cost apportioning agreements with municipalities within their jurisdiction for programs and services that fall into category 2 and 3 as defined in the Regulation.

The transition period runs from October 2021 to January 1, 2024 and provides conservation authorities and municipalities the necessary time to address changes to the budgeting and levy processes and, in some cases, the need to establish agreements. Conservation authorities are required to develop and submit their Transition Plans to the Ministry of the Environment, Conservation and Parks (MECP), copied to member municipalities before December 31, 2021.

Figure 1.0 illustrates Conservation Halton's (CH) approach to ensuring successful completion of the Transition Period.



Conservation Halton's Transition Plan

Key Deliverables

The following deliverables will be met to ensure successful execution of the transition plan.

Deliverable	Date
Board of Directors update on the Transition Plan approach and progress	November 2021
Submission of Conservation Halton's Transition Plan to Municipalities and the MEC	December 2021
Development and Board of Directors approval of CH's Inventory of Programs and Services	February 2022
Circulation and Posting of Inventory of Programs and Services	February 2022
MOU and Municipality Agreements	2022 - 2024
Initiate Quarterly Reporting to MECP	July 2022

Governance

Following Conservation Halton's project management best practices, we will ensure a governance structure and a project team is assigned to support the transition. The President and CEO will act as the executive sponsor of this undertaking, providing guidance and ensuring accountability.

Transparency

The following structure outlines how Conservation Halton's will report on its progress towards executing the CA Act Transition Plan.

Stakeholder	Progress Update
MECP	Quarterly progress and status reporting
CH Board of Directors	Annual progress and status updates
Public	The progress and status updates shared with the Board of Directors will be made available to the public on conservationhalton.ca

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 02

FROM: Jill Ramseyer, Director, Corporate Compliance

DATE: November 25, 2021

SUBJECT: Purchasing Memo - August 1, 2021, to October 31, 2021

Recommendation

THAT the Conservation Halton Board of Directors **receives for information the Purchasing Memo for the period August 1, 2021 to October 31, 2021 in accordance with the Conservation Halton Purchasing Policy.**

Report

The following memo summarizes purchases to be reported during the period of August 1, 2021 to October 31, 2021. The Conservation Halton Purchasing Policy requires single or sole source purchases greater than \$25,000 (not including taxes) and Requests for Proposals awarded up to a value of \$100,000 (not including taxes) and Tenders awarded from a value of \$100,00.00 up to a value of \$350,000 (not including taxes) to be reported to the Board of Directors for information. Request for Proposal/Quotation award recommendations that exceed \$100,000.00 (not included taxes) and Tenders that exceed \$350,000.00 (not including taxes) will be subject to Board approval prior to award.

Single or Sole Source Purchases (above \$25,000.00):

Vendor	Amount (excluding HST)	Details
ParkPass Inc.	\$41,900.00	In conjunction with the existing Collaboration Agreement between CH and ParkPass Inc., a separate Statement of Work has been devised to support the enhancements of Parks Reservation System and Payment Processing Integration.

Tenders / Quotations from \$100,000.00 up to \$350,000.00 reported for Board information:

Vendor	Amount (excluding HST)	Details
Denco Inc. (Board approved: September 23, 2021 meeting)	\$158,500.00	RFQ # 190721 - Shade Structures and Pavilion contract awarded to Denco Inc.

Requests for Proposals / Quotations exceeding a value of \$100,000.00 seeking Board approval:

Vendor	Amount (excluding HST)	Details
Sysco Canada Inc. (Board approved: October 21, 2021 meeting)	\$316,616.84	Supply & Delivery of Food Products contract to be awarded to Sysco Canada Inc. for a five (5) year base term as a result of the RFP # 220721 issued July 22, 2021

Impact on Strategic Goals

This report supports the Momentum strategic priority of Organizational Sustainability.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:


Jill Ramseyer
Director, Corporate Compliance

Approved for circulation:


Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Pavan Seth, Procurement Manager,
pseth@hrca.on.ca, 905.336.1158 x2249

REPORT TO: Conservation Halton Board of Directors

MEMO NO: # CHBD 08 21 03

REPORT FROM: Jill Ramseyer, Director, Corporate Compliance

DATE: November 25, 2021

SUBJECT: Health & Safety Update (Q2 - Q3 2021)

MEMO

CH completed a one-year voluntary performance-based incentive program through the Workplace Safety and Insurance Board (WSIB) called the Health and Safety Excellence program. Organizations select safety topics and implement them over the course of a year using the plan-do-check model. CH selected health and safety training and review of trends as our topics. A narrative about why CH chose the topics and how we met our objectives was then submitted along with evidence of the steps taken. This program provides organizations with the opportunity to improve safety systems and processes and a financial rebate. After our program work was evaluated, we received notice that CH was successful.

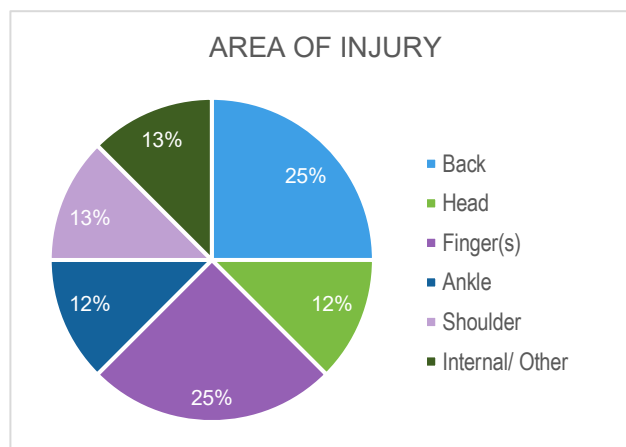
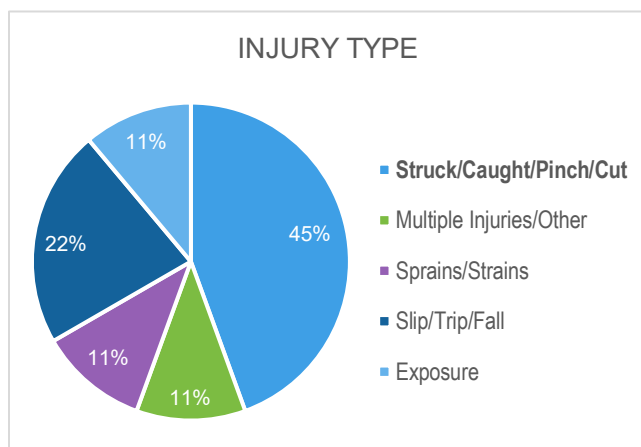
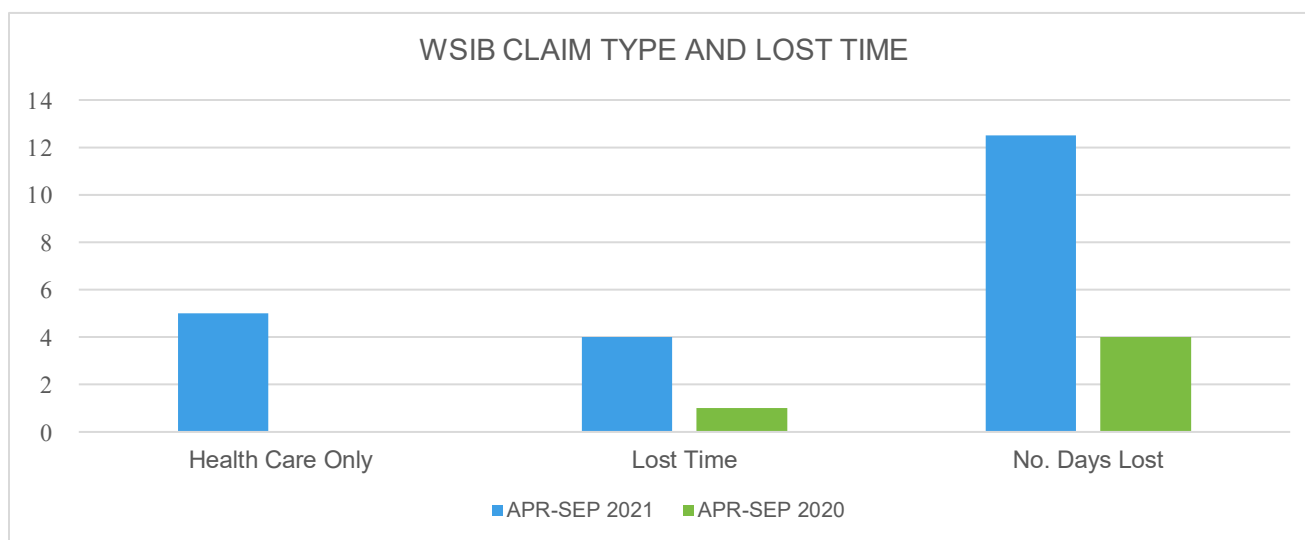
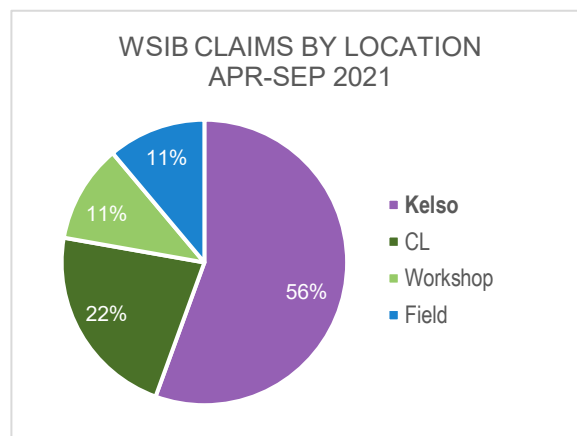
The WSIB has recognized our commitment to health and safety by awarding a badge that appears on our business profile on their website (www.wsib.on.ca) and a rebate of \$13,611.38.

The summary below provides an overview of Conservation Halton's Health and Safety Performance for Q2 through Q3 of 2021. The number of incidents are tracked and categorized depending on severity (whether there was lost time and the number of lost days) and frequency (number of incidents and whether they are reportable to WSIB). Several other indicators are tracked such as area of injury, root cause, location, job type and more. Analysis of the data allows us to determine what type of prevention programs, including training, should be implemented.

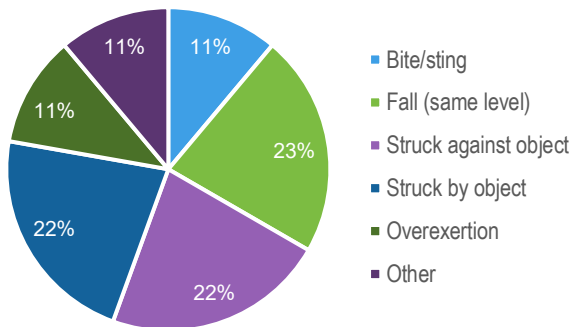
The number of reportable WSIB claims for this period is higher in comparison to the same period in 2020, which is likely because of temporary shutdowns, limited programs and significantly reduced program capacity and staffing levels due to COVID-19 in 2020 vs. the same period in 2021. However, in a year-over-year comparison, all trend lines are moving in a positive direction.

WSIB INJURY STATISTICS

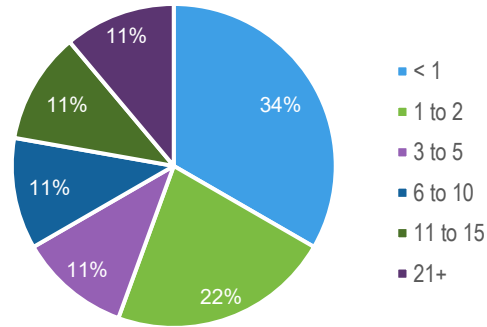
LOCATION	Apr-Sep 2021	Apr-Sep 2020
Admin Office	0	0
Glen Eden	0	0
Kelso	5	0
Mountsberg	0	0
Crawford Lake	2	0
Hilton Falls	0	0
Rat-MN	0	0
Workshop	1	0
Field	1	1
Total	9	1



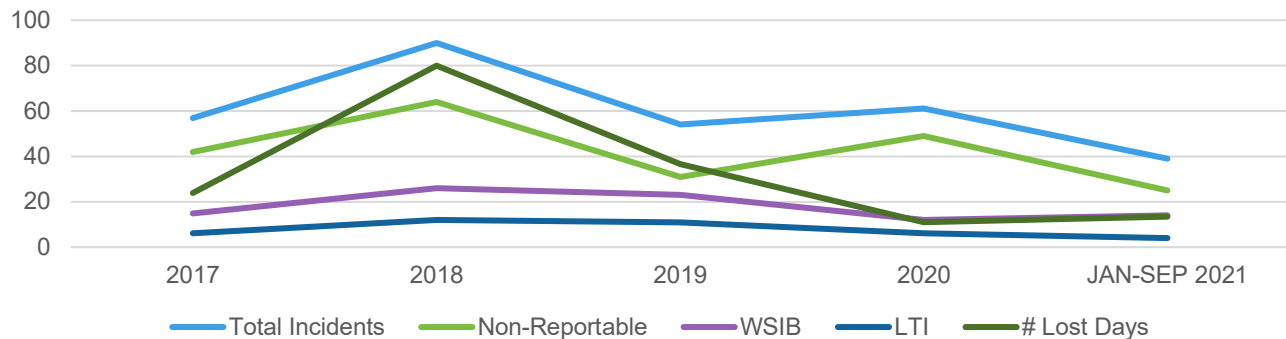
IMMEDIATE CAUSE



YEARS OF SERVICE



YEAR-OVER-YEAR TRENDING



AREAS OF FOCUS

- Review and update to the contractor program, which includes policies, procedures and training while working in partnership with procurement to ensure consistency in the pre-qualification of contractors and establishing a vendor of record (VOR) arrangement.
- Continued work on the Vehicle and Equipment training program improvement, which began earlier this year. There is much work involved to ensure that trainers are competent, and that training content and delivery is sufficient and consistent to keep staff safe, comply with applicable laws and standards, and improve efficiencies and the ensuring the safe condition of equipment.
- Continued focus on the Safety Observation Program to encourage discussions about safety, identification of hazards and reinforcement of safe behaviours.

FOR QUESTIONS ON CONTENT:

Nikki Garstang, Health and Safety Specialist
ngarstang@hrca.on.ca, 905.336.1158 x2246

REPORT TO: Conservation Halton Board of Directors

REPORT NO: CHBD 08 21 04

FROM: Barbara J. Veale, Director, Planning & Watershed Management

DATE: November 25, 2021

SUBJECT: **Permits & Letters of Permission issued under Ontario Regulation 162/06 from July 1 to September 30, 2021**

Recommendation

THAT the Conservation Halton Board of Directors **receives for information the Permits and Letters of Permission issued by staff under Ontario Regulation 162/06 for the period of July 1 to September 30, 2021, as identified in Report No. # CHBD 08 21 03 dated November 25, 2021.**

Report

Between July 1 to September 30, 2021, Conservation Halton (CH) issued 100 Permits and 11 Letters of Permission (Appendix A). All approvals were reviewed and approved in accordance with Board approved policies contained in CH's *Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document April 27, 2006, last amended, November 26, 2020.*

Impact on Strategic Priorities

This report supports the Momentum priority of Natural Hazards and Water.


Financial Impact

CH staff work with permit applicants to address their needs while meeting Board approved policies for administering Ontario Regulation 162/06. Fees for permits are based on staff time and effort required to process different types of applications as approved by the Board.

Signed & respectfully submitted:


Barbara J. Veale
Director, Planning & Watershed Management

Approved for circulation:


Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Kellie McCormack, Associate Director, Planning & Regulations; 905-336-1158 x 2228;
kmccormack@hrca.on.ca

Appendix A

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
Burlington						
A/21/B/84	7882	154 Nicholson Court	Re-construction of the roofline with height increase and new rear canopy extension on a dwelling located within the erosion hazard of the shoreline of Lake Ontario, resulting in no increase to habitable space and maintaining setback requirements for non-habitable development.	2021-06-21	2021-07-02	Cassandra Connolly
A/21/B/56	7879	0 Laurentian Drive (for 800)	Installation of 355m of a new NPS 6" pipeline and regulating station partially within the floodplain and 7.5m regulatory allowance associated with Roseland Creek.	2021-06-28	2021-07-02	Cassandra Connolly
A/21/B/87	7881	1449 Reynolds Avenue	Construction of an inground pool and patio within the 7.5m regulatory allowance associated with the floodplain and valley of Tuck Creek, maintaining the required 3m setback.	2021-06-28	2021-07-02	Cassandra Connolly
A/21/B/93	7889	1405 Beaufort Drive	Construction of an accessory structure within the valley associated with Upper Rambo Creek.	2021-07-07	2021-07-07	sean stewart
A/21/B/02	7685 **REVISED**	0 Walkers Line (adj 6391)	REVISED permit is for the replacement of a concrete culvert conveying Bronte Creek with a rigid frame open-footing culvert; the alteration (widening) of the creek bed and creation of adjacent slopes; and, the construction of road shoulders at the new bridge structure.	2021-07-06	2021-07-07	Cassandra Connolly
A/20/B/43	7891	6119 Mountain Top Road	Construction of a minor addition within the valley associated with Bronte Creek.	2021-06-28	2021-07-08	Ola Panczyk
A/21/B/86	7895	5370 Riverside Drive	Construction of a deck with roof overhang/extension to the dwelling partially within the 7.5m regulatory allowance associated with the floodplain and valley of Sheldon Creek, maintaining the required 3m setback.	2021-06-28	2021-07-19	Cassandra Connolly
A/21/B/92	7899	3282 Foundation Gate	Excavation works and construction of a walk-out basement within 7.5 metres of the floodplain of Sheldon Creek.	2021-07-05	2021-07-22	Cassandra Connolly
A/21/B/94	7900	3139 Ferguson Drive	Excavation works and construction of a walk-out basement within 7.5 metres of the floodplain of Sheldon Creek.	2021-07-05	2021-07-22	Cassandra Connolly
A/20/B/132	7898	6471 Cedar Springs Road	Installation of 7 m of a new NPS 2" pipeline and 10 m of NPS 1 ¼" pipeline, within the valley and 15m regulatory allowance associated with Bronte Creek, for residential servicing.	2021-07-07	2021-07-22	Cassandra Connolly
A/21/B/91	7902	New Street	Replacement of the New Street bridge and reconfiguration of Bell Mobility lines within/ the regulated areas associated with Tuck Creek.	2021-07-05	2021-07-23	Cassandra Connolly
A/21/B/90	7902	3414 New Street	Replacement of the New Street bridge and reconfiguration of Bell Mobility lines within/ the regulated areas associated with Tuck Creek.	2021-07-05	2021-07-23	Cassandra Connolly
A/21/B/18	7764 **REVISED**	658 North Shore Boulevard East	REVISED permit is for the construction of a dwelling with rear yard balconies, patio and a swimming pool requiring retaining wall within the erosion hazard of the shoreline of Lake Ontario, maintaining setback requirements for habitable and non-habitable development.	2021-07-20	2021-07-28	Cassandra Connolly
A/21/M/46	7905	7200 Trafalgar Road	Installation of new utility conduits and pedestals within the floodplain associated with a tributary Sixteen Mile Creek.	2021-06-11	2021-07-28	Justin McArthur
A/21/B/107	7910	4197 Walkers Line	Emergency replacement of a failed culvert within the floodplain of a tributary of Bronte Creek.	2021-07-29	2021-07-30	sean stewart
A/21/B/98	7913	3151 Velebit Park Drive	Construction of a raised deck and interlock paver patio below within 7.5m of the floodplain associated with Sheldon Creek.	2021-07-23	2021-08-11	Cassandra Connolly

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/B/85	7880	140 Secord Lane	Replacement of a septic bed within the erosion hazard of the shoreline of Lake Ontario, maintaining setback requirements for non-habitable development.	2021-07-28	2021-08-12	Cassandra Connolly
A/21/B/95	7923	2052 Headon Forest Drive	The construction of an in-ground swimming pool and patio within 7.5m of the valley associated with Shoreacres Creek, maintaining the minimum 3m setback from top of bank.	2021-08-15	2021-08-19	Cassandra Connolly
A/21/B/23	7924	2226 Lakeshore Road	The construction of a covered rear patio addition, and internal renovations (minor demolition/removals) to the existing dwelling located within the erosion hazard of the shoreline of Lake Ontario.	2021-08-09	2021-08-19	Cassandra Connolly
A/20/B/09	7925	3497 Rockwood Drive	The construction of ground floor and second storey additions and construction of a swimming pool within the floodplain of Tuck Creek.	2021-08-04	2021-08-20	Cassandra Connolly
A/21/B/108	7926	408 Shoreacres Road	Renovation of a dwelling within the floodplain and valley of Shoreacres Creek including minor demolition/removals, construction of a rear bay window, and window/door replacements/expansions.	2021-07-29	2021-08-23	Cassandra Connolly
A/21/B/113	7931	1323 Snake Road	Construction of swimming pool and shed within the 15m regulatory allowance from the valley of Grindstone Creek, maintaining a 6m minimum setback from the hazard.	2021-08-18	2021-08-25	Cassandra Connolly
A/21/B/19	7932	2380 Lakeshore Road	Construction of a one-storey cabana on an on-grade slab, and the removal of an existing concrete patio within the erosion hazard of the shoreline of Lake Ontario, with new construction maintaining setbacks applicable for non-habitable accessory structures.	2021-08-16	2021-08-27	Cassandra Connolly
A/21/B/112	7934	5280 Lakeshore Road	Construction of minor repairs to the existing shoreline protection works including resetting displaced armourestones and filling voids along the rip rap splash pad.	2021-08-18	2021-08-27	Cassandra Connolly
A/21/B/114	7939	3353 Guelph Line	Wing wall repairs to an existing bridge and culvert replacement, if needed, within the flooding and erosion hazards associated with Shoreacres Creek.	2021-08-18	2021-09-02	Ola Panczyk
A/21/B/100	7943	North Service Road @ Walkers line & 3455 North Service Road	Installation of conduit requiring directional bore and hydro vac works, and the installation of vaults requiring excavation, grading, and restoration works, within the flooding and erosion hazards associated with Tuck Creek.	2021-08-19	2021-09-07	Cassandra Connolly
A/21/B/116	7942	312 North Shore Boulevard West	Construction of a new two-storey dwelling, driveway, swimming pool, patio, and deck within the erosion hazard of the shoreline of Lake Ontario.	2021-08-23	2021-09-07	Cassandra Connolly
A/21/B/96	7945	South Service Road (adj to 5230)	Installation of a conduit requiring directional bore, and the installation of a vault requiring excavation, grading, and restoration works within the flooding hazards associated with Appleby Creek.	2021-08-24	2021-09-08	Cassandra Connolly
A/21/B/101	7944	1110-1200 Heritage Road (to service 4145 North Service Rd)	Installation of a conduit requiring directional bore, and the installation of vaults requiring excavation, grading, and restoration works within the flooding and erosion hazards associated with Shoreacres Creek.	2021-08-19	2021-09-08	Cassandra Connolly
A/20/B/11	7949	1509 Norwood Drive	Reconstruction of a detached accessory structure and minor site grading within the 15m regulatory allowance of the valley of Grindstone Creek. The reconstruction of a dwelling is also proposed outside of the regulated area.	2021-09-04	2021-09-09	Cassandra Connolly
A/21/B/106	7950	3261 McCurdy Court	Construction of an in-ground swimming pool and patio within 7.5m of the valley associated with Sheldon Creek, maintaining the minimum 3m setback from top of bank.	2021-08-25	2021-09-09	Cassandra Connolly

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/B/111	7936	1064 Mohawk Road	Temporary excavation and minor grading within 7.5m of the valley of Indian Creek, associated with the construction of a new dwelling outside of the regulated area.	2021-08-12	2021-09-10	Cassandra Connolly
A/20/B/130	7954	0 Guelph Line (Colling Rd to Britannia Rd)	Replacement of an existing 1500mm CSP culvert (Culvert CU-01) with a 1500mm concrete culvert crossing Guelph Line. The culvert conveys a tributary associated with Bronte Creek	2021-09-09	2021-09-20	Ben Davis
A/21/B/120	7951	1963 Snake Road	Construction of an in-ground swimming pool, pool shed, and associated decking within the valley associated with Grindstone Creek.	2021-09-09	2021-09-22	Sean Stewart
A/21/B/122	7959	1560 Snake Road	Installation of a new septic system within 15m from the valley of Grindstone Creek, no closer toward the valley than the existing system.	2021-09-22	2021-09-23	Cassandra Connolly

Halton Hills

A/21/HH/22	7937	Five Sideroad & Eighth Line	Installation of utility conduits and pedestals within the floodplain associated with a tributary Sixteen Mile Creek and within 120 metres of wetlands greater than 2 hectares in size.	2021-09-09	2021-09-10	Justin McArthur
A/21/HH/24	7969	10741 Third Line	Farm equipment field entrance with culvert located within 15 metres of the flooding and erosion hazards associated with a tributary of Sixteen Mile Creek.	2021-09-16	2021-09-29	Colleen Bain
A/21/HH/25	7968	12 - 16 Cleve Court	Installation of approximately 277 metres of NPS 4 inch natural gas pipeline and 220 metres of NPS 4 service pipeline above an existing culvert which conveys a tributary of Sixteen Mile Creek.	2021-09-28	2021-09-29	Charles Priddle
A/21/HH/19	Letter of Permission	18 Deer Run Crescent	Construction of an above ground swimming pool located between 30 and 120 metres of a wetland greater than 2 hectares in size	2021-07-09	2021-07-22	Justin McArthur
A/21/HH/20	Letter of Permission	8482 Sixth Lane	Widening of a farmyard access located between 30 and 120 metres of a wetland greater than 2 hectares in size.	2021-07-08	2021-07-27	Justin McArthur

Hamilton

A/21/H/11	7877	0 Campbellville Road (adj to 154)	Replacement of a municipal road culvert conveying a tributary of Bronte Creek and within a Provincially Significant Wetland (PSW).	2021-05-11	2021-07-02	Cassandra Connolly
A/21/H/12	7876	0 Beeforth Road (adj to 865)	Replacement of a municipal road culvert conveying a tributary of Grindstone Creek.	2021-05-11	2021-07-02	Cassandra Connolly
A/21/H/17	7878	Moffat Road (Conc. 5 to end)	Municipal ditch maintenance requiring grading and excavation and the replacement of a municipal road culvert within the floodplain of Grindstone Creek and within a Provincially Significant Wetland (PSW).	2021-06-07	2021-07-02	Cassandra Connolly
A/21/H/35	7884	0 Parkside Drive (adj to 386 Parkside)	Installation of buried fibre optic cable via trenching within the valley associated with Grindstone Creek.	2021-06-28	2021-07-07	Sean Stewart
A/21/H/37	7906	23 Reynold Street	Reconstruction and reconfiguration of a deck within the valley associated with Grindstone Creek.	2021-07-15	2021-07-29	Sean Stewart
A/21/H/38	7912	700 Spring Gardens Road	The placement/construction of a permanent soil storage structure on an existing concrete base located within the erosion hazard associated with the shoreline of Lake Ontario.	2021-07-22	2021-08-10	Cassandra Connolly
A/20/H/21	7472 **REVISED**	Centre Rd & Seventh Conc.	This REVISED permit is for municipal ditch maintenance activities and replacement of three culverts within the flooding and erosion hazards associated with Grindstone Creek and immediately adjacent to a Provincially Significant Wetland (PSW).	2021-07-21	2021-08-11	Cassandra Connolly
A/20/H/70	7689 **REVISED**	19 Laurendale Avenue	REVISED - construction of a second storey addition within the 15 metre regulatory allowance from the valley of Grindstone Creek that maintains the minimum required 6 metre setback from the hazard.	2021-08-19	2021-08-19	Cassandra Connolly

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/H/43	7941	62 Maddaugh Road	Replacement of a septic system within 30m of a Provincially Significant Wetland, to be located no closer toward the wetland than the existing system.	2021-08-30	2021-09-07	Cassandra Connolly
A/21/H/41	7957	960 Garden Lane	Construction of dwelling additions and a roof extension partially within the 15m regulatory allowance of the floodplain of Grindstone Creek and within 30-120m of a Provincially Significant Wetland (PSW).	2021-09-09	2021-09-21	Cassandra Connolly
A/21/H/29	7958	0 Dundas Street East (b/w Board St & Mill St N)	Utility pole relocation and installation, and extension of underground duct work within the valley associated with Grindstone Creek.	2021-07-26	2021-09-23	Cassandra Connolly
A/21/H/47	7966	374 Fifth Concession Road East	Construction of a Stormwater Management Pond and outlet between 30-120 metres of a Provincially Significant Wetland (PSW).	2021-09-27	2021-09-28	Sean Stewart
A/21/H/39	Letter of Permission	394 Mountsberg Road	Construction of an inground swimming pool with surrounding concrete deck/patio between 30 metres and 120 meters of a Provincially Significant Wetland (PSW).	2021-08-17	2021-08-30	Cassandra Connolly
A/21/H/31	Letter of Permission	245 Carlisle Road	REVISED - Construction of a side addition to the dwelling with rear porch, and the replacement and relocation of a septic system located between 30 metres and 120 meters of a Provincially Significant Wetland (PSW).	2021-08-19	2021-09-09	Cassandra Connolly

Milton						
A/21/M/39	7867	1211 Fourth Line	The site alteration including construction of a sediment pond outfall and topsoil stripping and grading within the floodplain associated with a tributary of Sixteen Mile Creek (Centre Tributary BP-4-C).	2021-07-07	2021-07-07	Ben Davis
A/21/M/52	7885	Whitlock Ave/Basswood Crescent (Mattamy Martin West Property)	Construction of a trail and associated grading within 15 metres but beyond 6 metres of the valley associated with Sixteen Mile Creek.	2021-07-07	2021-07-07	Justin McArthur
A/21/M/50	7892	320 Pine Street	Replacement of waterline and damaged sanitary line within the floodplain associated with Sixteen Mile Creek.	2021-07-09	2021-07-09	Ben Davis
A/21/M/12	7890	1211 Fourth Line (Mattamy Bayview Lexus-Node Connections)	Alteration of a watercourse with the connection of nodes required to transfer flows to a temporary diversion channel on a tributary of Sixteen Mile Creek.	2021-05-26	2021-07-12	Ben Davis
A/21/M/34	7897	0 Thompson Road (adj to 8625 Britannia)	Construction of a wetland within the floodplain associated with Sixteen Mile Creek in conjunction with the Sixteen Mile Creek Ecological Master Plan.	2021-06-11	2021-07-22	Justin McArthur
A/19/M/15	7901	0 Bronte Road North (approx. 210m S. of Steeles)	Widening of Bronte Street including the replacement of a bridge crossing Sixteen Mile Creek, storm sewer replacement and associated landscaping within the floodplain associated with of Sixteen Mile Creek.	2021-07-21	2021-07-22	Justin McArthur
A/20/M/36	7903	8321 Britannia Road	Construction of a 1175 metre long trail section within Sixteen Mile Creek valley.	2021-07-08	2021-07-27	Ben Davis
A/21/M/54	7904	152 Court Street North	Construction of a 12ft x 24ft in-ground swimming pool and stone retaining wall partially within the floodplain associated with Sixteen Mile Creek.	2021-07-29	2021-07-29	Justin McArthur
A/19/M/54	7917	0 Fifth Line (170m south of 401)	The reconstruction and expansion of a road crossing (Culvert 16) which conveys a tributary of Sixteen Mile Creek.	2021-06-21	2021-08-16	Charles Priddle
A/20/M/02	7919	0 Fifth Line	The construction of a 975mm x 1535mm concrete storage pipe (SWM facility 16 S-7) with an outlet within the flooding and erosion hazards associated with Sixteen Mile Creek.	2021-06-21	2021-08-16	Ben Davis
A/20/M/03	7918	0 Fifth (0.2 km south of Main Street) Line	The construction of a 975mm x 1535mm concrete storage pipe (SWM facility 20W-8) with an outlet within the flooding and erosion hazards associated with Sixteen Mile Creek.	2021-06-21	2021-08-16	Charles Priddle

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/M/56	7921	9266 Guelph Line	Replacement of a septic tank and filter bed within the floodplain associated with Bronte Creek.	2021-08-05	2021-08-18	Charles Priddle
A/21/H/40	7935	27 Campbellville Road	Grading and paving an existing residential accessway within the floodplain of Bronte Creek.	2021-08-17	2021-08-30	Cassandra Connolly
A/21/M/60	7938	1211 Fourth Line (Mattamy Bayview Lexus)	Installation of a 525-millimeter diameter sanitary sewer within the floodplain associated with a tributary of Sixteen Mile Creek, and within 120 metres of a wetland greater than 2 hectares in size.	2021-08-05	2021-09-02	Justin McArthur
A/19/M/55	7948	0 Fifth Line (98m south of Main St)	Reconstruction and expansion of a road crossing (Culvert 17) which will convey a tributary of Sixteen Mile Creek.	2021-09-03	2021-09-09	Charles Priddle
A/21/M/49	7953	Varga Subdivision	Site alteration including the construction of a sediment basin with an emergency spillway and outlet within the floodplain associated with a tributary of Sixteen Mile Creek.	2021-08-27	2021-09-17	Justin McArthur
A/21/M/35	7933 **REVISED**	11151 First Nassagaweya Line	**REVISED** permit is for the construction of a 2-storey dwelling addition adjacent to the floodplain associated with a tributary of Bronte Creek and a 27 square metre garage addition within the floodplain.	2021-09-22	2021-09-24	Charles Priddle
A/16/M/103	7961	0 Britannia Road	Replacement of an existing structural culvert (Crossing 14) and installation of a 1500mm sanitary sewer associated with the reconstruction and widening of Britannia Road. Crossing 14 Reg file# R2668B, R2669B	2021-08-23	2021-09-24	Ben Davis
A/16/M/105	7962	0 Britannia Road	Replacement of an existing structural culvert (Crossing 16) and installation of a 400mm watermain associated with the reconstruction and widening of Britannia Road. - Crossing 16 File # R2668B, R2669B	2021-08-23	2021-09-24	Ben Davis
A/21/M/78	7971	7580 Tremaine Road	Replacement of a failed septic system located within 15 metres from the flooding and erosion hazards associated with tributaries of Bronte Creek.	2021-09-24	2021-09-29	Colleen Bain
A/21/M/53	Letter of Permission	6625 Sixth Line	Addition to an existing dwelling located between 30 and 120 metres of a wetland greater than 2 hectares in size.	2021-07-13	2021-07-22	Justin McArthur
A/21/M/57	Letter of Permission	10740 First Nassagaweya Line	Construction of a pool which is to be located between 30 and 120 metres of a wetland greater than 2 hectares in size	2021-08-05	2021-08-05	Charles Priddle
A/21/HH/23	Letter of Permission	7462 Fifteenth Sideroad	Installation of a septic system replacement located between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2021-08-30	2021-09-03	Colleen Bain
A/21/M/77	Letter of Permission	11295 Sixth Nassagaweya Line	Expansion of a riding arena, new pole building and associated grading located between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2021-09-22	2021-09-23	Justin McArthur

Mississauga

No Permits or Letters of Permission issued during this time

Oakville

A/21/O/61	7883	237 Creek Path Avenue	Construction of an inground swimming pool and associated patio and landscaping adjacent to a wetland which is less than 2ha in size.	2021-06-28	2021-07-06	Charles Priddle
A/21/O/53	7864	571 Patricia Drive	Construction of a front entry way, covered porch and addition above garage on a house located within the floodplain of McCraney Creek, and within 7.5m of the valley associated with that watercourse.	2021-07-05	2021-07-06	Megan Winiacki
A/21/O/59	7886	3358 Lakeshore Road West	Installation of gas pipeline on a property that contains the erosion hazard associated with the shoreline of Lake Ontario, maintaining minimum setback requirements for development.	2021-06-18	2021-07-07	Megan Winiacki

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/O/63	7887	1131 Truman Avenue	Construction of an inground swimming pool within 7.5m of the erosion hazard associated with Morrison Wedgewood Diversion Channel.	2021-06-29	2021-07-07	Megan Winiacki
A/21/O/54	7888	0 Advance Road (behind 1390)	Integrity dig within the floodplain associated with 14 Mile Creek to inspect an existing pipeline.	2021-07-07	2021-07-07	Megan Winiacki
A/21/O/62	7872	1267 Monks Passage	Construction of an inground swimming pool and patio within 7.5m of the erosion hazard associated with the valley of McCraney Creek, maintaining a 3m setback from top of bank.	2021-06-28	2021-07-12	Megan Winiacki
A/21/O/66	7893	3194 Shoreline Drive	Construction of a 2 storey home with backyard patios and a pool within the erosion hazard associated with the shoreline of Lake Ontario, maintaining minimum setback requirements.	2021-07-08	2021-07-12	Megan Winiacki
A/21/O/71	7894	Wheatboom @ Trafalgar	Installation of natural gas pipelines including over a culvert which conveys a tributary or Upper Morrison Creek.	2021-07-14	2021-07-14	Charles Priddle
A/21/O/43	7896	0 Rebecca Street (in front of 120 Navy Street)	Installation of new Rogers 1-3" conduit along Rebecca Street/Randall Street to be affixed to a bridge over Sixteen Mile Creek.	2021-06-23	2021-07-22	Megan Winiacki
A/21/O/73	7911	0 William Halton Parkway (Glenorchy)	Restoration and enhancement of the valley and floodplain associated with a tributary of McCraney Creek.	2021-08-03	2021-08-03	Megan Winiacki
A/21/O/56	7915	528 Morrison Road	The re-construction of front porch and construction of rear deck located within the floodplain of Lower Wedgewood Creek, and within 7.5m of the valley associated with that watercourse.	2021-06-03	2021-08-17	Megan Winiacki
A/21/O/76	7922	285 Glen Oak Drive	Construction of an inground swimming pool within 7.5m of the erosion hazard associated with the valley of McCraney Creek.	2021-08-05	2021-08-18	Megan Winiacki
A/21/O/70	7929	8 Ennisclare Drive	Repairs to an existing pier in Lake Ontario primarily involving concrete work.	2021-08-24	2021-08-24	Charles Priddle
A/20/O/54	7930	174-176 Front Street	Construction of a one-storey garage addition and basement excavation, with removal of habitable portions of the main and second floors to ensure there is no increase in habitable space within the erosion and flooding hazards associated with Lake Ontario.	2021-08-17	2021-08-24	Colleen Bain
A/21/O/74	7920	1280 Lakeshore Road	Construction of a patio, alterations to a swimming pool, and the extension of a retaining wall within the erosion hazard associated with the shoreline of Lake Ontario, with no works occurring closer to the Lake than existing.	2021-08-03	2021-08-26	Megan Winiacki
A/20/O/30	7928	0 Dundas Street (DUNOAK)	Construction of two storm outfalls in JC-36, a tributary of Joshua's Creek.	2021-05-05	2021-09-09	Megan Winiacki
A/20/O/85	7927	0 Dundas Street (DunOak Subdivision)	Channel restoration requiring debris removal, creation of a low flow channel and associated grading of JC-36, a tributary of Joshua's Creek.	2021-05-05	2021-09-09	Megan Winiacki
A/21/O/65	7947	0 Bronte Street East (W of 1297 Bronte)	Temporary outfall channel within the flooding and erosion hazard associated with a tributary of Joshua's Creek, also requiring grading for access upgrades	2021-08-30	2021-09-09	Charles Priddle
A/21/O/49	7952	0 Rebecca Street	Integrity dig within the valley associated of Bronte Creek to inspect a pipeline.	2021-07-31	2021-09-16	Megan Winiacki
A/21/O/86	7955	1248 Wood Place	Reconstruction of a dwelling within the valley of Fourteen Mile Creek.	2021-09-20	2021-09-20	Megan Winiacki
A/21/O/87	7956	2156 Colonial William Parkway	Construction of an inground swimming pool and patio within 7.5m of the erosion hazard associated with the valley of Fourteen Mile Creek.	2021-09-20	2021-09-20	Megan Winiacki
A/21/O/80	7963	2039 Markle Drive	Construction of an inground swimming pool within 7.5m of the erosion hazard associated with the valley of Munn's Creek.	2021-08-27	2021-09-24	Megan Winiacki

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/O/37	7960	128 Water Street (Busby Park)	The reconstruction of existing launch ramp and shore wall within the floodplain associated of Sixteen Mile Creek.	2021-06-21	2021-09-24	Megan Winiecki
A/21/O/78	7964 **REVISED**	1051 Pearson Drive	**REVISED** Reconstruction and expansion of a residence, including driveway, accessory decking and associated landscaping, within 7.5m of a flood hazard (Spill) associated with the Morrison Wedgewood Diversion Channel.	2021-08-24	2021-09-27	Charles Priddle
A/21/O/78	7964 *REVISED #2*	1051 Pearson Drive	**REVISED** Reconstruction and expansion of a residence, including driveway, accessory decking and associated landscaping, within 7.5m of a flood hazard (Spill) associated with the Morrison Wedgewood Diversion Channel.	2021-09-24	2021-09-27	Charles Priddle
A/21/O/84	7965	187 Front Street	Reconstruction of a single-family dwelling with an in-ground pool, landscaping, driveway, walkways, and site services within the erosion hazard limit associated with Lake Ontario.	2021-09-07	2021-09-27	Colleen Bain
A/21/O/05	7967	155 Leighland Avenue	Construction of a two-storey dwelling, an in-ground pool, landscaping and decking, as well as grading and filling within the flood hazard (spill) associated with the Morrison-Wedgewood Diversion Channel.	2021-09-14	2021-09-27	Charles Priddle
A/21/O/85	7970	2-300 Ravineview Way	Construction of a deck within 7.5m of the erosion hazard associated with the valley of Morrison Creek.	2021-09-14	2021-09-29	Megan Winiecki
A/21/O/08	7759 **REVISED**	1483 Pembroke Drive	**REVISED** Construction of a new two-storey dwelling, attached covered porch, patio and infinity pool within 7.5m of Stable Top of Bank associated with Munn's Creek	2021-09-29	2021-09-29	Megan Winiecki
A/21/O/39	7805 **REVISED**	2477 Whistling Springs Crescent	**REVISED** - Construction of an inground pool and deck within 7.5m of the valley associated with Fourteen Mile Creek.	2021-09-30	2021-09-30	Megan Winiecki
A/21/O/67	Letter of Permission	3448 Ninth Line	Installation of natural gas pipeline between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2021-06-30	2021-07-07	Megan Winiecki
Puslinch						
A/21/P/03	Letter of Permission	7742 Leslie Road West (severed from 4099 Watson Rd)	Dwelling with driveway, septic system, and associated landscaping between 30 meters and 120 metres of a Provincially Significant Wetland (PSW).	2021-07-28	2021-07-29	Charles Priddle
A/21/P/04	Letter of Permission	0 Watson Road South (north of 4116)	Proposed dwelling with driveway, septic system, and associated landscaping between 30 meters and 120 metres of a Provincially Significant Wetland (PSW).	2021-09-22	2021-09-23	Charles Priddle

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 05

FROM: Marnie Piggot, Director Finance

DATE: November 25, 2021

SUBJECT: Budget Variance Report for the Period Ended September 30, 2021, and December 31, 2021 Projected Year-End Amounts

Recommendation

THAT the Conservation Halton Board of Directors **receives for information the staff report dated November 25, 2021 on the Budget Variance Report for the period ended September 30, 2021 and December 31, 2021 Projected Year End Amounts.**

Executive Summary

An operating surplus of \$725,318 is projected in the attached Budget Variance Report Financial (Appendix B) for the December 31, 2021, year-end. This amount is a favourable change compared to the projected deficit of (\$197,578) presented in the previous report based on July 31, 2021 results. Projected year end amounts continue to be based on conservative estimates by staff for the remainder of the year.

The surplus of \$725,318 summarized in the table below, consists of a projected surplus of \$753,100 in the Watershed Management and Support Services (WMSS) programs and a slight deficit of (\$27,782) projected for the Conservation Areas. Park operations have been impacted by COVID-19 more significantly than WMSS programs that are able continue to provide services remotely.

The primary drivers related to the WMSS favourable surplus are additional planning and regulation revenues due to increased applications in-year, offset by increased legal fee expenses, combined with expense savings primarily in Corporate Services and Operations departments.

The Conservation Areas variance can be attributed to a shortened Glen Eden operating season in early 2021 due to a provincial shutdown order and lower program revenue with COVID-19 restrictions. These reduced revenues were partially mitigated by park fee increases implemented in June and decreased expenses.

Program	Actual Sept 30, 2021	Projected Dec 31, 2021	Budget Dec 31, 2021	Projected Budget Variance	Actual Dec 31, 2020
<i>Watershed Management & Support Services (WMSS)</i>					
Revenue	14,973,337	19,638,740	18,069,470	1,569,270	15,398,620
Expenses	12,643,728	18,885,640	18,069,470	816,170	14,267,614
Operating surplus	2,329,609	753,100	-	753,100	1,131,006
<i>Conservation Areas</i>					
Revenue	8,318,387	10,369,314	13,843,514	(3,474,200)	11,816,692
Expenses	8,030,513	10,397,097	13,592,230	(3,195,133)	10,744,663
Operating surplus (deficit)	287,875	(27,782)	251,284	(279,066)	1,072,029
Total Operating surplus	\$2,617,483	\$725,318	\$251,284	\$474,034	\$2,203,035

Additional appendices provided with this report include:

- Capital Project Summary Financial Appendix (Appendix C) and,
- Reserve Continuity schedule with reserve balances projected to the end of year (Appendix D).

Report

Operating Program

The Budget Variance Report Financial (Appendix B) provides explanations for variances that are projected to be greater than 10% and exceed \$10,000 from the December 31, 2021, budget amounts.

Canadian Emergency Wage Subsidy (CEWS) claims received in 2021 continue to be excluded from operating results until Conservation Halton staff confirm eligibility requirements with more certainty. Canada Revenue has denied several claims for other conservation authorities, generally based on board governance, with one claim currently being appealed. This conservative accounting practice was reviewed with KPMG, Conservation Halton's auditors.

Watershed Management & Support Services

Total WMSS revenue is projected to exceed the budget target by approximately \$1.57M. Significant variances of note contributing to the overall revenue increase include:

WMSS Revenue	Actual Sept 30, 2021	Projected Dec 31, 2021	Budget Dec 31, 2021	Projected Budget Variance
WMSS Various Departments				
Internal Chargeback Recoveries - WMSS to Parks decrease for staff changes	1,044,891	1,221,800	1,393,200	(171,400)
Corporate Compliance				
Estate donation	820,487	820,487	-	820,487
Planning & Watershed Management				
Planning and Regulations fees increase	2,978,953	3,494,566	2,380,000	1,114,566
Partnership Projects				
Estimated decrease in project funding fully offset by decreased expenses	655,431	1,534,131	1,903,647	(369,516)
Various other increases				175,133
Total WMSS Revenue Projected Variance over Budget				\$ 1,569,270

Projected WMSS expenses exceed the budget by \$816,170 and include the following:

WMSS Expenses	Actual Sept 30, 2021	Projected Dec 31, 2021	Budget Dec 31, 2021	Projected Budget Variance
WMSS Various Departments				
Staff salaries & benefits decrease - staff changes and vacancies	9,082,937	12,321,306	12,491,385	(170,079)
Corporate Compliance				
Insurance premiums increase	85,478	129,388	100,000	29,388
Transfer to Property Management Reserve - Estate donation	820,487	820,487	-	820,487
Planning & Watershed Management				
Legal fees increase	674,355	1,024,355	375,000	649,355
Partnership Projects				
Estimated decrease in project expenses fully offset by decreased funding	655,431	1,534,131	1,903,647	(369,516)
Various other increases (decreases)				(143,465)
Total WMSS Expenses Projected Variance over Budget				\$ 816,170

Conservation Areas

The Park Operating Summary chart below provides further details on the significant projected revenue and expense variances.

Parks Operating Summary	Actual Sep 30, 2021	Projected Dec 31, 2021	Budget Dec 31, 2021	Projected Budget Variance	Actual Dec 31, 2020
Revenue					
Ski	2,219,104	2,637,104	6,649,000	(4,011,896)	6,332,520
Entry fees	2,743,765	3,493,765	1,819,000	1,674,765	3,110,821
Program & other	1,718,175	2,474,415	4,150,235	(1,675,820)	1,178,933
Annual park memberships	1,370,880	1,405,880	870,000	535,880	841,027
Municipal funding - Education & Outreach	266,463	358,150	355,279	2,871	353,393
Total Revenue	8,318,387	10,369,314	13,843,514	(3,474,200)	11,816,693
Expenses					
Staff salaries & benefits - full time	1,957,938	2,655,351	3,221,645	(566,293)	2,594,176
Staff salaries & benefits - part time	2,354,749	3,048,283	3,453,440	(405,157)	3,217,503
Materials & supplies and Purchased services	2,672,935	3,471,662	5,523,945	(2,052,283)	4,006,085
Internal Chargeback - WMSS Support Services	1,044,891	1,221,800	1,393,200	(171,400)	926,900
Total Expenses	8,030,513	10,397,097	13,592,230	(3,195,133)	10,744,663
Parks Operating surplus (deficit)	\$287,875	(\$27,782)	\$ 251,284	(\$279,066)	\$ 1,072,029

Park revenues are projected to be lower than the budget amount by \$3.47 million overall. The shortfall is primarily related to the closure of Kelso Glen Eden ski programs to mid-February 2020 due to the provincial shutdown order, as well as the inability to provide park programs such as Education and Maple Town / Sugarbush Season as a result of the pandemic. Park expenses continue to include the Internal Chargeback from Support Service programs projected at \$1.22M. Staff and other Park operating expenses have been reduced, where possible, to mitigate the revenue shortfall.

Glen Eden program revenues are estimated to fall short of the budget by almost \$4.01 million due to an approximate 30-day season compared to an average 90-day season and the cancellation of group ski lesson programs. The majority of Glen Eden passholders were provided with a refund or deferred their season pass until the following 2021-2022 season. Projected Park revenue for the remainder of 2021 includes a portion of estimated Glen Eden pass, lesson, lift and other ski program revenue assuming a late December opening consistent with an average season.

Park annual membership and entry fee increases approved by the Board in February were implemented in mid-June in line with the phased provincial reopening plan. Park pass sales and entry fees continue to be strong after the fee increase. Ways of the Woods summer camp program revenue were close to the budget target amount.

Park projected revenues and expenses will continue to be closely monitored for the rest of the year as the uncertainty of COVID-19 still exists.

Capital Program

The Capital Project Summary Financial (Appendix C) attached includes current capital projects, the respective approved project budget, life to date costs and the budget remaining to be spent. As of September 30, 2021 life to date capital expenses are \$4,616,231, or 42% of the total capital budget.

New capital projects added during 2021 to the budget include:

- Flood Plain Mapping Update project for East Burlington with project staff resources and consultant in place. National Disaster Mitigation Program funding was approved in June for up to \$475,000 in addition to matching municipal funding.
- The Enhancing Trail Systems and Park Infrastructure capital project was added for the construction of new park trails and a shade pavilion with a budget of \$1,041,500 and fully funded by a grant.

Dams and channels capital projects are funded 50% provincially (WECI) and 50% funded municipally through the Water Management Capital Reserve. WECI funding was approved for \$501,200 in June for the capital projects as noted on the Capital Project Financial (Appendix C). Projects closed for the most part have been moved out to a later year in the 2022 budget and forecast.

The Hilton Falls Dam diversion structure upgrade construction is estimated to exceed the \$609,000 budget amount by \$31,000. The cost increase is related to unanticipated site conditions that required additional excavation and backfill at the site. The increased cost is expected to be offset by savings in another dams and channel capital project.

A successful Conservation Halton Foundation (Foundation) Gala event raised funds for the Foundation and close to \$50,000 allocated to the Kelso Quarry Park / Area 8. These funds will further support infrastructure improvements at this new park.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

The report Recommendation outlines the financial impacts of the Budget Variance Report for the period ended September 30, 2021, and the December 31, 2021, projected year end amounts.

Signed & respectfully submitted:



Marnie Piggot
Director, Finance

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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Conservation Halton
Budget Variance Report Financial - Appendix B

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS)						
CORPORATE SERVICES						
<u>Expenditures</u>						
Salaries and Benefits	1	2,198,914	3,008,449	3,515,016	(506,567)	(14.4%)
Total Materials & Supplies and Purchased Services	2	700,980	1,009,530	917,528	92,002	10.0%
Debt Financing Charges		37,000	619,245	619,245	-	0.0%
Transfer to Reserves - State of Good Repair Levy		-	503,500	503,500	-	0.0%
Total Expenditures		2,936,894	5,140,724	5,555,289	(414,565)	(7.5%)
<u>Revenue</u>						
Program & Other Revenue	3	4,817,285	206,056	109,000	97,056	89.0%
Municipal Funding		7,363,944	9,815,729	9,818,600	(2,871)	(0.0%)
Internal Chargeback Recoveries	1	691,879	763,949	922,149	(158,200)	(17.2%)
Reserve Funding	2	-	27,000	10,000	17,000	170.0%
Total Revenues		12,873,108	10,812,734	10,859,749	(47,015)	(0.4%)
TOTAL CORPORATE SERVICES		9,936,214	5,672,010	5,304,460	367,550	6.9%

Notes:

- Salaries and benefits will be lower than the budget amount due to staff vacancies in Corporate Service departments. The staff recovery internal chargeback to the Conservation Areas will be reduced as a result of the staffing changes.
- Materials & Purchased Services are projected to be higher than the 2021 budget amount by \$92,002 for costs not included in the budget such as for the financial review of Covid relief funding claims and COO costs offset by salary savings. Additional Digital Transformation expenses were incurred for Innovation Hub projects that are fully offset by program revenue derived through associated agreements. Also included in this category are staff professional development program costs of \$27,000 from the 2020 budget and approved to be funded by a transfer from the WMSS Stabilization Reserve.
- Program & Other Revenue increase of \$97,056 is primarily related to revenue not included in the 2021 budget for 1) staff employment grants of \$30,000; 2) additional recovery of \$15,000 from the Conservation Halton Foundation for staff time spent on Foundation programs and 3) Innovation Hub project revenue of \$50,963.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
CORPORATE COMPLIANCE						
<u>Expenditures</u>						
Salaries and Benefits		390,973	535,092	570,777	(35,685)	(6.3%)
Total Materials & Supplies and Purchased Services	4	161,943	230,653	204,000	26,653	13.1%
Transfer to Reserves - Property Management	5	820,487	820,487	-	820,487	0.0%
Total Expenditures		1,373,403	1,586,232	774,777	811,455	104.7%
<u>Revenue</u>						
Program & Other Revenue	5	834,968	834,968	-	834,968	0.0%
Internal Chargeback Recoveries		140,778	174,900	187,700	(12,800)	(6.8%)
Total Revenues		975,746	1,009,868	187,700	822,168	438.0%
TOTAL CORPORATE COMPLIANCE		(397,657)	(576,364)	(587,077)	10,713	(1.8%)

Notes:

4. Insurance costs are projected to exceed the budget amount by approximately \$30,000 as a result of COVID impacts on 2021 insurance premiums.

5. A donation of \$820,487 was received from an estate settlement and property sale that Conservation Halton was named as a beneficiary in. These additional funds not included in the budget were approved to be transferred to the Property Management Reserve.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
FLOOD FORECASTING & OPERATIONS						
<u>Expenditures</u>						
Salaries and Benefits	6	310,348	424,513	363,284	61,229	16.9%
Total Materials & Supplies and Purchased Services		67,535	118,735	145,000	(26,265)	(18.1%)
Total Expenditures		377,883	543,248	508,284	34,964	6.9%
<u>Revenue</u>						
Program & Other Revenue		-	7,750	-	7,750	0.0%
Provincial Funding		155,034	155,034	155,034	-	0.0%
Internal Chargeback Recoveries	7	22,675	24,675	30,950	(6,275)	(20.3%)
Total Revenues		177,709	187,459	185,984	1,475	0.8%
TOTAL FLOOD FORECASTING & OPERATIONS		(200,174)	(355,789)	(322,300)	(33,489)	10.4%

Notes:

6. Salaries and benefits are projected to exceed the budget primarily due to a new staff position not included in the budget with the additional cost offset by savings in other expenses.

7. The staff internal chargeback recovery to capital projects is anticipated to be less than the budget amount in this department based on approved WECI funded capital project work.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PLANNING & WATERSHED MANAGEMENT						
<u>Expenditures</u>						
Salaries and Benefits		3,386,844	4,570,079	4,426,754	143,325	3.2%
Total Materials & Supplies and Purchased Services	8	701,877	1,089,165	466,914	622,251	133.3%
Total Expenditures		4,088,721	5,659,245	4,893,668	765,577	15.6%
<u>Revenue</u>						
Program & Other Revenue	9	2,979,173	3,494,786	2,383,000	1,111,786	46.7%
Provincial Funding		185,603	253,212	273,464	(20,252)	(7.4%)
Other Municipal Funding		336,904	439,683	507,533	(67,850)	(13.4%)
Internal Chargeback Recoveries		35,338	37,440	37,440	-	0.0%
Total Revenues		3,537,017	4,225,120	3,201,437	1,023,683	32.0%
TOTAL PLANNING & WATERSHED MANAGEMENT		(551,704)	(1,434,125)	(1,692,231)	258,106	(15.3%)

Notes:

8. Purchased Services include legal expenses projected to exceed the budget by \$652,000 related to Planning & Regulations matters, Ontario Land Tribunal and other cases.
9. Planning and regulation revenues are anticipated to exceed the budget amount by \$1,115,000 as a result of increased applications.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
SCIENCE & PARTNERSHIPS (S & P)						
<u>Expenditures</u>						
Salaries and Benefits		1,093,528	1,490,606	1,391,075	99,531	7.2%
Total Materials & Supplies and Purchased Services		71,939	132,951	159,257	(26,306)	(16.5%)
Total Expenditures	10	1,165,467	1,623,556	1,550,332	73,224	4.7%
<u>Revenue</u>						
Program & Other Revenue		55,284	123,160	135,426	(12,266)	(9.1%)
Provincial Grant Funding		44,876	64,876	65,000	(124)	(0.2%)
Other Municipal Funding		58,822	110,210	117,704	(7,494)	(6.4%)
Federal Funding		142,888	166,638	163,750	2,888	1.8%
Internal Chargeback Recoveries	10	136,049	257,001	148,720	108,281	72.8%
Reserve Funding		-	5,000	17,500	(12,500)	(71.4%)
Total Revenues		437,919	726,885	648,100	78,785	12.2%
TOTAL SCIENCE & PARTNERSHIPS		(727,548)	(896,672)	(902,232)	5,561	(0.6%)

Notes:

10. Increased staffing costs are offset by savings in other expenses and other funding including Internal Chargeback Recoveries from Partnership Projects. These recoveries will be higher than the budget amount based on confirmed project funding and costs.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PROJECT MANAGEMENT OFFICE						
<u>Expenditures</u>						
Salaries and Benefits		828,019	1,112,793	1,036,531	76,262	7.4%
Total Materials & Supplies and Purchased Services	11	104,735	172,397	223,465	(51,068)	(22.9%)
Transfer to Reserves		-	-	-	-	0.0%
Total Expenditures		932,755	1,285,191	1,259,996	25,194	2.0%
<u>Revenue</u>						
Program & Other Revenue	11	71,430	122,262	102,318	19,944	19.5%
Internal Chargeback Recoveries		242,732	369,425	380,835	(11,410)	(3.0%)
Total Revenues		314,162	491,688	483,153	8,535	1.8%
TOTAL PROJECT MANAGEMENT OFFICE		(618,592)	(793,503)	(776,843)	(16,659)	2.1%

Notes:

11. Restoration project materials and purchased services are anticipated to be less than the budget with the allocation of costs to projects funded by other grants. Program revenue includes Restoration administration cost recoveries not included in the budget that are funded through partnership project grants.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
OPERATIONS						
<u>Expenditures</u>						
Salaries and Benefits		874,311	1,179,774	1,187,947	(8,173)	(0.7%)
Chargeback - Parks staff support		47,466	59,612	63,290	(3,678)	(5.8%)
Total Materials & Supplies and Purchased Services	12	191,427	273,927	372,239	(98,312)	(26.4%)
Total Expenditures		1,113,203	1,513,312	1,623,476	(110,164)	(6.8%)
<u>Revenue</u>						
Program & Other Revenue	13	208,357	228,559	136,000	92,559	68.1%
Provincial Grants		93,750	125,000	125,000	-	0.0%
Other Municipal Funding		41,257	41,257	42,000	(743)	(1.8%)
Internal Chargeback Recoveries		200,811	256,039	296,700	(40,661)	(13.7%)
Total Revenues		544,175	650,855	599,700	51,155	8.5%
TOTAL OPERATIONS		(569,029)	(862,458)	(1,023,776)	161,318	(15.8%)

Notes:

12. Property Management and Forestry departments materials and purchased services are projected to be less than the budget by approximately \$98,000 as a result of work on partnership projects funded by other grants and reduced discretionary maintenance costs.
13. Increased Forest Management program revenue was received for planting projects that were completed primarily by staff.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PARTNERSHIP PROJECTS - SCIENCE & PARTNERSHIPS AND PROJECT MANAGEMENT OFFICE						
<u>Expenditures</u>						
Staff support		310,281	571,546	457,433	114,113	24.9%
Total Materials & Supplies and Purchased Services		345,120	962,585	1,446,214	(483,629)	(33.4%)
Total Expenditures	14	655,401	1,534,131	1,903,647	(369,516)	(19.4%)
<u>Revenue</u>						
Program Revenue		433,426	698,666	1,172,298	(473,632)	(40.4%)
Provincial Grants		87,714	468,700	623,015	(154,315)	(24.8%)
Other Municipal Funding		-	-	-	-	0.0%
Federal Funding		134,290	366,765	108,334	258,431	238.6%
Total Revenues	14	655,431	1,534,131	1,903,647	(369,516)	(19.4%)
		30	(0)	-	(0)	0.0%
Notes:						
14. Partnership project costs are fully funded by related project grants and other funding. Reduced Partnership Projects costs and funding are estimated based on confirmed project work.						
TOTAL WMSS REVENUE		19,515,268	19,638,740	18,069,470	1,569,270	8.7%
TOTAL WMSS EXPENDITURES		12,643,728	18,885,640	18,069,470	816,170	4.5%
TOTAL		6,871,540	753,100	0	753,100	

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD SEP 30, 2021	2021 PROJECTED	2021 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
CONSERVATION AREAS						
<u>Expenditures</u>						
Salaries and Benefits		4,811,033	6,181,839	8,104,208	(1,922,369)	(23.7%)
Total Materials & Supplies and Purchased Services		2,174,588	2,993,457	4,094,822	(1,101,365)	(26.9%)
Internal Chargeback - WMSS Support Services to Parks		1,044,891	1,221,800	1,393,200	(171,400)	(12.3%)
Total Expenditures	15	8,030,513	10,397,097	13,592,230	(3,195,133)	(23.5%)
<u>Revenue</u>						
Program Revenue		11,015,910	9,832,935	13,301,330	(3,468,395)	(26.1%)
Other Revenue		5,709	60,709	65,000	(4,291)	(6.6%)
Municipal Funding		93,537	408,150	405,279	2,871	0.7%
Reserve Funding (Outreach)		-	-	8,615	(8,615)	(100.0%)
Internal Chargeback Recovery - Parks to WMSS		47,466	67,520	63,290	4,230	6.7%
Total Revenues	15	11,162,622	10,369,314	13,843,514	(3,474,200)	(25.1%)
TOTAL - TRANSFER TO (FROM) CONSERVATION AREA RESERVES		3,132,110	(27,782)	251,284	(279,066)	(111.1%)

Notes:

15. Park program costs and revenue will be significantly lower the 2021 budget amounts with the closure of Kelso Glen Eden ski programs until mid February during the provincial shutdown order as well as continued COVID impacts on park programs. Glen Eden revenues are estimated to be lower than the 2021 budget by almost \$4 million with the reduced operating season and cancellation of group ski lesson programs. Glen Eden passholders were provided with a refund or deferral of their pass until the 2021-2022 season. Glen Eden revenue includes a conservative estimate for the anticipated December 2021 ski season start. Other park programs including Education and Maple Town revenue will also be significantly lower than the budget amount by \$1.7 million. The reduced Glen Eden and other program revenue is partially offset by increased Entry fees of \$1.67 million and increased annual membership revenue of \$535,000. Revenue and expenses are being closely monitored and further mitigated through reductions in staffing and other discretionary program expenses.

Appendix C

CONSERVATION HALTON
CAPITAL PROJECT SUMMARY FINANCIAL APPENDIX
AS AT SEPTEMBER 30 2021

Capital Project Description	Budget - Prior Years ** Carryover	2021 Budget	Budget Increase (Decrease)	Total Capital Budget	Prior Years Capital Costs	2021 Capital Costs	Life to Date Capital Costs	Budget Unspent	Project to be Closed	Capital Project Funding
Watershed Management & Support Services (WMSS)										
Milton Channel Main & Millside Slab Repair	\$255,927			255,927	\$0	30,104	30,104	225,823		50% MNRF; 50% Reserve
Kelso Dam Lift Gates and Hoists Refurbishment - West Gate	\$120,000		173,000	293,000	\$17,031	29,831	46,862	246,138		50% MNRF; 50% Reserve
Hilton Falls Dam Diversion Structure Upgrade Construction Phase 2	\$0	740,000	(131,000)	609,000	\$0	430,655	430,655	178,345		50% MNRF; 50% Reserve
Hilton Falls Dam Construction Phase 1 (2020)	\$220,000			220,000	\$168,360	26,251	194,611	25,389	CLOSED	50% MNRF; 50% Reserve
Hilton Falls Dam Safety Repairs & Electrical Upgrades	\$150,000			150,000	\$46,491	108,827	155,318	(5,318)	CLOSED	50% MNRF; 50% Reserve
Morrison Wedgewood Channel Spill Study	\$100,000			100,000	\$78,057	51,092	129,149	(29,149)	CLOSED	50% MNRF; 50% Debt Financing
Scotch Block Dam Safety Repairs	\$300,000			300,000	\$72,142	191,062	263,204	36,796	CLOSED	50% MNRF; 50% Debt Financing
Kelso Dam Safety Repairs	\$110,000			110,000	\$55,069	44,714	99,784	10,217	CLOSED	50% MNRF; 50% Reserve
Channel Replacement Study	\$50,000			50,000	\$16,052	33,862	49,914	86	CLOSED	50% MNRF; 50% Reserve
Hilton Falls 96" sluice gate	\$0	15,000	(15,000)	-	\$0		-	-	CLOSED	50% MNRF; 50% Reserve
Freeman Pond Maintenance	\$0	135,000	(135,000)	-	\$0		-	-	CLOSED	50% debt financing; 50% reserves
Mountsberg Dam Safety Review	\$0	90,000	(90,000)	-	\$0		-	-	CLOSED	50% MNRF; 50% Reserve
Mountsberg Dam 4' sluice gate	\$0	65,000	(65,000)	-	\$0		-	-	CLOSED	50% MNRF; 50% Reserve
Hager-Rambo triple pond sediment removal	\$0	105,000	(105,000)	-	\$0		-	-	CLOSED	50% MNRF; 50% Reserve
Morrison Wedgewood Channel Spill Design	\$0	53,000	(53,000)	-	\$0		-	-	CLOSED	50% MNRF; 50% Debt Financing
Emerald Ash Borer **	\$9,889	820,000		829,889	\$0	585,845	585,845	244,044		Municipal - EAB; Lumber sales
Forest Management - Gypsy Moth**	\$13,000		65,000	78,000	\$0	60,473	60,473	17,527		Municipal; Reserve
Flood Forecasting & Warning **	\$81,525	70,000		151,525	\$0	11,933	11,933	139,592		Municipal
Floodplain Mapping - 2019 (Urban Milton; Morrison-Wedgewood)	\$466,626			466,626	\$464,179	5,459	469,638	(3,012)		50% Federal NDMP; 50% Municipal
Floodplain Mapping - 2020	\$330,000			330,000	\$0	68,969	68,969	261,031		Other Municipal Halton Region
Floodplain Mapping - 2021 (East Burlington)	\$0	500,000		500,000	\$0	144,799	144,799	355,201		50% Halton Region; 50% NDMP
Watershed Planning	\$0	25,000		25,000	\$0		-	25,000		Municipal
Watershed Database Management System	\$75,000			75,000	\$31,731		31,731	43,269		Municipal
WMSS Facility & Admin. Office Renovations - non SOGR	\$279,000	500,000		779,000	\$159,333	13,123	172,456	606,544		Reserve - Building
WMSS Facility & Admin. Office - State of Good Repair (SOGR)	\$102,000	70,136		172,136	\$54,282	4,038	58,320	113,816		Reserve - Building SOGR
Operations Centre Study and Design	\$100,000			100,000	\$0		-	100,000		Reserves
Information Technology - WMSS **	\$49,078	122,000		171,078	\$0	84,334	84,334	86,744		Municipal
Digital Transformation - WMSS **	\$201,047			201,047	\$0		-	201,047		Municipal
Financial system upgrades	\$75,000			75,000	\$0		-	75,000		Municipal
Website Upgrade	\$100,000			100,000	\$0	44,768	44,768	55,232		Municipal; Reserves
Payroll System Upgrade - Phase 2 (Phase 1 Completed)	\$89,500			89,500	\$69,736		69,736	19,764		Municipal; Reserves
GIS Imagery Data Acquisition (Lidar; Ortho)	\$100,000	15,000		115,000	\$10,446		10,446	104,554		Municipal
Vehicle and Equipment Replacements - WMSS	\$0	167,562		167,562	\$0	44,852	44,852	122,710		Reserve; Vehicle Sales
Land Securement	\$0			-	\$0	(2,302)	(2,302)	2,302		Land transfer proceeds; Reserve
Giant's Rib Geopark	\$200,000			200,000	\$0		-	200,000		Other funding
Property Management (prev. Clappison & Waterdown Woods)	\$25,000	25,000		50,000	\$0		-	50,000		Municipal
Speyside Weir Removal	\$32,000	144,000		176,000	\$0		-	176,000		Reserve
Conservation Areas Facility & Infrastructure:										
Kelso/Glen Eden - Water/Wastewater Servicing	\$704,035			704,035	\$627,593		627,593	76,442		Reserve; Dev. Contribution funds
Kelso & Crawford Lake Visitor Centres (Dev. Contr'n Projects)	\$625,000			625,000	\$162,521		162,521	462,479		Dev. Contribution funds
Kelso/Glen Eden - Ski/Snowboarding Capital Expenditures	\$0	500,000		500,000	\$0	257,212	257,212	242,788		Reserve
Facility and Infrastructure Major Maintenance **	\$82,288	420,000		502,288	\$0	85,047	85,047	417,241		Reserve
Enhancing Trail Systems and Park Infrastructure	\$0		1,041,500	1,041,500	\$0	-	-	1,041,500		Grant
Foundation Funded Capital Projects	\$0	100,000		100,000	\$0		-	100,000		CH Foundation
Information Technology Infrastructure - Conservation Areas **	\$128,000	75,000		203,000	\$0	21,197	21,197	181,803		Reserve
PCI Compliance	\$235,000			235,000	\$175,007		175,007	59,993		Reserve 95%; Municipal 5%
Vehicle and Equipment replacements - Conservation Areas	\$0	148,412		148,412	\$0	32,056	32,056	116,356		Reserve; Vehicle Sales
Total Capital Projects	\$5,408,915	\$4,905,110	\$685,500	\$10,999,525	\$2,208,029	\$2,408,202	\$4,616,231	\$6,383,294		

CONSERVATION HALTON
Reserve Continuity
September 30, 2021

Name of Reserve	Reserve Balances Jan.1, 2021	2021 Budget & Previously Approved Reserve Transfers	Projected Reserve Balances Dec. 31, 2021
Watershed Management & Support Services			
Vehicle and equipment	723,967	(167,562)	556,405
Building - State of Good Repair	315,611	(117,854) 102,000	299,757
Building	373,137	(219,667)	153,470
Watershed Management Capital - Municipal Funds	783,983	(601,500) 376,500	558,983
Watershed Management Capital - Self Generated Funds	416,909		416,909
Watershed Management & Support Services Stabilization	1,789,212		1,789,212
Debt Financing Charges	425,564		425,564
Digital Transformation	254,900		254,900
Legal - Planning & Watershed Management	258,891		258,891
Legal - Corporate	200,000		200,000
Water Festival	188,911	(18,615)	170,296
Land Securement	60,437	25,000	85,437
Property Management	145,629	820,487 (47,473)	918,643
Stewardship and restoration	420,511	(161,500)	259,011
Conservation Areas			
Capital	3,294,219	(1,143,412) 251,284	2,402,091
Revenue Stabilization	1,000,568		1,000,568
Total Reserves	\$10,652,449	\$ (902,312)	\$ 9,750,137

TO: Conservation Halton Board of Directors

MEMO NO: # CHBD 08 21 19

FROM: Hassaan Basit, President & CEO/Secretary-Treasurer

DATE: November 25, 2021

SUBJECT: Momentum Progress Report: April – November 2021

MEMO

Conservation Halton's strategic plan, Momentum, was approved by the Board of Directors in April 2021. In order to ensure accountability to the Board and the public, staff will prepare updates on the progress achieved towards each of the strategic objectives through a mid-year Board of Directors report and an annual report.

The first progress report (Appendix N) on our new strategic plan will provide status updates for Strategic Objective Key Performance Indicators as of November 2021 through a dashboard and scorecard overview.

We will use the following schedule for future Momentum performance and progress related reporting:

Date	Report
September 2021-2024	Board of Directors Progress Report
April 2022-2024	CH Annual Report

Impact on Strategic Priorities

This report supports the Momentum commitment to a transparent performance measurement and reporting process, where we will monitor and share our progress towards achieving our strategic objectives

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Hassaan Basit
President & CEO/Secretary-Treasurer

momentum

OUR STRATEGIC DIRECTION:

OUR PURPOSE

Protect our communities from natural hazards, conserve our watershed, support partners in sustainable development and provide opportunities for outdoor recreation and education.

OUR AMBITION

A green, resilient, connected tomorrow.

GUIDES OUR PRIORITIES:

DELIVER VALUE

THROUGH BUSINESS EXCELLENCE



EDUCATION,
EMPOWERMENT
& ENGAGEMENT



NATURE
& PARKS



SCIENCE,
CONSERVATION
& RESTORATION



NATURAL
HAZARDS &
WATER



DIGITAL
TRANSFORMATION
& INNOVATION



ORGANIZATIONAL
SUSTAINABILITY



PEOPLE
& TALENT

TO ACHIEVE OUTCOMES:

HEALTHY WATERSHED

RESILIENT ECOSYSTEMS

ENGAGED COMMUNITIES



Priority	Strategic Objectives
Protect people, property, drinking water sources and natural resources to support development that is in balance with the environment	<ul style="list-style-type: none"> • Optimize dam safety, operations, and flood forecasting within a sustainable funding model • Lead the Halton-Hamilton source water protection program through a comprehensive review and update of drinking water science and source protection plan policies • Modernize Planning and Regulations policies and mapping and adopt a sustainable program delivery model • Lead in delivering planning and permitting customer service and experience excellence • Foster partnerships and identify opportunities to build mutual understanding, trust, respect, and support with watershed stakeholders

Progress Summary
<p>The indicators related to flood forecasting are making progress or have met their target. The action items under this objective either completed or expected to be completed on time/on budget by end of the calendar year.</p> <p>The source protection KPIs are making progress or have met their targets despite some challenges early in the year related to staff transitions, documentation and data maintenance. The 2021 action items under this area are on track to be completed by end of calendar year.</p> <p>Planning and Regulations indicators include key service delivery targets for planning and permitting reviews, as well as targets relating to modernizing CHs policies and mapping and fostering partnerships. Permit and RIT targets are met or exceeded. The planning target for complex technical reviews is below target due to increases in the volume and complexity of files and condensed municipal review timelines. To mitigate risks and improve this target, discussions with senior municipal staff will occur. Policy and mapping related targets are making progress and on track for 2021, as are partnership targets.</p>



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Lead the Halton-Hamilton source water protection program through a comprehensive review and update of drinking water science and source protection plan policies	% of municipal drinking water systems/wells/intakes protected	100%			50%		
	% of required MECP reportables assessed and submitted in an annual progress report	100%			100%		
	% of sector engagement supported and undertaken as funded	100%			100%		
Foster partnerships and identify opportunities to build mutual understanding, trust, respect and support with watershed stakeholders	Engagement satisfaction rate from partners	80-90%			NA		Partner satisfaction survey to be launched in 2022
	% completed and implemented of the P&WM engagement strategy	100%/2024			32%		
	# of public engagement/input opportunities provided for CH policy and planning initiatives	3-5/year			4		
	# of new/renewed MOU/agreements for services	1-2/year			1		
	# of committees/groups in which CH takes a leadership role*	30-40/year			32		*Defined as: 1) Minimum two meetings/year 2) Related to Natural Hazards and/or Water 3) CH staff takes leadership role and/or has substantial influence in the outcome/deliverables of the group
Modernize Planning and Regulations policies and mapping and adopt a sustainable program delivery model	% of jurisdiction with updated wetland mapping	100%/2024			50%		
	% of jurisdiction with updated floodplain mapping	50%/2024			15%		
	% of jurisdiction with updated confined valley mapping	100%/2024			NA		To be initiated in 2022
	% complete of CH's Regulatory and Land Use policies reviewed and updated	100%/2024			15%		

 No Progress/ No Data

 Making Progress

 Target Met



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Optimize dam safety, operations, and flood forecasting within a sustainable funding model	% of CH jurisdiction covered by real-time hydrometric monitoring stations	70-80%/2024			62%		
	# of additional watersheds integrated into real-time flood forecasting & warning system	4-8/2024			1		
	% of identified safety, maintenance, inspection and repair concerns addressed within assigned response time	90%			90%		
	% of capital funding from external grant programs	40%			45%		
	% of major capital repair projects for dam and channel within scope, budget and on schedule	75%			89%		
Lead in delivering planning and permitting customer service and experience excellence	% of minor permit applications processed within 30 days	95%			91%		
	% of major permit applications processed within 90 days	95%			98%		
	% of regulatory technical reviews for permit applications reviewed within six weeks	95%			99%		
	% of violations resolved through voluntary compliance process	75-85%			NA		New KPI to be tracked in 2022
	% of minor RIT permit applications processed within 30 days	95%			NA		No minor permits received in Q3
	% of major RIT permit applications processed within 90 days	95%			100%		
	% of RIT technical reviews completed within six weeks (e.g., EAs)	95%			100%		
	% of planning & development files reviewed by municipal / NEC deadline (no technical review)	95%			85%		
	% of planning technical reviews completed within six weeks (standard technical review)	75-85%			75%		
	% of planning technical reviews completed by municipal deadline (complex technical review)	75-85%			67%		Volume/complexity of files and condensed municipal review timelines increased; discussions with municipal staff to occur to mitigate risks
	% of planning technical reviews completed by municipal deadline (municipal files; complex technical & plan review)	75-85%			100%		



Priority	Strategic Objectives
Inspire action by fostering an appreciation of our environment and heritage through leading edge educational programming and outdoor experiences	<ul style="list-style-type: none"> • Build community awareness and support by demonstrating the value and impact of our programs and services • Broaden our reach by engaging and empowering community allies and advocates through stronger partnerships and collaboration • Develop community informed programming through greater allyship with Indigenous, Black, People of Colour, Racialized, LGBTQ+, and Disability communities • Inspire action and create leaders by empowering, youth, volunteers, landowners and the greater community • Provide learning opportunities and recreation programming of the highest quality by leveraging current research, cross-sector collaboration, and smart technologies

Progress Summary

The 2021 action items under the priority area are progressing as either on track to be completed by end of calendar year or have been completed.

These actions will help to establish a baseline for several of the new indicators that have been developed for the Strategic Objectives under Education, Empowerment and Engagement.

The trends in yellow are representative of the gap in baseline data and/or a delay in data collection until Q4.

The Education, Partnerships and Parks teams are working hard to ensure that a sound data collection infrastructure is in place for this priority area. Metrics and KPI's need to reflect the significant shift in program delivery over the past two years due to the pandemic and a gradual return to in-person activity.



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Build community awareness and support by demonstrating the value and impact of our programs and services	% of guests who would recommend our education and recreation programs	80%			85%		Based on data to date. Additional data collected Q4
	Brand sentiment score across social media platforms	80%			93%		Based on positive and neutral messages
	Combined total impressions across social media platforms	700,000/quarter			764,200		
Broaden our reach by engaging and empowering community allies and advocates through stronger partnerships and collaboration	# of private sector third party and collaborative events hosted	100-110/year			81		
	% of partners that indicate their relationship with CH added value to their operations	80%			NA		New initiative. Data collection in Q4
Develop community informed programming through greater allyship with Indigenous, Black, People of Colour, Racialized, LGBTQ+, and Disability communities	% increase in \$ invested in developing programs and relationships with Indigenous, Black, LGBTQ+ & disability communities	4-5%/year			435%		Using 2018/2019 average as baseline
	% of educational and recreational programming staff who participate in Indigenous led training	85-85%/2024			15%		Began late summer/fall. Will continue through Q4
	% of educational and recreational programming staff who participated in community informed EDI training per year	85-80%/2024			NA		New initiative. To be completed Q4 2021
Inspire action and create leaders by empowering, youth, volunteers, landowners and the greater community	# of landowner conversions	90-105/year			78		Composite of LOR, Forestry, PMO and Community Outreach results
Provide learning opportunities and recreation programming of the highest quality by leveraging current research, cross-sector collaboration, and smart technologies	# of projects with funding secured that support smart tech and digital innovations	2-5/year			2		Green Space funding, From the Ground Up funding and shift to virtual.
	# of participants in virtual and technology enhanced programming	2021 Baseline			10,590		'21 data will inform baseline. '20/'21 represents significant shift due to pandemic. Will taper with return to in-person
	Recreation programming satisfaction score	2021 Baseline			NA		Working to establish baseline by Q4 2021

	No Progress/No Data
	Making Progress
	Target Met

Priority	Strategic Objectives
Grow our network of parks and greenspaces to promote equitable access and provide unique experiences that connect people with nature and heritage	<ul style="list-style-type: none"> • Develop and Implement a marketing and branding playbook to support customer engagement and product development • Expand the CH Park System to provide additional greenspace and opportunities • Implement new tools to enhance customer experience and streamline internal operations • Develop and Implement a new vision for CH Park spaces and infrastructure to ensure optimization of resources

Progress Summary
<p>The indicators for the Nature and Parks Strategic Objectives are trending positively, making progress or having met their annual targets.</p> <p>Efforts are underway to ensure our survey collection processes are streamlined and the information collected can be used to inform our performance.</p> <p>The 2021 actions under Nature and Parks are on track to be completed by end of the calendar year.</p> <p>The teams will be utilizing the 2022 action planning cycle to identify long-term efforts to support attracting new visitor groups to CH parks and implementing brand consistency across all parks.</p>



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Develop and Implement a marketing and branding playbook to support customer engagement and product development	# of new visitor groups to CH parks	6-8/year			9		Halton Black Voices, Grandmothers Voice, Library Membership Program, Nish Dish Guests, Indigenous Sovereignty Event, Muslim Youth Group, Nectar Education, Milton Public Library
	# of parks with brand consistency fully implemented	2/year			0		Will begin work against this KPI in Q1 2022
	% of customers who respond to survey as Satisfied or Greater	85-90%			77%		
Expand the CH Park System to provide additional greenspace and opportunities	# of new parks open to the public	1/year			1		Area 8
	# of properties reviewed and evaluated	4-5/year			2		Initial assessment of Grindstone and Clappison complete. Working towards a detailed trail assessment and plan for visitor use.
Implement new tools to enhance customer experience and streamline internal operations	# of tools implemented that have improved efficiency of operations	2-3/2024			1		Each tool will be evaluated individually. This target is a rolled up representation of evaluations
	% positive survey responses from customers and staff to new tools	85-90%			84%		
Develop and Implement a new vision for CH Park spaces and infrastructure to ensure optimization of resources	# of buildings reviewed and evaluated	4/year			2		Initial review of Kelso and Crawford Lake VC's completed.
	# of open space within parks reviewed and evaluated	2021 Baseline			8		Initial evaluation of all current park spaces complete. Working towards next steps for specific spaces within current parks.





Priority	Strategic Objectives
<p>Use environmental science, collaborative research and collective data to protect the integrity and strengthen the resilience of our ecosystems</p>	<ul style="list-style-type: none"> • Expand monitoring and analytical capabilities to support resource management decisions • Implement restoration activities to help manage natural hazards and improve watershed functions • Undertake and implement watershed plans to identify and prioritize actions that enhance sustainability • Identify and promote climate change approaches for watershed resiliency and lead by example
Progress Summary	
<p>Science, Conservation and Restoration indicators are trending as on track to meet their targets by end of the year or have met their targets for the year.</p> <p>The monitoring portfolio is making progress against efforts to enhance monitoring and analytical capabilities.</p> <p>The climate change and watershed planning has experienced some challenges in time allocation due to competing priorities with source water protection.</p> <p>An area for the 2022 action planning cycle will be to determine how we can move the climate change agenda further.</p>	



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Expand monitoring and analytical capabilities to support resource management decisions	# of resource management projects supported by inventory and monitoring	20-25/year			25		Projects include bat surveys at Crawford Lake to support construction of the new boardwalk
	% complete of the watershed monitoring strategy renewal	100%/2024			22%		
	% of Subwatershed sampled for water quality	100%/2024			50%		Significant increase in water quality sampling coverage in Grindstone and Indian Creek watersheds
Implement restoration activities to help manage natural hazards and improve watershed functions	# of trees and shrubs planted	75-85K/year			51,154K		
	Ha of floodplain, forest and wetland restored	50-60 ha/year			29.7 ha		
	Km of restored streams	3-4 km/year			3.5 km		
Undertake and implement watershed plans to identify and prioritize actions that enhance sustainability	% complete of the watershed planning program renewal	100%/2024			10%		
Identify and promote climate change approaches for watershed resiliency and lead by example	% complete of the watershed climate change strategy	100%/2024			15%		

	No Progress/No Data
	Making Progress
	Target Met



Priority	Strategic Objectives
Implement organizational practices that support the social, environmental and economic dimensions of sustainability	<ul style="list-style-type: none"> • Transition infrastructure and operations from grey to green solutions • Apply an integrated approach to risk, governance and compliance to ensure alignment of operations with enterprise business objectives • Implement a CH Park experiences and cost recovery model • Create a sustainable plan for the long-term management of CH lands • Implement an enterprise information management framework for governance, utilization and reporting of data assets

Progress Summary
<p>The organizational sustainability priority has been a collaborative effort and overall, 70% of the indicators are making progress.</p> <p>The 2021 action items are progressing well and are on track to be completed by end of the calendar year.</p> <p>Two main focuses for 2021 under this area were to to evolve and improve the Enterprise Risk Management program and to establish a GHG emission baseline.</p> <p>We will continue to establish and set baselines for several KPIs into early 2022.</p> <p>2022 action planning will look to initiate audit planning and GHG reduction efforts.</p>



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Transition infrastructure and operations from grey to green solutions	# of green initiatives implemented	2021 Baseline			3		
	% reduction in corporate carbon emissions	10%/year			NA		Data collected annually. 2021 emissions will be available Q2 2022
Apply an integrated approach to risk, governance and compliance to ensure alignment of operations with enterprise business objectives	# of internal audits conducted	1/year			0		
	# of risk management focused initiatives launched	1-3/year			3		
Implement a CH Park experiences and cost recovery model	% of revenue spent on labour	>50%/2024			64		2021 will be the baseline year
	% of new educational opportunities at full cost recovery	70-75%			75%		
	% of new recreational opportunities at full cost recovery	95-100%			100%		
Create a sustainable plan for the long-term management of CH lands	% increase in annual tax supported municipal levy against the regional budget guidelines	<3-3.7%/year			3%		
	% of CH lands that are under a current master plan	85-95%			62%		
Implement an enterprise information management framework for governance, utilization and reporting of data assets	% of the organization fully managing assets digitally	70-80%/2024			15%		

	No Progress/No Data
	Making Progress
	Target Met



Priority	Strategic Objectives
Attract, support and invest in the brightest and most passionate people to collectively achieve our ambition	<ul style="list-style-type: none"> • Position CH as an employer of choice to attract, invest in and retain talent • Broaden the wellness program initiatives to invest in employee well-being • Create an Equity, Diversity and Inclusion (EDI) framework to cultivate a culture that honors and embraces differences • Establish a growth mindset, learning organization to enable and empower employees to achieve our collective ambition • Increase employee safety competency through enhanced training and development processes
Progress Summary	
<p>Progress is being made against 75% of the performance indicators under People and Talent. The KPIs trending in yellow are due to lack of a baseline as this is a new strategic objective for the organization and/or the data is not collected and/or ready for analysis.</p> <p>In 2021, 12 actions (projects, initiatives, programs, etc.) were launched to support the People and Talent objectives. To date, 80% of the actions have either been completed or are on track to be completed by end of calendar year.</p>	



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Position CH as an employer of choice to attract, invest in and retain talent	# of Employer of Choice categories recognized	1/year			NA		
	# of Employer of Choice initiatives HR supports	10-15/year			14		
	Annual turnover rate	3-5%			3.8%		
Broaden the wellness program initiatives to invest in employee well-being	# of wellness programs added	1-2/year			2		
	% of employees participating in wellness programming	30-40%			25%		
	% of participants who report a positive experience during their participation in wellness programming	65-75%			82%		
Create an Equity, Diversity and Inclusion (EDI) framework to cultivate a culture that honors and embraces differences	# of EDI focused training initiatives hosted	4-6/year			NA		Will begin in 2022
	% of employer participation level of training	70-80%			NA		Will begin in 2022
	% complete of EDI framework development	100%/2022			30%		Phase I assessment complete
Establish a growth mindset, learning organization to enable and empower employees to achieve our collective ambition	Community of Learning engagements per employee	2021 Baseline			3.3		
Increase employee safety competency through enhanced training and development processes	# of new and enhanced safety training initiatives implemented	2-4/year			5		
	% of trained employees participating in the Safety Observation program	60-70%			22%		

	No Progress/No Data
	Making Progress
	Target Met



Priority	Strategic Objectives
<p>Integrate digital technologies, processes, and mindsets to strengthen adaptability and problem-solving capabilities</p>	<ul style="list-style-type: none">• Establish digital reinvention and readiness standards to guide the development, implementation and operations of digital solutions• Enable a digital culture across the organization• Invest in high-potential technologies to improve problem-solving and service delivery• Implement cross-departmental business intelligence analytics and visualization solutions to derive actionable insights and customized reports• Establish partnerships with agencies, nature-tech companies and academia to raise awareness and co-create solutions to environmental problems
Progress Summary	
<p>The priority of DT is advancing well so far. Overall KPIs are trending as on track or met our target for the year.</p> <p>A few opportunities for improvement of KPIs for 2022 will be to develop a framework and standards to better centralize, track and categorize all IT/DT projects across CH. We will continue to investing in technology as a means of generating revenue by focusing on expanding the application of ParkPASS as well as exploring opportunities to utilize digital tools to improve water monitoring. We continue to build and strengthen partnerships across sectors and markets locally, regionally and nationally.</p>	



KPI Scorecard

Strategic Objective	Key Performance Measures	Target	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Comments
Establish digital reinvention and readiness standards to guide the development, implementation and operations of digital solutions	% of IT/DT projects on track against baseline	90%			63%		
Enable a digital culture across the organization	% of employees participating in DT learning initiatives annually	80-100%			65%		Based off of Q2 data. Next data collection in Q1 2022
Invest in high-potential technologies to improve problem-solving and service delivery	# of new product launches	1-3/year			2		
	\$ revenue generated from products or services	65-70k/year			5K		
Implement cross-departmental business intelligence analytics and visualization solutions to derive actionable insights and customized reports	# of unique insights and reports developed	2-5/year			5		
Establish partnerships with agencies, nature-tech companies and academia to raise awareness and co-create solutions to environmental problems	# of active strategic partnerships	2-4/year			2		

	No Progress/No Data
	Making Progress
	Target Met

REPORT TO: Conservation Halton Board of Directors

REPORT: # CHBD 08 21 06

FROM: Hassaan Basit, President & CEO

DATE: November 4, 2021

SUBJECT: Amendments to Halton Region Conservation Authority General Membership By-law 2018-01

Recommendation

THAT the Conservation Halton Board of Directors **approves the Amendments to Halton Region Conservation Authority General Membership By-law 2018-01 which reflects the February 2, 2021, proclamation of a number of governance-related clauses in the Conservation Authorities Act as recommended by the Governance and Risk Committee at the meeting held on November 4, 2021.**

And

THAT the Conservation Halton Board of Directors **approves the amendments to the Halton Region Conservation Authority General Membership By-law 2018-01 under Section 9. Signing Officers to reflect administrative updates to the titles of authorized signatories within Conservation Halton. The Governance and Risk Committee approved these recommendations at their meeting on November 4, 2021.**

Background

Recent amendments to the Conservation Authorities Act (CA Act) include a number of amendments related to governance as part of the Province's commitment to modernizing accountability and transparency at Conservation Authorities (CAs). Conservation Halton (CH) has been demonstrating and communicating our commitment to accountability and transparency over the past several years and will continue to do so.

On February 2nd, 2021, a number of governance-related clauses were proclaimed in the *Conservation Authorities Act*, including some amendments which were included in schedule 6 of Bill 229, the *Protect, Support and Recover from COVID-19 Act (Budget Measures)*.

Implementing updates to the Halton Conservation Authority General Membership By-law 2018-01 is a priority identified under the Conservation Halton's Governance Accountability and Transparency Initiative (CHBD 05 21 08/June 17, 2021). The proposed amendments are included in Appendix E attached. The specific amended sections are listed in the following table:

Table of Amendments

Halton Region Conservation Authority General Membership By-law 2018-01

Area of Impact	Section	Change to Act	Changes to the Halton Region Conservation Authority General Membership By-law 2018-01 (Revised October 2021)
Municipal Appointments	14(1.1), 14(1.2)	At least 70% of a municipality's appointees must be municipal councillors, effective January 1, 2023 Municipality can apply to Minister to have percentage reduced; the decision is at the Minister's direction (including adding any conditions or restrictions).	C. Governance a) Appointments Participating Municipalities within the jurisdiction of the Conservation Authority shall appoint Members in accordance with Section 14 of the Act (option to also reference existing municipal agreement / Order in Council). Appointed Members must reside in a Participating Municipality within the Authority's area of jurisdiction. Participating municipalities must ensure that at least 70 percent of its appointees are selected from among the members of the municipal council or apply to the Minister for permission to appoint less than this percent. Additional appointees may include citizens as well as an additional member who may be appointed by the Minister as a representative of the agricultural sector
Agricultural Appointee	14(4), 14(4.0.1), 14(4.1)	The Minister has the authority to appoint an additional member to a conservation authority to represent the agricultural sector. The voting powers of such a representative are limited (i.e. can't vote on a decision to enlarge, amalgamate or dissolve an authority or on budgetary matters presented at a meeting). Term up to 4 years, as determined by Minister	C. Governance a) Appointments An additional agricultural sector representative may be appointed to the Authority by the Minister. D. Meeting Procedures 13. Voting Where a member has been appointed by Minister as a representative of the agricultural sector, the member shall not vote on: a resolution to enlarge an authority's area of jurisdiction; a resolution to amalgamate the Authority with another conservation authority; a resolution to dissolve the Authority; or, a resolution related to any budgetary matter.
Agenda/ Minutes	15(2.1), 15(2.2)	Authority and executive committee meeting agendas to be available to the public before a meeting takes place and the minutes are to be available to the public within 30 days following a meeting. Both to be available by posting on website or by any other means the authority considers appropriate.	Section D. Meeting Procedures 19. Minutes of Meetings After the minutes have been approved by resolution, original copies shall be signed by the President & CEO/Secretary-Treasurer and copies of all non-confidential minutes shall be posted on the Authority's website. Minutes shall be made available for review on the Authority's website within 30 days of the meeting. Such minutes shall also be available for review by any member of the public at the Authority's

Table of Amendments

Halton Region Conservation Authority General Membership By-law 2018-01

Area of Impact	Section	Change to Act	Changes to the Halton Region Conservation Authority General Membership By-law 2018-01 (Revised October 2021)
			administration centre Minutes shall be made available in alternative formats, in accordance with the Accessibility for Ontarians with Disabilities Act, if requested by interested parties.
Chair/Vice Chair Term	17(1.1), 17(1.2), 17(1.3)	<p>A chair or vice-chair shall hold office for a term of one year and shall serve for no more than two consecutive terms.</p> <p>Appointments must rotate amongst participating municipalities, a member from a specific municipality cannot be appointed to succeed an outgoing chair or vice-chair appointed by the same municipality.</p> <p>The Minister may grant permission to appoint a chair or vice-chair for a term of more than one year or to hold office for more than two consecutive years or waive the rotating provision. Conservation Halton has received an exception from MCEP until the 2023 annual general meeting. The exception was granted by the Minister of the Environment, Conservation and Parks on March 15, 2021.</p>	<p>C. Governance</p> <p>5. Election of Chair and Vice-Chairs</p> <p>Successors to the positions of Chair and Vice-Chair shall be a Member from a different participating municipality from the incumbent. Upon application by an Authority or a participating municipality, the Minister may grant permission for a member who was appointed to the Authority by the same participating municipality that appointed the outgoing Chair or Vice-Chair to serve as Chair or Vice-Chair.</p> <p>6. Maximum Term for Chair and Vice-Chair(s)</p> <p>Both the Chair and Vice-Chair shall hold office for a term of one year and shall serve for no more than two consecutive terms. Notwithstanding these terms, the Minister may grant permission (upon application by an Authority or a participating municipality) for a Chair or Vice-Chair to serve for a term of more than one year or to hold office for more than two consecutive terms.</p>
Powers of authorities	21(1)	Amendments were made to sub-clauses (a), (b), (c) and (p).	Not applicable to the By-law
Annual Audit	38 (1), 38(4)	<p>Annual audits are still required by a person licensed under the <i>Public Accounting Act</i>, 2004 and it is additionally specified that it be prepared in accordance with generally accepted accounting principles for local governments recommended by the Public Sector Accounting Board of the Chartered Professional Accountants of Canada, as they exist from time to time.</p> <p>Within 60 days of receiving the audit report, must make available to the public on its website and any other means the authority considers appropriate.</p>	<p>C. Governance</p> <p>7. Financial Statements and Report of the Auditor</p> <p>The Authority's accounts and transactions will be audited annually by a person licensed under the Public Accounting Act, 2004 and shall ensure that the annual audit is prepared in accordance with generally accepted accounting principles for local governments recommended by the Public Sector Accounting Board of the Chartered Professional Accountants of Canada.</p> <p>BMP Action: CH has always made the board approved audit report available to the public on the CA website.</p>

Conservation Halton Administration is also proposing that **Section 9. Signing Officers of the Halton Region Conservation Authority General Membership By-law 2018-01** be amended to reflect the updates to the titles of authorized signatories within Conservation Halton:

All deeds, transfers, assignments, contracts, and obligations entered into by the Authority shall be signed by the signing officers of the Authority. Signing Officers of the Authority are as follows:

*Chair; Vice Chair; President & CEO/Secretary-Treasurer; ~~Senior Director, Corporate Services;~~
Chief Operating Officer; Director, Parks and Recreation; and Director, Finance as the Signing
Officers for the Authority and their delegates when a Signing Officer position becomes vacant.*

With the updated changes to the titles of authorized signatories at Conservation Halton, under Appendix 4 of the By-law – *President & CEO/Secretary-Treasurer Management Authority Limits Policy*, the Corporate Policy Table needs to reflect these changes. The updated Corporate Policy Table has been included under the current Corporate Policy Table in Appendix A attached.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

There is no financial impact associated with this report.

Signed & respectfully submitted:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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The Halton Region Conservation Authority General Membership By-law No. 2018-01

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THE HALTON REGION CONSERVATION AUTHORITY GENERAL
MEMBERSHIP

By-law No. 2018-01

A. Definitions

“General Membership” means the Halton Region Conservation Authority General Membership as established by Order-in-Council 3988-63 under Section 3.1 of the Conservation Authorities Act, R.S.O. 1990, Chapter C.27;

“Act” means the *Conservation Authorities Act*, R.S.O. 1990, Chapter C.27

“Business Day(s)” means a day other than a Saturday or a Sunday or a civic or public holiday which is a declared holiday in Ontario.

“President & CEO/Secretary-Treasurer” means the President & Chief Executive Officer/Secretary-Treasurer of the Halton Region Conservation Authority, as appointed by the General Membership and which may, by resolution of the General Membership, include the responsibilities of the Secretary-Treasurer, if so designated by resolution of the General Membership.

“Chair” means the Chairperson as referenced in the Act as elected by the Members of the General Membership.

“Civic or Public Holiday” means those listed as holidays in the Employment Standards Act, 2000, Part 1.1, Public Holiday as amended from time to time, with the exception of Easter Monday and Remembrance Day.

“Committee(s)” means any Committee and/or Advisory Board of the General Membership, including but not limited to the PRESIDENT & CEO Compensation Committee, the Finance and Audit Committee and the Governance Committee.

“Delegation” means a person or a group of persons who address the General Membership on behalf of an individual or a group for the purpose of making a presentation to the General Members.

“Fiscal Year” means the period from January 1 through December 31 in each year.

“General Membership” means all of the Members, collectively.

“In Camera” means any regular or special Meeting of the General Membership or any one of its Committees sitting in closed session not open to the public.

“Levy” means the amount of costs apportioned to participating municipalities in accordance with the Act and Regulations under the Act.

“Majority” means half of the votes plus one.

“Member(s)” shall mean the member(s) appointed to the General Membership by the participating municipalities in the General Membership’s area of jurisdiction.

“Meeting” means any regular or special meeting of the General Membership, or any Committee of the General Membership.

“MFIPPA” means the Municipal Freedom of Information and Protection of Privacy Act.

~~**“Minister”** means the minister responsible for the administration of the Act or specific activity of the Authority.~~

“Minister” means the Minister as defined in the Act.

“Non-matching Levy” means the portion of an Authority’s levy that meets the definition of non-matching levy as found in Ontario Regulation 139/96.

“Officer” means an officer of the General Membership empowered to sign contracts, agreements and other documents on behalf of the General Membership in accordance with section 19.1 of the Act, which shall include the Chair, Vice-Chair(s) and the President & CEO/Secretary-Treasurer.

“Participating Municipality” means a municipality that is designated by or under the Act as a participating municipality in a Conservation Authority.

“Pecuniary Interest” includes the financial or material interests of a Member and the financial or material interests of a member of the Member’s immediate family.

“Recorded Vote” means the recording of the name and vote of every Member on a motion during a meeting.

“Staff” means employees of the General Membership as provided for under Section 18(1) of the Act.

“Vice-Chair” means the Vice-Chairperson as elected by the Members of the General Membership. If a first and second Vice-Chair are elected, they shall be called First Vice-Chair and Second Vice-Chair.

“Weighted Majority” means the votes of 51 per cent of those represented after the votes are weighted by the percentage that applies under Ontario Regulation 139/96 for Municipal Levies.

B. General Applications

1. The rules of procedure contained in this By-law shall be observed in all proceedings of the General Membership and its Committees and shall be the rules for the order and dispatch of business at the General Membership.
2. Except as provided elsewhere in this By-law and the rules as set out by legislation any one or more of the rules contained in this paragraph may be temporarily suspended by the General Membership with consent of the majority of the Members present:

- a. Rules with respect to a change in agenda order of proceedings and content
 - b. Rules respecting notice of delegation status
 - c. Rules with respect to the increase of delegation and debate limitations
 - d. Rules to introduce a motion without standard notice
3. This By-law shall not be amended or repealed except by a two-third majority vote of the Members of the General Membership.

C. Governance

1. Members

a) *Appointments*

~~Participating Municipalities within the jurisdiction of the General Membership may appoint Members in accordance with Section 14 of the Act.~~

a) Appointments

Participating Municipalities within the jurisdiction of the Conservation Authority may shall appoint Members in accordance with Section 14 of the Act. An additional agricultural sector representative may be appointed to the Authority by the Minister.

~~Appointed Members must reside in a Participating Municipality within the General Membership's area of jurisdiction and may include citizens as well as elected members of municipal councils.~~ **Appointed Members must reside in a Participating Municipality within the Authority's area of jurisdiction. Participating municipalities must ensure that at least 70 percent of its appointees are selected from among the members of the municipal council or apply to the Minister for permission to appoint less than this percent. Additional appointees may and may include citizens as well as an additional member who may be appointed by the Minister as a representative of the agricultural sector.**~~elected members of municipal councils.~~

Collectively, the appointed Members comprise the General Membership, and for the purposes of this By-law are also referred to as the General Membership.

b) *Term of Member Appointments*

In accordance with Section 14 of the Act, a Member shall be appointed for a term of up to four years at the discretion of the appointing ~~municipal council.~~ **participating municipality;** The term begins with the first meeting of the General Membership following his or her appointment, and ends immediately before the first meeting of the General Membership following the appointment of his or her replacement. The President & CEO/Secretary-Treasurer shall notify the appropriate municipality in advance of the expiration date of any Member's term, unless notified by the municipality of the Member's reappointment or the appointment of his or her replacement. A Member is eligible for reappointment. A Member can be replaced by a Participating Municipality at the municipality's discretion prior to the end of their term.

c) *Powers of the General Membership*

Subject to the Act and other applicable legislation, the General Membership is empowered without restriction to exercise all of the powers prescribed to the General Membership

under the Act. In addition to the power of a General Membership under s.21 of the Act for the purposes of accomplishing its objects the powers of the General Membership include but are not limited to:

- i. Approving by resolution the creation of committees, advisory boards, members thereof and the terms of reference for the committee and advisory boards;
- ii. Appointing a President & CEO/Secretary-Treasurer, a PRESIDENT & CEO, and a Secretary-Treasurer;
- iii. Terminating the services of the President & CEO/Secretary-Treasurer, PRESIDENT & CEO and Secretary-Treasurer;
- iv. Approving, establishing, and implementing regulations, policies and programs;
- v. Awarding contracts or agreements where the approval of the General Membership is required under the Authority's purchasing policy;
- vi. Appointing an Executive Committee and delegate to an Executive Committee any of its powers except:
 - i. The termination of the services of the President & CEO/Secretary-Treasurer,
 - ii. The power to raise money, and
 - iii. The power to enter into contracts or agreements other than those contracts or agreements as are necessarily incidental to the works approved by the General Membership;
- vii. Approving by resolution, any new capital project of the Authority;
- viii. Approving by resolution, the method of financing any new capital projects;
- ix. Approving details on budget allocations on any new or existing capital projects;
- x. Approving of the total budget for the ensuing year, and approving the levies to be paid by the Participating Municipalities;
- xi. Receiving and approving the Financial Statements and Report of the Auditor for the preceding year;
- xii. Authorizing the borrowing of funds on the promissory note of the Authority in accordance with subsection 3(5) of the Act;
- xiii. Approving by resolution, any proposed ~~expropriation~~ **acquisition** of land or disposition of land, subject to the requirements under the Act;
- xiv. Approving permits or refusing permission as may be required under any regulations made under Section 28 of the Act; and
- xv.** Holding hearings required for the purpose of reviewing permit applications, and advising every applicant of their right to appeal the decision to the Minister through the ~~Mining and Lands Tribunal~~ **Ontario Lands Tribunal**

d) Member Accountability

Participating Municipalities appoint Members to the General Membership as their representatives. Members have the responsibilities of Directors of the corporation that is the General Membership. While the administration is responsible for the day-to-day operations, the General Membership is responsible for matters of governance, ensuring compliance with applicable legislation, and ensuring appropriate policies are in place and for financial soundness of the Authority.

All Members have the responsibility to be guided by and adhere to the Code of Conduct (Appendix 1) and Conflict of Interest Policy (Appendix 2), as adopted by the General Membership.

All Members shall serve in a conscientious and diligent manner. No Member shall use the influence of office for any purpose other than for the exercise of his/her official duties. Every Member will abide by the legislative requirements of the position and this By-law.

Members' responsibilities include:

- i. Attending all meetings of the General Membership;
- ii. Understanding the purpose, function and responsibilities of the General Membership;
- iii. Being familiar with the Authority's statutory and other legal obligations;
- iv. With the administration, setting strategic direction for the Authority;
- v. Adhering to the Code of Conduct;
- vi. Advancing the Strategic Plan;
- vii. Advancing the Mission of the Authority;
- viii. Supporting the fundraising efforts of Conservation Halton Foundation;
- ix. Ensuring fiscal stability of the Authority; and
- x. Recruiting, interviewing and hiring a President & CEO/Secretary-Treasurer and performance managing the work of the President & CEO/Secretary-Treasurer.

e) Applicable Legislation

In addition to the Act, the Members are subject to other legislation including, but not limited to:

- *Municipal Conflict of Interest Act;*
- *Municipal Freedom of Information and Protection of Privacy Act;*
- *Accessibility for Ontarians with Disability Act; and*
- *Ontario Occupational Health and Safety Act*

If any part of the By-law conflicts with any provision of the Municipal Conflict of Interest Act or the Municipal Freedom of Information and Protection of Privacy Act or a provision of a regulation made under one of those Acts, the provision of that Act or regulation prevails.

f) Relationship between Members and Staff

The General Membership relies on the President & CEO/Secretary-Treasurer to manage the operations of the organization, including all employees of the Authority. The President & CEO/Secretary-Treasurer is accountable to the General Membership, working cooperatively to achieve the goals established by the General Membership.

The General Membership will ensure that a process exists for regular performance evaluations of the President & CEO/Secretary-Treasurer.

g) Practicing Effective Human Resources Practices

The Members must act as a team. A strong partnership must be forged between the Members and the President & CEO/Secretary-Treasurer. The President & CEO/Secretary-Treasurer manages the organization and its staff. The following guidelines should be followed to ensure a common voice is heard throughout the organization and by the public at large.

- If a Member has questions on a project or report, such questions should be referred through the President & CEO/Secretary-Treasurer for him/her to invite the appropriate staff to explain the project and answer questions.

- If a Member would like to volunteer to assist in a project, such action should be taken in consultation with the General Membership to organize the process if appropriate.
- If a Member receives a complaint about a staff member or would like to acknowledge a staff member, such information should go through the President & CEO/Secretary-Treasurer in writing.
- If a Member receives a complaint from a staff member, the Member must refer the staff member to the President & CEO/Secretary-Treasurer or if the complaint is against the President & CEO/Secretary-Treasurer to the head of Human Resources Department of the Authority. The head of the Human Resources Department will report directly to the General Membership if the complaint relates to the President & CEO/Secretary-Treasurer.

With respect to staffing issues, the following outlines the responsibilities of the General Membership and the President & CEO/Secretary-Treasurer.

- The General Membership is solely responsible for the following:
 - Recruiting, hiring, evaluating, and dismissing the President & CEO/Secretary-Treasurer;
 - Determining the annual salary and pay for performance of the President & CEO/Secretary-Treasurer
- The General Membership and the President & CEO/Secretary-Treasurer share the following responsibilities in that the recommendation will come from the President & CEO/Secretary-Treasurer and the approval will come from the General Membership;
 - Setting goals for the President & CEO/Secretary-Treasurer;
 - Setting human resource and personnel policies which will have a monetary impact upon the budget; and
 - Setting staff salary schedules and plans as part of the annual budget review process
- The President & CEO/Secretary-Treasurer is responsible for the following:
 - Assessing and approving staffing requirements;
 - Recruiting, hiring, evaluating, promoting, disciplining and dismissing staff;
 - Providing staff direction;
 - Approving staff evaluations;
 - Implementing and administering approved salary schedule and plan;
 - Designing and implementing changes to the organizational structure; and
 - Setting human resource and personnel policies, which have no monetary impact on the budget

h) Members Focusing on Team

The following suggestions regarding focusing on “team results” include:

- a) Concentrate on governing, not micro-managing;
- b) Focus on the big picture;
- c) Practice listening;
- d) Maintain a relationship with the community for which you serve;
- e) Recognize staff as partners; treat them as you expect to be treated;
- f) Don’t refer matters to staff for a further report unless you can cite good reasons to do so, otherwise, vote – the matter may not get any easier;
- g) Use a policy approach;
- h) Respect democracy; and

- i) Be prepared for meetings

i) Employee Appointed to General Membership

In the event that a municipality appoints an employee of the Authority to the General Membership of the Authority, the following process will take place:

- The President & CEO/Secretary-Treasurer shall advise the appointing municipality immediately
- To alleviate any conflict of interest, the employee must either reject the proposed appointment to the General Membership of the Authority or resign from his/her position and employment with the Authority

In the event that a Member of the General Membership of the Authority is interested in applying for any position of employment at the Authority, the Member must first resign his/her position on the Authority's General Membership and such resignation must be made in writing to the appointing municipality with a copy attached to the Authority's application for employment.

2. Officers

The Officers of the General Membership, and their respective responsibilities, shall be:

Chair

- Is a Member of the General Membership;
- Presides at all meetings of the General Membership (and Executive Committee if applicable);
- Calls special meetings if necessary;
- Supports the President & CEO/Secretary-Treasurer to ensure Board resolutions are carried out;
- Assists President & CEO/Secretary-Treasurer in preparing agenda for board meetings where required;
- Periodically consults with General Membership on their roles;
- Represents the General Membership at Conservation Ontario Council meetings;
- Serves as ex-officio Member of Conservation Halton Foundation Board;
- Serves as ex-officio Member of the Committees of the General Membership;
- Acts as a public spokesperson on behalf of the General Membership;
- Serves as signing officer for the Authority;
- Ensures relevant information and policies are brought to the General Membership's attention;
- Keeps the General Membership apprised of significant issues in a timely fashion; and
- Performs other duties when directed to do so by resolution of the General Membership.

With respect to any meetings over which he/she presides, to:

- Preserve order and decide all questions of order, subject to appeal; and without argument or comment state the rule applicable to any point of order if called upon to do so;
- Receive and submit to a vote all motions presented by the Members which do not contravene the rules and regulations of the General Membership;

- Announce the results of the vote on any motions so presented;
- Decline to put to a vote motions which infringe upon the rules and regulations, or which are beyond the jurisdiction of the General Membership;
- Enforce on all occasions the observance of order and decorum among the Members;
- Adjourn the meeting when business is concluded;
- Adjourn the sitting without any questions being asked or suspend or recess the sitting for a time to be named if considered necessary;
- Represent and support the General Membership, declaring its will and implicitly obeying its decisions in all things; and
- Perform other duties when directed to do so by resolution of the General Membership.

Vice-Chair(s)

- Is/are a Member(s) of the General Membership;
- Attends all meetings of the General Membership (and Executive Committee if applicable);
- Carries out assignments as requested by the Chair;
- Understands the responsibilities of the Chair and acts as Chair immediately upon the death, incapacity to act, absence or resignation of the Chair until such time as a new Chair is appointed or until the Chair resumes his/her duties;
- Serves as a member of Conservation Halton Foundation Board; and
- Serves as a signing officer for the Authority.

President & CEO/Secretary-Treasurer

Responsibilities of the President & CEO/Secretary-Treasurer as assigned by the General Membership include, but are not limited to the following:

- Is an employee of the Authority;
- Attends all meetings of the General Membership (and Executive Committee if applicable) or designates an acting PRESIDENT & CEO if not available;
- Works in close collaboration with the Chair and Vice-Chair(s) and keeps them apprised of relevant information and significant issues in a timely fashion;
- Develops a strategic plan for approval by the General Membership and implements short and long-range goals and objectives;
- Is responsible for the management of the operations of the Authority, including all staff and programs of the Authority;
- Ensures resolutions of the General Membership are implemented in a timely fashion;
- Develops and maintains effective relationships and ensures good communications with Participating Municipalities, federal and provincial government ministries/agencies, Indigenous communities, other conservation authorities, Conservation Ontario, stakeholders, community groups and associations;
- Makes recommendations as applicable to the General Membership regarding suggested policy changes;
- Acts as public spokesperson on behalf of the Authority;
- Represents the Authority at Conservation Ontario Council, ad hoc and Task Force meetings;

- Negotiates and enters into contracts with external agencies/partners to carry out the goals of the organization in accordance with the Purchasing of Goods and Services Policy;
- Fulfills the requirements of the Secretary-Treasurer as defined in the Act;
- Is the custodian of the Corporate Seal
- Serves as a member of Conservation Halton Foundation Board;
- Serves as a signing officer for the Authority, and
- Ensures the practices, activities, and decisions of the organization consider the provisions of the President & CEO/Secretary-Treasurer Management Authority Limits Policy (Appendix 4)

3. Absence of Chair and Vice-Chair(s)

In the event of the absence of the Chair and Vice-Chair(s) from any meeting, the Members shall appoint an acting Chair who, for the purposes of that meeting has all the powers and shall perform all the duties of the Chair.

4. Representatives to Conservation Ontario Council

The General Membership may appoint up to three Representatives to Conservation Ontario Council ("Council"), designated as Voting Delegate and Alternate(s). Council will consist of the Voting Delegates appointed by each Member Conservation General Membership. The Voting Delegate and Alternates shall be registered with Conservation Ontario annually.

5. Election of Chair and Vice-Chairs

The election of the Chair and one or more Vice-Chairs shall be held in accordance with the Act: at the Annual/Inaugural meeting of the General Membership held prior to May 31 of each year in accordance with the General Membership's Procedures for Election of Officers (Appendix 3). **Successors to the positions of Chair and Vice-Chair shall be a Member from a different participating municipality from the incumbent. Upon application by an Authority or a participating municipality, the Minister may grant permission for a member who was appointed to the Authority by the same participating municipality that appointed the outgoing Chair or Vice-Chair to serve as Chair or Vice-Chair.**

6. Maximum Term for Chair and Vice-Chair(s)

Both the Chair and Vice-Chair shall hold office for a term of one year, and shall serve for no more than two consecutive terms. Notwithstanding these terms, the Minister may grant permission (upon application by an Authority or a participating municipality) for a Chair or Vice-Chair to serve for a term of more than one year or to hold office from more than two consecutive terms.

6. Appointment of Auditor

The General Membership shall appoint an auditor for the coming year at the Annual Meeting in accordance with Section 38 of the Act.

7. Financial Statements and Report of the Auditor

The General Membership's accounts and transactions will be audited annually by a person licensed under the *Public Accounting Act, 2004* and shall ensure that the annual audit is prepared in accordance with generally accepted accounting principles for local governments recommended by the Public Sector Accounting Board of the Chartered Professional Accountants of Canada.

The General Membership shall receive and approve the Audited Financial Statements and Report of the Auditor annually for the previous year at the meeting of the General Membership held prior to the first day of May each year.

The General Membership shall forward copies of the Audited Financial Statements and Report of the Auditor to Participating Municipalities and the Minister in accordance with Section 38 of the Act and will make the Audited Financial Statements available to the public **on the Authority's website within sixty (60) days of receiving the Auditor's Report.**

The Audited Financial Statements will be included in the Authority's Annual Report. ~~and on the Authority's website.~~

8. Borrowing Resolution

If required, the General Membership shall establish a borrowing resolution by March 31 of each year and such resolution shall be in force until it is superseded by another borrowing resolution.

9. Signing Officers

All deeds, transfers, assignments, contracts, and obligations entered into by the Authority shall be signed by the signing officers of the Authority. Signing Officers of the Authority are as follows:

Chair; Vice Chair; President & CEO/Secretary-Treasurer; ~~Senior Director, Corporate Services;~~ **Chief Operating Officer;** Director, Parks and Recreation; and Director, Finance as the Signing Officers for the Authority and their delegates when a Signing Officer position becomes vacant;

The President & Chief Executive Officer/Secretary-Treasurer may delegate approval of signing authority to positions to enable decisions to be made by those persons who are in the most appropriate position to do so within Conservation Halton, in terms of their accountability, control and knowledge. Once the vacant Signing Officer position is filled/no longer vacant the delegated authority goes back to the Signing Officer of the Authority.

A Signing Officer cannot assign responsibility to someone else for temporary absences or vacations.

Any delegation of signing authority will be signed off by the President & Chief Executive Officer/ Secretary-Treasurer and the duration (if known) should be agreed upon at the time when the need for delegation arises.

The Delegation of Signing Authority must be kept on file in the office of the Signing Officer and be readily available as required by Internal Audit and/or Finance.

Any two of the named Signing Officer positions shall be required for signing bank documents and agreements that bind the Authority and any other document or agreement that requires two signatures. In all other circumstances where the contract or agreements are necessarily incidental to the works approved by the Authority, a single signature of the President & CEO/Secretary-Treasurer, or his/her delegate, will be sufficient to bind the Authority.

Signing authority that was authorized by any previous Administration Regulation or By-law is superseded by this By-law.

10. Levies and Audit Reports

The levy due to the Authority from Participating Municipalities shall be communicated to those municipalities in accordance with the Act and any applicable Regulations.

Each watershed municipality will be advised of a scheduled discussion of the budget and levy of the Authority 30 days prior to the General Membership's Board meeting conducting such discussion.

Within 30 days following the adoption of the General Membership's budget in each year and, if so required by the municipal By-law, no later than April 1, in each year, the President & CEO/Secretary-Treasurer or the head of the Financial and Administrative Services Department shall send to the Clerk of each watershed municipality, a notice indicating the monies due to the Authority from each watershed municipality, and the apportionment of those monies due shall be as required by the Act and as approved by the General Membership. A copy of the Auditor's report for the preceding year shall be sent to the Clerk of each watershed municipality and to the Ministry.

11. Executive Committee

The General Membership may appoint an executive committee at the first meeting of the General Membership each year in accordance with the Section 19 of the Act and Section 1(c) of this By-law.

12. Advisory Boards and Other Committees

In accordance with Section 18(2) of the Act, the General Membership shall establish such advisory boards as required by regulation and may establish such other advisory boards or committees as it considers appropriate to study and report on specific matters.

The General Membership shall approve the terms of reference for all such advisory boards and committees, which shall include the role, the frequency of meetings and the number of members required.

Resolutions and policies governing the operation of the General Membership shall be observed in all advisory board and committee meetings.

Each advisory board or committee shall report to the General Membership, presenting any recommendations made by the advisory board or committee.

The dates of all advisory board and committee meetings shall be made available to all Members of the General Membership.

Committees of the General Membership include but are not limited to:

- President & CEO/Secretary-Treasurer Compensation Committee (Comp)
- Finance and Audit Committee (F&A)
- Governance Committee (Gov)

13. Remuneration of Members

Members who are present for the full duration of a duly called Meeting(s) and who are officially appointed to the Board(s) or Committee(s) holding such Meeting shall be entitled to payment of a per diem. No Member may collect more than one per diem per day. Per diem rates shall be set and approved by the General Membership from time to time. Where a Member is duly authorized to attend to General Membership's business other than at a Meeting, the Member shall be entitled to a per diem for attending at such business.

Members who take on additional roles as Chair/Vice- Chair of the General Membership may be entitled to the payment of additional per diems/compensations as provided in the PRESIDENT & CEO Departmental budget allocation for elected officials.

Duly authorized Members who attend meetings of the General Membership, Committees/ad-hoc meetings, shall be entitled to a return travel allowance between the Member's principal residence and the meeting place.

Where a Member is duly authorized by the General Membership to attend to General Membership's business other than a Meeting, the Member shall be eligible for a travel allowance from his principal place of residence to the location of the business and return.

14. Records Retention

The General Membership shall keep full and accurate records including, but not limited to:

- Minutes of all meetings of the General Membership, including registries of statements of interests in accordance with the *Municipal Conflict of Interest Act*;
- Assets, liabilities, receipts and disbursements of the General Membership and Financial Statements and Reports of the Auditors;
- Human Resources Files for all employees and Members as applicable;
- Workplace Health and Safety documents including workplace inspections, workplace accidents, investigations, etc.;
- Electronic Communications including emails;
- Contracts and Agreements entered into by the Authority;
- Strategic Plans and other documents providing organizational direction;
- Projects of the Authority;
- Technical Studies and data gathered in support of Programs of the Authority;
- Legal Proceedings involving the General Membership; and
- Incidents of personal injury or property damage involving the General Membership and members of the public.

Such records shall be retained and protected in accordance with all applicable laws and the Records Retention Policy of the Authority as approved by the General Membership from time-to-time.

15. Records Available to Public

Records of the General Membership shall be made available to the public, subject to requirements of the *Municipal Freedom of Information and Protection of Personal Privacy Act* (MFIPPA).

The General Membership shall designate the Chair to act as head of the Authority for the purposes of MFIPPA.

The Chair shall delegate the powers and duties vested in the head to the member of Staff or their designate who is the FOI Coordinator.

16. By-law Review

In accordance with the Act, this By-law shall be reviewed by the General Membership to ensure the By-law is in compliance with the Act and any other relevant law. The General Membership shall review the By-law every four years to ensure best management practices in governance are being followed.

17. By-law Available to Public

In accordance with the Act, the General Membership shall make its By-law available to the public on the General Membership's website. The By-law shall also be available for review by any member of the public at the Authority's administration centre or provided in alternative formats, in accordance with the *Accessibility for Ontarians with Disabilities Act*, if requested by interested parties.

18. Enforcement of By-law and Policies

The Members shall respect and adhere to all applicable By-law and policies (for example, the Code of Conduct and Conflict of Interest). The General Membership may take reasonable measures to enforce its By-law and policies, including the enforcement mechanisms under the Municipal Conflict of Interest Act. The procedure for enforcement shall be as follows:

1. Complainants (which includes any Member, Staff, or any member of the general public) may use two different complaint procedures to indicate concerns regarding a breach of the By-law, policies and Code of Conduct (collectively in this section the "Policies"):

- a) Informal Complaint Procedure
- b) Formal Complaint Procedure

2. The Informal Complaint Procedure will provide an opportunity to immediately identify and address behaviours and activities which are considered to be in contravention of the Policies.

a) The Complainant shall:

- i. Advise the Member that his/her behaviour or activity contravenes the Policies. This may or may not be in writing;
- ii. Request that the Member immediately discontinue the prohibited behaviour or activity;

- iii. Keep a written record of the incident including date, time, location, other persons present and any other relevant information;
 - iv. If applicable, advise the Member of his/her satisfaction or dissatisfaction with the response;
 - v. In the event of a dissatisfactory or no response, consider the need to pursue the matter in accordance with the formal complaint procedure.
3. Members are encouraged to initially pursue the informal complaint procedure as a means of stopping and remedying a behaviour or activity contrary to the Policies. However, it is not a precondition or a prerequisite that the informal complaint procedure be initiated or completed prior to pursuing the formal complaint procedure as described in the Formal Complaint Procedure option.
4. The Formal Complaint Procedure shall be as follows:
- a) A dated, signed and written complaint detailing the relevant particulars shall be submitted to the Chair.
 - b) Upon receipt of the complaint, the Chair or designate shall prepare an information package that shall include the following:
 - i. The Complaint;
 - ii. A copy of the Policies that are relevant;
 - iii. Such other information or documentation that the Chair deems relevant.
 - c) The Governance Committee not directly involved in the complaint shall address the complaint. In the case where the Chair is involved in the complaint, the Vice-Chair will receive the complaint.
 - d) The information package referred to above shall be provided to the Member alleged to be in contravention forthwith and to the Governance Committee.
 - e) The Chair shall submit a brief report to the General Membership in closed session at a regularly scheduled General Membership Meeting advising that a complaint was received, providing the following information:
 - i. Name of Alleged Offender;
 - ii. Name of Complainant;
 - iii. The provision of the Policies allegedly contravened;
 - iv. A summary of the facts constituting the alleged contravention;
 - v. The date of request.
 - f) The Governance Committee, where appropriate, shall complete an investigation of the complaint (which shall include an opportunity to the affected Member to respond to the allegation) within 30 days of receipt of the information package or such longer period as it may require not to exceed 60 days, and provide a report to the Chair of the General Membership (or Vice-Chair as the case may be) on the matter as to the validity of the complaint and its written recommendations as to the appropriate measures, if any, to be taken by the General Membership.

The report shall be tabled in closed session at the next regularly scheduled Meeting.

g) The General Membership shall receive the report and recommendations from the Governance Committee and may determine the appropriate action(s) to be taken, if any.

Following such determination by the General Membership the appointing municipality shall be notified of such determination.

19. Indemnification of Members, Officers and Employees

The General Membership undertakes and agrees to indemnify and save harmless its Members, Officers and Employees and their heirs and legal representatives, respectively, from and against all costs, charges and expenses, including all amounts paid to settle an action or satisfy any judgement, reasonably incurred by any such Member, Officer or Employee in respect of any civil, criminal or administrative action or proceeding to which any such Member, Officer or Employee is made a party by reason of being a Member, Officer or Employee of the General Membership (except in respect of an action by or on behalf of the General Membership to procure a judgment in its favour) if;

- Such Member, Officer or Employee acted honestly, in good faith with a view to the best interests of the General Membership and within the scope of such Member's, Officer's or Employee's duties and responsibilities, and
- In the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty that such Member, Officer or Employee had reasonable grounds for believing that the conduct was lawful.

D. Meeting Procedures

The meeting procedures below governing the procedure of the General Membership shall be observed in all Meetings of the General Membership including its Committees and Advisory Board Meetings, as far as they are applicable, and references to Committees or Advisory Board may be substituted for the word General Membership as applicable.

1. Rules of Procedure

All matters of procedure not specifically dealt with under the Act and this By-law and its Appendices, shall be decided by the Chair in accordance, as far as is reasonably practicable, with Robert's Rule of Order or generally accepted rules or procedure.

2. Notice of Meeting

The General Membership shall approve a schedule for regular Meetings in advance. The President & CEO/Secretary-Treasurer shall send Notice of regular Meetings to all Members at least seven calendar days in advance of a Meeting. Notice of all regular or special Meetings of the General Membership or its Committees shall be made available to the public as soon as possible after its delivery to General Membership.

The Annual/Inaugural Meeting of the General Membership shall be held prior to May 31 each year. The regular Meetings of the General Membership shall be held according to the meeting schedule adopted by the General Membership. The Authority may alter the schedule of meetings from time to time. The Chair of the General Membership may call additional Meetings on any vacant/available day.

Notice of any Meeting shall indicate the type, meeting number, time and place of that meeting and the agenda for the Meeting.

Notice(s) of each Authority General Membership, and any other Committee Meetings shall be given to each Member of the General Membership, the President & CEO/Secretary-Treasurer and posted on the Authority's website.

All material and correspondence to be dealt with by the General Membership at a Meeting will be submitted to the President & CEO/Secretary-Treasurer, at least ten calendar days, if it is to be included in the published agenda, or at least five Business Days, if it is to be introduced at the meeting, in advance of the Meeting where it is to be dealt with.

The Chair may, at his/her pleasure, call a special Meeting of the General Membership as necessary on one calendar day notice in writing or email. That notice shall state the business of the special Meeting and only that business shall be considered at that special Meeting. Any Member, with 50% support of the other Members, may also request the Chair to call a Meeting of the General Membership and the Chair will not refuse.

The Chair or the President & CEO/Secretary-Treasurer may, by notice in writing or email delivered to the Members so as to be received by them at least 24 hours before the hour appointed for the Meeting, postpone or cancel any Meeting of a Committee or Advisory Board until the next scheduled date for the specific Committee or Advisory Board affected.

The Chair or the President & CEO/Secretary-Treasurer may, if it appears that a storm or like occurrence will prevent the Members from attending a Meeting, postpone that Meeting by advising as many Members as can be reached. Postponement shall not be for any longer period than the next regularly scheduled meeting date.

Notwithstanding any other provision of this By-law, an emergency Meeting may be held, without notice, to deal with an emergency situation, provided that an attempt has been made to reach the Members by telephone or email at their respective residences or places of business as appropriate and applicable. No business except business dealing directly with the emergency situation shall be transacted at such emergency Meeting.

A Meeting which has been interrupted through the loss of a quorum may be reconvened without notice, provided that the Meeting is reconvened on the same day.

3. Meetings Open to Public

All Meetings of the General Membership and other Committees shall be open to the public.

A Meeting or part of a Meeting may be closed to the public if the subject matter being considered is identified in the closed meeting section of the Agenda and the subject matter meets the criteria for a closed meeting as defined in this By-law.

4. Agenda for Meetings

Authority staff, under the supervision of the President & CEO/Secretary-Treasurer, shall prepare an agenda for all regular Meetings of the General Membership that shall include, but not necessarily be limited to, the following headings:

Agenda Items:

1. Roll Call and Mileage
2. Acceptance of Agenda Items as listed or identification of additional topics Members and Staff wish to have listed on the agenda
3. Approval of Minutes of Previous Meeting
4. Disclosure of Pecuniary Interest
5. Delegations/Presentations, if applicable
6. Consent Items
7. Action Items
8. In Camera Items, if applicable
9. Other Business Items
10. Adjournment

The agenda for special Meetings of the General Membership shall be prepared as directed by the Chair.

At the Annual/Inaugural Meeting (s) of the General Membership in each year, Authority Staff, under the supervision of the President & CEO/Secretary-Treasurer shall prepare an agenda for the use of the Members that includes but is not necessarily limited to the following items of business:

Annual/Inaugural Meeting(s) Agenda Items:

1. Roll Call and Mileage
2. Acceptance of Agenda Items as listed or identification of additional topics Members and Staff wish to have listed on the agenda
3. Disclosure of Pecuniary Interest
4. Delegations/Presentations, if applicable
5. Action Items, to include:
 - a. Election of Officers of the General Membership
 - b. Borrowing By-law
 - c. Signing Officers
 - d. Appointment of the Auditor for the Upcoming Year
 - e. Approval of Financial Statements and Report of the Auditor for the prior year
 - f. Election of Officers
 - g. Approval of Budgets and Levies
6. Other Business Items
7. Adjournment

Agendas for Meetings shall be forwarded to all Members at least five Business Days in advance of the Meeting. Such agendas shall be made available to the public on the General Membership's website at the same time, unless the Meeting is closed to the public in accordance with this By-law. Such agendas shall also be available in alternative formats, in accordance with the *Accessibility for Ontarians with Disabilities Act*, if requested by interested parties.

The agenda shall be accompanied by any relevant material to be brought before such Meeting. The agenda page shall list at the top of the page the following:

- Name of Committee
- Meeting number
- Date of meeting

- Time of meeting
- Place of meeting

All matters requiring the General Membership's attention shall be submitted in writing to the President & CEO/Secretary-Treasurer or designate for placement on the agenda for the General Membership. The deadline for receiving items for consideration at the next regularly scheduled meeting will be seven Business Days prior to the said meeting, provided that no report is required.

Any items received after that time will be placed on the agenda for the next Meeting. If any item that is received requires a report from a particular Department, it will be the responsibility of that Department Director to advise the President & CEO/Secretary-Treasurer when the report will be available for inclusion in the agenda. The Department Director shall advise the individual or group as to when the matter will be considered.

Requests from Members for Staff to prepare additional information related to an agenda item of a General Membership Meeting agenda should be made to the President & CEO/Secretary-Treasurer prior to the Meeting.

Requests from Members for Staff to prepare information about non-agenda items should be made at the General Membership's Meeting and voted upon. Included in the request for information would be a target date for the information to come back to the General Membership.

All reports classified as "Action Items" from Departments to the General Membership must be approved by the President & CEO/Secretary-Treasurer or designate for inclusion and circulation on all agendas.

All reports classified as "Consent Items" from Departments to the General Membership must be approved for inclusion and circulation by the appropriate Department Director as designated by the President & CEO/Secretary-Treasurer.

An item of business not listed on the General Membership agenda cannot be introduced at a General Membership Meeting without the approval of the Members expressed by motion. Items of an emergent or congratulatory nature may be introduced under the "Other Business Items" of the agenda.

There shall only be an addendum to the agenda for a meeting when an item(s) arises after the closing of the deadline for items for the agenda and prior to the meeting, which item(s) the Chair or the President & CEO/Secretary-Treasurer believe are of an urgent nature requiring immediate consideration of the body concerned.

Members will receive, by email, a copy of the agenda. For those Members who have requested a hard copy, it shall be couriered to their residence or place of business, as far as possible, five Business Days preceding the meeting.

5. Quorum

At any Meeting of the General Membership, a quorum consists of one-half of the Members appointed by the Participating Municipalities, except where there are fewer than six such

Members, in which case three such Members constitute a quorum. At any Committee (if applicable) or Advisory board Meeting, a quorum consists of one-half of the Members of the Committee (if applicable) or Advisory board.

If there is no quorum within one half-hour after the time appointed for the Meeting, the Chair for the Meeting shall declare the Meeting adjourned due to a lack of a quorum, or shall recess until quorum arrives, and the recording secretary shall record the names of the Members present and absent.

If during a General Membership or Committee Meeting a quorum is lost, the Chair shall declare that the Meeting shall stand recessed or adjourned, until the date of the next regular meeting or other meeting called in accordance with the provisions of this By-law. Agenda items including delegations present may be covered and presented and issues discussed, but no formal decisions may be taken by the remaining Members who do not constitute a quorum.

Notwithstanding the provisions of this section, where the number of Members who are disabled from participating in a Meeting due to the declaration of a conflict of interest is such that at that Meeting the remaining Members are not of sufficient number to constitute a quorum, the remaining number of Members shall be deemed to constitute a quorum, provided such number is not less than five.

6. Order of Business

The business of the General Membership shall be taken up in the order in which it stands on the agenda unless otherwise decided by a majority of those Members present.

No Member shall present any matter to the General Membership for its consideration unless the matter appears on the agenda for the Meeting of the General Membership or leave is granted to present the matter by the affirmative vote of a majority of the Members present.

7. Debate

The General Membership shall observe the following procedures for discussion/debate on any matter coming before it:

- a) A Member shall be recognized by the Chair prior to speaking;
- b) Every Member, before speaking to any question or motion at a General Membership Meeting, shall first receive recognition from the Chair and respectfully address the Chair;
- c) Where two or more Members rise to speak, the Chair shall designate the Member who has the floor, who shall be the Member who in the opinion of the Chair was first recognized;
- d) All questions and points of discussion shall be directed through the Chair;
- e) Where a motion is presented, it shall be moved and seconded before debate;
- f) No Member shall speak more than once to the same question without leave from the Chair, except in explanation of a material part of the speech;
- g) Any Member may ask a question of the previous speaker through the Chair;
- h) The Member who has presented a motion, other than a motion to amend or dispose of a motion, may speak again to the motion immediately before the Chair puts the motion to a vote;

- i) When a motion is under debate, no motion shall be received other than a motion to amend, to defer action, to refer the question, to take a vote, to adjourn, or to extend the hour of closing the proceedings;
- j) When a motion is under consideration, only one amendment is permitted at a time; and
- k) If a Member considers that a ruling made by the Chair is not in order, an appeal may be made. When challenged, the Chair may give a brief explanation of the ruling and ask the Members "Is the ruling of the Chair/Committee Chair upheld?" In the event of a tie vote, the ruling is upheld. The decision of the Chair under this section is final.

8. Matters of Precedence

The following matters shall have precedence over the usual order of business:

- a) a point of order;
- b) matter of privilege;
- c) a matter of clarification;
- d) a motion to suspend a rule of procedure or to request compliance with the rules of procedure;
- e) a motion that the question be put to a vote; and
- f) a motion to adjourn.

9. Members' Attendance

The General Membership shall provide a listing of Members' attendance at scheduled Meetings of the General Membership to the Participating Municipalities at least annually.

Upon a Member's vacancy due to death, incapacity or resignation occurring in any office of the General Membership, the General Membership shall request the municipality that was represented by that Member to appoint a Member replacement.

Each Member shall attend at least 60% of the Meetings in a calendar year/12 months.

If a Member is unable to attend any Meeting and wishes to bring any additional information or opinion pertaining to an agenda item to the General Membership, the Member shall address in writing or email to the Chair or President & CEO/Secretary-Treasurer such correspondence prior to the start of the Meeting. The correspondence shall be read aloud by the President & CEO/Secretary-Treasurer without comment or explanations.

10. Electronic Participation

Members may participate in a Meeting that is open to the public by telephone or other electronic means that permits all participants to communicate adequately with each other during the Meeting. A Member participating in a Meeting by electronic means shall be counted in determining quorum and can vote provided that they have all relevant information available to them. A Member shall participate by electronic means in a Meeting that is closed to the public.

During any period, in all or part of an area over which Conservation Halton has jurisdiction, under any circumstances that may prevent members of the General Membership from meeting in person (when it is deemed appropriate by the conservation authority to do so), the By-law provides for electronic meeting procedures as per section 10.1.

10.1. Electronic participation

- a) That members of the General Membership be permitted to participate in meetings electronically, which shall include the ability of those members participating electronically to register votes.
- b) That any member of the General Membership who is participating electronically in a meeting may be counted in determining whether or not a quorum of members is present at any point in time during the meeting in accordance with the requirement in subsection 16 (2) of the Conservation Authorities Act
- c) That any member of the General Membership can participate electronically in a meeting that is closed to the public.
- d) That any hearing or appeal that is dealt with in the By-law can be conducted electronically with provisions for applicants and their agents to participate, if the Authority holds any such hearing or appeal during any period where an emergency has been declared to exist.

11. Delegations

Any person or organization who wishes to address the General Membership may make a request in writing or email to the President & CEO/Secretary-Treasurer. The request should include an accurate and thorough summary or statement of the issue or matter involved and indicate the name of the proposed speaker(s). If such request is received ten calendar days in advance of a scheduled Meeting, the delegation shall be listed on the published agenda.

Any person or organization requesting an opportunity to address the General Membership, but not having made a written request to do so in the timelines specified above, may appear before the Meeting if approved by two thirds of Members present, or shall be listed on the published agenda for the following Meeting.

Upon receipt of the written notice requesting delegation status, the President & CEO/Secretary-Treasurer shall list the delegation on the next agenda for a General Membership Meeting only if:

- The matter is one which is to be dealt with by the General Membership at the next Meeting, or
- The request for delegation to the General Membership is approved by the Chair.

Special consideration may be given to any person, group of persons, firm or organization not being a Member of the General Membership, or an appointed official of the General Membership, requesting delegation status at a General Membership Meeting up to 24 hours prior to the meeting date concerned. The status of the request to speak to the General Membership may be granted upon the majority vote of the Members present at the General Membership meeting. The request should include accurate and thorough summary or statement of the issue or matter involved and indicate the name of the proposed speaker(s).

Except by leave of the Chair or appeal by the leave of the General Membership, delegations shall be limited to one (1) speaker for not more than 5 minutes.

Upon the completion of a presentation to the General Membership by a delegation, any discourse between Members of the General Membership and the delegation shall be limited to Members, through the Chair, asking questions for clarification and obtaining additional, relevant information only. Members shall not enter into debate with the delegation respecting the presentation.

No delegation shall:

- Speak disrespectfully of any person;
- Use offensive words or unparliamentarily language;
- Speak on any subject other than the subject for which they have received approval to address the General Membership; and
- Disobey the rules of procedure or a decision of the Chair or of the General Membership.

Speakers will be requested not to repeat what has been said by previous speakers at the meeting. A returning delegation will only be allowed to speak again if new, relevant information has become available since their previous presentation. The Chair may choose to end a returning delegation's presentation if, in the opinion of the Chair, the new information being presented is not relevant to a decision facing the General Membership.

The Chair may curtail any delegation, any questions of a delegation or debate during a delegation for disorder or any other breach of this By-law and, if the Chair rules that the delegation is concluded, the person or persons appearing shall immediately withdraw.

12. Meetings with Closed "In Camera" Sessions

Every Meeting of the General Membership and Committees shall be open to the public as per Section 15(3) of the Act, subject to the exceptions set out below.

Meetings may be closed to the public if the subject matter being considered relates to:

- a) The security of the property of the Authority;
- b) Personal matters about an identifiable individual, including employees of the Authority;
- c) A proposed or pending acquisition or disposition of land by the Authority;
- d) Labour relations or employee negotiations;
- e) Litigation or potential litigation, including matters before administrative tribunals (e.g. ~~Local Planning Appeal Tribunal~~ **Ontario Land Tribunal, affecting** the Authority;
- f) Advice that is subject to solicitor-client privilege;
- g) A matter in respect of which the General Membership or committee or other body may hold a closed meeting under another Act;
- h) Information explicitly supplied in confidence to the General Membership by Canada, a province or territory or a Crown agency of any of them;
- i) A trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the General Membership, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization;
- j) A trade secret or scientific, technical, commercial or financial information that belongs to the Authority and has monetary value or potential monetary value; or

- k) 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 the General Membership.

The General Membership shall close a Meeting if the subject matter relates to the consideration of a request under the Municipal Freedom of Information and Protection of Privacy Act, and the General Membership is the head of an institution for the purposes of the Municipal Freedom of Information and Protection of Privacy Act.

A Meeting of the General Membership or Committee may also be closed to the public if:

- a) The Meeting is held for the purpose of educating or training the Members, and
- b) At the Meeting, no Member discusses or otherwise deals with any matter in a way that materially advances the business or decision-making of the General Membership or other Committee.

Before holding a Meeting or part of a Meeting that is to be closed to the public, the Members shall state by resolution during the open session of the Meeting that there will be a Meeting closed to the public and the general nature of the matter to be considered at the closed Meeting. Once matters have been dealt with in a closed Meeting, the General Membership shall reconvene in an open session.

The General Membership shall not vote during a Meeting that is closed to the public, unless:

- a) The Meeting meets the criteria outlined in this By-law to be closed to the public; and
- b) The vote is for a procedural matter or for giving directions or instructions to Officers, employees or agents of Authority.

Any materials presented to the General Membership prior to and during a closed Meeting in respect to a confidential Agenda item shall be returned to the President & CEO/Secretary-Treasurer prior to departing from the Meeting and shall be treated in accordance with the Authority's policies and procedures and any applicable legislation for handling confidential material. Members not attending the closed meeting shall be required to return the confidential materials related to the closed session to the President & CEO/Secretary-Treasurer at or prior to the next scheduled meeting.

13. Voting

In accordance with Section 16 of the Act:

- a) Each Member is entitled to one vote, including the Chair and
- b) A majority vote of the Members present at any Meeting is required upon all matters coming before the Meeting.

Every Member who is present when a question is put, shall vote thereon, unless prohibited in law or by this By-law.

Where a member has been appointed by Minister as a representative of the agricultural sector, the member shall not vote on: a resolution to enlarge an authority's area of jurisdiction; a resolution to amalgamate the Authority with another conservation authority; a resolution to dissolve the Authority; or, a resolution related to any budgetary matter.

If any Member who is qualified to vote abstains from voting, they shall be deemed to have voted neither in favour nor opposed to the question, which will not alter the number of votes required for a majority.

On a tie vote, the motion is lost.

Except as provided elsewhere in this By-law, a motion shall be deemed to have been carried when a majority of the Members present and voting have expressed agreement with the question.

Interrelated motions shall be voted on in the order specified in Robert's Rules of Order.

Unless a Member requests a Recorded Vote, a vote shall be by a show of hands or such other means as the Chair may call. No question shall be voted upon more than once at any Meeting, unless a Recorded Vote is requested.

Any Member at a General Membership Meeting before or immediately after a vote is taken, may require a Recorded Vote to be taken on the question concerned. In such circumstances, the Chair shall have the right to speak to the question and indicate how the Chair intends to vote on the question, prior to the commencement of the Recorded Vote.

Where Recorded Vote is required, the Chair shall call for those Members in favour to all rise, at which time the recording secretary shall record the name of each Member standing and their vote in favour and upon completion of the recording then the Chair shall call for those Members opposed to all rise, at which time the recording secretary shall record the name of each Member standing and their vote in opposition.

After a non-Recorded Vote is held and after the Chair declares the result, any Member may rise and declare his disagreement with the declaration, and thereafter another vote must be held or the Member may request a Recorded Vote and a Recorded Vote must be taken as mentioned above.

At the Meeting of the General Membership at which the Non-Matching Levy is to be approved, the President & CEO/Secretary-Treasurer shall conduct the vote to approve of Non-Matching Levy by a Weighted Majority of the Members present and eligible to vote, in accordance with Ontario Regulation 139/96.

Where a question under consideration contains more than one item, upon the request of any Member, a vote upon each item shall be taken separately.

Except as provided in this By-law (Election of Chair and Vice-Chair), no vote shall be taken by ballot or by any other method of secret voting, and every vote so taken is of no effect.

14. Motions

In General Membership and Committee Meetings, the following matters and motions with respect thereto, may be introduced orally, without notice and with leave of the Chair, except as otherwise provided by this By-law:

- A point of order or personal privilege
- To close debate and

- To adjourn.

In General Membership and Committee meetings, the following motions may be introduced without notice and with leave of the General Membership except as otherwise provided by this By-law:

- To suspend the rules of procedure
- To table
- To postpone definitely
- To refer
- To amend
- To censure
- To postpone indefinitely (defer) and
- Any other procedural motion

In voting, all motions may be supported or opposed by the mover and/or seconder. The mover and seconder may withdraw a motion or a notice of motion at any time prior to it being called by the Chair. After a motion has been called or stated by the Chair, it shall be deemed to be in the possession of the General Membership, but may be withdrawn by the originator at any time before a decision or amendment, provided the General Membership does not object.

15. Notice of Motion

Written notice of motion to be made at a General Membership or Committee Meeting may be given to the President & CEO/Secretary-Treasurer by any Member of the General Membership not less than ten calendar days prior to the date and time of the Meeting and shall be forthwith placed on the agenda of the next meeting. The President & CEO/Secretary-Treasurer shall include such notice of motion in full in the agenda for the Meeting concerned.

Recommendations included in reports of Committees that have been included in an agenda for a Meeting of the General Membership shall constitute notice of motion for that Meeting.

Recommendations included in Staff reports that have been included in an agenda for a Meeting of the General Membership shall constitute notice of motion for that Meeting.

Notwithstanding the foregoing, any motion or other business may be introduced for consideration of the General Membership provided that it is made clear that to delay such motion or other business for the consideration of an appropriate Committee would not be in the best interest of the Authority and that the introduction of the motion or other business shall be upon an affirmative vote of majority of the Members of the General Membership present.

16. Motion to Reconsider

No motion to reconsider a decided matter of the General Membership shall be in order when the original motion has been implemented resulting in a legally binding commitment that is in place on the date that a motion to reconsider is to be debated.

A motion to reconsider a decided matter of the General Membership at the same meeting at which the original motion was decided shall be introduced under “Other Business Items”

of the General Membership agenda unless the Chair determines there was a clear misunderstanding of the question that was put, in which case a motion for reconsideration shall be introduced immediately after the original vote was taken.

A motion to reconsider a decided matter of the General Membership at a meeting subsequent to the meeting at which the original motion was decided shall require a notice of motion submitted in accordance with this By-law, unless the motion to reconsider comes forward to the General Membership through a report of a Committee.

A motion to reconsider a decided matter of the General Membership must be made by a Member who voted with the majority on the original motion.

No motion to reconsider a decided matter of the General Membership shall be made more than once in the twelve month period from the date the matter was decided, unless a regular election has occurred following the decision.

A motion to reconsider a decided matter of the General Membership shall require the approval of at least two thirds of the whole General Membership.

If a motion to reconsider is decided in the affirmative at a meeting, then consideration of the original matter shall become the next order of business.

17. Duties of the Meeting Chair

It shall be the duty of the Chair, with respect to any Meetings over which he/she presides, to:

- a) Preserve order and decide all questions of order, subject to appeal; and without argument or comment, state the rule applicable to any point of order if called upon to do so;
- b) Ensure that the public in attendance does not in any way interfere or disrupt the proceedings of the Members;
- c) Receive and submit to a vote all motions presented by the Members, which do not contravene the rules of order or regulations of the General Membership;
- d) Announce the results of the vote on any motions so presented; and
- e) Adjourn the Meeting when business is concluded.

18. Conduct of Members

Members shall maintain a high standard of conduct and at all times comply with applicable laws and the General Membership's Code of Conduct (Appendix 1).

No Member at any Meeting of the General Membership shall:

- a) Speak in a manner that is discriminatory in nature based on an individual's race, ancestry, place of origin, citizenship, creed, gender identity, gender expression, sex, sexual orientation, age, colour, marital status, family status, ethnic origin or disability;
- b) Leave their seat or make any noise or disturbance while a vote is being taken or until the result is declared;
- c) Interrupt a Member while speaking, except to raise a point of order or a question of privilege;
- d) Speak disrespectfully or use offensive words against the General Membership, the Members, Staff, or any member of the public;
- e) Speak beyond the question(s) under debate;

F. Appendices to the Administrative By-law

Appendix 1 - Code of Conduct

1. Background

Since its inception in 1963, The Halton Region Conservation Authority has demanded a high level of integrity and ethical conduct from its General Membership. The General Membership's reputation has relied upon the good judgement of individual Members. A written Code of Conduct helps to ensure that all Members share a common basis for acceptable conduct. Formalized standards help to provide a reference guide and a supplement to legislative parameters within which Members must operate. Further, they enhance public confidence that Members operate from a base of integrity, justice and courtesy.

The Code of Conduct is a general standard. It augments the laws which govern the behaviour of Members, and it is not intended to replace personal ethics.

This Code of Conduct will also assist Members in dealing with confronting situations not adequately addressed or that may be ambiguous in Authority's resolutions, regulations, or policies and procedures.

2. General

All Members, whether municipal councillors or appointed representatives of a municipality, are expected to conduct themselves in a manner that reflects positively on the General Membership.

All Members shall serve in a conscientious and diligent manner. No Member shall use the influence of office for any purpose other than for the exercise of his/her official duties.

It is expected that Members adhere to a code of conduct that:

- i. Upholds the mandate, vision and mission of the General Membership;
- ii. Considers the General Membership's jurisdiction in its entirety, including their appointing municipality;
- iii. Respects confidentiality;
- iv. Approaches all General Membership issues with an open mind, with consideration for the organization as a whole;
- v. Exercises the powers of a Member when acting in a meeting of the General Membership;
- vi. Respects the democratic process and respects decisions of the General Membership and Committees;
- vii. Declares any direct or indirect pecuniary interest or conflict of interest when one exists or may exist; and
- viii. Conducts oneself in a manner which reflects respect and professional courtesy and does not use offensive language in or against the General Membership or against any Member or any Authority Staff.

3. *Gifts and Benefits*

Members shall not accept fees, gifts, hospitality or personal benefits that are connected directly or indirectly with the performance of their duties, except compensation authorized by law.

This section does not apply to tokens, mementos, souvenirs or such gifts or benefits that are received as an incident of protocol or social obligations that normally accompany the responsibilities of office.

4. *Confidentiality*

The Members shall be governed at all times by the provisions of the *Municipal Freedom and Information and Protection of Privacy Act*.

All information, documentation or deliberations received, reviewed, or taken in an In Camera Meeting are confidential.

Members shall not disclose or release by any means to any member of the public, either in verbal or written form, any confidential information acquired by virtue of their office, except when required by law to do so.

Members shall not permit any persons, other than those who are entitled thereto, to have access to information which is confidential.

In the instance where a member vacates their position on the General Membership they will continue to be bound by MFIPPA requirements.

Particular care should be exercised in protecting information such as the following:

- i. Human Resources matters;
- ii. Information about suppliers provided for evaluation that might be useful to other suppliers;
- iii. Matters relating to the legal affairs of the Authority;
- iv. Information provided in confidence from an Aboriginal community, or a record that if released could reasonably be expected to prejudice the conduct of relations between an Aboriginal community and the Authority;
- v. Sources of complaints where the identity of the complainant is given in confidence;
- vi. Items under negotiation;
- vii. Schedules of prices in tenders or requests for proposals;
- viii. Appraised or estimated values with respect to the Authority's proposed property acquisitions or dispositions; and
- ix. Information deemed to be "personal information" under MFIPPA.

The list above is provided for example and is not exhaustive.

5. *Use of General Membership Property*

No Member shall use for personal purposes any Authority property, equipment, supplies, or services of consequence other than for purposes connected with the discharge of General Membership duties or associated community activities of which the General Membership has been advised.

No Member shall obtain financial gain from the use or sale of Authority developed intellectual property, computer programs, technological innovations, or other patentable items, while a Member or thereafter. All such property remains the exclusive property of the Authority.

6. *Work of a Political Nature*

No Member shall use Authority facilities, services or property for his/her election or re-election campaign to any position or office within the Authority or otherwise.

7. *Conduct at General Membership Meetings*

During meetings of the General Membership, Members shall conduct themselves with decorum. Respect for delegations and for fellow Members requires that all Members show courtesy and not distract from the business of the General Membership during presentations and when others have the floor.

8. *Influence on Staff*

Members shall be respectful of the fact that Staff work for the Authority as a whole and are charged with making recommendations that reflect their professional expertise and corporate perspective, without undue influence.

9. *Business Relations*

No Member shall borrow money from any person who regularly does business with the Authority unless such person is an institution or company whose shares are publicly traded and who is regularly in the business of lending money.

No Member shall act as a paid agent before the General Membership or Committee, except in compliance with the terms of the *Municipal Conflict of Interest Act*.

10. *Encouragement of Respect for the General Membership and its Regulations*

Members shall represent the General Membership in a respectful way and encourage public respect for the Authority and its Regulations.

11. *Harassment*

It is the policy of the Authority that all persons be treated fairly in the workplace in an environment free of discrimination and of personal and sexual harassment. Harassment of another Member, Staff or any member of the public is misconduct. Members shall follow the Authorities' Harassment Policy as approved from time-to-time.

Examples of harassment that will not be tolerated include: verbal or physical abuse, threats, derogatory remarks, jokes, innuendo or taunts related to an individual's race, religious beliefs, colour, gender, physical or mental disabilities, age, ancestry, place of origin, ethnic origin, citizenship, creed, gender identity, gender expression, record of offences, marital status, source of income, family status, or sexual orientation. The General Membership will also not tolerate the display of pornographic, racist or offensive signs or images; practical jokes that result in awkwardness or embarrassment; unwelcome invitations or requests, whether indirect or explicit and any other prohibited grounds under the provisions of the *Ontario Human Rights Code*.

12. Breach of Code of Conduct

Any breach, or alleged breach, of the Code of Conduct shall be investigated in accordance with the Enforcement of By-law and Policies procedure outlined in Section 18 of the Halton Region Conservation General Membership Administrative By-law.

Appendix 2 - Conflict of Interest

1. *Municipal Conflict of Interest Act*

The General Membership commit themselves to ethical, businesslike, and lawful conduct when acting as the General Membership. The General Membership is bound by the *Municipal Conflict of Interest Act*. This appendix to the By-law is intended to assist Members in understanding their obligations. Members are required to review the *Municipal Conflict of Interest Act* on a regular basis.

2. *Disclosure of Pecuniary Interest*

Where a Member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the General Membership or Committee at which the matter is the subject of consideration, the Member:

- a) Shall, prior to any consideration of the matter at the meeting, disclose the pecuniary interest and the general nature thereof;
- b) Shall not take part in the discussion of, or vote on any question in respect of the matter; and
- c) Shall not attempt in any way whether before, during or after the meeting to influence the voting on any such question.

3. *Chair's Conflict of Interest or Pecuniary Interest*

Where the Chair of a meeting discloses a conflict of interest with respect to a matter under consideration at a meeting, another Member shall be appointed to chair that portion of the meeting by Resolution.

4. *In Camera Meetings*

Where a meeting is not open to the public, a Member who has declared a conflict of interest shall leave the meeting for the part of the meeting during which the matter is under consideration.

5. *Member Absent*

Where the interest of a Member has not been disclosed by reason of their absence from the particular meeting, the Member shall disclose their interest and otherwise comply at the first meeting of the General Membership or Committee, as the case may be, attended by them after the particular meeting.

6. *Disclosure Recorded in Minutes*

The recording secretary shall record in reasonable detail the particulars of any disclosure of conflict of interest or pecuniary interest made by Members and whether the Member withdrew from the discussion of the matter. Such record shall appear in the minutes/notes of that particular meeting of the General Membership or Committee, as the case may be.

7. *Breach of Conflict of Interest Policy*

Should a Member breach the Conflict of Interest Policy, they shall advise the Chair and Vice-Chair, in writing, with a copy to the President & CEO/Secretary-Treasurer, as soon as possible after the breach.

Should a Member allege that another Member has breached the Conflict of Interest Policy, the said breach shall be communicated to the Chair, in writing, with a copy to the President & CEO/Secretary-Treasurer. In the absence of the Chair, or if a Member alleges that the Chair has breached the Conflict of Interest Policy, the said breach shall be communicated to the Vice-Chair, in writing, with a copy to the President & CEO/Secretary-Treasurer.

Should a member of the public or a municipality allege that a Member has breached the Conflict of Interest Policy, the party making the allegation will be directed to follow the notification procedure outlined above.

Any breach, or alleged breach, of the Conflict of Interest Policy shall be investigated in accordance with the Enforcement of By-law and Policies procedure outlined or referred to in the Authority's Administrative By-law.

Appendix 3 - Procedure for Election of Officers

1. Voting

Voting shall be by secret ballot and no Members may vote by proxy.

2. Chair for Election of Officers

The President & CEO/Secretary-Treasurer, or designate, will assume the position of Chair for the purpose of Election of Officers.

3. Scrutineer(s)

The appointment of one or more scrutineers is required for the purpose of counting ballots, should an election be required. All ballots shall be destroyed by the scrutineers afterwards. The Acting Chair shall call a motion for the appointment of one or more persons, who are not Members of the General Membership, to act as scrutineers. A Member, who will not stand for election, may be appointed as an additional scrutineer if requested.

4. Election Procedures

The Acting Chair shall advise the Members that the election will be conducted in accordance with the Act as follows:

- a) The elections shall be conducted in the following order:
 - i. Election of the Chair, who shall be a Member of the General Membership
 - ii. Election of one or more Vice-Chairs, who shall be Members of the General Membership.
- b) The Acting Chair shall ask for nominations to each position;
- c) Only current Members of the General Membership who are present may vote;
- d) Nominations shall be called three (3) times and will only require a mover;
- e) The closing of nominations shall require both a mover and a seconder; and
- f) Each Member nominated shall be asked to accept the nomination. The Member must be present to accept the nomination unless the Member has advised the President & CEO/Secretary-Treasurer in writing or by email in advance of the election of their willingness to accept the nomination.

If one Nominee:

- g) If only one nominee the individual shall be declared into the position by acclamation.

If More than One Nominee:

- h) In the event of an election, each nominee shall be permitted not more than three (3) minutes to speak for the office, in the order of the alphabetical listing by surnames.
- i) Upon the acceptance by nominees to stand for election to the position of office, ballots shall be distributed to the Members by the scrutineers for the purpose of election and the Acting Chair shall ask the Members to write the name of one individual only on the ballot.

- j) The scrutineers shall collect the ballots, leave the meeting to count the ballots, return and advise the Acting Chair who was elected with more than 50% of the vote.

A majority vote shall be required for election. If there are more than two nominees, and upon the first vote no nominee receives the majority required for election, the name of the person with the least number of votes shall be removed from further consideration for the office and new ballots shall be distributed. In the case of a vote where no nominee receives the majority required for election and where two or more nominees are tied with the least number of votes, a special vote shall be taken to decide which one of such tied nominees' names shall be dropped from the list of names to be voted on in the next vote.

Should there be a tie vote between two remaining candidates, new ballots shall be distributed and a second vote held. Should there still be a tie after the second ballot a third vote shall be held. Should there be a tie after the third vote, the election of the office shall be decided by lot drawn by the Acting Chair or designate.

Appendix 4 - PRESIDENT & CEO/SECRETARY–TREASURER MANAGEMENT AUTHORITY LIMITS POLICY

The PRESIDENT & CEO/ SECRETARY – TREASURER shall act within the purpose of all executive limitations as outlined herein. To the extent that there is any inconsistency between the executive limitations as set-out in this policy and the By-law and other policies of the Authority this policy will prevail.

1. EXECUTIVE LIMITATIONS

The PRESIDENT & CEO/Secretary–Treasurer shall not cause or permit any practice, organizational circumstance, activity, or decision that is either imprudent or in violation of commonly accepted business practices or professional ethics.

1. Budgeting in any fiscal year shall not deviate materially from the Authority policies, risk financial jeopardy, or fail to be derived from a multi-year business plan.
2. Staff compensation and benefits shall not deviate materially from current market conditions.
3. Information presented to the General Membership will have no significant gaps in timeliness, accuracy or completeness.
4. Financial performance shall not incur jeopardy or compromise the Authority's Strategic Plan priorities policies.
5. The scope of business activities shall recognize General Membership directions or regulatory restrictions and deviations from same shall require General Membership approval.
6. Risk management procedures shall be explicit and updated to protect the organization, Members, officers and Staff from exposed liabilities.

2. GENERAL MEMBERSHIP- PRESIDENT & CEO/SECRETARY–TREASURER RELATIONSHIP

The General Membership will link governance and management functions and performance through the PRESIDENT & CEO/Secretary–Treasurer.

1. Subject to the By-law of the Authority all authority to the operational organization is delegated through the PRESIDENT & CEO/Secretary–Treasurer, so that all authority and accountability for the operational organization is considered to belong to the PRESIDENT & CEO/Secretary–Treasurer
2. The PRESIDENT & CEO/Secretary–Treasurer is accountable to the General Membership for achieving the Corporate Objectives and achieving provisions of the Strategic Plan

policies within the PRESIDENT & CEO/SECRETARY–TREASURER Management Authority Limits Policy.

3. The General Membership limits the latitude the PRESIDENT & CEO/Secretary–Treasurer may exercise in practices, methods, conduct and other “means” by establishing the PRESIDENT & CEO/SECRETARY –TREASURER Management Authority Limits Policy.
4. As long as the PRESIDENT & CEO/Secretary–Treasurer uses any reasonable interpretation of By-law and Management Authority Limits Policy, the PRESIDENT & CEO/Secretary–Treasurer is automatically authorized to establish all further policies, make all decisions, take all actions, establish all practices, and develop all activities.
5. Monitoring data that disclose the degree of organizational performance, compliance with Strategic Plan priorities will be systematically gathered by the General Membership and considered part of the evaluation of PRESIDENT & CEO/Secretary–Treasurer Performance.
6. Members can never carry the instructive authority of the General Membership, nor can they waive requirements set out by the General Membership.

3. MATTERS REQUIRING GENERAL MEMBERSHIP REVIEW AND APPROVAL

A) MATTERS REQUIRING GENERAL MEMBERSHIP CONSENT

- Any matter requiring General Membership consent pursuant to The Halton Region Conservation Authority General Membership By-law dated the day of, 2018.

B) BUDGET AND BUSINESS PLAN DOCUMENTATION

- annual corporate and business objectives, financial and non-financial;
- annual strategic plan;
- financial plans including proposed corporate financing and investments;
- annual operating and capital budget; or
- any other items as outlined in the Conservation Halton Budget Principles, approved by the General Membership.

C) RISK MANAGEMENT

- general risk management policies,
- purchase (or sale) of any real property interest of Conservation Halton, except as outlined in the Land Acquisition Strategy approved by the General Membership.

D) COMPENSATION AND HUMAN RESOURCES

- compensation for the PRESIDENT & CEO/Secretary–Treasurer.

E) FINANCIAL REPORTING REQUIREMENTS

- The General Membership should be presented with financial statements (in conjunction with the General Membership's meeting schedule), complete with an analysis of variances between actual and budget, by major classification.

Conservation Halton Purchasing Policy Approval and Reporting Requirements

- The following summary outlines the purchasing process and reporting procurement values, excluding taxes and shipping and has been approved by the General Membership on March 22, 2018, Report # 02 18 06, Resolution CHBD 02 06:

Procedure	Procurement Value	Process, Approvals and Reporting Requirements
No quotation required	< \$10,000	Open procurement by authorized buyer.
Informal quotation	\$10,000 – <\$25,000	Three written quotes solicited. Approval by Program Director & Director, Finance.
Informal Request for Proposals	\$25,000 – <\$50,000	Informal proposals with at least three bids solicited. Approval by PRESIDENT & CEO or Senior Director, Corporate & Strategic Initiatives.
Formal Quotation	\$25,000 – <\$50,000	Three written quotes solicited using formal quotation process administered by Finance. Approval by PRESIDENT & CEO or Senior Director, Corporate & Strategic Initiatives.
Formal Request for Proposal	\$50,000 – <\$100,000	Formal proposal process administered by Finance and Purchasing Consultant. Approval by PRESIDENT & CEO or Senior Director, Corporate & Strategic Initiatives.
	\$100,000 & over	Approval by General Membership.
Formal Tender	\$50,000 – <\$350,000	Formal tender process, administered by Finance and Purchasing Consultant. Approval by PRESIDENT & CEO or Senior Director, Corporate & Strategic Initiatives.

	\$350,000 & over	Report >\$100,000 to General Membership. Approval by General Membership.
Other than lowest compliant bid or exceeds budget	>\$25,000	Approval by General Membership.
Non-competitive or negotiated bid— Sole, Single Source	>\$25,000- <\$100,000	Approval by Program Director, Director, Finance, and PRESIDENT & CEO or Senior Director, Corporate & Strategic Initiatives. Information report provided to the General Membership.
Emergency Purchases	>\$25,000	Approval by Program Director, Director, Finance, and PRESIDENT & CEO or Senior Director, Corporate & Strategic Initiatives. Information report to General Membership after resolution of the emergency situation.

Procedure	Procurement Value	Process, Approvals and Reporting Requirements
Competitive quotations not required	< \$10,000	Open procurement by procurement authorized staff.
Informal quotation	\$10,000 - <\$25,000	Three written quotes solicited by procurement authorized staff. Procurement Manager available to support. Approval by program Director is required.
Formal Quotation	\$25,000 - <\$50,000	Three written quotes solicited using formal quotation process administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.
Formal Request for Proposal	\$25,000 - <\$50,000	Proposals with at least three bids solicited using standard template forms administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.

	\$50,000 - <\$100,000	Formal publicly advertised proposal process administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.
	\$100,000 & over	As above and approval by Board of Directors.
Formal Tender	\$50,000 - <\$350,000	Formal publicly advertised tender process, administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance. Information report >\$100,000 to Board.
	\$350,000 & over	Process as above and approval by Board of Directors.
Other than lowest compliant bid or exceeds budget	>\$50,000	Approval by Board of Directors.
Non-competitive or negotiated bid – Sole, Single Source	>\$10,000-<\$25,000	Approval by program director and Director, Corporate Compliance
Non-competitive or negotiated bid – Sole, Single Source	>\$25,000-<\$100,000	Approval by program director, Director, Corporate Compliance, and the President & CEO, COO or Director, Finance Information report provided to the Board.
	>\$100,000	Process as above and approval by Board of Directors.
Emergency Purchases	>\$10,000-<\$25,000	Approval by program director, Director, Corporate Compliance, and the President & CEO, COO or Director, Finance. Information report to Board after resolution of the emergency situation.
	>\$25,000	

- It is acknowledged that the PRESIDENT & CEO/Secretary–Treasurer or acting PRESIDENT & CEO may need to act promptly in emergency situations, including but not limited to
 - major storm or catastrophic damage,
 - public and health & safety issues,

- expiring deadline, or
- any other emergent matter adversely affecting the Authority.

In these circumstances, the PRESIDENT & CEO/Secretary–Treasurer and Acting PRESIDENT & CEO may exceed the Authority Limits but will immediately inform the Chair of the General Membership, or if unavailable, the Vice-Chair of the General Membership, or if unavailable, the Chair of the Finance and Audit Committee, or if unavailable, the Chair of the Governance Committee of the situation and reasons why the limits were exceeded. Thereafter provide a written report at the next scheduled meeting of the General Membership or later date as appropriate.

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 07

FROM: Jill Ramseyer, Director, Corporate Compliance

DATE: November 25, 2021

SUBJECT: Corporate Purchasing Policy Update

Recommendation

THAT the Conservation Halton Board of Directors **approves the updates to the Corporate Purchasing Policy.**

Report

The corporate Purchasing Policy (Appendix F) at Conservation Halton (CH) has been updated to reflect signing authority for the Chief Operating Officer, and additional oversight by the Director, Corporate Compliance as well as other administration changes. The main premise of the recommended changes (illustrated in the table below) is to permit CH to operate with maximum efficiency in alignment with existing business operations, to fill policy component gaps and adopt best practices.

Summary of Changes

Section	Description of Change
Throughout	<ol style="list-style-type: none"> COO added as signing authority for level of signing that includes CEO and Director, Finance The term Deviation Report changed to Exception Report and all exceptions must be approved by Director, Corporate Compliance Staff title/position updates
Purchase Order Change Requests Section 2.5	Limit the approval requirement for Change Order increases to the amount delta only where increase amount is within preauthorized contingency. This negates the requirement to seek "Cumulative" approval to increases where contingencies have been preauthorized.
Emergency Purchases Section 2.6	New: Emergency Purchases - Added \$10K - \$24,999 to permit approval by Director, Corporate Compliance. This spend range was previously unaccounted for.

Negotiation, inclusive of Sole and Single Source Section 2.8	New: Added \$10K - \$25K single source approval required by Director, Corporate Compliance. This spend range was previously unaccounted for.
Negotiation, inclusive of Sole and Single Source Section 2.8	Deleted the last sentence of section paragraph in single source approval section, "When the award amount for requests for proposals exceeds \$100,000, or for tenders exceeding \$350,000, Conservation Halton Board approval is required" as it is not pertinent to single sources.
CH Core Values Section 1 (h)	Update to CH Core Values to align with momentum

Impact on Strategic Goals

This report supports the Momentum strategic priority of Organizational Sustainability.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Jill Ramseyer
Director, Corporate Compliance

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Pavan Seth, Procurement Manager,
pseth@hrca.on.ca, 905.336.1158 x2249

CONSERVATION HALTON
PURCHASING POLICY



PURCHASING POLICY

November 2021

CONSERVATION HALTON
PURCHASING POLICY

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CONSERVATION HALTON PURCHASING POLICY

Purpose of the Purchasing Policy

The purpose of the purchasing policy is to provide the necessary policies and procedures to procure the required quantity and quality of goods and services while obtaining the best value for public funds. The Purchasing Policy supports the procurement of goods and services approved and funded through the annual budget process.

The purchasing policy will protect the integrity of Conservation Halton and the participants in the procurement process. An understanding of the risks of competitive procurement will also serve to safeguard the interests of Conservation Halton.

Section 1 - Goals and Objectives

The goals and objectives of the purchasing policy are to:

a) Ensure efficiency

Goods and services will be procured by purchase, rental or lease in an efficient and cost-effective manner.

b) Ensure an open, objective, and competitive process

An open competitive bidding process for the acquisition and disposal of goods and services where practicable will be encouraged. The annual aggregate value or the total project cost of specific goods and services that will be required by Conservation Halton will be considered prior to determining the appropriate acquisition method.

c) Ensure all costs are considered – (TCO) Total Cost of Ownership

All costs will be considered, including acquisition, operating and disposal costs, in evaluating bid submissions from qualified, responsive and responsible vendors, rather than basing a decision solely on the lowest bid price.

d) Ensure fairness & transparency

The procurement process will be fair and transparent so that any given bidder does not receive an unfair advantage or disadvantage. The policy will comply with Canada-European Union Comprehensive Economic and Trade Agreement (CETA) and the Canadian Free Trade Agreement (CFTA).

e) Ensure the environment is considered

Necessary goods and services will be procured with regard to the conservation and preservation of the natural environment. Vendors will be encouraged to supply goods made by a method resulting in the least damage to the environment and incorporating recycled materials where applicable.

f) Ensure sustainability is considered

The purchase of sustainable products and services will be considered at all times. These products and services are defined as those having a lesser or reduced effect on human health and the environment when compared to other products and services that serve the same purpose. Specifications will include,

CONSERVATION HALTON PURCHASING POLICY

unless otherwise justified, sustainable products that: use recycled materials; are durable, reusable or are designed to be recycled; consume fewer resources in their manufacture and/or their use; and services that use sustainable responsible practices.

g) Ensure health and safety

Health and safety in the workplace will be considered to prevent accidents, injuries, and occupational illness.

h) Ensure Conservations Halton's Core Values are maintained

- Diversity & Inclusion
- Learning & Innovation
- Person-Centered Service
- Collaboration
- Sustainability
- Integrity
- Resilience

Section 2: Procurement Process

2.1 Authority and Responsibilities

The Procurement Manager will oversee the procurement processes in accordance with the requirements of these policies and procedures. All designated procurement authorized staff, involved in procurement activity will follow the purchasing limits and authorization process outlined in purchasing policy section 2.8 that includes the following:

- a) The acquisition of goods and services including the purchase of capital assets and the leasing or rental of such goods and services;
- b) The disposal of goods, equipment, supplies, materials and salvage which has been declared surplus;
- c) The development of cooperative purchasing plans with other levels of government and other local agencies, where deemed beneficial to Conservation Halton;
- d) The standardization of goods and services wherever possible;
- e) The issuing, opening, and reviewing formal bids as defined in section 2.3.2. Formal bid documents will be reviewed prior to issuance to ensure appropriate terms and conditions and special provisions, such as a schedule for completion of services and a request to provide satisfactory references as required, have been included.
- f) Certificates of insurance must be approved by the Procurement Manager prior to start of work.

2.2 Electronic Bidding

CONSERVATION HALTON PURCHASING POLICY

Electronic bidding by issuing bids and / or receiving bids through a bidding system over the internet is acceptable for use in informal and formal bids. Formal bids are received electronically through the purchasing software bidsandtenders™. Formal bids received electronically are not released by the purchasing software until the predetermined opening time. A bid is determined to be late when the electronic time stamp through bidsandtenders™ exceeds the corresponding solicitation dictated closing time.

A bidder may withdraw their formal bid prior to the closing time. Withdrawal requests shall be completed by the vendor electronically through bidsandtenders™. The withdrawal of the bid does not disqualify a bidder from submitting another proposal on the same bid call prior to the closing time. Withdrawal requests received after the closing time shall not be considered.

Bidder questions for formal bids should be submitted electronically online through the electronic purchasing system by the bidder. The questions submitted and the respective answers will be issued within the designated period of time, in the form of an addendum and posted on the conservationhalton.bidsandtenders.ca website for all potential bidders at least two (2) days prior to closing. Any questions and answers occurring during bidders' meetings, site visits or information sessions shall be treated in the same manner as outlined above.

Where it is deemed necessary by Conservation Halton to revise the bid documents, an automatic electronic notification will be issued to all registered bidders that a new addendum has been issued. The onus is on the bidder to ensure that the bidder is in receipt of all addenda prior to the bid closing.

Once a decision to award a vendor has been made, all information received, such as references and evaluation forms used will be submitted to the Procurement Manager for retention and audit purposes.

2.3 Purchasing Limits and Authorization

The following purchasing limits will apply to the procurement of goods and services at Conservation Halton. Procurement authorized staff who may be involved in CH procurements are listed in Section 3. Procurement authorized staff may choose to delegate authority to other staff not listed but assume all responsibility for directives within this policy. Items where these limits do not apply are identified in Section 4, where the total cost of the purchase does not exceed the amount approved in the annual budget and the purchase is in compliance with the authorization provisions of this policy.

The dollar amounts referred to in the purchasing policy will be the total cost of all individual items purchased, excluding taxes and freight. For leased goods the purchasing limits will apply to the total amount being financed.

2.3.1 Procurement Process for Purchases \$10,000.00 to less than \$50,000.00

a) Purchases of \$10,000.00 to \$24,999.99

- * A minimum of three written quotations are to be obtained from suppliers.
- * Standard procurement templates will be used to ensure all terms and conditions for the purchase are included.
- * If at least three written quotes are not obtained, the reasons must be documented, reviewed by the Procurement Manager, or designate and retained on file for audit purposes.

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- * If the lowest compliant bidder is not being recommended for award, the rationale for the recommendation must be documented in a Purchasing Policy Exception Report and approved by the Director, Corporate Compliance
- * A purchase order requisition will be completed by procurement authorized staff, with applicable documentation attached to the purchase order requisition, and submitted to finance to prepare a purchase order. The purchase order must be completed before the start of work as finance staff are unable to process invoices for payment without an approved purchase order.
- * Approval of the program director is required.

b) Purchases of \$25,000.00 to \$49,999.99

- * A minimum of three written quotations are to be obtained from suppliers.
- * Standard procurement templates including terms and conditions are to be included in the request for written quotations.
- * It is preferred that bids be obtained for purchases within this range by posting publicly on bidsandtenders™ websites to ensure a fair and competitive process.
- * If at least three written quotes are not obtained, the reasons must be documented and provided to the Director, Corporate Compliance via the Procurement Manager. If the lowest compliant bidder is not being recommended for award, the rationale for the recommendation must be documented in a Purchasing Policy Exception Report and approved by the Director, Corporate Compliance.
- * A purchase order requisition is to be completed by Procurement authorized staff, with all documentation attached to the purchase order requisition, and submitted to finance to prepare a purchase order. The purchase order must be completed before the start of work as finance staff are unable to process invoices for payment without a prior approved purchase order; Approval of (a) program director, (b) Director, Finance or President & CEO or COO is required on the above noted purchase order requisition.

Where a purchase order is not completed prior to the receipt of an invoice, finance staff are to return the invoice to the supplier and advise the supplier of the unauthorized purchase. Finance staff do not have the authority to process payment for invoices for which an approved purchase order does not exist. Staff who make purchases without an authorized purchase order may be held personally liable for those unauthorized purchases.

2.3.2 Procurement Process for Purchases of \$50,000 or More

a) Requests for Proposals \$50,000.00 to \$99,999.99 and Tenders \$50,000.00 to \$349,999.99

- * Goods and services exceeding \$50,000.00 are to be obtained by a formal publicly advertised bid process. The invitation for formal requests for proposals, tenders and prequalifications will be posted on the Conservation Halton and bidsandtenders™ websites at conservationhalton.bidsandtenders.ca. When the bid is subject to the Canada Free Trade Agreement (CFTA) the bid will be posted for a minimum of fifteen (15) calendar days. The posting will include the project title, brief description of the goods or services being acquired, timing of submission, website where the bid is posted and contact person.
- * Individual business units along with the Procurement Manager are responsible for preparation of the formal bid documents, including detailed specifications.
- * Procurement Manager and / or legal review of the formal bid document is required prior to issuing the bid document.
- * If utilizing hard copy solicitations, instructions are to be provided to reception staff for the receipt and distribution of formal hard copy bids.
- * Approval of (a) program director, (b) Director, Corporate Compliance and (c) President & CEO or Director, Finance or COO are required for the selection of the successful bidder.

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- * The reasons for accepting other than the lowest compliant or highest overall scoring submission must be documented in a Purchasing Policy Exception Report and approved by the Board of Directors.
- * A Memorandum of Purchase Approval (MPA) document will be required to provide historical detail of the procurement process and secure the necessary approvals prior to commitment.
- * A purchase order requisition is to be completed by procurement authorized staff, with the approved MPA report and summary of formal bids attached to the purchase order requisition and submitted to finance to prepare a purchase order. The purchase order must be completed before start of work as finance staff are unable to process invoices for payment without a prior approved purchase order.

b) Request for Proposals of \$100,000 and over and Tenders \$350,000 and over

When a bid is subject to the Canada Free Trade Agreement (CFTA) and Canada-European Union Comprehensive Economic and Trade Agreement (CETA) the bid will be posted for a minimum of forty (40) calendar days in accordance with CETA regulations. The posting will include the project title, brief description of the goods or services being acquired, timing of submission, website where the bid is posted and contact person.

*In addition to the approval requirements outlined in 2.3.2 a), the award must be approved by the Conservation Halton Board of Directors.

c) Revenue Generating Contracts

The same conditions and limits outlined above for goods and services will be applied to revenue generating contracts.

2.4 Bid Requests Containing Irregularities

Each bid received in response to a bid request will be reviewed to determine whether a bid irregularity exists. Section 5 establishes the actions to be taken if an irregularity exists.

2.5 Purchase Order Change Requests

In accordance with finance policy, if additional funding is required that exceeds the original award amount including contingency following the approval of a purchase order then approval from the appropriate authority for the requested **cumulative value** including the Director, Finance is required. If funding increase approval is required within a pre-approved contingency amount, standard approval authority will be required for the increase amount. If funds are to be reallocated from another project or exceed \$25,000.00 CDN, the President & CEO approval is required. If additional funds are not available in the approved budget, approval of the Board is required.

2.6 Emergency Purchases

Goods and services required to address an emergency where the purchase is essential to prevent loss of life, potential loss in business, damage to property, or for the continuation of a program or service that is essential to the wellbeing of Conservation Halton shall be acquired by the most open market procedure and the lowest overall cost possible.

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An Emergency Purchase template, prepared by procurement authorized staff via the Procurement Manager, must be submitted to the President & CEO and the respective program director for approval for emergency goods and services with a purchase cost greater than \$25,000 after the resolution of the emergency situation. The Director, Finance must be notified and will report these emergency purchases in the quarterly Budget Variance Report to the Conservation Halton Board of Directors. A separate Emergency Purchase memo will be prepared and provided to the Board for visibility. For costs between \$10,000 - \$24,999 the Emergency Purchase template will be submitted to the Director, Corporate Compliance for review and approval.

2.7 Cooperative Purchasing

Conservation Halton shall encourage and participate in cooperative purchasing with other levels of government or other public agencies whenever the best interests of all participants would be served. As a participant, Conservation Halton shall award contracts to the vendors approved by the issuing agency, selected through a competitive bid process, including the Halton Cooperative Purchasing Group (HCPG) and Province of Ontario Vendor of Record (VOR) program. Purchases made through co-operative buying procedures will follow all approvals and reporting as outlined in this policy.

2.8 Negotiation, inclusive of Sole and Single Source

Purchase by negotiation may be adopted when any of the following conditions apply. Approvals, as noted in the Reporting Requirements and Approvals table in Section 2.8, are required to proceed with the purchase order:

- a) when in the judgment of procurement authorized staff, goods are judged to be in short supply due to market conditions and the purchase is critical to the timely completion of work;
- b) there is only one known source of the goods or service (sole source);
- c) two or more identical low bids have been received;
- d) the lowest bid substantially exceeds the estimated costs of the goods and services and it is impractical to re-bid;
- e) all bids received fail to comply with the specifications, tender terms and conditions and it is impractical to recall tenders;
- f) the extension of the existing contract would prove more cost effective or beneficial;
- g) a single source is recommended because it is more cost effective or beneficial to ensure compatibility with an existing product, facility or service;
- h) when no bids are received;
- i) when only one bid is received in a bid call;
- j) when work is required at a location where a contractor has already been secured through a bid process, with established unit prices and it is considered to be beneficial and cost effective to extend the unit prices for the work to be completed;
- k) after the request for proposal process, it may be necessary for discussion and revision of the proposal.

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Award of a single or sole source (non-competitive) contract may not be made before a request has been reviewed by the Procurement Manager and a report is submitted and approval is received from the Program Director and Director, Corporate Compliance for purchases between \$10,000 - \$24,999. The report must provide sufficient justification to support a single/sole source award.

When the award amount is between \$25,000 - \$99,999, approval by the President & CEO or Director, Finance or COO and the Director, Corporate Compliance is required. Single or Sole Source recommendations that exceed \$100,000 require Board Approval.

2.9 Reporting Requirements and Approvals

The following summary outlines the purchasing process, reporting and approvals required according to procurement values, excluding taxes and shipping:

Procedure	Procurement Value	Process, Approvals and Reporting Requirements
Competitive quotations not required	< \$10,000	Open procurement by procurement authorized staff.
Informal quotation	\$10,000 - <\$25,000	Three written quotes solicited by procurement authorized staff. Procurement Manager available to support. Approval by program Director is required.
Formal Quotation	\$25,000 - <\$50,000	Three written quotes solicited using formal quotation process administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.
Formal Request for Proposal	\$25,000 - <\$50,000	Proposals with at least three bids solicited using standard template forms administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.
	\$50,000 - <\$100,000	Formal publicly advertised proposal process administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.
	\$100,000 & over	As above and approval by Board of Directors.
Formal Tender	\$50,000 - <\$350,000	Formal publicly advertised tender process, administered by the Procurement Manager. Approval by the President & CEO, COO or Director, Finance.

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		Information report >\$100,000 to Board.
	\$350,000 & over	Process as above and approval by Board of Directors.
Other than lowest compliant bid or exceeds budget	>\$50,000	Approval by Board of Directors.
Non-competitive or negotiated bid – Sole, Single Source	>\$10,000-<\$25,000	Approval by program director and Director, Corporate Compliance
Non-competitive or negotiated bid – Sole, Single Source	>\$25,000-<\$100,000	Approval by program director, Director, Corporate Compliance, and the President & CEO, COO or Director, Finance Information report provided to the Board.
	>\$100,000	Process as above and approval by Board of Directors.
Emergency Purchases	>\$10,000-<\$25,000	Approval by program director and Director, Corporate Compliance
	>\$25,000	Approval by program director, Director, Corporate Compliance, and the President & CEO. Information report to Board after resolution of the emergency situation.

2.10 Disposal of Surplus Goods

The President & CEO or designate shall have the authority to sell, exchange or otherwise dispose of goods declared as surplus to the needs of Conservation Halton, with the exception of real property, and where it is cost effective and in the interest of Conservation Halton to do so, items or groups of items may:

- a) be offered to other public agencies;
- b) be sold by external advertisement, formal request, auction or public sale;
- c) be advertised internally to employees for sale and sealed bids will be received with award to the highest bidder;

Obsolete or surplus goods may be sold or traded to the original supplier or others in that line of business where it is determined that a higher net return will be obtained.

A reserve price may be established where it is deemed appropriate.

In the event that all efforts to dispose of goods by sale are unsuccessful, the Director, Finance shall be directed to dispose of such items in an appropriate manner and document the disposition.

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2.11 Prohibitions (Contravention of Policy)

Failure to adhere to the provisions in this policy may be subject to disciplinary action in accordance with human resources policies;

- a) No contract for goods or services including professional and consulting services shall be divided to avoid the requirements of this purchasing policy;
- b) No personal purchases shall be made by Conservation Halton for members of the Board of Directors or employees of Conservation Halton or their families;
- c) An employee or Board member who has the responsibility of declaring goods surplus will not bid or personally obtain any goods they have declared surplus except for when goods are sold by an arms length auction house conducting live or online auctions;
- d) No employee or Board member of Conservation Halton shall purchase or offer to purchase, on behalf of Conservation Halton, any goods or services, except in accordance with this purchasing policy;
- e) Any Board member, employee or member of an employee's family of Conservation Halton is expressly prohibited from accepting, directly or indirectly from any person or organization to which a purchase order or contract is, or may be awarded, any rebate, gift or money, except;
 - gifts given for the use and benefit of Conservation Halton;
 - moderate hospitality during the normal course of business that would not significantly exceed what Conservation Halton, through the employee's expense account, would likely provide in return and would not be perceived by others as influencing the making of a business decision.
- g) No employee shall sell directly to Conservation Halton or use Conservation Halton to purchase goods and services at a reduced price for personal use except as provided by Conservation Halton's human resources policies.

2.12 Health and Safety

Conservation Halton is committed to promoting health and safety in the workplace by preventing accidents, injuries, and occupational illness.

In keeping with this policy, Conservation Halton staff directly responsible for engaging service providers (contractors) must:

- Be on the lookout for and identify potential health and safety hazards.
- Specify health and safety requirements in the contract and ensure the contractor is in compliance with all government regulated policies and training requirements.
- Obtain agreement from the contractor to follow these requirements prior to awarding the contract.
- Actively monitor compliance with health and safety requirements.
- Ensure appropriate staff receives the direction and training to fulfill their responsibilities.

Contractors shall be required at all times to comply with the Occupational Health and Safety Act (Act), Regulations, all Industry standards, training requirements, and guidelines, and shall be responsible for and take every precaution reasonable in the circumstances for the protection of all workers associated

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with the services being performed, whether employed by the contractor, Conservation Halton or a third party.

Contractors shall acknowledge that they have read, understood, and provided training in relation to the Act, Regulations, all industry standards and guidelines to its supervisors and employees. Upon request, the contractor shall provide its health and safety policies and procedures, valid training certificates and other related materials to Conservation Halton for review prior to the commencement of the services.

In the event the contractor determines that any of its material and/or equipment is unsafe, the contractor shall take appropriate action to protect the employees and third parties from all hazards and immediately notify Conservation Halton.

The contractor shall report all serious accidents, critical injuries, fatalities, and accidents involving third parties to Conservation Halton immediately.

In the case of construction projects, Conservation Halton staff shall also comply with the Occupational Health and Safety Act and Regulations for construction projects.

Staff will ensure that Conservation Halton is not put into the position of “Constructor”. Contractors will not work in an area together where their work or the flow of workers could interfere or be perceived to interfere with the safety of workers. If this is unavoidable, there must be clear delineation between the work areas as provided for in the Constructor Guidelines from the Ministry of Labour.

2.13 The Freedom of Information and Protection of Privacy Act

The information collected in response to Conservation Halton’s purchasing policy is collected under the authority of the Freedom of Information and Protection of Privacy Act. The information collected will be used solely for the purpose stated. Documents submitted by bidders shall become the property of Conservation Halton and shall be subject to the Freedom of Information and Protection of Privacy Act.

2.14 References

Contractors not used previously by Conservation Halton must provide three satisfactory references prior to the award of a contract for services in excess of \$10,000 similar in scope and size of the services requested. References must provide satisfactory evidence of the contractor’s ability to complete the work as bid.

2.15 Local Preference

Conservation Halton subscribes to open market, fair and transparent purchasing practices, and as such, does not provide for incentives or means to promote local vendor preference.

2.16 Disclosure of Bid Information

Conservation Halton may disclose the results of the bid process to other suppliers and members of the public as follows:

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For Quotations and Tenders – Bidder's names and amount bid.

For Request for Proposals – Bidder's names only as the decision to award to a bidder is based on specific evaluation criteria and price is not the sole criteria for the award.

Upon award, Conservation Halton may disclose name of awarded vendor and total awarded amount.

If the bid was posted on BidsandTenders.ca the award information will be posted on the site.

2.17 Environmental Considerations

Conservation Halton shall encourage the procurement of supplies and services with regard to preservation of the natural environment. Suppliers may be selected to supply goods made by methods resulting in the least damage to the environment, and/or to supply goods incorporating recycled materials where practicable. It is to be understood that total lifecycle cost analysis may be required to ensure that these supplies and services are financially viable and available at competitive prices.

2.18 Purchase of Used or Second-Hand Goods

From time to time there may be a case to be made for the purchase of used or second-hand goods. In all cases the purchase must first be reviewed by the Procurement Manager. Used goods may only be purchased from other public agencies or government endorsed sources or auction sites. A purchase of used goods made other than as noted above may not be paid for from Conservation Halton funds.

Section 3: Procurement Authorized Staff

Senior Staff/Department

Procurement Authorized Staff

President & CEO

Manager, Office of the CEO

Chief Operating Officer

Manager, Flood Forecasting & Operations
Project Managers
Facilities Maintenance Coordinator
GIS Lead
IT Lead

Executive Director, Foundation

Director, Human Resources

Senior Human Resources Partner

Director, Planning &
Watershed Management

Associate Director, Planning & Regulations
Senior Manager, Watershed Planning & Source Water
Coordinator, Floodplain Mapping

Associate Director, Science & Partnerships

Coordinator, Landowner Outreach

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	Coordinator, Monitoring Ecology HHRAP Coordinator
Director, Parks & Operations	Manager, Programs Manager, Recreation Operations Coordinator, Rental & Retail Coordinator, Events Manager, Facilities & Maintenance Coordinator, Facilities & Maintenance Coordinator, Risk & Enforcement Visitor Safety Lead Coordinator, Outdoor Recreation Operations Coordinator, Recreation Programs Supervisor, Lift Operations Coordinator, Animal Care & Programs Coordinator, Community Engagement & Outreach Forestry Technician Lead Manager, Visitor Experience Coordinator, Visitor Services Coordinator, Visitor Services & Retail Manager, Education
Director, Corporate Compliance	Health & Safety Specialist Lands Manager Procurement Manager Risk & Compliance Specialist
Director, Finance	Sr. Manager, Finance
Director, Communication	Brand Engagement Specialist
Manager, Marketing	Senior Graphic Designer Marketing and Events Coordinator

Delegated Authority:

Authorized staff noted above may, from time to time, delegate authority to other staff members under their supervision. However, at all times, a procurement authorized staff will be held responsible for the proper execution of the Purchasing Policy.

All procurement authorized staff and those who have received delegated authority, will be required to attend training when the policy is approved or revised.

Section 4: Exempt Goods and Services

- 1. Petty Cash Items**
- 2. Training and Education**

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- a) Conferences, conventions, courses and seminars;
- b) Magazines, books, periodicals;
- c) Professional and association memberships

3. Employee and Board Member Expenses

- a) Advances
- b) Meal Allowances
- c) Travel and Entertainment
- d) Accommodation

4. Employer's General Expenses

- a) Employee payroll
- b) Payroll deduction remittances
- c) Medical and dental expenses
- d) Licenses (eg. vehicles, radios, lifts)
- e) Software licensing and maintenance fees
- f) Insurance premiums
- g) Damage claims through insurance
- h) Bank charges, merchant services
- i) Audit fees

5. Professional and Special Services

- a) Board per diems
- b) Artistic and cultural services
- c) Honorariums
- d) Legal fees
- e) Witness Fees
- f) Appraiser fees
- g) Legal settlements
- h) Human resources medical/disability assessments and investigations

6. Utilities

- a) Postage
- b) Hydro, fuel oil, gas
- c) Telephone
- d) Telecommunications services

7. Cooperative Purchasing Contracts Awarded by:

- a) Halton Cooperative Purchasing Group (HCPG)
- b) Province of Ontario Broader Public Sector (BPS) Agreements, OEM and LAS etc.

8. Real Property Purchase and Sale

Note: The exemptions listed in this policy do not exclude a supplier, contractor, consultant, or vendor of any kind of the requirement to provide insurance certificates, WSIB certificate.

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Section 5: Bid Irregularities

A bid irregularity is a deviation between the requirements (terms & conditions, specifications, special instructions) of a bid request and the information provided in a bid response.

APPLICABLE TO ELECTRONIC BIDDING ONLY

	<u>Irregularity</u>	Action Taken
1.	<u>Late bid</u> : Bid received after the closing date and time specified in the bid document.	Bidding system does not accept late bids Bid declared non-compliant
2.	<u>Addenda</u> : Addenda not acknowledged	Bidding system does not accept bids that have not acknowledged all addenda Bid declared non-compliant
3.	<u>Site meeting</u> : Bidder did not attend a mandatory site meeting.	Bidding system does not accept bids from bidders that did not attend the mandatory meeting Bid declared non-compliant
4..	<u>Method of delivery</u> : Where the bid has been submitted via any other method other than through the bidding system, where no such provision is allowed for in the bid document.	Bid declared non-compliant
5.	<u>Suspended vendor</u> : Bid received by a bidder who has been suspended from the bidding process.	Bid declared non-compliant unless express approval has been provided by the appropriate authority and evidence of corrective measures and discrepancies have been remedied
6.	<u>Format</u> : Bid not on the form supplied by Conservation Halton or not in the format specified in the bid document.	Bid declared non-compliant
7.	<u>Bid bond/Agreement to bond</u> : Bond is missing.	Bidding system does not accept bids that do not have the bid bond or agreement to bond attached. Bid declared non-compliant
8.	<u>Bid bond/Agreement to bond</u> : The amount is less than the amount indicated in the bid document.	Unless in the opinion of the Procurement Manager, the insufficiency is trivial or insignificant. Bidder shall be given five (5) business days to rectify.

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9.	<u>Bid bond/Agreement to bond:</u> The bonding company is not licensed to conduct business in Ontario.	Bid declared non-compliant
10.	<u>Bid bond:</u> Bond is not an electronically verifiable/enforceable (e-Bond) as indicated in the bid document.	Bidder shall be given five (5) business days to rectify
11.	<u>Documents:</u> Documents provided through the Bidding System were not the required ones and/or documents are not legible	Bid declared non-compliant
12.	<u>Qualified bid:</u> Where the bid has been qualified by changes to specification or major requirements and acceptance would allow an unfair advantage over competitors.	Bid declared non-compliant
13.	<u>Bid does not meet major specifications and is not suitable, Major specification to be determined by Conservation Halton bid representative and Director, Corporate Compliance.</u>	Bid declared non-compliant
14.	<u>Bid does not meet minor specifications and an acceptable alternative is provided as determined by Conservation Halton bid representative and Director, Corporate Compliance.</u>	Bid to be reviewed by Bid Review team and Director, <u>Corporate Compliance.</u>
15.	<u>Bid form not signed</u>	The bidding system does not accept bids unless the bidder has checked a box confirming authority to submit a bid on behalf of the bidder.
16.	<u>Failure to execute:</u> Fails to execute a contract or supply supplementary documents after Intent to Award letter has been issued.	Award may be overturned.
17.	<u>Other bid irregularities</u>	Ruling by Director, <u>Corporate Compliance</u> - Bidder <u>may</u> be given up to five (5) business days to remedy the bid irregularity

APPLICABLE TO HARD COPY BIDDING SUBMISSION ONLY (bids between \$10,000-\$50,000)

	<u>Irregularity</u>	<u>Action Taken</u>
1.	<u>Late bid:</u> Bid received after the closing date, location and time specified in the bid document.	Bid rejected

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2.	<u>Addenda:</u> Addenda not acknowledged	Bid rejected if the addendum could impact the bid response. If the addendum will not impact the bid response, the bidder has two (2) business days to acknowledge and incorporate the addenda
3.	<u>Site meeting:</u> Bidder did not attend a mandatory site meeting.	Bid rejected
4.	<u>Suspended vendor:</u> Bid received by a Bidder who has been suspended from the bidding process.	Bid declared non-compliant unless express approval has been provided by the appropriate authority and evidence of corrective measures and discrepancies have been remedied
5.	<u>Format:</u> Bid not on the form supplied by Conservation Halton or not in the format specified in the bid document.	Bid declared non-compliant if the format is material to the bid
6.	<u>Bid bond/Agreement to bond:</u> Bond is missing.	Bid rejected
7.	<u>Bid bond/Agreement to bond:</u> The amount is less than the amount indicated in the bid document.	Unless in the opinion of the Procurement Manager, the insufficiency is trivial or insignificant. Bidder shall be given two (2) business day to remedy.
8.	<u>Bid bond/Agreement to bond:</u> The bonding company is not licensed to conduct business in Ontario or is not in the form specified, or not signed by the bonding company and/or bidder.	Bid declared non-compliant
9.	<u>Documents:</u> Documents are not completed in ink or documents are not legible	Bid declared non-compliant
10.	<u>Documents:</u> Documents contain changes, erasures, overwriting, whiteouts, cross outs, or strikeouts that are not initialed by the bidder	Bidder shall be given two (2) business days to rectify.
11.	<u>Qualified bid:</u> Where the bid has been qualified by changes to specification or major requirements and acceptance would allow an unfair advantage over competitors.	Bid declared non-compliant
12.	<u>Bid does not meet major specifications and is not suitable, Major specification to be determined by Conservation Halton bid representative and Director, Corporate Compliance.</u>	Bid declared non-compliant

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13.	<u>Bid does not meet minor specifications and an acceptable alternative is provided as determined by Conservation Halton bid representative and Procurement Manager.</u>	Bid to be reviewed by Bid Review team and Procurement Manager.
14.	<u>Bid form not signed</u>	Bid declared non-compliant
15.	<u>Mathematical errors:</u> in extensions, additions, or totals	Conservation Halton has the right to correct the mathematical errors. In all cases the unit prices will be used to correct the discrepancy.
16.	<u>Other bid irregularities</u>	Ruling by Bid Review Panel - Bidder <u>may</u> be given up to five (5) business days to rectify the bid irregularity

Note: The above noted should not be considered all-inclusive. The Director, Corporate Compliance, in consultation with the requisitioning department will review minor irregularities. The Director, Corporate Compliance may then accept the bid, or request that the bidder rectify the deviation.

Section 6: Definitions

“**acquisition**” means the process of obtaining goods or services, including rental or lease;

“**award**” means the authorization to proceed with the purchase of goods, services or construction;

“**bid**” means an offer or submission from a vendor in response to a request for quotation, tender or proposal, which is subject to acceptance or rejection;

“**bidder**” means any legal entity that submits a bid in response to a call for bids;

“**bid request**” means a written request for bids or a solicitation, which may be in the form of a Request for Quotation, Request for Tender or Request for Proposal;

“**Conservation Halton**” means The Halton Region Conservation Authority;

“**constructor**” means “a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer” as defined by the Constructor Guidelines from the Ministry of Labour and as provided for in the Occupational Health and Safety Act.

“**contract**” means a legally binding agreement between two parties;

“**contractor**” means the party responsible for providing construction and/or services also see Vendor;

“**cooperative purchasing**” means the participation of two or more public agencies, in a request for a quotation, tender or proposal;

“**electronic bidding**” means a method of issuing bids and/or receiving bids through a bidding system over the internet;

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“electronic bidding system” means the eSolutions Group bidsandtenders™ proprietary bidding system;

“emergency” means an event or circumstance where the immediate purchase of goods, services or construction is necessary to prevent or alleviate serious delay, a threat to public health, safety or welfare, the disruption of essential services or damage to public property or any other expenditure that is necessary to respond to any such event;

“environmentally preferred” means an environmentally preferred product or service will meet the criteria of a recognized third-party certification program, where such a certification exists for that product category.

“goods and services” includes supplies, equipment, materials and maintenance and service contracts;

“life cycle costs” means the cost of the good or service throughout its life cycle, from production, distribution, usage, end of life and its environmental impacts.

“open market procedure” means obtaining price quotations from vendors verbally or in writing;

“personal purchases” means a purchase of goods and services requested by a member, or by any employee of Conservation Halton or their family members, the requirement for which is not for Conservation Halton or any of its purposes, but is personal to the person requesting the purchase;

“procurement authorized staff” means those senior staff members or those designated to conduct or participate in procurement activity as identified in Appendix 1;

“program director” means the senior leader of the Conservation Halton program issuing the bid.

“proposal” means an offer from a vendor in response to a request for proposal, acceptance of which may be subject to further negotiation. The selection of the successful supplier is based on the effectiveness of the proposed solution rather than on price alone. The effectiveness of the proposal is measured against a standard set of evaluation criteria;

“purchase order” means a written or electronic offer to purchase goods and services or a written or electronic acceptance of an offer;

“quotation” means an offer from a bidder to buy or sell goods and services;

“senior staff” means a senior staff director of Conservation Halton as identified in Section 3;

“service provider” means the external party responsible for providing services also see Contractor and Vendor;

“signing officer” means one of the Conservation Halton Board Chairman, Vice-Chairman, President & C.E.O., Director, Watershed Management Services ,Director, Finance and the Chief Operating Officer (COO);

“single source” means although there may be more than one source in the open-market, only one of these is recommended for consideration in a contract;

“sole source” means there is only one source of supply.

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“tender” means an offer from a bidder to buy from or sell goods and services in response to a public advertisement requesting tenders;

“third party certification” refers to an independent organization that licenses and certifies products that meet stringent sustainable standards developed by the organization. Some of the known certification programs most frequently used to certify environmentally preferred products are:

Energy Star, EcoLogo / Environmental Choice, Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), Electronic Products Environmental Assessment Tool (EPEAT), Green Seal, Greenguard, Leadership in Energy and Environmental Design (LEED), ecoAction, Canada Organic, Fairtrade Canada

“vendor” means the party responsible for providing the service, also see Contractor

Section 7: Standard Contract Terms and Conditions

General purchasing terms and conditions will be posted on the Conservation Halton website. These “simple form” terms and conditions apply to all purchases made by procurement authorized, or delegated staff. The terms are subject to change from time to time and vendors are encouraged to refer to these terms prior to accepting staffs offer to purchase.

Standard templates for staff use are available for informal bids, quotations, tenders, and RFP’s. These templates can be found on the corporate compliance page on Sharepoint. Contact the Procurement Manager for assistance. The templates will change from time to time as laws and best practices change, staff are to use the appropriate template for completion of their bid documents. Staff are not to use old or previously released bid document terms and conditions, as they may not contain all relevant and updated clauses.

If changes are required to the templates, the Director, Corporate Compliance along with the Procurement Manager will ensure any necessary revisions are captured.

Section 8: Use of Corporate Credit Cards

1. Definition and Purpose

The use of corporate credit cards issued to authorized staff provides an efficient, flexible, and convenient means for purchasing low value goods and services and avoids employee out of pocket expenses for business purposes.

Corporate credit cards are not intended to avoid or bypass appropriate purchasing or payment procedures, but to complement existing procedures.

2. Authority

The credit card issued will be approved by both the Director, Finance and the respective program director and issued to those employees who occupy positions with the appropriate delegated purchasing authority. A position with the appropriate delegated authority does not necessarily include all procurement authorized staff in the Conservation Halton Purchasing Policy. Corporate credit cards are

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issued to the President & CEO, program directors and department managers as well as supervisors and coordinators where the position warrants.

Each credit card will have a unique number and will be issued both in the name of The Halton Region Conservation Authority and the name of the employee who has been authorized to use the card. The card is not transferable to, or to be used by, any other person including other employees.

3. Restrictions

Corporate credit cards are not to be used for the following purchases:

- When the purchase price exceeds the cardholder's credit limit. Credit cards issued have a predetermined credit limit. A transaction cannot be split into two or more separate amounts to bypass the cardholder's credit limit.
- Contracted services
- Hazardous materials
- Personal purchases or cash advances
- Rental and lease agreements beyond one year
- Illegal transactions

4. Staff Travel Expenses

Staff travel expenses paid by corporate credit card must be in accordance with the guidelines provided in Conservation Halton's human resources policies.

5. Cardholder Responsibilities

The cardholder is responsible for:

- Using the credit card in accordance with the guidelines set out in this policy and procedure.
- The security of the card and ensuring that documents bearing the card number are kept in a secure location with controlled access. When quoting the credit card number by fax or internet for a purchase, every precaution should be taken to avoid the risk of unauthorized use of the card number. The credit card number is only to be provided for internet purchases if it is known to be a secure site.
- The cardholder must notify immediately Scotiabank VISA and the Director, Finance if the credit card is lost or stolen. Scotiabank VISA can be notified during 24 hours, 7 days a week.
- Obtaining receipts for each purchase and reconciling the receipts with the monthly credit card statement. Detailed credit card receipts showing the purchase breakdown and taxes charged must be submitted with the reconciled statement by the end of each month. Repeated failure to submit receipts will result in card cancellation. Without the detailed receipt, providing the HST Registration number, tax rebates cannot be applied to the purchase resulting in inflated expenses. If no receipt is available, a completed Missing Receipt Form must be completed and attached to the credit card statement.
- The cardholder is responsible for the vendor search and selection, product/service specification, quality, quantity, price negotiation, freight charges, delivery requirements, and resolving any problems arising from the purchase including returns and disputed charges.

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- Upon a transfer of position within Conservation Halton or termination from Conservation Halton, the cardholder shall return the credit card to the Director, Finance for immediate cancellation of the card.

Cardholders who do not comply with this policy, may have their credit card privileges revoked by the President & CEO without notice and are subject to disciplinary action in accordance with the human resources progressive discipline policy I.

6. Late Payment Charges

Conservation Halton will not pay late payment charges. All cardholder statements will be paid in full as charged by ScotiaBank, even if they are not reconciled in time for payment. Finance staff will code unreconciled credit card charges to an appropriate account.

7. Reconciliation and Approval of Monthly Statement

Monthly statements are emailed to cardholders from ScotiaBank within a few days following the 15th of the month. Cardholders are responsible for printing their statement, attaching receipts (for each charge listed) that include appropriate account code. The statement must be reviewed and approved by the direct supervisor. Supervisors are responsible for reviewing purchases, ensuring all receipts have been attached before signing the statement, and forwarding the signed statement to the Accounts Payable & Capital Assets Coordinator by the end of each month. The cardholder is responsible for settling disputes directly with the merchant or business concerned.

Cardholder monthly statements are to be signed by the cardholder's supervisor indicating approval of the statement as follows:

<u>Cardholder</u>	<u>Approving Supervisor</u>
Supervisor	Area Manager
Managers and Supervisors	Program Director
Program Directors	President & CEO
President & CEO	Conservation Halton Board of Directors Chair or in their absence the Vice Chair

8. Card Renewal

Each credit card is issued for a period of one year. Credit cards will be automatically renewed unless the Director, Finance advises ScotiaBank otherwise.

9. Use of Personal Credit Cards

When a staff has been issued a corporate credit card, that card is the only card that shall be used for purchases made on behalf of Conservation Halton. Personal credit cards for Conservation Halton purchases may only be used with prior permission from the Director, Finance.

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To be completed for missing receipts and attached to credit card statement or expense reimbursement form.

Vendor: _____

Description of Expense: _____

Date of Receipt: _____

Amount: _____

The original receipt for the expenditure noted above is not available and is the correct amount of the original receipt. No reimbursement of this expense will be sought or accepted from any other source.

Name: _____

Signature: _____ Date: _____

Approver's Name: _____

Signature: _____ Date: _____

CONSERVATION HALTON PURCHASING POLICY

Section 9: Certificate of Insurance

Service Providers or contractors providing services to Conservation Halton are required to carry and maintain coverage suitable to Conservation Halton. Certificates of insurance (naming Conservation Halton as an additional insured) must be completed by the service provider or contractor and submitted to the Director, Corporate Compliance or Procurement Manager prior to the start of work.

Section 10: Sustainable Purchasing Guideline

The purpose of this guideline is to assist staff in acquiring goods and services for Conservation Halton from suppliers that generate positive environmental outcomes, and to integrate sustainability considerations into product selection so that negative impacts on the environment are minimized throughout the full life cycle of the products.

Environmentally preferred purchasing considers the environmental impacts of all phases of the life cycle of goods and services, including raw materials, manufacturing, packaging, distribution, operation, maintenance, and disposal, including the potential for reuse or ability to be recycled.

Staff are encouraged to consider purchasing environmentally preferred goods and services as part of their purchasing decisions. Purchasing environmentally preferred goods and services demonstrates Conservation Halton's leadership and support for greener business practices, while achieving value for money through the consideration of life-cycle costs.

Environmental Procurement

Conservation Halton shall seek opportunities to encourage the procurement of environmentally preferred goods and services through employee education; pilot testing of potential new products when appropriate; adopting innovative product standards, specifications, and contracts; leveraging buying expertise in Halton Region and cooperative ventures with other organizations.

Wherever possible, the following environmental considerations will be incorporated into the procurement of goods and services.

1. Conserving Resources – purchasing goods and services that:

- a) reduce consumption of resources (e.g., water, energy, raw materials)
- b) maximize recycled, post-consumer content
- c) require less packaging and/or will be taken back for recycling or reuse
- d) promote durability and can be reused, recycled, and repaired
- e) minimize toxicity
- f) contains re-usable parts
- g) protects indoor and outdoor air quality

2. Protecting Human Health and the Environment – purchasing goods and services that:

- a) are made from environmentally sustainable harvesting or extraction practices
- b) reduce or eliminate toxic substances released and/or used in their production are properly managed at the end of their useful life
- c) minimize pollutant releases

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- d) minimize greenhouse gas emissions
- e) minimize impacts on biodiversity
- f) minimizes human health impacts

Conservation Halton will rely on third-party certification for identification of environmentally preferred products and services when available. The third-party certification process will provide a minimum standard by which to select environmentally preferred products and services. Additional environmental criteria can be added to the requirements, on an as needed basis.

3. Life Cycle Cost Review – an assessment will be completed for the full cost of the good or service during its life cycle including the following:

- a) Initial cost of the purchase – including installation and delivery fees;
- b) Operating costs of using the good or service – including energy used; training; health and safety equipment requirements;
- c) Required maintenance and repairs – warranty provided by vendor, service agreement costs; cleaning products, cost and frequency of upgrades;
- d) Disposal costs at the end of the good's useful life – special disposal requirements and fees, recyclable good for return to vendor or reuse by another organization.
- e) Environmental impacts – air and noise emissions, toxic or hazardous materials used in the good, waste produced.

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 08

FROM: Barbara J. Veale, Director, Planning and Watershed Management

DATE: November 25, 2021

SUBJECT: Interim Service Delivery Agreement
for Ecological Review Services in Halton
CH File No. ADM 362

Recommendation

THAT the Conservation Halton Board of Directors **endorses the “Interim Service Delivery Agreement for Ecological Review Services in Halton” between Conservation Halton and the Region of Halton,**

And

THAT the Conservation Halton Board of Directors **authorizes the President & CEO to execute the “Interim Service Delivery Agreement for Ecological Review Services in Halton” and any ancillary documents.**

Executive Summary

In 2018, the Region of Halton, local municipalities, and conservation authorities renewed a high-level Memorandum of Understanding (MOU) relating to provision of an integrated planning process in Halton Region. In Section 7.4 of the MOU, all parties agreed that future amendments to the MOU would be needed to outline roles and responsibilities relating to the long-term provision of Ecological Review Services. However, before the MOU is formally amended, Region of Halton and Conservation Halton (CH) staff identified a shared need to establish a more streamlined environmental planning review process and that there would be multiple benefits of entering into an Interim Service Delivery Agreement for Ecological Review Services in Halton (Agreement), using CH's ecological and environmental planning expertise.

The contents of the Agreement (Appendix G) are comprehensive and align with what CH is anticipating in future Provincial regulations, including requirements for Service Agreements between CAs and municipalities. The Agreement establishes that CH will deliver Ecological Review Services to the Legislative and Planning Services Department of the Region of Halton for a term of three years for fees outlined in the Agreement. It also lays out, among other things, roles and responsibilities, service delivery tasks, standards (i.e., KPIs), and general workflow processes, and staff training and billing/reimbursement requirements.

The Agreement will benefit CH and the Region, along with local Halton municipalities, and members of the development community and public, as it will enable more efficient, timely, coordinated, and

consistent environmental reviews of development applications in Halton. Staff recommends that the Board of Directors endorse the Interim Service Delivery Agreement for Ecological Review Services in Halton and authorize the President & CEO to execute the Agreement on CH's behalf.

Report

Background

Conservation Halton (CH) provides a range of planning and technical review services to watershed municipalities and other agencies. These services are typically outlined in a Memorandum of Understanding (MOU) or Service Agreement with individual municipalities and agencies. Through these MOUs or Service Agreements, CH provides technical advice on a range of matters including, but not limited to natural hazards, natural heritage, water quality and quantity and stormwater management. The terms of the agreements provided by CH can differ, depending on the needs of a specific municipality or agency, as well as CH's in-house staff expertise and resource capacity.

On July 18, 2018, the Region of Halton, local municipalities, and conservation authorities (CAs) renewed a high-level MOU relating to provision of an integrated planning process in Halton Region. This MOU outlines general principles and approaches but does not specifically define roles and responsibilities for planning services, as those specifics are to be defined further through separate agreements or addendums to the existing MOU.

In Section 7.4 of the 2018 Halton MOU, all parties agreed on the need to amend the MOU to outline roles and responsibilities relating to the long-term provision of Ecological Review Services in Halton Region. However, in the period before the MOU is formally amended, Region of Halton and CH staff identified the shared need to establish a more streamlined environmental planning review process, using CH's technical and professional expertise related to natural heritage and sub-watershed and watershed planning and management. CH and the Region agreed that there were benefits for both parties, along with local Halton municipalities, and members of the development community and public, to enter into an Interim Service Delivery Agreement for Ecological Review Services in Halton (Agreement).

The *Conservation Authorities Act* states that CAs may enter into MOUs or Service Agreements, with a municipality situated in whole or in part within its area of jurisdiction, for programs and services that the authority may provide on behalf of the municipality. However, once proclaimed, recent changes made to the *Conservation Authorities Act* and those made through the *Protect, Support and Recover from COVID-19 Act (Budget Measures)*, 2020, will impose additional requirements for Service Agreements between CAs and municipalities.

The Province signaled its intention to advance the first of two phases of regulatory amendments to implement the above-mentioned legislative changes in May 2021, through a posting on the Environmental Registry (ERO No. 019-2986). An overview of the proposed regulatory changes was presented to CH's Board of Directors in Staff Report No. CHBD 05 21 09. On October 7, 2021, a decision was posted on the Environmental Registry which included, among other things, *Regulation 687/21* (Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the Act). The Regulation sets out requirements for CAs to have agreements with municipalities for the funding of programs and services that a CA delivers on their behalf and a transition period to establish

those agreements. Standards and requirements for the delivery of municipal programs and services are anticipated during Phase 2 of the Province's regulatory changes.

The contents of the Agreement for Ecological Review Services with the Region of Halton are comprehensive and align with what staff anticipates in future regulations. An overview of the terms and conditions of the Agreement are outlined in the section below. A full copy of the Agreement, executed by the Region, is attached to this report (Appendix G).

Overview of the Interim Service Delivery Agreement for Ecological Review Services in Halton

CH and the Region of Halton have a shared interest in the protection, management, and enhancement of the Natural Heritage System (NHS) in Halton. We also share goals for providing efficient, timely, coordinated, and consistent environmental reviews for development and site alteration applications. The purpose of the Agreement is to lay out the process for how coordinated environmental reviews will occur in Halton Region within CH's watershed. The Agreement establishes that CH agrees to deliver Ecological Review Services to the Legislative and Planning Services Department of the Region of Halton for a term of three years, as well it lays out:

- the purpose and goal of the Agreement;
- roles and responsibilities of CH and the Region;
- service delivery tasks, standards (i.e., KPIs), and general workflow processes;
- staff training requirements;
- conflict resolution mechanisms;
- billing/fees/reimbursement requirements;
- insurance/Workplace Safety and Insurance Board coverage requirements; and
- other general terms and conditions, including indemnification clauses.

The Agreement relates to ecological services only and does not limit CH's other roles and responsibilities, including our legislated responsibilities under the *Conservation Authorities Act*, Provincially delegated responsibilities for the Natural Hazard policies of the Provincial Policy Statement (PPS), or our watershed management agency or public commenting agency roles. CH will continue to provide planning application and technical clearance reviews under these roles.

The Agreement does not replace the Region's position as lead Environmental Planning review and approval agency for applications under the *Planning Act*. The Region will continue to be responsible for interpretation of NHS protection and enhancement policies in the Regional Official Plan and PPS, in consultation with CH.

As part of the transition of Ecological Review Services from the Region to CH, joint staff training sessions will be held so that both parties are clear on roles and responsibilities, the review process, and how to interpret Natural Heritage definitions, policies, and guidelines. Regularly scheduled Liaison Meetings have also been established to support communications for specific development files and to monitor the effectiveness of the Agreement.

To deliver on the terms of the Agreement, CH staff estimated that two service delivery staff, a Planning Ecologist and an Environmental Planner, would be needed. The combined annual cost estimate for the service delivery staff in Year 1 of implementing the Agreement is \$240,793, Year 2 is \$252,832 (with 5% inflation), and Year 3 is \$265,474 (with 5% inflation). CH will invoice the Region for a quarter-portion of the annual cost estimate on a quarterly basis.

The Agreement comes into effect the day on which it is executed by all Parties. The Commissioner of Legislative & Planning Services at the Region has executed the Agreement on the Region's behalf. CH staff recommends that CH's President & CEO be authorized to execute the Agreement on CHs behalf.

Conclusion

CH and the Region of Halton have a shared interest in ensuring that the NHS in Halton is protected for the long-term. CH has ecological and environmental planning expertise and can provide technical support to the Region in its role as an approval agency for applications under the *Planning Act*. The Agreement will benefit both parties, along with local Halton municipalities, and members of the development community and public, as it will enable more efficient, timely, coordinated, and consistent environmental reviews of development applications in Halton. Staff recommends that the Board of Directors endorse the Interim Service Delivery Agreement for Ecological Review Services in Halton' and authorize CHs President & CEO to execute the Agreement on CHs behalf.

Impact on Strategic Priorities

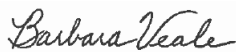
This report supports the Momentum priority of Natural Hazards & Water and Science, Conservation & Restoration.

Financial Impact

In addition to the benefits outlined in the report, the Agreement will result in the addition of two staff positions that are not currently included in the budget. The staff salaries, benefits, and associated administrative costs will be funded through the fees contained in the Agreement. Though there will be budget variances related to increased staff expenses that are funded by increased revenue, there will be no net budget impact.

Signed & respectfully submitted:

Approved for circulation:



Barbara J. Veale, PhD, MCIP, RPP
Planning and Watershed Management



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Kellie McCormack, Associate Director, Planning & Regulations; 905-336-1158 x 2228;
kmccormack@hrca.on.ca

This Interim Service Delivery Agreement for Ecological Review Services in Halton (the “Agreement”) made this ____ day of _____, 2021.

BETWEEN:

THE REGIONAL MUNICIPALITY OF HALTON

hereinafter referred to as the "Region"

- and -

THE HALTON REGION CONSERVATION AUTHORITY

hereinafter referred to as the "Conservation Halton"

WHEREAS the Planning Services department within the **Regional Municipality of Halton** and the **Halton Region Conservation Authority** (the “**Parties**”) have a shared interest in providing efficient, timely and coordinated environmental review commentary in response to development applications within Halton Region in a consistent and reasonable manner;

AND WHEREAS on July 18, 2018, the Parties entered into a Memorandum of Understanding relating to provision of an integrated planning process in Halton Region (the “**2018 Updated MOU**”);

AND WHEREAS Conservation Halton is mandated to provide, in the area over which it has jurisdiction, under Section 20 of the *Conservation Authorities Act* the organization and delivery programs and services that further the conservation, restoration, development and management of natural resource in watersheds in Ontario;

AND WHEREAS Conservation Halton has the authority to enter into a memorandum of understanding, or such other agreement, with a municipality situated in whole or in part within its area of jurisdiction in respect of programs and services that the authority may provide on behalf of the municipality, under the *Conservation Authorities Act*;

AND WHEREAS Conservation Halton has technical and professional expertise related to natural heritage and watershed and sub-watershed planning and management;

AND WHEREAS based on section 7.4 of the 2018 Updated MOU, the Parties agreed to amend the MOU to outline roles and responsibilities in relation to the long-term provision of this Ecological Review Services in Halton Region;

AND WHEREAS the Parties identified a shared need to guide the provision of this Environmental Planning Review Service during the interim period until such time that the 2018 Updated MOU is amended;

NOW THEREFORE the Parties hereby agree to enter into this Agreement in relation to the provision of Ecological Review Services in Halton Region within the Halton Region Conservation Authority’s jurisdiction, on an interim basis, in accordance with specific terms and conditions outlined herein.

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1. Definitions

- “Conservation Halton” – means The Halton Region Conservation Authority
- “Development” – means *development* as defined in the Regional Official Plan as it relates to “Development Applications”
- “Development Applications” – refers to the following application types:
- Local Official Plan Amendments;
 - Zoning By-law Amendments;
 - Draft Plans of Subdivision;
 - Plan of Condominium;
 - Site Plan Control;
 - Part Lot Control
 - Minor Variances;
 - Consents; and
 - Niagara Escarpment Commission (NEC) Development Permits.
- “Ecological Review Services” – means
- A multi-disciplinary approach to reviewing and commenting on environmental studies that characterize the components of Halton’s Natural Heritage System, demonstrate potential impacts on the components and ecological functions of the system and the mitigation measures to ensure there are no negative impacts on the system as a whole.
 - The identification for the need of Environmental Impact Assessment (EIA) in accordance with the Regional Official Plan and Provincial Plans, in consultation with all Parties;
 - Conducting site visits to verify boundaries of key features and components as defined in Sections 115.2, 115.3, and 115.4 in the Regional Official Plan and to discuss potential constraints/future study requirements/refinements to key features;

- The Region reserves the right to enlist the Regional Forester as needed to verify boundaries of significant woodlands and review significant woodland assessments where there is a Regional interest (e.g. potential impacts on Regional Forest tracts).
- Waiving, scoping and assessing Terms of References for EIAs, and EIAs submitted by the proponents’ consultants in accordance with the Region’s EIA Guideline (2020). The EIA Process outlined in Section 2.0 and the EIA Content in Section 3.0 of the Guideline shall be adhere to;
- The review of Sub-watershed Impact Study (SIS), or equivalent study as determined by the Local Municipality, as requested by the Region to verify that the report satisfies the requirements of the Sub-watershed Study (SWS). In cases where the Regional review is not requested, Conservation Halton will review based on its role as a watershed management agency, regulatory authority and/or public commenting body;
- The review of Environmental Implementation Report (EIR), or equivalent study as determined by the Local Municipality, as requested by the Region to verify that the report satisfies the requirements of the SWS, in consultation with all Parties. In cases where the Regional review is not requested, Conservation Halton will review based on its role as a watershed management agency, regulatory authority and/or public commenting body;
- Specifying modifications or additional technical studies required and conditions of acceptance; validating the technical methods used to determine potential environmental impacts in accordance with Regional Official Plan;
- Identifying the nature and extent of mitigation measures required to demonstrate no negative impacts to Halton’s Natural Heritage System as per section 118(3) of the Regional Official Plan; and
- Providing technical support in recommending and clearing ecological conditions based on the findings of the EIA or EIR in order to satisfy policies of the Regional Official Plan and Provincial Plans and clearing of conditions.

“**Halton Region**” or the “**Region**” – means The Regional Municipality of Halton.

“**Natural Heritage System**” – means the Greenbelt Natural Heritage System and the Regional Natural Heritage System as identified in the Regional Official Plan.

“**Negative Impact**” – means *negative impact* as defined in the Regional Official Plan.

“**Parties**” – means the Parties to this agreement, including the Regional Municipality of Halton and the Halton Region Conservation Authority .

“**Policy Planning Review**” – means the responsibility of interpreting natural heritage policy under Provincial and Regional plans is that of Halton Region.

“**Provincial Plans**” – means the provincial plan that are relevant to environmental planning matters in Halton Region, including the “Greenbelt Plan”, the “Niagara Escarpment Plan”, the “A Place to Grow Plan for the Greater Golden Horseshoe”, as amended from time to time.

“**Regional Official Plan**” – means the in force and effect Official Plan of the Regional Municipality of Halton.

“**Site Alteration**” – means *site alteration* as defined in the Regional Official Plan as it relates to “*Development Applications*”.

“**Staff**” – means employees of the Parties.

2. Purpose

2.1 This interim Agreement details the agreed upon terms of service to be provided by Conservation Halton to the Region relating to interim Ecological Review Services in Halton as it relates to Development Applications.

3. Goal

3.1 The goal of this Agreement is to establish and maintain an efficient, timely and coordinated environmental review process for Development and Site Alteration

applications in Halton that upholds the Parties’ values and expectations for protecting Halton’s Natural Heritage System in a coordinated and reasonable manner.

4. Agreement

4.1 The Agreement is as follows:

- a) Conservation Halton agrees to deliver Ecological Review Services to the Legislative and Planning Services department of the Region in accordance with the service levels described in **Section 6 – Roles and Responsibilities of Conservation Halton, Section 8 – the Service Delivery Standards**, agrees to execute the tasks outlined in **Table 2 – Service Agreement Table for the Ecological Review of Development Applications, contained in Schedule 2**, and generally follow the workflow processes identified in **Figures 1 through 5, contained in Schedule 3**.
- b) The Region agrees to deliver planning services in accordance with **Section 7 – Roles and Responsibilities of the Region**, agrees to execute the tasks outlined in **Table 2 - Service Agreement Table for the Ecological Review of Development Applications, contained in Schedule 2**, and generally follow the workflow processes identified in **Figures 1 through 5, contained in Schedule 3**.
- c) The Region and Conservation Halton agree to hold regularly scheduled liaison meetings as a means to execute the tasks outlined in Sections 6 and 7 – Roles and Responsibilities, Section 8 – the Service Delivery Standards, and in Table 2 - Service Agreement Table for the Ecological Review of Development Applications, contained in Schedule 2.

5. Limitations

- 5.1 Conservation Halton has a number of roles and responsibilities including those legislated responsibilities under the *Conservation Authorities Act*, watershed management agency and public commenting agency roles (e.g. provides technical comments to the Niagara Escarpment Commission). Conservation Halton will continue to provide planning application and technical clearance reviews pursuant to these roles. The function of Conservation Halton’s roles and responsibilities under the *Conservation Authorities Act*, or any other piece of legislation is not impacted by this Agreement.
- 5.2 Conservation Halton will continue to provide input on Natural Hazards policies through the Provincial One-Window Protocol, as mandated by the Province and led by the Ministry of Municipal Affairs and Housing.
- 5.3 Should there be a conflict of interest or a perceived conflict of interest between providing the requested Ecological Review Services required under this Agreement and other Conservation Halton responsibilities then written notice shall be provided to the Region’s managers and Conservation Halton’s managers as early in the review process as possible. In such a situation, the Region may wish to retain a third party consultant to complete the review.
- 5.4 This Agreement does not replace the Region’s position as lead Environmental Planning review and approval agency in the integrated Halton Area Planning System for applications under the *Planning Act*.
- 5.5 This Agreement does not preclude the Region from obtaining consultants to support the environmental planning review, where deemed necessary, to meet the goals and objectives of the Halton Region’s Official Plan, Strategic Plan, and roles and responsibilities under the current Memorandum of Understanding, 2018.
- 5.6 Nothing in this Agreement shall limit Conservation Halton and the Region from independently appealing a decision or lack of decision to the Ontario Land Tribunal (OLT) or other Tribunal, Board or Commission on behalf of their policies and regulations, in accordance with the provisions of the *Planning Act*. Conservation Halton cannot appeal a Regional decision if it has provided technical review clearance to address Regional ecological policies on the file.

6. Roles and Responsibilities of Conservation Halton

- 6.1 A breakdown of the specific services affected by this Agreement, associated tasks, and associated responsibilities of Conservation Halton relating to ecological review services for development applications are detailed in **Table 2, contained in Schedule 2** to this agreement. The Party (or Parties) responsible for each task Deliverables and Service Standards are also listed.
- 6.2 Notwithstanding **Schedule 2, Table 2 Service Agreement Table for the Ecological Review of Development Applications**, Conservation Halton will perform the following roles and responsibilities under this Agreement:
- a) Environmental Technical Review Memo and EIA Checklists – Conservation Halton will provide all comments for ecological review services in the Environmental Technical Review Memo, to be developed by the Region and Conservation Halton and complete the checklists in Appendices D-1, D-2 and D-3 of Halton’s EIA Guidelines (2020), as needed based on a case by case.
 - b) Pre-consultation and Site Visits– Conservation Halton will consult with Region prior to attending a pre-consultation meeting and/or site visits in relation to matters requiring ecological review services by Conservation Halton and coordinate as necessary to ensure guidance, that is consistent with the Region’s position, is offered to the proponent.
- 6.3 Recommendation on Development Applications: Conservation Halton will provide to the Region technical recommendations on a Development Application, based on their ecological expertise, to assist the Region in interpreting Sections 115.3, 115.4 and 118(3) of the Regional Official Plan and in accordance with the processes detailed in Halton’s EIA Guideline (2020).
- 6.4 Where Conservation Halton has provided technical recommendations for a Development Application pursuant to Section 6.3, and the Development Application has been appealed to the Ontario Land Tribunal or other Tribunal, Board or Commission, the Region may require Conservation Halton to provide their ecological expertise to support Conservation Halton’s technical recommendations during the appeal.
- 6.5 The extent of the support required pursuant to section 6.4 will be determined on a case-by-case basis in consultation between legal counsel for Conservation Halton and legal counsel for Halton Region.
- 6.6 Conservation Halton shall provide written notice to Halton Region as soon as possible if Conservation Halton amends any technical recommendations pursuant to sections 6.3, 6.4 or 6.5.

7. Roles and Responsibilities of the Region

- 7.1 A breakdown of the specific services affected by this Agreement, associated tasks, and associated responsibilities of the Region relating to ecological review services for development applications are detailed in **Table 2, contained in Schedule 2** to this agreement. The Party (or Parties) responsible for each task Deliverables and Service Standards are also listed.
- 7.2 Notwithstanding **Table 2 – Service Agreement Table for the Ecological Review of Development Applications**, the Region will perform the following roles and responsibilities under this agreement:
- a) Screening – The Region shall identify Development Applications that would require technical review/clearance by Conservation Halton based on the proximity of these activities to the Halton’s Natural Heritage System and its mapped and unmapped Key Features.
 - b) Pre-consultation – The Region will consult Conservation Halton prior to attending a pre-consultation meeting in relation to matters requiring technical review and clearance by Conservation Halton and coordinate as necessary to ensure appropriate guidance is offered to the proponent.

- c) Circulation – The Region shall undertake the following circulation steps:
 - i. Circulate for technical review/clearance Development Application in consultation with Conservation Halton as detailed in **Table 2, contained in Schedule 2**;
 - ii. Include with the circulation the Environmental Technical Review Memo that includes information required from the Region as specified within the template; and
 - iii. Specify a review/comment Timeline for Conservation Halton to conduct their technical review/clearance within if the Timeline differs from the Timelines listed in **Section 8 – Service Delivery Standards**.
- d) Policy Interpretation – The Region shall be responsible for interpretation of all Natural Heritage System protection and enhancement policies in the Regional Official Plan, Provincial Policy Statement, 2020, and applicable provincial plans as updated from time to time, in consultation with Conservation Halton.
- e) Public Commenting Agency – The Region shall review Development Applications, provide comments and issue conditions in relation to the implementation of the Natural Heritage System protection and enhancement policies of the Regional Official Plan, which will be carried out in consultation with Conservation Halton.
- f) Approval – Where the Region is the planning approval authority under the *Planning Act*, issue approval for Development Applications that implements the Natural Heritage System protection and enhancement policies of the Regional Official Plan.

8. Service Delivery Standards of Conservation Halton

- 8.1 Service Delivery Standards, as described in **Table 2 – Service Agreement Table for the Ecological Review of Development Applications, contained in Schedule 2**, are to be followed in relation to the provision of services by Conservation Halton.
- 8.2 The Parties agree to work within the following timelines in **Table 1 – Technical Comments Review Deadline, contained in Schedule 1** to meet the review times set out in **Schedule 2 Non-Statutory Development Application Review Timelines** in the **2018 Updated MOU**.

9. Monitoring, Conflict Resolution and Notice

- 9.1 This Agreement comes into effect the day on which it is executed by all Parties. There will be a six (6) month transition period from the date of execution at which time training as detailed in Section 10 will be undertaken. The tracking of performance measures **identified in Schedule 4** will start when the 6-month transition period has ended.
- 9.2 This Agreement shall be revised and amended from time to time as needed to be consistent with the **2018 Updated MOU**.
- 9.3 This Agreement shall be reviewed and amended between the Region and Conservation Halton to:
 - a) Reflect any changing policies, legislation, or programs at the provincial, watershed, or Regional level;
 - b) Assess its effectiveness, relevance and appropriateness with respect to affected parties.
- 9.4 In the event of any dispute between the Region and Conservation Halton staff in carrying out the terms this Agreement that cannot be resolved between staff members, the issue(s) under dispute are to be elevated to the Manager level for resolution. Should the Managers be unable to resolve the issue(s), the matter will be elevated to the Director level for resolution.
- 9.5 This Agreement may be terminated at any time by either Party by providing six (6) months written notice, which may be given personally, electronically or sent by registered mail. Notice shall be deemed to be received as follows, as applicable: (i) on the date of personal delivery, or (ii) if delivered by prepaid registered mail, ten (10) clear days following the mailing.
- 9.6 Any notice, election, demand, request, consent or objection required or contemplated to be given or made by any provisions of this Agreement shall be given or made in writing

and either delivered personally, electronically or sent by registered mail, postage prepaid, addressed:

Region:	1151 Bronte Road Oakville, Ontario L6M 3L1 Attn: Director of Planning Services and Chief Planning Official Email: curt.benson@halton.ca
Conservation Halton:	2596 Britannia Road West Burlington, Ontario L7P 0G3 Attn: Director of Planning and Watershed Management Email: bveale@hrca.on.ca

10. Training

- 10.1 The Region shall be responsible for providing training to Conservation Halton as part of the execution of this Agreement for interim ecological review services. The training will provide clear direction on how to interpret the Natural Heritage definitions, policies and guidelines and apply Halton’s high level of standard in the protection of the Halton’s Natural Heritage System.
- 10.2 The Region shall provide the following training and/or materials to Conservation Halton and the Region’s Community Planners:
 - a) Training and materials on Halton’s Environmental Impact Assessment Guideline (2020);
 - b) Training and materials on Natural Heritage mapping and screening tools;
 - c) Training and materials on Natural Heritage policies;
 - d) Training and materials on Halton Region’s requirements for conformity with Provincial plans;
 - e) Training on the standardized Environmental Technical Review Memo (2021) and
 - f) Any additional training and/or creation of new materials that Halton Region and Conservation Halton deem necessary to execute the Agreement.
- 10.3 Conservation Halton shall provide training to Halton Region on their roles and responsibilities under the *Conservation Authority Act*, or any relevant legislation.
- 10.4 To assist in the transition of Ecological Review Services as prescribed in this Agreement, the Region’s Community Planners and Conservation Halton agree to hold regularly scheduled Region and Conservation Halton Liaison Meetings and other technical support meetings as needed.

11. Billing/Fees/Reimbursement of Expenses

- 11.1 Prior to the commencement of this Agreement, and on an annual basis thereafter, Conservation Halton shall provide the Region an estimate of the salary and benefit cost of the Service Delivery Staff (the “Annual Cost Estimate”). The Region may request supporting documentation and upon receipt of such request, Conservation Halton shall provide same with respect to Annual Cost Estimates.
- 11.2 Conservation Halton estimates the need for two (2) Service Delivery Staff, a Planning Ecologist and an Environmental Planner to implement their roles and responsibilities under this Agreement. The combined Annual Cost Estimate for the Service Delivery Staff

in Year 1 of implementing this agreement is \$240,793; Year 2 is \$252,832 (with 5% inflation); and Year 3 is \$265,474 (with 5% inflation).

- 11.3 Prior to the commencement of this Agreement, and on a quarterly basis thereafter, Conservation Halton shall invoice the Region for a quarter-portion of the Annual Cost Estimate (the “Quarterly Invoice”).
- 11.4 Notwithstanding section 11.2, other than the first Quarterly Invoice, each Quarterly Invoice shall include the actual costs for the Service Delivery Staff incurred by Conservation Halton during the preceding quarter, including aggregate or total salary, benefit, associated administration and training cost of the Service Delivery Staff. Supporting documentation shall also be provided and any further or additional documentation concerning actual costs shall be supplied upon request from the Region.
- 11.5 The Region shall pay each Quarterly Invoice within thirty (30) days.
- 11.6 The Region shall be permitted to dispute a Quarterly Invoice at its sole discretion. Notwithstanding the generality of the foregoing, the Region will be required to pay all undisputed portions of each Quarterly Invoice in accordance with this Agreement.
- 11.7 As dispute concerning a Quarterly Invoice, or a disputed portion therein, shall be resolved in accordance with this Agreement.
- 11.8 The Region acknowledges that the Annual Cost Estimate may be adjusted throughout the year based upon any Conservation Halton review of job descriptions, salary adjustments and unanticipated benefit cost increases. In such an event, the revised Annual Cost Estimate shall be provided to the Region at least thirty (30) days in advance of the date of delivery of the next Quarterly Invoice to the Region.
- 11.9 All increases to the Annual Cost Estimate beyond permissible costs explicitly identified herein shall require the written approval of the Commissioner of Legislative and Planning Services and the Commissioner of Finance and Regional Treasurer and such approval shall not be unreasonably withheld. Any request for an increase to the Annual Cost Estimate shall be subject to a detailed review, which may include comparison with industry compensation standards and supporting documentation shall be provided upon request from the Region.
- 11.10 For the purposes of the Quarterly Invoicing and reporting, a fiscal year will be the 1st of January to the 31st of December. For audit purposes, all financial records will be maintained and reports prepared to coincide with the January to December Fiscal year. All records must be kept for seven (7) years in accordance with Halton Region’s audit requirements.
- 11.11 Where the Region requires Conservation Halton to provide support for technical recommendations for a Development Application that has been appealed to the Ontario Land Tribunal or other Tribunal, Board or Commission pursuant to Section 6.4, the Region shall pay for the additional costs incurred for these services.

12. Communications

- 12.1 Conservation Halton is not to act on behalf of Halton Region in relation to a Development Application or Site Alteration matter unless agreed to by Halton Region in order to execute the tasks described in **Table 2 - Service Agreement Table for the Ecological Review of Development Applications**, contained in **Schedule 2**.
- 12.2 When communicating in any way as it relates to the Ecological Review Services described in this Agreement, Conservation Halton must declare that they are acting in accordance with this Agreement, in a purely technical manner, and that the Region maintains final decision authority with respect to the application and interpretation of Regional Official Plan policies relating to the protection and enhancement of Halton’s Natural Heritage System.

12.3 The Region’s Planning staff shall be included on all correspondence from Conservation Halton to landowners/consultants as it relates the Region’s interests as outlined in this Agreement.

12.4 Nothing in Section 12 is meant to affect the free and open dialogue of Conservation Halton with landowners and consultants regarding technical review matters affected by this Agreement. Such communications should be provided within the appropriate policy context to eliminate confusion and avoid outcomes that would not conform to the relevant policies.

13. Information Sharing / Open Data

13.1 The Parties will work together to define a screening map and guidelines to assist all parties in determining when development applications will be circulated for technical review.

13.2 Any information or data sources generated by the Province, Conservation Halton or the Region, or generated through municipal or watershed studies will be shared, where possible.

14. Insurance

14.1 Conservation Halton agrees that it shall, at its own expense during the performance of the Services, name the Region as additional insured and maintain the following insurance:

14.2 Comprehensive General Liability insurance, such coverage shall include:

14.2.1 personal injury coverage, bodily injury and public liability and property damage coverage against loss or damage resulting from bodily injury to or death to one or more persons and loss of or damage to property of the Region or any other public or private property resulting from or arising out of any negligent act or omission on the part of the Conservation Halton. Such insurance shall include;

14.2.2 a \$2,000,000.00 limit of coverage per occurrence; and

14.2.3 a cross liability/severability of interest clause.

14.3 In respect of the Comprehensive Automobile Liability Insurance

14.3.1 Conservation Halton agrees to carry a comprehensive automobile liability policy providing bodily injury liability and property damage liability insurance. The policy shall protect Conservation Halton and the Region against all liability arising out of the use of owned or leased automobiles, both passenger and commercial. The limits of the liability under this insurance policy shall not be less than \$2,000,000.00 per occurrence

14.4 Conservation Halton further agrees that the coverage provided by the policies specified in this Section will not be changed, amended, or cancelled until sixty (60) days after written notice of such intended change, amendment or cancellation has been delivered to the Region.

14.5 Conservation Halton shall deliver proof of insurance to the Region in a form of a certificate of insurance policy as soon as possible after execution of this Agreement and before commencing to perform any of the Services, and thereafter evidence satisfactory of the renewal of insurance shall be delivered to the Region at least thirty (30) days before the termination thereof and will remain in force until the termination of the agreement.

15. Workplace Safety and Insurance Board Coverage

- 15.1 Workplace Safety and Insurance coverage is applicable and required where Conservation Halton engages in any form of services on the Region's premises. Workplace Safety and Insurance Board (WSIB) certificate showing Conservation Halton's coverage shall be provided to the Region upon execution of this Agreement.

16. Indemnification

- 16.1 Conservation Halton covenants and agrees to indemnify and save the Region, its Councillors, officers, employees and agents harmless from any liability, action, claim, loss, injury, damage, payment, cost, fine, fine surcharge, recovery or expense, including assessable legal fees arising out of the performance of its obligations under this Agreement, including without limitation any negligent act or omission by any employee, agent or sub-consultant or anyone else from whom it is in the law responsible, save and except where the liability, action, claim loss, injury, damage, payment, cost, fine, fine surcharge, recovery or expense, including assessable legal fees, arises out of the negligence of the Region, its Councillors, officers, employees or agents.

- 16.2 The Region covenants and agrees to indemnify and save Conservation Halton, its Board Members, officers, employees and agents harmless from any liability, action, claim, loss, injury, damage, payment, cost, fine, fine surcharge, recovery or expense, including assessable legal fees arising out of the performance of its obligations under this Agreement, including without limitation any negligent act or omission by any employee, agent or sub-consultant or anyone else from whom it is in the law responsible, save and except where the liability, action, claim loss, injury, damage, payment, cost, fine, fine surcharge, recovery or expense, including assessable legal fees, arises out of the negligence of Conservation Halton, its Board Members, officers, employees or agents.

17. General

- 17.1 The Region and Conservation Halton acknowledge that there are no covenants, representations, warranties, agreements or conditions express or implied, collateral or otherwise forming part of or in any way affecting or relating to this Agreement other than as set out in this Agreement which constitutes the entire agreement between the parties and which may be modified only by further written agreement.
- 17.2 This Agreement and the covenants and agreements herein contained extend to and enure to the benefit of and are binding upon the Region, Conservation Halton, and their respective successors and assigns, according to the purport and intent of their respective covenants and agreements.
- 17.3 Should any provision or provisions of this Agreement be illegal or unenforceable, it or they shall be considered separate and severable from this Agreement, and the remaining provisions shall remain in force and be binding upon the parties hereto as though the said provision or provisions had never been included.
- 17.4 The Region and the Provider agree that each of them shall and will, upon the reasonable request of the other, make, do, execute, or cause to be made, done or executed, all such further and other lawful acts, deeds, things, documents and assurances whatsoever necessary to give effect to this Agreement, and the terms and conditions contained herein.
- 17.5 This Agreement may be executed in any number of counterparts and may be delivered by means of electronic transmission.
- 17.6 The headings contained in this Agreement are for reference only.
- 17.7 Schedule "1", "2" and "3" annexed hereto shall form part of this Agreement.

SIGNED AND DELIVERED

November 11, 2021

This ____ day of ____ 2021

at the

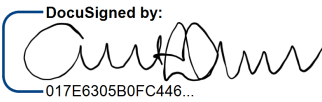
Province of Ontario

This ____ day of ____ 2021

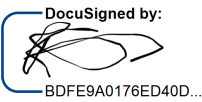
at the

Province of Ontario

THE REGIONAL MUNICIPALITY
OF HALTON

DocuSigned by:

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Per: _____
Name: Curt Benson
Title: Director, Planning Services and
Chief Planning Official

DocuSigned by:

BDFE9A0176ED40D...

Per: _____
Name: Robert Gray
Title: Commissioner of Legislative
& Planning Services, Corporate
Counsel

I/We have authority to bind the
Corporation.

THE HALTON REGION
CONSERVATION AUTHORITY

Per: _____
Name: Barb Veale
Title: Director, Planning and
Watershed Management

Per: _____
Name: Hassaan Basit
Title: President and CEO of
Conservation Halton

I/We have authority to bind the
Corporation.

Schedule 1

Table 1 – Technical Comments Review Timelines for Development Applications

The following table describes the timeframes for development review applications that the Parties will aim to achieve, broken down by certain major application types. This table should be read in accordance with Schedule 2 of the Memorandum of Understanding for an Integrated Halton Area Planning System (July 16, 2018). In some cases timeframes may change due to circulation deadlines provided by the Local Municipality and/or the Niagara Escarpment Commission.

Application Type	Planning Stage	Comments for First Circulation Conservation Halton	Total Review Time First Circulation	Comments for Resubmissions Conservation Halton	Total Review Time Resubmission
Draft plans of subdivision or condominium	Pre-Consultation	4 calendar days	5 calendar days	N/A	N/A
	EIA Scoping	5 calendar days	5 calendar days	N/A	N/A
	Terms of Reference for EIA	12 calendar days	14 calendar days	5 calendar days	7 calendar days
	Technical Review Clearance without an EIA	15 calendar days	20 calendar days	5 calendar days	7 calendar days
	Application Review with an EIA	35 calendar days	45 calendar days	15 calendar days	20 calendar days
Site specific local official plan amendments	Pre-Consultation	4 calendar days	5 calendar days	N/A	N/A
	EIA Scoping	5 calendar days	5 calendar days	N/A	N/A
	Terms of Reference for EIA	12 calendar days	14 calendar days	5 calendar days	7 calendar days
	Application Review without an EIA	15 calendar days	20 calendar days	5 calendar days	7 calendar days
	Application Review with an EIA	35 calendar days	45 calendar days	15 calendar days	20 calendar days
Site specific zoning by-law amendments	Pre-Consultation	4 calendar days	5 calendar days	N/A	N/A
	EIA Scoping	5 calendar days	5 calendar days	N/A	N/A
	Terms of Reference for EIA	12 calendar days	14 calendar days	5 calendar days	7 calendar days
	Application Review without an EIA	12 calendar days	18 calendar days	10 calendar days	12 calendar days
	Application Review with an EIA	20 calendar days	30 calendar days	15 calendar days	20 calendar days
Site Plans	Pre-Consultation	4 calendar days	5 calendar days	N/A	N/A
	EIA Scoping	5 calendar days	5 calendar days	N/A	N/A
	Terms of Reference for EIA	12 calendar days	14 calendar days	5 calendar days	7 calendar days
	Application Review without an EIA	10 calendar days	14 calendar days	5 calendar days	7 calendar days
	Application Review with an EIA	12 calendar days	14 calendar days	10 calendar days	12 calendar days
Consent, Minor Variances, Part Lot Control	Pre-Consultation	4 calendar days	5 calendar days	N/A	N/A
	EIA Scoping	5 calendar days	5 calendar days	N/A	N/A
	Terms of Reference for EIA	14 calendar days	14 calendar days	5 calendar days	6 calendar days
	Application Review without an EIA	10 calendar days	14 calendar days	5 calendar days	7 calendar days

Application Type	Planning Stage	Comments for First Circulation Conservation Halton	Total Review Time First Circulation	Comments for Resubmissions Conservation Halton	Total Review Time Resubmission
	Application Review with an EIA	12 calendar days	14 calendar days	10 calendar days	12 calendar days
Niagara Escarpment Commission Development Permits	Pre-Consultation	4 calendar days	5 calendar days	N/A	N/A
	EIA Scoping	5 calendar days	5 calendar days	N/A	N/A
	Terms of Reference for EIA	14 calendar days	14 calendar days	5 calendar days	6 calendar days
	Application Review without an EIA	13 calendar days	15 calendar days	6 calendar days	8 calendar days
	Application Review with an EIA	13 calendar days	15 calendar days	11 calendar days	13 calendar days

Schedule 2

Table 2 – Service Agreement Table for the Ecological Review of Development Applications

Reference	Review Stage	Tasks	Party Responsible	Deliverable
1	Pre-Application in support of pending development applications	a) Parties will consult to establish an appropriate response to landowner and/or consultant inquiries regarding natural heritage related constraints affecting limits of development. Final decision retained on file. Note: Some proposals will not be appropriate to pursue and ecological review services should not be applied prematurely in such instances. Parties should discuss each inquiry on a case by case basis to determine whether or not preliminary feedback is appropriate given nature of proposal.	All Parties – The Region makes final decision as it relates to Regional Natural Heritage interests.	Record of consultation and final decision retained on file by both Parties.
		b) Review Regional Official Plan and relevant Provincial Plans mapping (and Halton Region Enviro Planning Viewer if available) to identify relevant natural heritage features, areas, designations and constraint areas.	Conservation Halton	Conservation Halton shall include the Region on all correspondence.
		c) Provide preliminary feedback to landowner/consultant including standard information/text regarding applicable natural heritage system development constraints/study requirements.	Conservation Halton	
		d) Arrange a site visit if necessary to facilitate further investigation, verify boundaries of NHS components and discuss potential constraints/future study requirements. Task 8 – Site Visits of this table shall be followed.	Conservation Halton	Field note summary
		e) In the event that the landowner and/or consultant wants the Parties to determine if an Environmental Impact Assessment (EIA) is required based on a development concept provided, Tasks 2 b) and 2c) of this table should be followed.	Conservation Halton	See deliverables in Tasks 2b) and 2c)
		f) If an EIA is deemed required, EIA scoping and terms of reference (ToR) should follow Tasks 3 and 4 of this table.	All Parties	See deliverables in Tasks 3 and 4
2	Pre-Consultation or Preliminary Circulation of Development Applications	a) Parties review circulations and consult as necessary to determine whether proposed Development Applications warrants provision of ecological review services by Conservation Halton.	All Parties – The Region makes final decision as it relates to Regional Natural Heritage interests.	
		b) Where ecological review services are deemed warranted per task 2a), the Region’s Community Planner will: i. complete the “Regional Technical Circulation” section of the Environmental Technical Review Memo; ii. circulate the Environmental Technical Review Memo and application submission materials, as needed, to the Conservation Halton Environmental Planner; iii. Discuss draft comments from Conservation Halton prior to finalizing Regional notes on a Pre-Consultation or comments on a Development Application.	Region	Environmental Technical Review Memo
		c) Where ecological review services are deemed warranted per task 2a), Conservation Halton’s Environmental Planner will circulate the Environmental Technical Review Memo to the appropriate technical staff.	Conservation Halton	Environmental Technical Review Memo and Appendix D-1 - Waiving Assessment Tool (where applicable)

Reference	Review Stage	Tasks	Party Responsible	Deliverable
		d) Conservation Halton technical staff will complete the “Conservation Halton Technical Comments” section of the Environmental Technical Review Memo.	Conservation Halton	Environmental Technical Review Memo and Appendix D-1 - Waiving Assessment Tool (where applicable)
		e) Conservation Halton submits Environmental Technical Review Memo containing documentation referenced in 2b) to the Region and discusses comments prior to Conservation Halton finalizing their comments.	Conservation Halton	Environmental Technical Review Memo and Appendix D-1 - Waiving Assessment Tool (where applicable)
3	EIA Scoping/Terms of Reference (ToR) Checklist	a) Where it has been determined that an EIA is required in accordance with Regional Official Plan policies, Conservation Halton will provide the Region with a completed Appendix D-2 Scoping and Terms of Reference Checklist Conservation Halton submits this checklist to the Region.	Conservation Halton	Environmental Technical Review Memo and Appendix D-2 Scoping and Terms of Reference Checklist
		b) The Region will review the Scoping and Terms of Reference Checklist to ensure that the scope of work meets the intent of all NHS protection and enhancement policies in the Regional Official Plan, Provincial Policy Statement (2020) and applicable provincial plans as updated from time to time, in consultation with Conservation Halton.	All Parties	
		c) Conservation Halton to provide Scoping and Terms of Reference Checklist to the proponent.	Conservation Halton	
4	EIA Terms of Reference (ToR)	a) Conservation Halton will provide ecological review services of the ToR and ensure it completeness against the completed Appendix D-2 Scoping and Terms of Reference Checklist that was completed in task 3 above.	Conservation Halton	Environmental Technical Review Memo
		b) Region will use the ecological review services from the Conservation Halton to complete the policy planning review.	Region	
		c) Where resubmissions are required to address comments on the ToR, Conservation Halton will continue to provide ecological review services until regional policies can be satisfied.	Conservation Halton	Environmental Technical Review Memo
		d) Region will be the approval authority of the ToR in regards to the Regional Official Plan policies and in accordance with the Region’s EIA Guideline (2020).	Region	
5	Review of EIA	a) Parties should review the EIA against Appendix D-3 EIA Submission Checklist to confirm that the EIA meets submission requirements and have been prepared in accordance with an approved ToR.	All Parties	Appendix D-3 EIA Submission Checklist.
		b) Conservation Halton will provide ecological review services of the EIA and submit technical review memo to Region.	Conservation Halton	Environmental Technical Review Memo
		c) The Region will review the Environmental Technical Review Memo to ensure that the scope of work meets the intent of all Natural Heritage System protection and enhancement policies in the ROP, PPS, and applicable provincial plans, in consultation with Conservation Halton.	All Parties	
		d) If the Region is satisfied with the Environmental Technical Review Memo provided in 5b), Conservation Halton will provide technical comments on the EIA to the relevant agency under a separate “Interim Agreement” section in their letter. The Region will make reference in their comments to Conservation Halton’s letter.	Conservation Halton	
		e) Where resubmissions are required to address comments on the EIA, Conservation Halton will continue to provide ecological review services until Regional policy can be satisfied.	Conservation Halton	Environmental Technical Review Memo
		f) Once Conservation Halton and Halton Region have determined that the EIA has addressed policies of the ROP policies and Provincial plan, Conservation Halton will provide to the Region with recommendations for final conditions/clauses based on the proposed mitigations and/or conclusions of the EIA (i.e. requirement for landscape plan).	Conservation Halton	Environmental Technical Review Memo

Reference	Review Stage	Tasks	Party Responsible	Deliverable
6	Sub-watershed Impact Study (SIS) and Environmental Impact Report (EIR)	a) Parties review circulations and consult as necessary to determine whether proposed development application and subsequent SIS/EIR warrants provision of ecological review services by Conservation Halton.	All Parties – The Region makes final decision as it relates to Regional interests.	
		b) Conservation Halton will provide ecological review services of the EIR to determine if the report satisfies the requirements of the applicable Sub-watershed Impact Study (SIS).	Conservation Halton	
		c) Conservation Halton will provide ecological review services of the SIS to verify that the report satisfies the requirements of the Sub-watershed Study.		
		d) Conservation Halton will provide ecological review services of the EIR/SIS and submit the Environmental Technical Review Memo to the Region.	Conservation Halton	Environmental Technical Review Memo
		e) If the Region is satisfied with the Environmental Technical Review Memo provided in 6d), Conservation Halton will provide technical comments on the EIR/SIS to the relevant agency under a separate “Interim Agreement” section in their letter. The Region will make reference in their comments to Conservation Halton’s letter.	Conservation Halton	
		f) Where resubmissions are required to address comments on the EIR/SIS, Conservation Halton will continue to provide ecological review services as required by the Region to demonstrate that Regional policy can be satisfied.	Conservation Halton	Environmental Technical Review Memo
		g) Once Conservation Halton and Halton Region have determined that the EIR/SIS has addressed policies of the ROP policies and Provincial plan, Conservation Halton will provide to the Region with recommendations for final conditions/clauses based on the proposed mitigations and/or conclusions of the EIR/SIS (i.e. requirement for landscape plan).	Conservation Halton	Environmental Technical Review Memo
7	Decision / Conditional Approval	a) The Region shall be responsible for providing final recommendation for approval and conditions on a development application.	Region	
8	Clearing Conditions	a) The Region shall be responsible for the clearance of conditions that were requested by the Region on a development application.	Region	
		b) Where ecological review services are is deemed warranted per task 7a), Conservation Halton will provide ecological review services of the additional plans/drawings/studies and submit a technical review memo to the Region.	Conservation Halton	Environmental Technical Review Memo
8	Site Visits	a) Conservation Halton will arrange site visit if necessary, in coordination with the Region and proponent to facilitate further investigation, verify boundaries of Natural Heritage System components and discuss constraints/study requirements. Proceeding the site visit, the Conservation Halton will submit a summary of field notes and any mapping to show proposed boundary refinements to the to Natural Heritage System to the Region. Any communications on the site visit will be done in accordance with Section 12 Communications of this Agreement.	Conservation Halton	Field note summary

Schedule 3

Figure 1 – Conservation Halton General Review Process

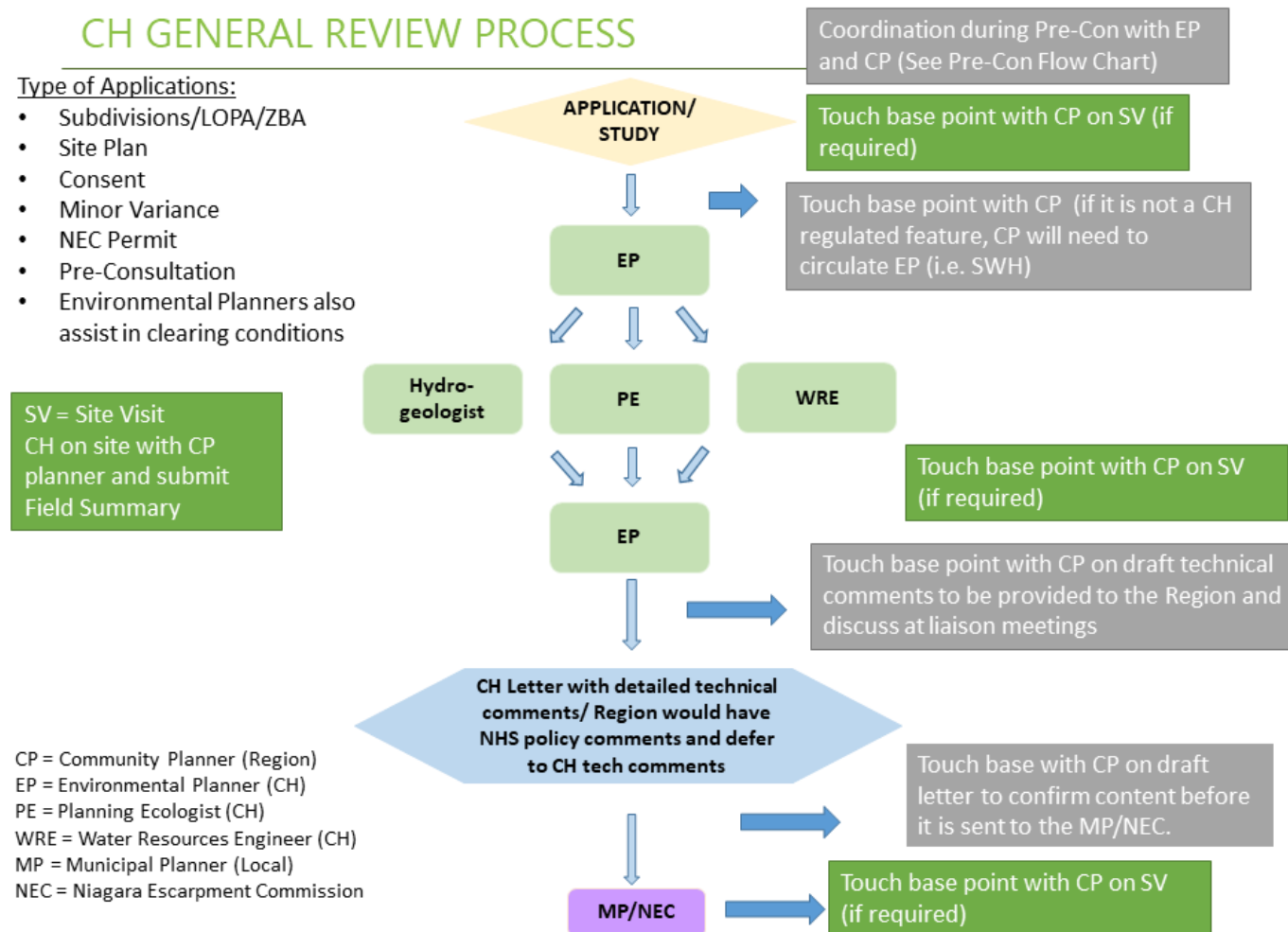


Figure 2 – Regional Role in Pre-Consultation Process

REGIONAL ROLE IN PRE-CONSULTATION PROCESS

CP = Community Planner (Region)
 EP = Environmental Planner (CH)
 DPM = Development Project Manager (Region)

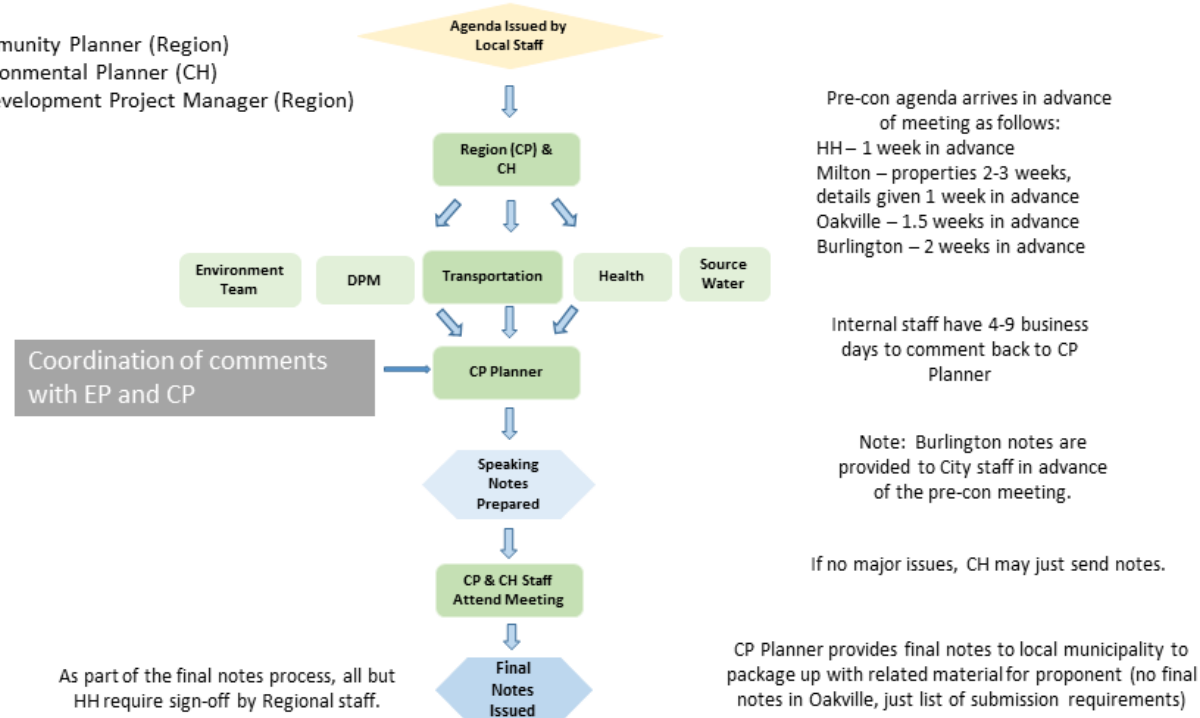


Figure 3 – Region/Conservation Halton: Proposed EIA Waiving Tool Review Process

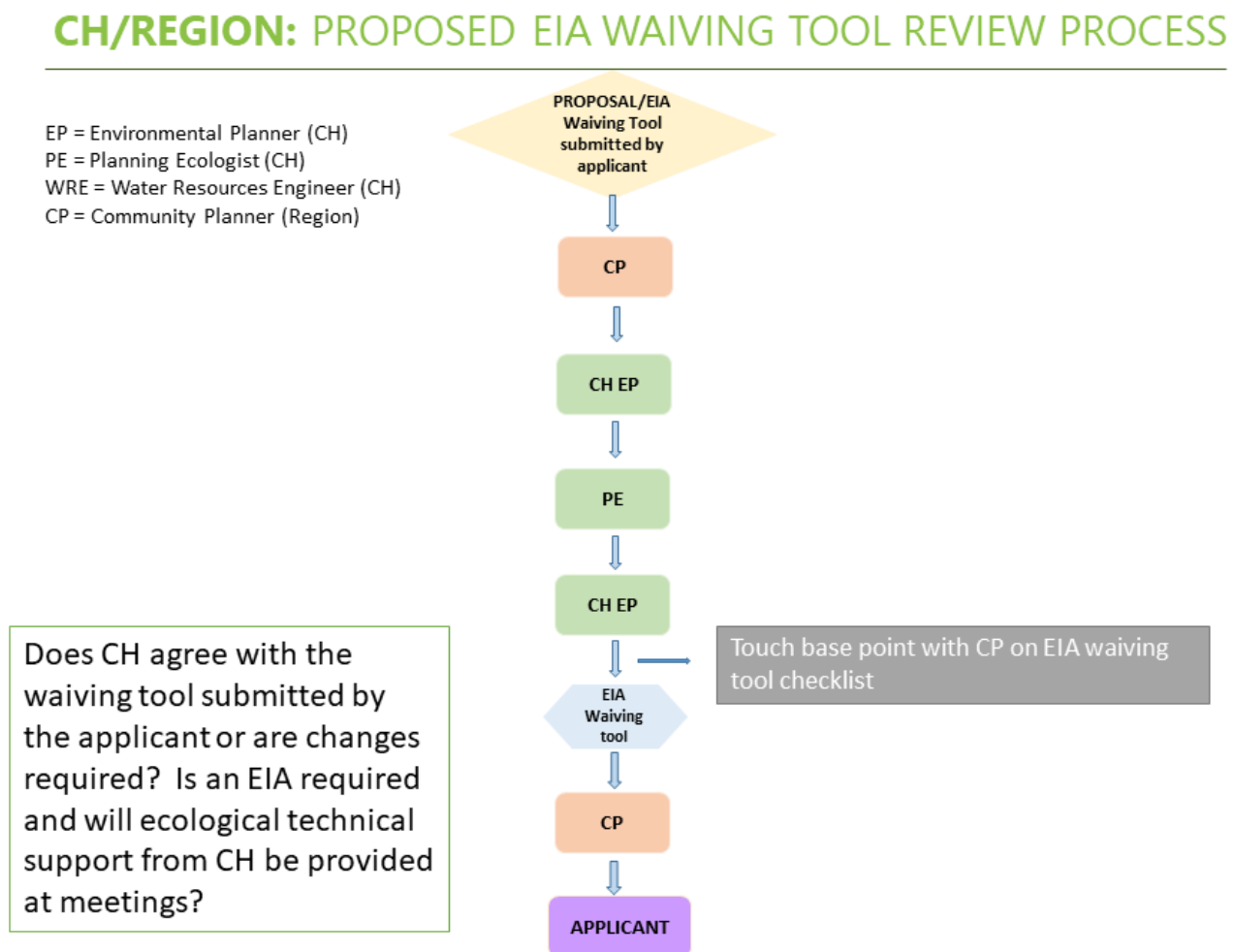


Figure 4 – Region/Conservation Halton: Proposed EIA Scoping Tool Process

CH/REGION: PROPOSED EIA SCOPING TOOL PROCESS

EP = Environmental Planner (CH)
 PE = Planning Ecologist (CH)
 CP = Community Planner (Region)

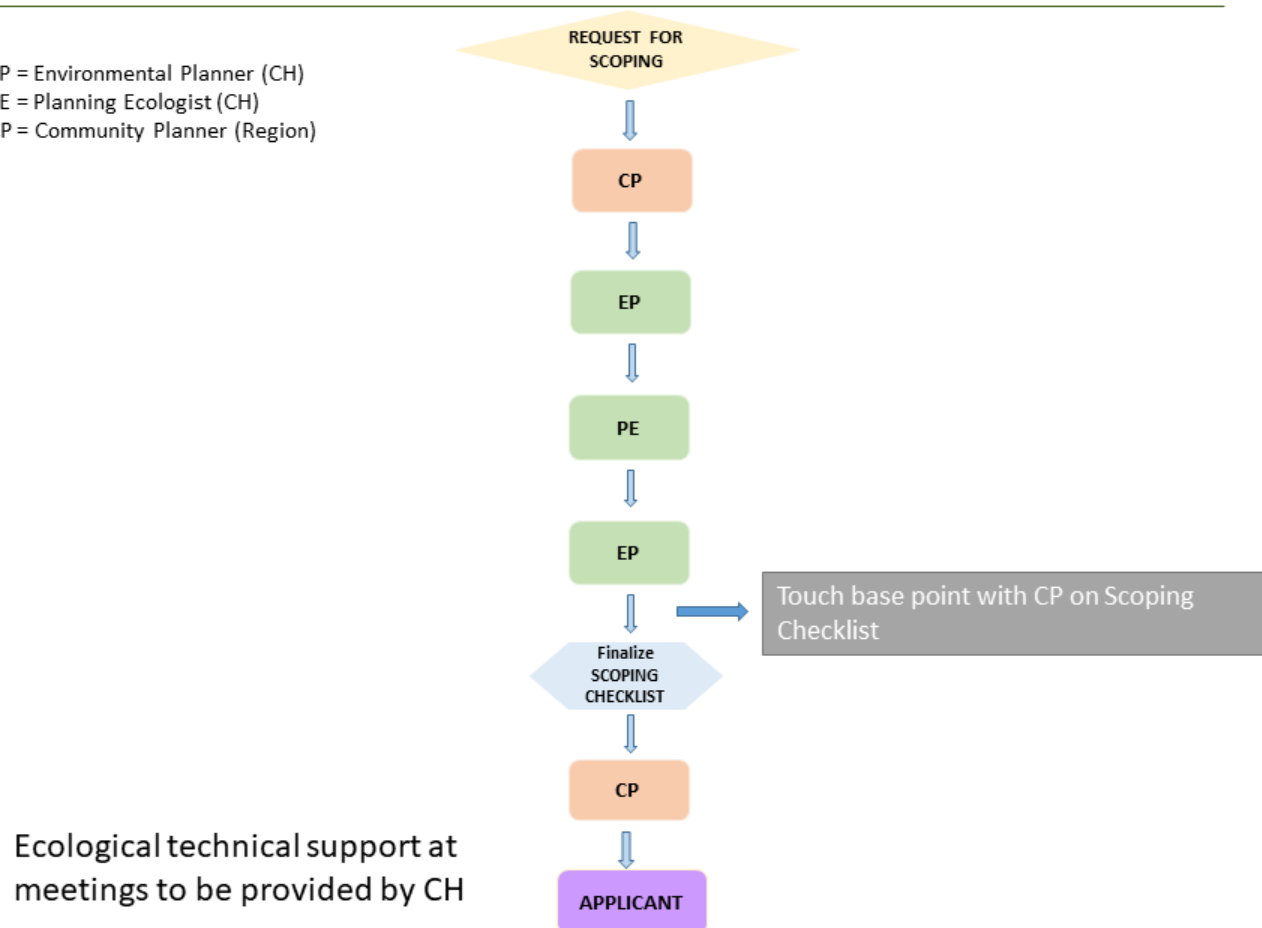
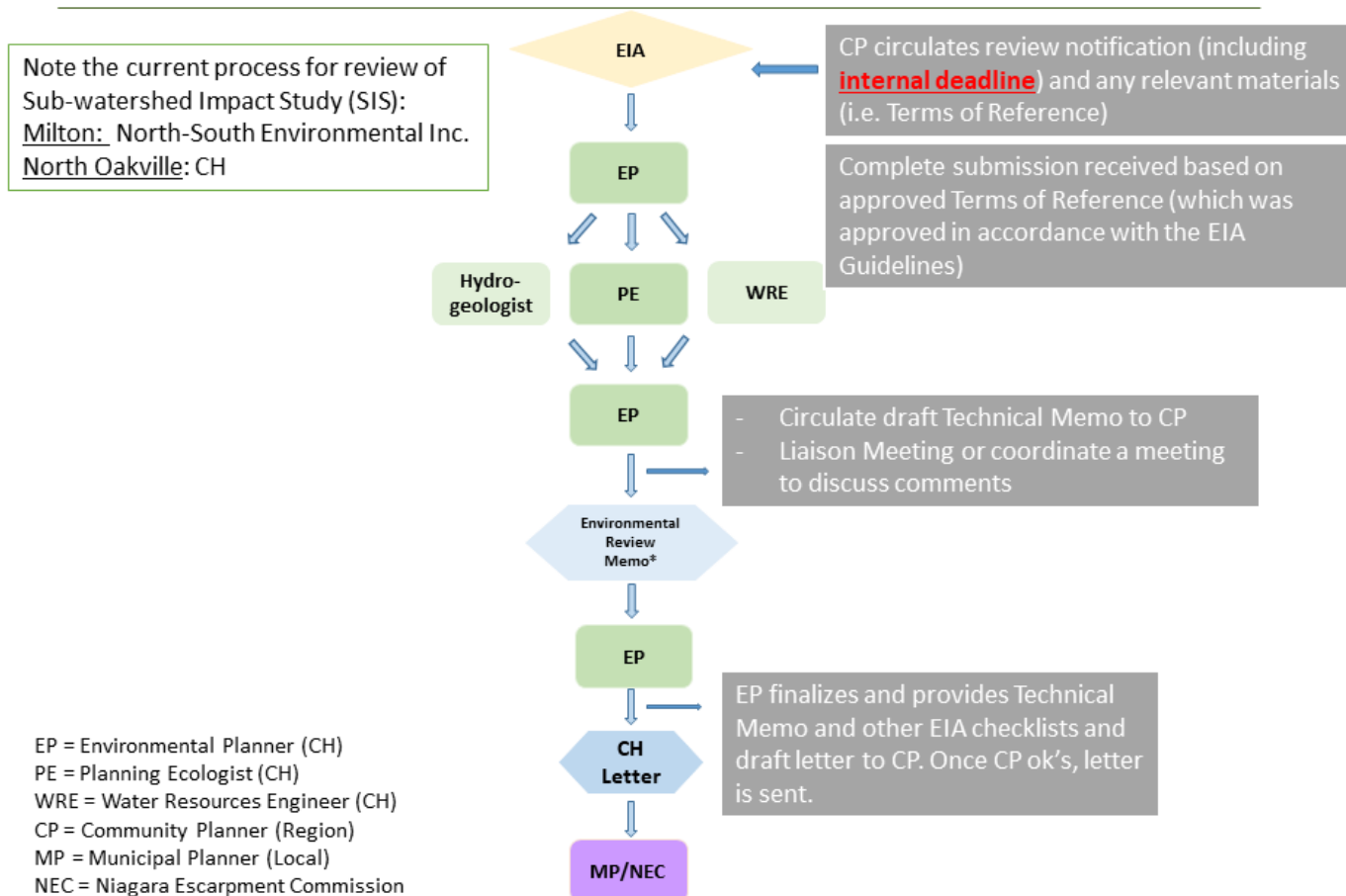


Figure 5 – Region/Conservation Halton: General Ecological Review Process

CH/REGION: GENERAL ECOLOGICAL REVIEW PROCESS



Schedule 4
Performance Measures

Focus Area	Objective	KPI	Target (%)	How to Measure	Notes
Timelines	Deliver timely reviews and excellent customer service and experience	Percentage of reviews that meet the required review timeline.	Year 1: 80 Year 2: 85 Year 3: 90	Track/calculate timelines / deadlines met	
Process	Ensure review process is efficient and effective for CH & Regional staff and external clients	Overall satisfaction of process.	Year 1: 80 Year 2: 85 Year 3: 90	Annual survey by CH & Regional staff	
Communications	Ensure communications between CH & Regional staff is positive and correspondence is clear and comprehensive	Overall satisfaction of communications between CH & Regional staff Quality of correspondence from CH & Regional staff	Year 1: 80 Year 2: 85 Year 3: 90	Annual survey by CH & Regional staff	
Conflict Resolution	Resolve conflicts in a timely and professional manner	Overall satisfaction of resolving issues.	Year 1: 80 Year 2: 85 Year 3: 90	Annual survey by CH & Regional staff	
Training, Resources and Tools	Ensure CH and Regional staff are adequately trained, prepared and provided with resources and tools to deliver terms of the Agreement	Overall satisfaction of training, preparedness, resources, and tools	Year 1: 80 Year 2: 85 Year 3: 90	Annual survey by CH & Regional staff	
Working Relationship	Ensure positive and productive working relationships and mutual trust between CH & Regional staff	Overall satisfaction of working relationship	Year 1: 80 Year 2: 85 Year 3: 90	Annual survey by CH & Regional staff	

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 09

FROM: Barbara J. Veale, Director, Planning and Watershed Management

DATE: November 25, 2021

SUBJECT: Conservation Halton Mapping Proposed Transition and Implementation Protocol

Recommendation

THAT the Conservation Halton Board of Directors **endorses the Conservation Halton Proposed Mapping Transition and Implementation Protocol.**

Executive Summary

Conservation Halton (CH) has embarked on a major review and update CH's regulatory mapping, which will result in refinements to our Approximate Regulation Limit (ARL) mapping. There is currently no Provincial guidance for conservation authorities related to the transition or implementation of draft hazard or regulatory mapping. To provide greater clarity and transparency to CH's stakeholders and the public, staff recommends that the Board of Directors endorses the proposed Mapping Transition and Implementation Protocol (Appendix H) This proposed protocol establishes the key stages in the mapping update / study process, what data will be used at each stage, how the data will be presented online, when the data can be used for administering Ontario Regulation 162/06, and when development is contemplated in hazardous/regulated areas, and when public and stakeholder notification/engagement will occur.

Report

Background & Rationale

Over the past few years, Conservation Halton (CH) has embarked on a major review and update to CH's regulatory mapping (e.g., flood hazard mapping, wetland mapping, watercourse mapping). Updates to technical studies and modelling, using new tools and technologies, help us to better understand the nature and extent of existing hazards and/or wetlands. As mapping reviews and updates progress, refinements to CH's Approximate Regulation Limit (ARL) mapping will be necessary, as additional hazard or regulated areas may be identified and some may be removed.

When hazards (i.e., flooding or erosion hazards) or wetlands are identified and mapped through technical studies, they are incorporated into CH's ARL mapping, following the public consultation process outlined in Conservation Ontario's, "*Procedures for Updating Section 28 Mapping: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations*" and, for major mapping updates, following Board approval. CH's ARL mapping is a screening tool to determine if a site contains natural hazards and is regulated by CH. This tool is

available on CH's website and is used by conservation authority (CA) staff, municipal staff, consultants, real estate agents, and the public.

Mapping is a dynamic, iterative process and evolves. Updated modelling or new information obtained via a technical study, or a site visit can result in refinements to CH's regulatory mapping. CH staff consistently applies "best available information" for: 1) understanding the magnitude and extent of the hazard, 2) assessing potential risk to life and property or interference with a wetland or watercourse, and 3) decision making and administering Ontario Regulation 162/06, when works or activities are contemplated within CH regulated areas. It is important to note that regardless of whether a hazard or wetland is mapped or not, the text providing the legal description of the areas regulated (Ontario Regulation 162/06, section 2(3)) prevails over the mapping.

To provide greater clarity and transparency to the public and stakeholders regarding revisions to mapping on their property, staff developed an Approximate Regulation Mapping (ARL) Maintenance Protocol, endorsed by the Board in November 2019 (CHBD 11 19 11). This protocol applies to minor mapping refinements determined through site visits or site-specific assessments or studies associated with environmental assessments and planning and permit applications. Through this protocol, minor changes made throughout the year are consolidated and the revised ARL mapping posted to the CH website on, at minimum, an annual basis.

The renewal of CH's major floodplain mapping program in 2018 offered another opportunity for CH to provide more information to the public and stakeholders about how regulated areas are delineated and refined and when new technical information generated from studies would be used by CH staff in reviewing permits. Before CH's mapping is released publicly, numerous iterations of draft mapping may be produced throughout the technical review and/or study process. Draft mapping may identify existing hazards and regulated areas that were not previously mapped and, although public consultation may not be completed or Board approval received, this mapping may be the "best available information".

While CH follows the consultation and notice processes outlined in the CO Guidelines for Updating Section 28 Mapping, there is currently no CO or provincial guidance for CAs related to the transition or implementation of draft hazard or regulatory mapping. Accordingly, staff recommended that a formal protocol for mapping transition and implementation be developed for CH. This approach was endorsed by the CH Board of Directors (CHBD 04 21 06). The protocol was to outline how CH would deal with draft regulation limit mapping, including public and stakeholder engagement, during the mapping review and update process. CH's Board of Directors approved a high-level work plan on April 22, 2021. The purpose of this report is to present staff's recommendation for a CH Mapping Transition and Implementation Protocol.

Purpose of Protocol

The purpose of the proposed Mapping Transition Implementation Protocol is to establish:

- key stages in the mapping update/study process,
- what data will be used at each stage of the process,
- how the data will be presented on CH's online mapping,
- when the data can be used for administering Ontario Regulation 162/06, and
- when public and stakeholder notification/engagement will occur.

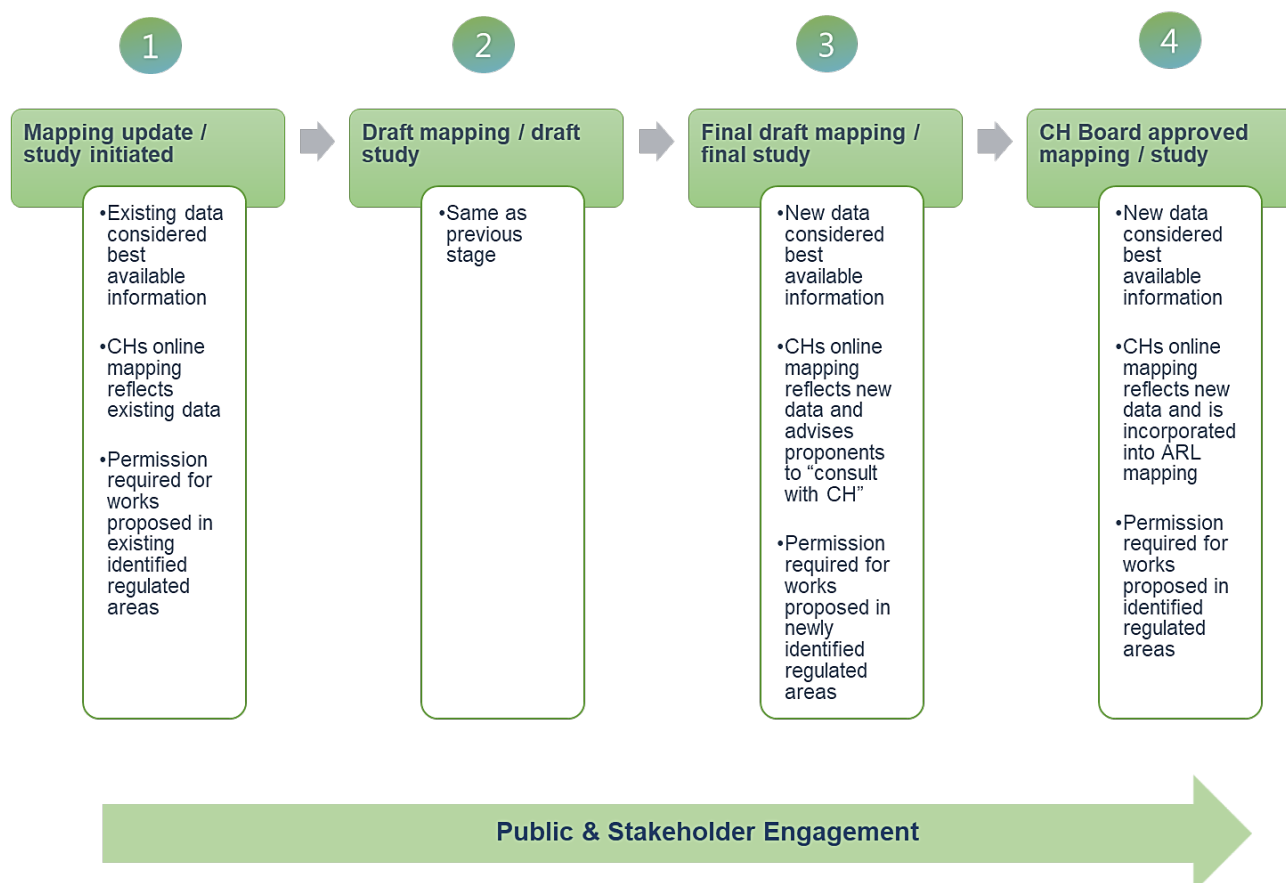
The protocol will help to ensure that CH's use of draft and new mapping is transparent, consistent, and defensible. It will also help CH's stakeholders and the public to better understand the dynamic nature of hazard/wetland mapping and to make better informed decisions, based on potential risks and CH's regulatory requirements. CH decisions related to flood forecasting or advisory and municipal decisions around risk management or emergency response may also benefit from this protocol. The protocol will help guide staff and enable more efficient and effective application of draft mapping.

Protocol

As part of the development of a proposed Mapping Transition Implementation Protocol, staff investigated approaches to draft mapping transition and implementation in other Conservation Authority (CA) jurisdictions. While formal protocols or strategies are limited among neighbouring CAs; CH staff met with their staff to discuss general mapping review and update processes and invite feedback on our draft versions of the protocol. This input was valuable for refining and validating the final version.

CH's proposed Mapping Transition Implementation Protocol is attached. A summary of the key stages in CH's protocol is provided in Figure 1 and the overview below.

Figure 1: Summary of Key Stages in CH's Mapping Transition Implementation Protocol



Stage 1 marks the initiation of the mapping update/study process. CH's stakeholders, development proponents, and the public are notified that CH has initiated a mapping update. A Technical Advisory Committee (TAC) is formed, and a Public Engagement session is hosted to provide 1) information about the mapping update/study process and how the public may provide input, and 2) general information about hazards and CH's roles and responsibilities. In stage 1, CH's existing data is considered the best available information for decision making and is the only data that can be shared with third parties. Permission is required from CH to develop in identified regulated areas, using existing data.

Stage 2 involves producing preliminary, draft mapping and study results. TAC meetings and public engagement sessions occur so that CH can obtain feedback on the preliminary results. CH's existing data is still considered the best available information for decision making, sharing with third parties, and administering Ontario Regulation 162/06.

The key deliverables in Stage 3 include final draft mapping and a final study, where applicable. Once CH's senior technical staff determines that the new data is technically sound and acceptable (and in the case of delineation of flood hazards, map sheets are signed and stamped by a Professional Engineer), the new data is considered "best available information" and will be used for decision making. Data will be shared with third parties and is also posted on CH's online mapping as a "Consult with CH" layer. Permission is required from CH to develop in identified regulated areas, using new data. A report is presented to CH's Board of Directors to obtain approval of the mapping and study.

Stage 4 is the final stage in the process, after the CH Board approves the mapping. CH's stakeholders, development proponents, and the public are notified that CH has completed its mapping update and the new data is officially incorporated into CH's ARL mapping. CH's new data is considered the best available information for decision making, sharing with third parties, and administering Ontario Regulation 162/06.

The timing on when the process moves from Stage 2 to Stage 3 may differ depending on the regulated feature, scale and scope of the technical review and study, and/or level of risk. Additional Public Engagement and TAC sessions may occur depending on the length of the study and there is also some flexibility when Public Engagement sessions occur throughout the mapping update process.

Conclusion

The proposed Mapping Transition and Implementation Protocol establishes when in the mapping update process draft data/mapping will be considered "best available information" for understanding the magnitude and extent of the hazard, assessing potential risk to life and property, identifying potential interference to a wetland, identifying areas requiring further analysis, decision making when development is contemplated in hazardous/regulated areas, and administering *Ontario Regulation 162/06*. The protocol will provide greater certainty, consistency, and transparency in the application and use of draft and new mapping, as well as public and stakeholder engagement opportunities in the mapping update process. Staff recommends that the Board of Directors endorse CH's proposed Mapping Transition and Implementation Protocol.

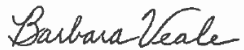
Impact on Strategic Priorities

This report supports the Momentum priority of Natural Hazards and Water.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Barbara J. Veale, Ph.D., MCIP, RPP
Director, Planning and Watershed Management

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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***DRAFT* CONSERVATION HALTON MAPPING IMPLEMENTATION AND TRANSITION PROTOCOL**

	Key stage in mapping update / study process	Public & stakeholder engagement	Best available information	Mapping updates required	Data sharing with third parties	Advice to applicants	CH permission required? ³
1	Mapping update / study initiated	Notification of study initiation PIC #1	Existing CH data, if available	Update internal maps to delineate study area	Share existing data; new data not yet available	Advise that study commenced; note that mapping subject to change in the future	Yes, if identified as regulated, using existing data
2	Draft mapping / draft study	PIC #2 ¹	Same as above		Same as above	Same as above	Same as above
3	Final draft mapping Final study Report to CH Board		New data, once accepted for use ²	Update CHs online mapping layers to “consult with CH”, once accepted for use ²	Share new data with third parties	Same as above	Yes, if identified as regulated, using new data
4	Study concluded CH Board approved study & maps	Notification of study conclusion	New data, once approved for use	Updated ARL mapping posted online and sent to municipalities	Same as above	Advise that FPM study complete	Yes, if identified as regulated

Notes:

¹ PIC #2 may also occur as part of Stage 3² QA/QC by senior technical staff to determine that data is acceptable for use and considered “best available information”; map sheets signed by P. Eng., where applicable³ CH regulates all watercourses, valleylands, wetlands, Lake Ontario and Hamilton Harbour shoreline and hazardous lands, as well as lands adjacent to these features. Not all regulated areas are mapped, but natural hazards, whether mapped or not, are considered regulated by a conservation authority.

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 10

FROM: Barbara J. Veale, Director, Planning and Watershed Management
905-336-1158 x2273

DATE: November 25, 2021

SUBJECT: Morrison-Wedgewood Diversion Channel Updated Flood Hazard Mapping
CH File: ADM 346

Recommendation

THAT the Conservation Halton Board of Directors **approves updated flood hazard mapping for the Morrison-Wedgewood Diversion Channel for incorporation into CH's Approximate Regulation Limit mapping based on the results of the 2021 Baseline Model Update as referenced in the staff report entitled "Morrison-Wedgewood Diversion Channel Updated Flood Hazard Mapping"**.

Executive Summary

CH retained Morrison-Hershfield to undertake "Flood Risk Mapping and Spill Quantification – Morrison-Wedgewood Diversion Channel (MWDC) 2020, Volume II: Hydraulic Modelling Report, 2021 Baseline Model Update" as well as a "Spill Mitigation Hydraulic Feasibility Assessment".

The 2021 Baseline Model Update has resulted in changes to CH's flood hazard and regulation limit mapping. Approximately fifty (50) residential homes have been pulled out of CH's regulation limit and eight (8) commercial or industrial properties are now considered within. The landowners of the eight affected properties were notified of the study and mapping changes via mail.

Staff recommends that the CH Board of Directors approve the updated flood hazard mapping for incorporation into CH's Approximate Regulation Limit mapping based on the most recent model update.

Report

Background

In 2019, CH hired Morrison Hershfield to undertake a study and update Flood Risk Mapping for the Morrison-Wedgewood Diversion Channel (MWDC) and its tributaries in Oakville. In Spring 2020, the "Flood Risk Mapping and Spill Quantification – MWDC Study" was completed. No significant changes to flood risk were identified along the contributing tributaries; however, flood risk was identified along and south of the Diversion Channel. Modelling indicated the potential for three major spills.

Public consultation was undertaken to ensure that local, provincial, and federal agencies, other stakeholders, and the public were made aware of the studies and had opportunities to participate in

Public Information Centres (PIC) and provide input. PIC# 1 for the MWDC study was held at CH's Administrative Office on September 19, 2019, and PIC # 2 was held at Halton Region's Headquarters on March 5, 2020.

Updated flood hazard mapping for the area was approved by CH's Board of Directors in June 2020 (CHBD 05 20 06). Flood lines were incorporated into CH's Approximate Regulation Limit (ARL) mapping and made public in November 2020.

Morrison Hershfield was subsequently retained to undertake a "Spill Mitigation Hydraulic Feasibility Assessment" to evaluate and identify hydraulic alternatives to fully mitigate three major spills along and south of the Diversion Channel and to prepare a high-level, cost-benefit analysis.

Through work on the Feasibility Assessment, as well as landowner feedback in January 2021, new information on the existing conditions was revealed. Staff concluded that further refinements to update the conditions model and mapping were warranted. Specifically, conditions along the QEW necessitated further analysis to recognize the potential for an overland spill outlet over the median barrier dividing the highway which may influence the nature and extent of the spill. Floodplain mapping is a dynamic, iterative process. Updates to the conditions model based on new information is a continuous process and one of the reasons why floodplain mapping needs to be updated on a regular basis.

A Change Order was issued on February 3, 2021, to enable Morrison Hershfield to refine the model and mapping. Given that a Feasibility Assessment was underway, it was important to have the work completed expeditiously to inform recommendations. The study area for the model was expanded to incorporate new information about existing conditions. The Change Order supported full documentation of model refinements and updated flood mapping for the spill areas (including flood extent, flood depth, flood velocity, and flood risk). Additional modelling and mapping were completed in Spring 2021.

The purpose of this report is to:

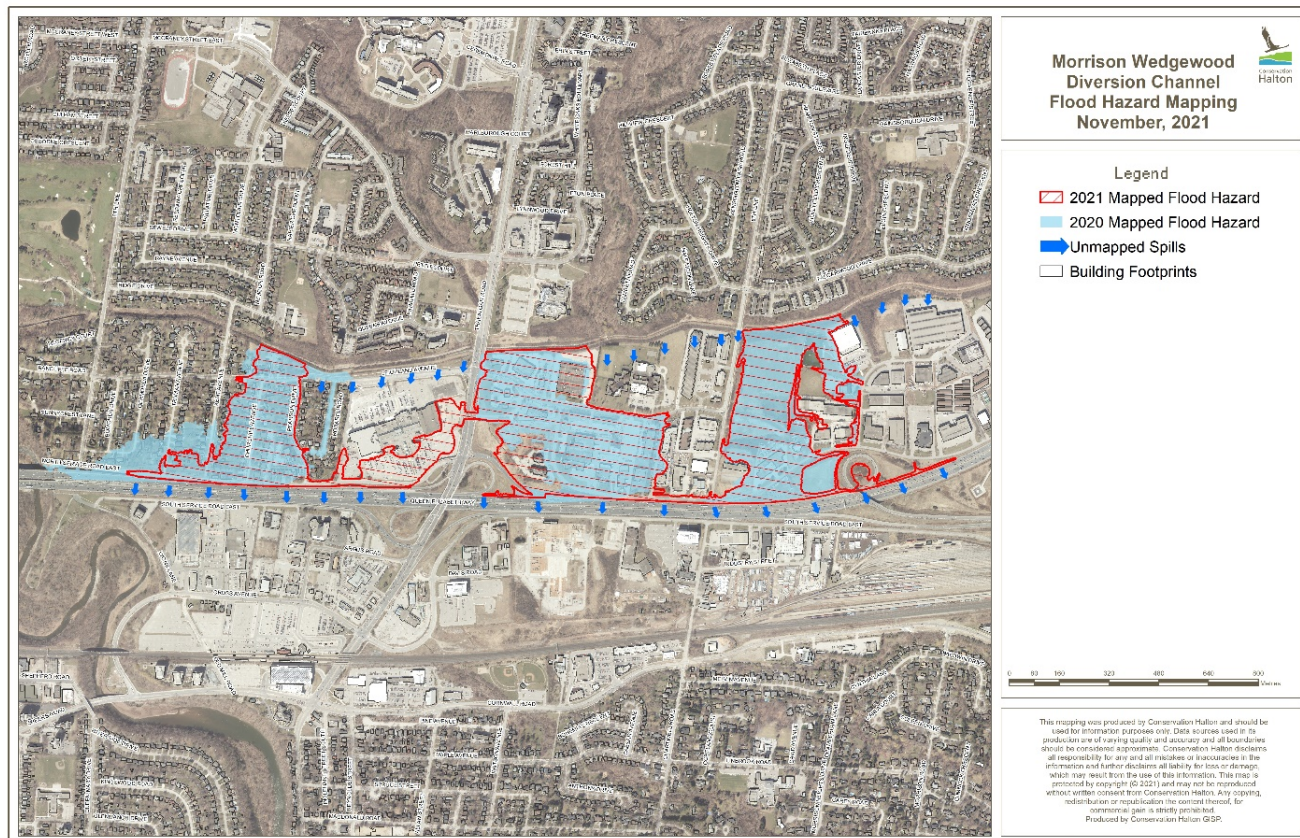
1. Provide an overview of the modelling and mapping results (i.e., 2021 Addendum report), as well as how affected landowners were notified of mapping changes, and
2. Seek CH Board approval the flood hazard mapping, as presented in the 2021 Addendum, for incorporation into CH's ARL Mapping.

MWDC Flood Risk Mapping (2021 Addendum) & Recommended Next Steps

New information on existing conditions in the MWDC study area was revealed as part of the Feasibility Assessment, as well as feedback received in January 2021, warranting further refinements to the 2020 flood hazard modelling/mapping. As a result, the study area for the model was expanded in early 2021 and changes documented in an Addendum entitled "Flood Risk Mapping and Spill Quantification – MWDC (2020) Volume II: Hydraulic Modelling Report, 2021 Baseline Model Update".

The updated modelling shows some additional areas identified within the flood hazard or CH regulated limit, while others are now outside. The original flood hazard limits approved in 2020 (CHBD 05 20 06) and the updated flood hazard mapping are shown on Figure 1. The updated flood hazard mapping is outlined in red, and the 2020 approved flood hazard limits are shown in shaded pale blue.

Figure 1: Morrison Wedgewood Diversion Channel Flood Hazard Mapping



The extent of the flood hazard is smaller than previously mapped in the area north of the QEW, in the vicinity of Germorda Drive. Approximately fifty (50) residential homes have been pulled out of CH's regulation limit. However, the extent of the flood hazard is larger than previously mapped for eight (8) commercial or industrial properties to the east.

Direct mailouts were sent to the landowners of the eight (8) properties not originally mapped as within the spill/flood hazard area at the time of PIC #1 and PIC #2 or in the 2020 study. CH's letter provided an overview of the study and what the results meant for their property, as well as an overview of CH's regulation and relevant regulatory policies. Property owners were encouraged to reach out to staff if they had questions. Staff has since met with one property owner to discuss the updated mapping, CH's current interim spills policy, and how CH would assess development proposals for the property.

The 2021 modelling and mapping represents the best available information for understanding the magnitude and extent of the hazard, assessing potential risk to life and property, and/or decision making when development is contemplated in hazardous areas. It is also the best available information for the purposes of administering *Ontario Regulation 162/06*.

Conclusion

A primary purpose for CH is to protect people and property from the risks associated with natural hazards and prevent aggravation of existing hazards or the creation of new hazards. Our understanding of the nature and extent of flood hazards has evolved over time. Updates to technical studies and new modelling can result in changes to mapping that shows flood hazard limits or CA regulated areas. It can also highlight the need for further study.

Staff recommends that the Board approve the most recent flood hazard mapping based on the final “Flood Risk Mapping and Spill Quantification – MWDC (2020) Volume II: Hydraulic Modelling Report, 2021 Baseline Model Update”. Once approved, the updated flood hazard (spill) areas will be incorporated into CH’s ARL mapping.

Impact on Strategic Priorities

This report supports the Momentum priority of Natural Hazards and Water.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Barbara J. Veale, PhD, MCIP, RPP
Director, Planning and Watershed Management

Approved for circulation:



Hassaan Basit
President & CEO/Secretary Treasurer

FOR QUESTIONS ON CONTENT:

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REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 11

FROM: Barbara J. Veale, Director, Planning and Watershed Management

DATE: November 25, 2021

SUBJECT: Improvements to Conservation Halton's Water Quality and Habitat Improvement Program and New Habitat Improvement Guidelines for Agriculture and Urban Land Uses

Recommendation

THAT the Conservation Halton Board of Directors **approves the Agricultural Water Quality and Habitat Improvement Guideline and the Urban Water Quality and Habitat Improvement Guideline.**

And

THAT the Conservation Halton Board of Directors **receives for information the Staff report entitled "Improvements to the Water Quality and Habitat Improvement and New Habitat Improvement Guidelines for Agriculture and Urban Land Uses",**

Report

Since 1994, Conservation Halton (CH) has provided technical and financial assistance to private landowners to incentivize and assist them in implementing voluntary best management practices and conservation projects that directly or indirectly result in:

- creek and/or wetland water quality improvements
- wildlife habitat improvements
- groundwater protection
- climate change mitigation or adaptation
- improved land management practices

To ensure funding is directed to meaningful projects that are correctly executed, and to enable landowners to access the funding, Conservation Halton has established processes, guidelines, and an advisory committee (CHBD 01 20 08).

During the past two years, staff have reviewed CH's processes and guidelines while also looking at neighbouring programs to see where improvements can be achieved. As a result of that effort, the following improvements have been made:

1. **Transitioned to a once annual application intake window.** This sets firm deadlines for applicants while also allowing the technical review committee to assess all proposals at once as opposed to accepting applications on a first come first serve basis

2. **Moving from a one size fits all guideline document to a set of detailed guidelines** with project specific eligibility requirements based on land use type. This provides a more customer-centric approach while also leaving less to interpretation regarding eligibility. The land use type guidelines developed thus far include:
 - a. Agricultural Water Quality and Habitat Improvement Program Guideline
 - b. Rural Non-Farm Water Quality and Habitat Improvement Program Guideline
 - c. Urban Water Quality and Habitat Improvement Program Guideline
3. **Increasing grant rates and caps for certain project types** to reflect changing costs while also recognizing some project types have greater water quality and/or ecological value.
4. **Introducing new project type categories:**
 - a. Invasive plant management
 - b. Fragile land retirement
 - c. Wellhead protection (well upgrades)
 - d. Education and training
 - e. Innovative projects
 - f. Rainwater conservation projects (lot level low impact development)
5. **Revised the Water Quality and Habitat Improvement Program Application**, making it easier for applicants to complete
6. **Developed a Landowner Support Guide** to help guide landowners as they prepare their application and provide examples of what information to include in each section
7. **Revised the Landowner Agreement**

Staff feel these changes improve the program process and customer service and position the program for greater uptake and growth moving forward. This report seeks endorsement of the new guidelines for agriculture and urban land uses (Appendix I and Appendix J); rural non-farm guidelines will be brought to the Board for approval in 2022.

Impact on Strategic Priorities

This report supports the Momentum priorities of Education, Empowerment and Engagement as well as Science, Conservation and Restoration.

Financial Impact

Unlike neighbouring Conservation Authority Water Quality and Habitat Improvement Programs that receive funding directly from the regional municipalities, Conservation Halton's Program is funded through corporate sponsorship and past project revenues. The 2022 funding allocated to this program is projected to be \$35,000, with growth planned year over year.

Signed & respectfully submitted:



Barb Veale
Director, Planning and Watershed Management

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Kent Rundle, Coordinator, Landowner Outreach and Restoration, 905-336-1158 x2319, krundle@hrca.on.ca



Agricultural Properties | Financial Incentive Program Guidelines

WATER QUALITY & HABITAT IMPROVEMENT PROGRAM

Appendix I



Conservation Halton has a lot of information and documents available to support landowners in both hard copy and online. To assist you in finding the information most relevant to you, documents have been organized into the following categories: Urban Properties, Countryside Properties and Agricultural Properties. Use the colour coding tag and symbology as a guide along your information gathering journey.

Agricultural Properties



Countryside Properties



Urban Properties





Conservation Halton

Water Quality and Habitat Improvement Program

AGRICULTURAL PROPERTIES

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Program Background

Since 1994, Conservation Halton has provided technical and financial assistance to private landowners to assist them in implementing best management practices and conservation projects that improve and protect water quality and wildlife habitat. Citizens in urban, rural, and agricultural areas of Conservation Halton's watershed are encouraged and supported in taking responsibility for restoring and maintaining the quality of the environment in which they live.

This is the foundation upon which this program, formerly known as the Hamilton-Halton Watershed Stewardship Program, was developed in 1994 with the following partners:

Conservation Halton
Hamilton Conservation Authority
Bay Area Restoration Council

Program Purpose

The purpose of the Water Quality and Habitat Improvement Program (WQHIP) is to support landowners with a grant towards the cost of eligible projects they undertake on their land to improve local surface and ground water quality as well as fish and wildlife habitat through improved land management practices. All projects implemented under this program are voluntary.



Program Goals

- To provide technical and financial assistance to landowners and residents in Conservation Halton's watershed to achieve their environmental and stewardship goals;
- To promote and facilitate the adoption of environmentally sound land management practices to protect, restore, and enhance surface and ground water, air and soil quality, and/or fish and wildlife habitat in Conservation Halton's watershed;
- To help protect agricultural lands as a natural resource of major importance in the area, while recognizing and supporting farmers and agricultural organizations as valuable contributors to the environment, community, and economy; and
- To promote healthy communities that respect the natural environment and water resources.

Program Process

Grant assistance is available to landowners who:

- Build new structures, upgrade existing structures, and adopt practices which will improve existing impairment problems as part of their water quality improvement



plan;

- Create or rehabilitate fish and wildlife habitat;
- Demonstrate good land stewardship practices; and
- Create educational opportunities or demonstration sites.

Projects will be pre-screened by Conservation Halton staff for eligibility to ensure they meet guidelines. Projects will then be reviewed by the Project Technical Advisory Committee (PTAC) who will consider the merit of each project and score them accordingly.

There may be instances where Conservation Halton is the recipient of external grant funding that can be allocated to landowner projects. Under these circumstances, a PTAC review of the project may not be required.

There may be instances where landowners' proposed projects require review by one or more of the following: Ontario Ministry of Natural Resources and Forestry (OMNRF), Ontario Ministry of the Environment, Conservation and Parks (MECP), Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), local Medical Officer of Health, Ontario Soil and Crop Improvement Association (OSCIA), Conservation Halton (CH), Fisheries and Oceans Canada (DFO), or municipality, etc.

Approvals Committee: The Project Technical Advisory Committee (PTAC) acts as the Approvals Committee for all WQHIP project proposal applications as outlined in the PTAC Terms of Reference and ensures that the Water Quality and Habitat Improvement Program is administered in accordance with these guidelines.

PTAC consists of representatives from local agricultural organizations, environmental interest groups, citizens at large, as well as representation from local Conservation Authorities.

Conservation Halton staff provide support to landowners by offering free:

- Property site visits;
- Landowner consultations;
- Technical assistance for project design, when appropriate;
- Education and outreach opportunities.



Landowner Financial Assistance and Project Eligibility

Grant Overview

The following grants are available to agricultural landowners in Conservation Halton's watershed who implement projects to improve water quality or habitat on their properties as outlined below. A single property may be eligible to receive grants under each category up to the category cap each calendar year (some exceptions apply). For large projects that are planned to be implemented in phases, applicants are encouraged to present the complete project as well as the immediate phase that is requesting funds. Each phase of the project must provide a demonstrable environmental improvement as determined by the PTAC.

Refer to Table 1 for a list of project categories and their associated grant rates and caps.

Note: WQHIP grants may be combined (stacked) with other cost share sources, and applicants are encouraged to seek additional funding. Combined grants are not to exceed 100% of total expenses. Applicants must inform Conservation Halton staff of additional cost share funding. Conservation Halton's Water Quality and Habitat Improvement Program is applied as the final funding. If a landowner receives funding from another source(s), their project will be eligible to receive the WQHIP grant rate for the remaining costs. For example:

Total Project Cost = \$1000

\$250 confirmed funding from other cost share source

\$750 remaining cost is eligible for WQHIP grant rate and cap.



Table 1: Projects Eligible for Funding

Project Type	Cost Share	Maximum Cost Share	Performance Incentive	Notes
Manure Storage and Handling Systems	50%	\$10,000	-	One project per property
Manure Storage Decommissioning	50%	\$3,000	-	Per project
Clean Water Diversion	50%	\$10,000	-	Per project
Livestock Restriction from Environmentally Sensitive Features	75% - \$100	\$10,000	-	Livestock access restriction materials are eligible for 100% if installed by landowner.
Fuel and Chemical Storage	50%	\$3,000	-	Per project
Erosion Control Structures	75%	\$10,000	-	Per project
Dead Stock Composting Facilities	50%	\$4,000		One project per property
Machinery Crossings	75%	\$5,000	-	Per project
Nutrient Management Strategy	75%	\$2,000		Only available to farms not currently phased into nutrient management legislation.
Nutrient Management Plan	75%	\$3,000	-	Only available to farms not currently phased into nutrient management legislation
Cover Crops	n/a	\$3,000	\$100/acre	Maximum \$3,000 per farm business
Fragile Land Retirement	n/a	\$3,500/year	\$350/acre	Maximum 10 acres for 3 years per project
In-Stream Barrier Mitigation	75%	\$10,000		Per project
Natural Area Creation and Enhancement	75%	\$5,000/\$10,000		Per project
Wellhead Abandonment – City of Hamilton	100%	\$1000		Maximum 2 wells per property. A City of Hamilton program delivered through CH's WQHIP
Wellhead Abandonment – Halton Region	Offered Through Halton Region			
Invasive Species Management	50% - 75%	\$10,000		Per project
Wellhead Protection (upgrades)	100%	\$1000		One project per property
Education and Training	50%	\$500		Once per year per applicant
Innovative Projects	75%	\$5,000		Per project



Eligibility

1. A grant to implement a project through the Water Quality and Habitat Improvement Program may be paid to an individual applicant who:
 - is a resident of Ontario; and
 - is a registered owner of the property

Note: under this program, a person is deemed to be the owner of land if the person leases the land for farming from the registered owner.

2. The project must be located within Conservation Halton's jurisdiction and improve habitat and/or water quality.
3. The following costs are generally eligible for grant assistance:
 - Required permits
 - Purchased materials and supplies
 - Professional fees
 - Fees for design, construction, and supervision

Note: The labour and machinery use of the applicant, family dependents, and the applicant's business are not eligible.

4. All approvals and permits are the responsibility of the applicant. It is the applicant's responsibility to ensure that the project meets all legal requirements including (but not limited to):
 - Local municipal bylaws
 - Provincial and regional highway setbacks
 - Drainage Act
 - Federal and Provincial Acts
 - Canada Farm Building Code
 - Ontario Building Code
 - Conservation Authorities Act
5. Innovative technologies and projects that do not conform to the guidelines will be considered by the Project Technical Advisory Committee on a project-by-project basis. Applicants should contact Conservation Halton WQHIP staff to determine the application requirements.
6. From time to time, Conservation Halton staff will review the eligible project types and guidelines and may alter these at their discretion.



Limitations to Grant Availability

1. Grants are limited to properties in Conservation Halton's watershed, with completed water quality and/or habitat improvement project plan designs.
2. Any applicant who proceeds with a project before it has been approved by the Project Technical Advisory Committee has no assurance that financial assistance will be provided.
3. An applicant must specify the year in which the project will be completed. If the project cannot be completed within the specified year, the grant may not be available, however, the applicant may appeal to Conservation Halton staff for an extension.
4. Funds will be allocated on a priority basis. Those projects with the higher potential for improving habitat and/or water quality will be considered first.
5. The grant will not be paid on HST if the applicant is entitled to an HST rebate.
6. Conservation Halton will set funding allocations annually. At that time, they may decide to set allocations for priority areas, and/or project categories. Funds may be limited based on this decision.
7. The number of grants available may be restricted to meet local priorities and budgets. Once the annual Water Quality and Habitat Improvement Program budget has been committed, no further approvals will be given.
8. It is possible that a project is evaluated as having merit but is not funded due to available funding being fully allocated to higher ranking projects. If the approved projects in a single year exceed the annual budget, the remaining approved un-funded projects may be resubmitted for re-scoring and approval the following year.

The Grant Process

How to Apply

1. Contact the Water Quality and Habitat Improvement Program at Conservation Halton (CH) (905-336-1158 x 2263) or by email at stewardship@hrca.on.ca to verify that your proposed project meets the guidelines and to arrange a site visit. CH staff are available to assist you with the planning of your project and applying to the program.
2. Complete and submit the WQHIP Application to Conservation Halton by the December 1st* deadline of the year prior to the year of project implementation. An Application Support Guide will be provided for clarification and to assist with the process.

* Application deadline may be extended in a given year. Please check online at: <https://conservationhalton.ca/financial-incentives> or contact your Landowner Outreach Technician to confirm the current year's deadline.



Grant Application Review Process

1. The Project Technical Advisory Committee reviews project applications once per year over a two-week period in January/February. Grant applications are anonymously presented to PTAC to review, evaluate, and score the projects based on their potential to protect and/or improve local habitat and/or water quality. All applicants are notified of their project scoring results in the week following the PTAC review.
2. The committee may pose questions to the applicant, a contractor listed on the application, or to CH staff and may have discussions about the project to determine a project's merit.
3. Project merit is assessed based on the following attributes:
 - The project directly addresses a water quality impairment;
 - The project directly addresses a habitat impairment;
 - The project contributes to improving water quality;
 - The project contributes to improving habitat quality;
 - The project is located adjacent to, or in close proximity to a natural area; and
 - The project raises public awareness of water quality and habitat issues or opportunities.
4. PTAC members score each of the projects independently, based on the project's attributes.
5. After reviewing the responses from the PTAC members, Conservation Halton staff will rank the different projects and inform PTAC members of their decision to fund or not fund the grant applications.
6. Once the project proposal has been reviewed and approved by the Project Technical Advisory Committee, successful applicants will be notified to proceed with the project. If your project has not been approved, the reasons for this will be communicated. There may be an opportunity to resubmit the project application the following year after suggested changes have been made.
7. Once your project has been approved, you will be asked to review, sign, and return a WQHIP Agreement prior to commencing work. The agreement, alongside your application, will serve as the Project Agreement between you and Conservation Halton.



Project Closeout

1. Notify staff when the project is completed, paid for, and you have copies of all necessary permits and receipts. A site inspection is required to confirm that the project is complete. At that time, you can submit the Financial Tracking Form, original invoices marked “paid”, and a copy of cancelled cheques (front and back) or bank statement for all eligible project expenses to CH staff.
2. Within 4 weeks of a site inspection that determines that the work is complete and satisfactory, your pre-approved cost-share payment will be sent to you.

Timeline

ACTION	DATE
WQHIP applications to be submitted to Conservation Halton	January 15 th
PTAC Review meeting	February
Landowner notification letters distributed	Late February
Project Agreement established	Early March
Project installations	March-November
Financial Tracking submitted to Conservation Halton	ASAP, but no later than December 1 st
Grant payment issued (upon completion of inspection)	ASAP, but no later than December 15 th



Roles and Responsibilities

Conservation Halton (CH)

- Establishes and updates program guidelines as needed to ensure that the program is properly administered;
- Reviews the funding allocation regularly;
- Ensures that information on the administration of the program is available to all potential applicants;
- Establishes the WQHIP Project Guidelines with assistance from PTAC and partners and regularly reviews and evaluates the financial assistance framework to ensure the program is properly administered and the financial assistance available aligns with the goals of the WQHIP;
- Conducts site visits to identify project opportunities for the creation or enhancement of habitat and evaluates the potential sources, pathways, and magnitude of water quality impairment;
- Provides information to landowners regarding conservation practices, structures, and stewardship practices that may qualify for grants;
- Provides management choices and remedial options to reduce pollution potential from identified sources;
- Assists landowners with the completion of the Water Quality and Habitat Improvement Funding Application and Agreement;
- Reviews water quality and/or habitat improvement plans for acceptability for grant assistance;
- Ensures the anonymity of project applicants when grant applications/project proposals are presented to PTAC;
- Allocates funds based on the review, scoring, and ranking of PTAC;
- Communicates to all applicants the results of the PTAC review in writing;
- Verifies that projects have been completed;
- Ensures that payment is issued to the landowner upon project administrative completion; and,
- Undertakes monitoring of the completed project as written in the funding agreement.

The Project Technical Advisory Committee (PTAC)

- Is made up of industry professionals and community volunteers;
- Ensures that the WQHIP is administered in accordance with these guidelines; and,
- Evaluates and scores each project based on the attributes listed under the Grant Application Review Process above.

The Grant Applicant

- Contacts CH WQHIP staff to verify that the proposed project meets the grant eligibility requirements;
- Contacts CH WQHIP staff to arrange an on-site consultation;



- Completes the grant application to the best of their ability. CH WQHIP staff are available to assist;
- Ensures that the information on the grant application is complete and correct;
- When signing the grant application, agrees to maintain and use the new structures in accordance with their water quality improvement or habitat enhancement plan for a period of not less than 10 years or the life of the structure;
- Ensures that the project meets all relevant local, provincial, and federal laws and regulations;
- Ensures that appropriate permits are obtained prior to construction;
- Contacts CH promptly following completion so that verification of the completed projects can be made;
- Provides receipts for materials or items purchased and copies of supporting cancelled cheques or proof of financing in order to receive the grant, including completion of the Financial Tracking Form;
- Agrees to display a conservation project sign on their property in a location visible to the public;
- Agrees to inform CH if the property is sold to a new landowner in the future;
- Agrees to transfer a copy of the approved Water Quality and Habitat Improvement Funding Application and Agreement and associated documents to the new landowner (for information purposes only) if the property is sold in the future; and
- Gives permission to CH to photograph and promote the success of a particular project to demonstrate the positive actions that are being taken by the landowners in CH's watersheds.

Note: Although Conservation Halton may provide information regarding the applicant's water quality improvement plan, habitat enhancement plan, and the practices and structures contained in the plan, it is the responsibility of the applicant to ensure that the practices and structures undertaken are suitable to the applicant's operation and technically and structurally adequate.

Conservation Halton, Bay Area Restoration Council, PTAC Members, funding agencies or other review agencies (e.g., DFO, OMAFRA, MECP, MNRF, OSCIA, Local Medical Officer of Health) are not liable for any loss arising from the use of any advice or information provided as part of or under the Water Quality and Habitat Improvement Program.



Project Guidelines

Clean Water Diversion

Cost Share Details: 50% up to \$10,000

Purpose:

- To reduce the amount of contaminated runoff from manure storages and exercise yards by diverting clean rain and snow melt water away from sources of contamination to a satisfactory outlet, helping to prevent flooding and erosion, and improving land management.

Eligible Projects:

- Eavestroughs that direct water away from exercise yards and manure storage areas.
- Clean water diversion structures such as berms and ditches that direct clean water away from an exercise yard or manure storage.
- Roofs on exercise yards.
- Any other permanent technique to keep rain and snow from becoming contaminated by manure or adding to the volume of contaminated runoff.
- Impermeable surfaces and curb walls (maximum height 0.6 metres above grade) on livestock yards or container nursery yards to direct runoff to storage or treatment areas.

Project Details:

- Downspouts located where livestock can access them must be made of schedule 40 PVC (or stronger materials) and be well-secured to prevent dislodging.
- Eavestroughs must be made of galvanized steel or material of similar or greater strength to reduce the risk of ice damage.
- Applications for Clean Water Diversion that include eavestroughs directed into a tile must also include debris traps to ensure that tiles do not become plugged.
- All Clean Water Diversion projects must discharge clean water away from any source of contamination, and not pose other hazards such as soil erosion.
- Berms, tile outlets, and ditches must be properly protected.
- The Project Technical Advisory Committee may require an applicant to install an emergency shutoff valve if there is concern for conveyance of a spilled contaminant.

Eligible Costs:

- Materials and labour (other than applicant's) associated with an approved project
- Permits and engineering fees

Ineligible Costs:

- Paving of exercise yards
- Labour and machinery use of the applicant, family dependents, and the applicant's business
- When roofing an exercise yard, the Clean Water Diversion grant cannot be combined with the grant available under Manure Storage and Handling Systems.



Cover Crops

Cost Share Details: up to \$100/acre for a maximum of \$3,000 per Farm Business

Purpose:

- To promote the establishment and over-wintering of cover crops (living or dead), which help provide soil protection and reduce erosion to watercourses.
- To assist with the management of soil fertility, soil quality, water, pests, disease, biodiversity, and wildlife in an agro-ecosystem.
- To protect groundwater by promoting biological nitrogen fixation.

Project Details:

- The cost share grant is a maximum \$3,000 per farm business.
- Priority will be given to areas directly adjacent to watercourses or with tile drainage.
- Applicant must register all potential fields and provide a crop rotation plan. Eligible fields may be owned or rented. In the case of rented fields, the grant will be paid to the tenant farmer.
- Crops may be tilled no sooner than April 1st of the year following planting (may be chemically killed the previous fall).
- Cover crops must be destroyed before June 1.
- Only cover crops used exclusively for cover are eligible for grants, such as rye buckwheat and oilseed radish. This excludes crops that are harvested or grazed such as winter cereals, winter canola, and forages.
- The cover crop must be verified by CH WQHIP staff. Applicants are responsible for contacting CH prior to chemical destruction, winter freeze, or before tillage to ensure that the cover crop is providing at least 50% ground cover.

Eligible Costs:

- Only cover crops used exclusively for cover
- Crop consultant fees

Ineligible Costs:

- Purchase of Equipment
- On-going operating and capital costs
- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business



Dead Stock Composting Facilities

Cost Share Details: 50% up to \$4,000

Purpose:

- To encourage environmentally responsible composting of livestock mortalities and prevent contamination of surface and ground water from disposal of dead stock.

Eligible Projects:

- Composting facilities to dispose of dead livestock or poultry that meet OMAFRA guidelines and provincial regulations.

Project Details:

- Compost facilities must meet the most recent OMAFRA guidelines as described in their factsheet entitled “Deadstock Disposal Options for On-Farm (Order No. 09-025)”
<http://www.omafra.gov.on.ca/english/livestock/deadstock/index.html>
- Where a dead stock composting facility is constructed as part of a roofed solid manure storage, it must have a separate entrance from outside the building and be separated from the manure storage by a concrete wall.

Eligible Costs:

- Permits and engineering fees
- Materials and labour (other than the applicant’s) associated with an approved project

Ineligible Costs:

- Labour and machinery use of the applicant, family dependents, and the applicant’s business



Education and Training

Cost-Share: 50% up to \$500

Purpose:

- To support a watershed resident in accessing an opportunity that relates to the protection, restoration, and enhancement of surface and/or groundwater quality, air or soil quality, and/or fish and wildlife habitat as promoted by Conservation Halton.
- To provide support to an organization or collaborations that wish to educate or train Conservation Halton watershed residents on water quality, habitat, or agri-environmental related subjects.

Eligible Projects:

- Educational and/or Training Course costs
- Production of new materials (e.g., brochures, pamphlets, etc.)
- Reprints and distribution of existing materials
- Development and implementation of new events (e.g., workshops, farm tours, etc.)
- Support of recurring events



Project Details:

- Applicants* will provide a plan identifying the need for the initiative, the target audience, goals and objectives, draft content, distribution plan, itemized cost estimates, timeline, as well as potential and secured funding.
- The plan must demonstrate that the project is a priority in the context of Conservation Halton's Water Quality and Habitat Improvement Program.
- Applicants are encouraged to seek multiple funding partners. Applicants must identify all funding (potential and received) from other partners or cost recovery aspects at the time of application.
- Applicants are encouraged to develop materials and events that address the needs of various stakeholders including agricultural, residential, commercial, and industrial.
- Educational programs must not duplicate the work being done or previously completed by other agencies or organizations. The Program will make use of existing educational materials and events whenever possible, providing that they adequately meet its objectives.
- Applicants are eligible for one grant per year for educational initiatives. PTAC may consider additional project proposal applications from one group if funds remain at the end of the Program year.
- Conservation Halton's Water Quality and Habitat Improvement Program will not fund projects initiated by for-profit companies and organizations, government or government agencies and Conservation Authorities.
- The Program will not fund projects targeted at audiences exclusively outside of Conservation Halton's watershed.



- Successful applicants will consult with CH WQHIP staff on the final content and layout of publications and events to ensure that Program objectives are met.

Eligible Costs:

- Material costs
- Professional/speaker fees
- Translation
- Printing costs
- Rental of halls or equipment for events
- Permits and approvals
- Meals and non-alcoholic beverages

Ineligible Costs:

- Purchase of equipment
- On-going operating and capital costs (e.g., costs associated with an annual general meeting)
- Individual courses that solely benefit a single farm business
- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Mileage

* An 'applicant' represents the interests of their organization at its highest representative level. Therefore, individual applications, without the consent of their organization, will not be considered. Funding allocated to the applicant will be considered as funding to the entire organization and will be subject to the yearly grant maximum.



Erosion Control Structures

Cost Share Details: 75% up to \$10 000

Purpose:

- To control soil erosion problems on farmland which impact surface water quality.

Eligible Projects:

- Grass waterways
- Water and sediment control basins
- Contour terraces
- Drop inlet structures to reduce the velocity and erosive force of water

Project Details:

- Obtaining funding for erosion control projects will be enhanced if conservation tillage practices are used on adjacent fields.
- Work must be done by or supervised by a qualified contractor.
- Design by private sector professional engineers may be advisable on complex and/or large projects.
- Structures should be properly engineered to withstand expected water volume and velocities. The landowner and their contractor/engineer will be responsible for the structural integrity of the construction project. Applicants may refer to OMAFRA factsheets for design information: www.omafra.gov.on.ca
- Projects must be constructed to the standards specified in the OMAFRA Soil Erosion Manual.
- Applicant must obtain approval(s) from appropriate agencies prior to construction. In addition, any work done on municipal drains also requires prior approval from the municipality.
- All collected water must be taken to a sufficient and legal outlet.

Eligible Costs:

- Professional design fees for completed projects
- Labour, supervision and material
- Permits and fees

Ineligible costs:

- Systematic tile and subsurface drainage that is not an integral part of an erosion control structure
- Catch basins without adequate sediment control
- Labour and machinery use of applicant, family dependents, and the applicant's business
- Grant will not be paid on HST if the applicant is entitled to a HST rebate



Fragile Land Retirement

Cost Share Details: Performance incentive \$350/acre for 3 years, maximum 10 acres

Purpose:

- To improve water quality and wildlife habitat by retiring fragile agricultural land

Note: Fragile agricultural land is considered tilled or pastured land that is prone to water, tillage, or wind erosion.

Examples of Fragile Land Are:

- Steeply sloped croplands
- Lands that are prone to standing water
- Flood plains
- Areas where groundwater is recharged

Eligible Project Types:

Permanently retiring fragile land requires taking the land completely out of agricultural production to:

- Plant a permanent vegetated buffer, such as native trees, shrubs, grasses or wildflowers along a watercourse, wetland or pond and allow the land to naturalize, or
- Create a wetland

Project Details:

- Land must have been cropped or pastured within the previous 3 years to be eligible for the land retirement incentive.
- A plan is required specifying species, planting density, location, site preparation, and maintenance. For the greatest chance of success, the plan should be developed in conjunction with Conservation Halton staff or a private consultant.
- Minimum vegetated buffer width along water courses, wetlands (existing or created), and ponds is 3 metres from top of bank. Wider widths are encouraged.
- Appropriate native species must be planted in the buffer strip.
- Wetland creation projects must provide water storage, improve water quality by acting as a natural filter, reduce flooding, reduce erosion, replenish groundwater, and create or enhance wildlife habitat.
- Priority may be given to projects that are adjacent to identified natural heritage areas (please consult with Conservation Halton WQHIP staff).
- Priority may be given to projects partnering with other wetland restoration programs (e.g., Ducks Unlimited Canada)
- The participant is responsible for the care and maintenance of plantings. The project site must be properly maintained according to the approved plan to receive a performance incentive.



- The performance incentive is to compensate landowners choosing to retire agricultural lands from production. Performance incentives are paid out in the fall following successful establishment of planted or seeded vegetation. Retired land planted in the spring will be eligible for the first performance incentive in the fall. Retired land planted in the fall will be eligible for the first performance incentive the following year.
- Livestock must be fenced out of retired land (See *Livestock Restriction* project category for cost-share availability).
- Projects must obtain approval(s) from appropriate agencies prior to construction. In addition, any work done on municipal drains also requires prior approval from the municipality.
- Projects must not negatively impact existing natural or critical habitats, nor species at risk and their habitats.



Fuel and Chemical Storage

Cost Share Details: 50% up to \$3,000

Purpose:

To prevent contamination of surface and ground water, soil, and air quality by fuel products, chemicals, and fertilizers.

Eligible Projects:

- Farm chemical storage structure
- This category is limited to the replacement or upgrade of three (3) tanks per farm.
- Chemical mixing/sprayer washing structure
- Liquid fertilizer handling facility
- Upgrading existing facilities to prevent groundwater contamination

Project Details:

- Chemical storage structures must be able to contain any spills that may occur within the structure. No floor drains are permitted in storage structures and the non-permeable floor must have a minimum 5 centimetre (2 inches) curb.
- Chemical storage buildings must satisfy Canadian Farm Building Code. Buildings must be used exclusively for farm chemical storage.
- If fuel tanks are being replaced, they must be above ground, double-walled, vacuum sealed tanks and must be located on a reinforced, poured concrete pad.
- Tanks must be protected from vehicle collisions with a safety barrier (i.e., bollards).
- If an existing fuel storage system has single walled tank(s) in good condition, the tank(s) may not require replacement in order to be eligible for funding to upgrade other components of the system (e.g., emergency shut off, bollards).
- In accordance with Ontario Regulation 217-01: Liquid Fuels, any alteration to a tank(s) must be completed by a Technical Standards and Safety Authority (TSSA) registered contractor. Information on registered contractors can be found on the TSSA website: www.tssa.org
- Applicants are responsible for ensuring that the project meets all applicable requirements (e.g., separation distances from buildings, bollard specifications, etc.).
- Fuel storage spill containment must meet or exceed Gasoline Handling Code standards.
- A copy of an emergency plan for accidental exposure and spills must be submitted with the project proposal application.

Eligible Costs:

- Permits, engineering and design, and consultation fees
- Materials and labour (other than the applicant's or the applicant's family)

Ineligible Costs:

- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Pumps, nozzles, or hoses
- Primary hydro



Note: By law, tanks, pumps, and hoses must be Underwriters Laboratories of Canada (ULC) approved.



Innovative Projects

Cost Share Details: 75% up to \$5,000

Purpose:

To encourage the adoption of innovative technology that improves and protects surface water or groundwater quality and/or wildlife habitat.

Project Details:

- Projects will be reviewed on their own merits. The applicant must submit a plan outlining the proposed project.
- Projects must be able to demonstrate the potential for improving and protecting surface water or groundwater quality and/or wildlife habitat.
- Applicants are encouraged to seek additional funding from other sources.
- All permits required by the appropriate agencies must be obtained (municipal, provincial or federal, Conservation Authority, etc.).

Eligible Costs:

- Materials and supplies
- Labour (other than the applicant's) associated with an approved project
- Permit fees
- Professional design fees
- Engineering or consulting fees

Ineligible Costs:

- Primary research
- Purchase of farm equipment or equipment modifications
- GPS systems and components, yield monitors
- Funding will not be provided to incomplete projects
- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Primary hydro



In-Stream Barrier Mitigation

Grant Rate and Cap: 75% up to \$10,000

Purpose:

- To restore or enhance aquatic habitat through the remediation of an existing impairment to fisheries habitat. Impairments may include, but are not limited to, online ponds, dams, culverts, etc.

Eligible Project Types:

- Bypass channel
- Dam removal
- Debris removal
- In-stream Barrier Mitigation
- Culvert replacement or upgrade
- Online pond mitigation

Project Details:

- Projects must obtain approval from appropriate agencies (e.g., Conservation Authority, OMAFRA, DFO, MNRF, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- Project must remediate an existing water quality impairment.
- During construction all erosion control measures shall be implemented.
- For larger or more complex projects, engineered designs may be advised.
- Structures should be properly engineered to withstand expected water volume and velocities. The applicant and their contractor/engineer will be responsible for the structural integrity of the project.

Eligible Costs:

- Materials and labour (other than the applicant's or the applicant's family)
- Equipment rentals
- Professional services
- Permits
- Engineering and consulting fees

Ineligible Costs:

- Projects without adequate sediment control
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Installation or repair of the tile drainage system
- Maintenance of installed structures



Invasive Plant Species Control

Grant Rate and Cap: 50% - 75% up to \$5,000 (see Grant Rates and Caps in chart below)

Purpose:

- To support the implementation of best management practices to remove, control, and prevent the spread of invasive plant species and help enhance biodiversity.

Eligible Projects:

- Removal of invasive plant species such as *Phragmites*, Dog-Strangling Vine, Japanese Knotweed, Common Buckthorn, etc. For a full list of eligible species, visit www.invadingspecies.com



Note: Best Management Practices often recommend planting native tree and shrub species once the targeted invasive species population is eradicated or under control. If dealing with a large infestation, it is sometimes best to remove the invasive plant(s) and re-plant in phases to avoid other invasive species moving in. Re-planting with native species will help jump-start natural succession and increase biodiversity in the area. Higher consideration may be given to invasive plant species control projects that are paired with a native tree, shrub, herbaceous plant and/or grass planting project application. Projects proposing non-native species alternatives and lawn alternatives post removal, will not be considered. Best Management Practices for Invasive Plant Species in Ontario can be found at www.ontarioinvasiveplants.ca



Invasive Species Type	Description of Eligible Project	Grant Rate	Grant Cap
Herbaceous Plants and Grasses	Property within 100 meters of an Environmentally Significant Area (ESA), Area of Natural and Scientific Interest (ANSI), Significant Woodland, Provincially Significant Wetland (PSW) and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using Integrated Pest Management (IPM).	75%	\$5,000
Woody Shrubs			\$5,000
Trees			\$5,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$2,500
Woody Shrubs			\$5,000
Herbaceous Plants and Grasses	Property within 100 meters of an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$500
Woody Shrubs			\$1,000
Trees			\$1,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$250
Woody Shrubs			\$500
Herbaceous Plants and Grasses	Projects occurring within the floodplain of a creek. Funding to pay for contractors to remove invasive species using IPM.	75%	\$2,500
Woody Shrubs			\$5,000
Trees			\$5,000

Eligible Costs:

- Professional contracting services for removal/control of invasive plant species. Full list of eligible species found at www.invadingspecies.com
- Project costs could include the following:
 - Development of invasive plant species management plan
 - Materials, labour, equipment rentals, permits, and engineering fees
 - Use of specialized equipment for removal
 - Appropriate disposal of vegetation

Ineligible Costs:

- Major clearing of fencerows, field, or forest landscapes
- Purchase of cultivation equipment, including equipment used primarily for general vegetation control around farmsteads (e.g., tillers, bushhogs, mowers etc.)
- Chemicals (herbicides), unless proven to be the most effective means of control with a support letter from technical specialist or other supporting information deemed appropriate
- Purchase of chemical spraying equipment
- Control and management of plants not identified as invasive (full list of eligible species at www.invadingspecies.com)
- Fuel costs



Livestock Restriction from Environmentally Sensitive Features

Cost Share Details: 75% -100% up to \$10,000

Purpose:

- To restrict livestock from environmentally sensitive features including but not limited to woodlands, wildlife corridors, buffer strips, watercourses, wetlands, ponds, meadows, and prairies.
- To promote alternate watering sources and systems.
- To assist with the rehabilitation of natural areas.

Eligible Projects:

A project proposed under this category must be remedial in nature and improve an existing environmental impairment. Projects include:

- Fencing livestock from environmentally sensitive features with permanent or temporary fencing.
- Livestock crossings such as spanning bridges, culvert crossings, or bed-level crossings.
 - Spanning bridge
 - Culvert crossing

Bed-level crossing

- Alternate watering systems.



To be eligible a proposed farm or field should:

- Have livestock on the farm.
- Have had livestock on the pasture or field in the last year.
- Have the field seeded to pasture.
- Have a perimeter fence in place currently.
- Have evidence of environmental impairment.
- Try whenever practical to restrict access of livestock to all areas at risk.

Project Details:

Fencing livestock from Environmentally Sensitive Features

- Funding will only be provided for the portion of fencing that protects an environmentally sensitive feature or restricts livestock from an identified Source Water Protection threat area.
- The proposed fence should restrict livestock access over the entire length of the feature or identified Source Water Protection threat area.
- For a contractor-installed fence, the grant rate is 75% of the total project cost (labour and materials) paid up to a maximum of \$12/metre. Example: Jane hires a contractor to install 200 metres of fencing along a stream that runs through her sheep pasture. The project costs



her \$4,000. In this case, Jane could apply for \$2,400 (200m x \$12/m) in funding from the Water Quality and Habitat Improvement Program.

- For a landowner-installed fence, the grant rate is 100% of the material cost paid up to a maximum of \$15/metre. Example: Jane installs 200m of fencing herself along a stream that runs through her sheep pasture. The materials cost her \$3,500. In this case Jane could apply for \$3,000 (200m x \$15/m) in funding from the Water Quality and Habitat Improvement Program.
- Temporary fencing may be considered but if approved, will require a signed agreement requiring the applicant to install the fence prior to livestock being introduced to the pasture every year and to maintain the fence while livestock are present in the pasture.
- Fencing must be a minimum of 5 metres (16 feet) from the top of bank of any water feature, ditch, or municipal drain, measured from the highest seasonal water level.
- It is recommended that fencing be installed outside the drip-line of woodlots to reduce the likelihood of damages due to fallen tree limbs.
- Fencing setbacks from an identified Source Water Protection threat area will be in accordance with the Risk Management Plan for that property, if required.
- New fencing installed on existing farms to create a new pasture area may be eligible for funding if the project clearly demonstrates the protection of an environmentally sensitive feature.
- Replacement fences may be considered if the new fence is sited to provide significant environmental gain such as a wider buffer on a stream or wetland.
- Only fencing along an environmentally sensitive feature within an existing pasture will be considered for funding.

Livestock Crossings

- Projects must obtain approval(s) from appropriate agencies (e.g. Conservation Authority, OMAFRA, Municipality, etc.).
- For bed-level crossings, gates must be installed on each streambank to allow livestock to be restricted out of the crossing. Gates shall be opened only for the purposes of moving livestock to the other side for pasture rotation purposes. Watering facilities must be available on both sides of the stream.
- To be eligible for cost-share on a livestock crossing, fencing along the watercourse must either be undertaken concurrently, or livestock must already be restricted from the watercourse.
- If the project is proposed on a municipal drain, the municipal drain superintendent is to be contacted.
- For crossings intended to also accommodate machinery, refer to the Erosion Control category.

Alternate Watering Systems

- Watering systems for livestock will be eligible only where the water feature is properly fenced to exclude livestock.
- Nose pumps, spring boxes, electric and solar pumping units are eligible. Other systems may be proposed for consideration. Electrical pump systems are eligible, but the cost of primary hydro lines is not covered.



- Drilling of a new well to replace a surface water source. The intention is NOT to pay for drilled wells at the farmstead (except for extraordinary circumstances acceptable to CH WQHIP staff and PTAC).

Eligible Costs:

- Permits and engineering fees
- Materials and labour (other than the applicant's or the applicant's immediate family)
- Relocation of an existing fence to provide significant environmental gain
- Permanent and temporary fencing
- Alternate watering system
- Livestock crossings as outlined above

Ineligible Costs:

- Well drilling to supply an alternate water system (except in exceptional circumstances)
- Primary hydro lines
- Labour and machinery use of the applicant, the applicant's family and/or the applicant's business.
- Repair and/or maintenance of existing fences
- Costs associated with a project that would encourage new land or pasture to be put at risk or impairment



Machinery Crossings

Cost Share Details: 75% up to \$5,000

Purpose:

- To control or reduce the impact of farm machinery crossings on surface water quality.

Eligible Projects:

- Replacement or removal of machinery crossings with an existing water quality impact.
- Streambank stabilization including ditchbank seeding, culvert protection, and bioengineering techniques.

Project Details:

- Bed-level, mid-level, and bridge crossings may be considered. All bridge crossing designs must be engineered. The private sector is expected to fill these requirements.
- Applicant must obtain permit approval from appropriate agencies prior to construction. In-stream works will require a Conservation Authority permit. Any work done on a municipal drain requires prior approval from the municipality. Additional approvals may be required.

Eligible Costs:

- Professional design fees for completed projects
- Labour and supervision
- Materials and supplies
- Permits Fees

Ineligible costs:

Labour and machinery use of applicant, family dependents, and the applicant's business.



Manure Storage and Handling Systems

Cost Share Details: 50% up to \$10,000

Purpose:

- To prevent contamination of surface and groundwater from manure and exercise yard runoff and to encourage environmentally responsible manure handling and spreading practices.

Eligible Projects:

- Unroofed solid manure storages with runoff containment or treatment (e.g., vegetated flow path).
- Roofed solid manure storages.
- Concrete or steel liquid manure storage tanks (with or without lids/covers).
- Earthen manure storages and runoff containment and/or treatment system.
- Manure composting structures that meet the requirements of a manure storage structure (i.e., runoff containment, treatment or roof).

Project Details:

- Under the Nutrient Management Act, manure storage facilities must have a minimum 240-day storage capacity for all solid and liquid wastes, unless approved otherwise by OMAFRA in writing. Funding for storage facilities will be based on the program maximum of 400-day storage capacity. Information on manure storage facility requirements can be found on OMAFRA's website: www.omafra.gov.on.ca
- Must have a certified Nutrient Management Strategy and Nutrient Management Plan, unless:
 - If under the Nutrient Management Act and municipal by-laws the manure storage facility does not require a certified Nutrient Management Strategy and the manure storage is less than 5 Nutrient Units, CH WQHIP staff will work with technical advisors and the applicant to determine appropriate sizing.
 - Manure is not spread on the applicant's farm. In this instance, CH WQHIP staff will work with technical advisors and the applicant to determine appropriate BMPs to address disposal of manure.
- If a new barn is constructed, funding eligibility will be pro-rated to the volume of storage that was required for the existing/previous conditions.
 - In cases where the structure has been sized and constructed for an expanded operation, a simple arithmetic formula will be used. For example: a farmer currently has a herd of 50 dairy cows (including heifers and dry cows) and plans to expand to 75; the storage is sized and constructed for the 75 herd size. The eligible grant would be calculated based on 50/75 or 66% of the final cost of the project.
 - In cases where the herd size has not increased and where the structure has been constructed larger than that proposed in the approved WQHIP project proposal application and in excess of the 400 day program maximum, the volume of the



- approved structure will be divided by the volume of the structure constructed to arrive at the pro-rating factor.
- Pro-rating for funding eligibility for manure storage and handling systems to the volume of storage required for existing/previous conditions is not required in the following case:
 - The proposed manure storage and handling system exceeds a minimum regulatory standard required under the Nutrient Management Act;
 - The project will provide a substantive water quality benefit; and,
 - The Nutrient Management Strategy and Plan that is required for the farm operation is updated to ensure the project is subject to a regulatory requirement.
 - All manure storages, regardless of operation size or status, must meet the requirements of Ontario Regulation 267/03 under the Nutrient Management Act. This includes the Siting and Construction Standards which require manure storage facilities to be designed and inspected by a professional engineer. Applicants are responsible for determining the requirements for their proposed storage; contact OMAFRA for this service.
 - Applicants must provide CH WQHIP staff with a copy of the building permit prior to grant payment.

Eligible Costs:

- Permits and engineering fees
- Materials and labour (other than the applicant's) associated with an approved project
- Transfer pumping equipment and piping
- Walls around yards to direct contaminated precipitation into a runoff storage. Regardless of height, only an equivalent 1 ft (0.3 m) concrete wall and the footing will be funded
- Storage covers and roofs
- Upgrading storages to increase the capacity of existing storages to a minimum 240 days and a maximum of 400 days

Ineligible Costs:

- Pumping equipment to empty long term storages
- Equipment associated with moving manure to a permanent manure storage
- Equipment associated with the land application of manure
- Slats or solid floors over in-barn storages including support posts, beams, and roofs
- Barn gutters
- Timbers that are treated with creosote, pentachlorophenol, or other toxic substances
- Labour and machinery use of the applicant, family dependents, and the applicant's business
- When roofing an exercise yard, the Clean Water Diversion grant cannot be combined with the grant amount available under Manure Storage and Handling Systems



Manure Storage Decommissioning

Cost Share Details: 50% up to \$3,000

Purpose:

- To remove unused manure storage structures that pose risk to surface and groundwater quality and may interfere with movement of groundwater.

Eligible projects:

- All unused in-ground vessels to store liquid manure and milk house wash water.
- All unused below-grade solid manure storages that collect runoff containing animal wastes.
- Removal of earthen works, concrete, steel, and other components of the manure storage.

Project Details:

- All required permits must be obtained (e.g., municipality, Conservation Authority).
- If there is an adverse impact on surface or groundwater, the applicant shall seek direction from a MECP agricultural enforcement officer and/or an OMAFRA engineer prior to removal of any part of the storage structure.
- Decommissioning procedures must conform to instructions laid out in OMAFRA FACTSHEET NO. 12-061: *Decommissioning and/or Recommissioning Existing Nutrient Storage Structures*, <http://www.omafra.gov.on.ca/english/engineer/facts/12-061.pdf>
- Concrete base (floor) must be broken to not hinder seasonal movement of water table.
- All demolition to be performed by appropriately licensed individuals, as instructed by the Municipal Building Official.
- If any storage materials are taken off-site, an approved, MECP licensed hauler must be used and materials must be taken to an approved landfill.

Eligible Costs:

- Permit and engineering fees
- Removal of transfer tanks, piping, and equipment
- Unloading manure storage and spreading of materials. Materials must be spread in accordance with the Nutrient Management Act (NMA O. Reg.267/03 as amended)
- Grading and re-seeding site after storage removal to avoid flooding and soil erosion

Ineligible Costs:

- Labour and machinery use of applicant, family dependents, and the applicant's business
- Fines from any accidents or spills occurring during the decommissioning of the storage
- Manure transfer pumps and pipes located inside the barn
- Upgrades/maintenance to manure storages or related transfer equipment for future use



Natural Area Creation and Enhancement

Grant Rate and Cap: 75% up to \$10,000: Aquatic
75% up to \$5,000: Terrestrial

Purpose: To create, restore, or enhance aquatic and terrestrial habitats and/or enhance water quality.

Eligible Project Types:

- Watercourse or instream channel reconstruction/enhancements
- Riparian plantings*
- Streambank stabilization
- Wetland creation and enhancements
- Wetland buffer plantings*
- Seeding, planting, or live staking of native species of flora (e.g., reforestation, meadow or grassland establishment, pollinator habitat)
- Habitat features (e.g., bird and bat boxes, spawning substrate, turtle nesting bed, osprey platform, snake hibernaculum)



***Note:** Many of these projects types may be eligible for further incentives under the *Agricultural Fragile Land Retirement/Natural Area Enhancement and Creation* project category

Project Details:

- Projects must obtain approval(s) from appropriate agencies (e.g., Conservation Authority, OMAFRA, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- A plan is required specifying species, planting density, location, site preparation, and maintenance. To promote approval, the plan should be developed in conjunction with Conservation Authority/CH staff or a private consultant.
- A plan is required for construction of habitat features, including but not limited to, what materials will be used, size, location of installation, etc.
- A plan is required for all wetland and watercourse projects. Level of detail required will vary by project and site and will be stipulated by approval agencies.
- Appropriate native species are mandatory.
- Wetland creation projects must provide water storage, improve water quality by acting as a natural filter, reduce flooding, reduce erosion, replenish groundwater, and create or enhance wildlife habitat.
- Priority may be given to projects that are adjacent to identified natural heritage areas (please consult with Conservation Halton WQHIP staff).
- Priority may be given to projects partnering with other wetland restoration programs (e.g., Ducks Unlimited Canada)



- The participant is responsible for the care and maintenance of plantings. The project site must be properly maintained according to the approved plan to receive a performance incentive
- Livestock must be excluded from the site.

Eligible Costs:

- Materials and supplies
- Labour
- Equipment rentals
- Professional services
- Permits Fees
- Trees, shrubs, and planting costs (maximum \$30 per tree where site conditions warrant larger stock)
- Tree protection systems

Ineligible Costs:

- Commercial stock, fruit trees, or Christmas tree species which are commercially marketable in less than 15 years
- Farmstead landscaping
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Irrigation ponds
- Non-native species of flora



Nutrient Management Strategy and Plan

**Cost Share Details: 75% up to \$2,000: Nutrient Management Strategy
75% up to \$3,000: Nutrient Management Plan**

Purpose:

- To encourage the most effective use of available nutrient resources, optimize yields, and protect groundwater and surface water.
- To provide continued learning opportunities for nutrient management planning.

Eligible Projects:

- A Nutrient Management Strategy or Plan created using OMAFRA's NMAN software program.
- Full cost of registration fees for one producer (or producer's employee) to complete Ontario Ministry of Agriculture, Food and Rural Affairs' nutrient management training courses.

Project Details:

Note: There is a difference between a Nutrient Management Strategy (NMS) and a Nutrient Management Plan (NMP). A NMS documents the type and number of livestock, volume of manure produced, available land base, and manure storage requirements. A NMP documents where, when, and at what rate manure/nutrients will be applied to the land.

- A copy of the NMS and/or NMP must be submitted to CH WQHIP staff.
- To receive funding, the Nutrient Management Strategy or Plan must address all manure produced on the farm without producing 'red flags' in the NMAN program.
- It is recommended that on-site soil and manure sampling and testing be completed as part of the NMP.

Eligible Costs:

- Soil and manure nutrient sampling and analysis by an accredited laboratory. A list of accredited laboratories can be found on OMAFRA's website: www.omafra.gov.on.ca
- Professional fees for preparation of a Nutrient Management Strategy/Plan
- Registration fees for nutrient management training sessions

Ineligible Costs:

- Crop scouting fees
- Training courses associated with becoming a nutrient management consultant



Wellhead Abandonment - Halton Region

Cost Share Details: 50% up to \$1,000 per well

****This project is offered directly through Halton Region's Residential Private Well Decommissioning Grant Program. Details can be found at:***



Wellhead Abandonment – City of Hamilton

Cost Share Details: 100% up to \$1,000 per well

Purpose:

- To prevent groundwater contamination via improperly abandoned or unused wells by encouraging the proper plugging of wells that are dry or no longer used.

Eligible Projects:

- Proper plugging of unused wells (dug, bored, or drilled) by a licensed well contractor.

Project Details:

- Must comply with Ontario Ministry of the Environment, Conservation and Parks (MECP) procedures for plugging or abandoning unused water wells according to Ontario Regulation 903 under the Ontario Water Resources Act.
- A drilled well inside a dug well is considered one project and therefore qualifies for one grant only.
- The contractor is required to complete a Ministry of the Environment, Conservation and Parks Well Record to document the steps taken to plug the well. A copy of the well record must be submitted upon completion to the program representative.
- If you have an existing well record for the well that you are proposing to upgrade, please include a copy with the application form. If you do not have a well record, please see below for guidance on determining if a well record exists.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Parks website: Directory of Licensed Well Contractors in Ontario <https://www.ontario.ca/page/find-licensed-well-contractors> or by contacting the Water Well Help Desk at 1-888-396-WELL (9355) or wellshelpdesk@ontario.ca

Eligible Costs:

- Licensed contractor fees
- Any labour or materials associated with proper well plugging procedures

Ineligible Costs:

- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Grant will not be paid on HST if the applicant is entitled to a HST rebate



Wellhead Protection (Upgrades)

Cost Share Details: 100% up to \$1000 per well

Purpose:

- To reduce the risk of contamination of well water by implementing proper construction and maintenance practices and safeguards for existing wells.

Eligible Projects:

- Upgrading water wells to meet Ontario Regulation 903 of the Ontario Water Resources Act including:
 - Installing pitless adapter and filling drilled well pits;
 - Grading and permanently seeding soil surface to divert water away from well head;
 - Sealing annular space around well casing;
 - Upgrading or replacement of casing;
 - Extending well casing to 16" (40 cm) above finished ground level; and
 - Installing proper well head caps (vermin proof).

Project Details:

- In accordance with Regulation 903 of the Ontario Water Resources Act, any alteration to the well must be completed by a licensed well contractor. The contractor is required to complete a Ministry of the Environment, Conservation and Parks Well Record to document works undertaken on the well. A copy of the Well Record must be submitted upon completion to program staff.
- Where a contractor determines an existing well cannot be upgraded, funding may be provided for the drilling of a replacement well on the condition the old well is properly decommissioned. If a replacement well must be drilled, all reasonable attempts must be made to achieve adequate separation distances from potential sources of contamination. Conservation Halton WQHIP staff can assist with this.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Park's website: Directory of Licensed Well Contractors in Ontario: <http://www.waterwellontario.ca/>

Eligible Costs:

- Licensed contractor fees
- Materials and labour (other than that of the applicant or the applicant's family)
- Wiring and plumbing costs associated with well upgrades
- Drilling of new wells, if the existing well cannot be upgraded. To be eligible, existing wells must be properly decommissioned. Applications for well upgrades on properties which have the ability to connect to municipal water service will require additional justification and consultation with Conservation Halton staff

Ineligible Costs:

- Well pumps
- Water purification or treatment systems



- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Well upgrades in buildings. They will be considered for the well decommissioning grant



Urban Properties | Financial Incentive Program Guidelines

WATER QUALITY & HABITAT IMPROVEMENT PROGRAM

Appendix J



Conservation Halton has a lot of information and documents available to support landowners in both hard copy and online. To assist you in finding the information most relevant to you, documents have been organized into the following categories: Urban Properties, Countryside Properties and Agricultural Properties. Use the colour coding tag and symbology as a guide along your information gathering journey.

Agricultural Properties



Countryside Properties



Urban Properties





Conservation Halton

Water Quality and Habitat Improvement Program

URBAN PROPERTIES

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Program Background

Since 1994, Conservation Halton has provided technical and financial assistance to private landowners to assist them in implementing best management practices and conservation projects that improve and protect water quality and wildlife habitat. Citizens in urban, rural, and agricultural areas of Conservation Halton's watershed are encouraged and supported in taking responsibility for restoring and maintaining the quality of the environment in which they live.

This is the foundation upon which this Program, formerly known as the Hamilton-Halton Watershed Stewardship Program was developed in 1994 with the following partners:

Conservation Halton
Hamilton Conservation Authority
Bay Area Restoration Council

Program Purpose

The purpose of the Water Quality and Habitat Improvement Program (WQHIP) is to support landowners with a grant towards the cost of eligible projects they undertake on their land to improve local surface and ground water quality as well as fish and wildlife habitat through improved land management practices. All projects implemented under this program are voluntary.



Program Goals

- To provide technical and financial assistance to landowners and residents in Conservation Halton's watershed to achieve their environmental and stewardship goals;
- To promote and facilitate the adoption of environmentally sound land management practices to protect, restore, and enhance surface and groundwater, air, and soil quality and/or fish and wildlife habitat in Conservation Halton's watershed;
- To help protect agricultural lands as a natural resource of major importance in the area, while recognizing and supporting farmers and agricultural organizations as valuable contributors to the environment, community, and economy; and
- To promote healthy communities that respect the natural environment and water resources.

Program Process

Grant assistance is available to landowners who:

- build new structures, upgrade existing structures, and adopt practices which will improve existing problems as part of their water quality improvement plan;



- create or rehabilitate fish and wildlife habitat;
- demonstrate good land stewardship practices; and
- create educational opportunities or demonstration sites.

Projects will be pre-screened by staff for eligibility to ensure they meet guidelines. Projects will then be reviewed by the Project Technical Advisory Committee (PTAC) who will consider the merit of each project and score them accordingly.

There may be instances where Conservation Halton is the recipient of external grant funding that can be allocated to landowner projects. Under these circumstances, a PTAC review of the project may not be required.

There may be instances where landowners' proposed projects require review by one or more of the following: Ontario Ministry of Natural Resources and Forestry (MNRF), Ontario Ministry of the Environment, Conservation and Parks (MECP), Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), local Medical Officer of Health, Ontario Soil and Crop Improvement Association (OSCIA), Conservation Halton (CH), Fisheries and Oceans Canada (DFO), or municipality, etc.

Approvals Committee: The Project Technical Advisory Committee (PTAC) acts as the Approvals Committee for all WQHIP project proposal applications as outlined in the PTAC Terms of Reference and ensures that the Water Quality and Habitat Improvement Program is administered in accordance with these guidelines.

PTAC consists of representatives from local agricultural organizations, environmental interest groups, citizens at large, as well as representation from local Conservation Authorities.

Conservation Halton staff provide support to landowners by offering free:

- Property site visits;
- Landowner consultations;
- Technical assistance for project design when appropriate;
- Education and outreach opportunities.



Landowner Financial Assistance and Project Eligibility

Grant Overview

The following grants are available to urban landowners in Conservation Halton's watershed who implement projects to improve water quality or habitat on their properties as outlined below. A single property may be eligible to receive grants under each category up to the category cap each calendar year (some exceptions apply). For large projects that are planned to be implemented in phases, applicants are encouraged to present the complete project as well as the immediate phase that is requesting funds. Each phase of the project must provide a demonstrable environmental improvement as determined by the PTAC.

Refer to Table 1 for a list of project categories and their associated grant rates and caps.

Note: WQHIP grants may be combined (stacked) with other cost share sources, and applicants are encouraged to seek additional funding. Combined grants are not to exceed 100% of total expenses. Applicants must inform Conservation Halton staff of additional cost share funding. Conservation Halton's Water Quality and Habitat Improvement Program is applied as the final funding. If a landowner receives funding from another source(s), their project will be eligible to receive the WQHIP grant rate for the remaining costs. For example:

Total Project Cost = \$1000

\$250 confirmed funding from other cost share source

\$750 remaining cost is eligible for WQHIP grant rate and cap.

Table 1: Projects Eligible for Funding

Project Type	Cost Share	Maximum Cost Share	Notes
Aquatic and Terrestrial Habitat Enhancement	75%	\$5,000	Per project
Education and Training	50%	\$500	Once per year per applicant
In-Stream Barrier Mitigation	75%	\$5,000	Per project
Invasive Species Management	50% -75%	\$5,000	Per project (specific rates and caps in chart below apply)
Rainwater Conservation	50%	\$2,500	Per project
Wellhead Abandonment – City of Hamilton	100%	\$1,000	Maximum 2 wells per property
Wellhead Abandonment – Halton Region	Offered Through Halton Region		
Wellhead Protection	100%	\$1000	Per property



Eligibility

1. A grant to implement a project through the Water Quality and Habitat Improvement Program may be paid to an individual applicant who:
 - is a resident of Ontario
 - is a registered owner of the property
2. The project must be located within Conservation Halton's jurisdiction and improve habitat and/or water quality.
3. The following costs are generally eligible for grant assistance:
 - required permits
 - purchased materials and supplies
 - professional fees
 - fees for design, construction, and supervision

NOTE: The labour and machinery use of the applicant, family dependents, and the applicant's business are not eligible.

4. All approvals and permits are the responsibility of the applicant. It is the applicant's responsibility to ensure that the project meets all legal requirements including (but not limited to):
 - Local municipal bylaws
 - Provincial and regional highway setbacks
 - Drainage Act
 - Federal and Provincial Acts
 - Canada Farm Building Code
 - Ontario Building Code
 - Conservation Authorities Act
5. Innovative technologies and projects that do not necessarily conform to the guidelines will be considered by the Project Technical Advisory Committee on a project-by-project basis. Applicants should contact program staff to determine the application requirements.
6. From time to time, Conservation Halton staff will review the eligible project types and guidelines and may alter these at their discretion.

Limitations to Grant Availability

1. Grants are limited to properties in Conservation Halton's watershed, with completed water quality and/or habitat improvement project plan designs.
2. Any applicant who proceeds with a project before it has been approved by the Project Technical Advisory Committee has no assurance that financial assistance will be provided.



3. An applicant must specify the year in which the project will be completed. If the project cannot be completed within the specified year, the grant may not be available. However, the applicant may appeal to Conservation Halton staff for an extension.
4. Funds will be allocated on a priority basis. Those projects with the higher potential for improving habitat and/or water quality will be considered first.
5. The grant will not be paid on HST if the applicant is entitled to an HST rebate.
6. Conservation Halton will set funding allocations annually. At that time, they may decide to set allocations for priority areas, and/or project categories. Funds may be limited based on this decision.
7. The number of grants available may be restricted to meet local priorities and budgets. Once the annual Water Quality and Habitat Improvement Program budget has been committed, no further approvals will be given.
8. It is possible that a project is evaluated as having merit but is not funded due to available funding being fully allocated to higher ranking projects. If the approved projects in a single year exceed the annual budget, the remaining approved un-funded projects may be resubmitted for re-scoring and approval the following year.

The Grant Process

How to Apply

1. Contact the Water Quality and Habitat Improvement Program at Conservation Halton (CH) (905-336-1158 x 2263) or by email at stewardship@hrca.on.ca to verify that your proposed project meets the guidelines and to arrange a site visit. CH staff are available to assist you with the planning of your project and applying to the program.
2. Complete and submit the WQHIP Application to Conservation Halton by the December 1st* deadline of the year prior to the year of project implementation. An Application Support Guide will be provided for clarification and to assist with the process.

* Application deadline may be extended in a given year. Please check online at: <https://conservationhalton.ca/financial-incentives> or contact your Landowner Outreach Technician to confirm the current year's deadline.

Grant Application Review Process

1. The Project Technical Advisory Committee reviews project applications once per year over a two-week period in January/February. Grant applications are anonymously presented to PTAC to review, evaluate, and score the projects based on their potential to protect and/or improve local habitat and/or water quality. All applicants are notified of their project scoring results in the week following the PTAC review.



2. The committee may pose questions to the applicant, a contractor listed on the application, or to CH staff and may have discussions about the project to determine a project's merit.
3. Project merit is assessed based on the following attributes:
 - The project directly addresses a water quality impairment;
 - The project directly addresses a habitat impairment;
 - The project contributes to improving water quality;
 - The project contributes to improving habitat quality;
 - The project is located adjacent to or in close proximity to a natural area; and
 - The project raises public awareness of water quality and habitat issues or opportunities.
4. PTAC members score each of the projects independently, based on the project's attributes.
5. After reviewing the responses of the PTAC members, Conservation Halton staff will rank the different projects and inform PTAC members of their decision to fund or not fund the grant applications.
6. Once the project proposal has been reviewed and approved by the Project Technical Advisory Committee, successful applicants will be notified to proceed with the project. If your project has not been approved, the reasons for this will be communicated. There may be an opportunity to resubmit the project application the following year after suggested changes have been made.
7. Once your project has been approved, you will be asked to review, sign, and return a WQHIP Agreement prior to commencing work. The agreement, alongside your application, will serve as the Project Agreement between you and Conservation Halton.

Project Closeout

1. Notify staff when the project is completed, paid for, and you have copies of all necessary permits and receipts. A site inspection is required to confirm that the project is complete. At that time, you can submit the financial tracking form, original invoices marked "paid", and a copy of cancelled cheques (front and back) or bank statement for all eligible project expenses to CH staff.
2. Within 4 weeks of a site inspection that determines that the work is complete and satisfactory, your pre-approved cost-share payment will be sent to you.

Timeline

ACTION	DATE
WQHIP Applications to be Submitted to Conservation Halton	December 1 st



PTAC Review meeting	January-February
Landowner Notification Letters Distributed	Late February
Project Agreement Established	Early March
Project Installations	March-November
Financial Tracking Submitted to Conservation Halton	ASAP, but no later than December 1 st
Grant Payment Issued (upon completion of inspection)	ASAP, but no later than December 15 th



Roles and Responsibilities

Conservation Halton (CH)

- Establishes and updates program guidelines as needed to ensure that the program is properly administered;
- Reviews the funding allocation regularly;
- Ensures that information on the administration of the program is available to all potential applicants;
- Establishes the WQHIP Project Guidelines with assistance from PTAC and partners and regularly reviews and evaluates the financial assistance framework to ensure the program is properly administered and the financial assistance available aligns with the goals of the WQHIP;
- Conducts site visits to identify project opportunities for the creation or enhancement of habitat and evaluates the potential sources, pathways, and magnitude of water quality impairment;
- Provides information to landowners regarding conservation practices, structures, and stewardship practices that may qualify for grants;
- Provides management choices and remedial options to reduce pollution potential from identified sources;
- Assists landowners with the completion of the Water Quality and Habitat Improvement Funding Application and Agreement;
- Reviews water quality and/or habitat improvement plans for acceptability for grant assistance;
- Ensures the anonymity of project applicants when grant applications/project proposals are presented to PTAC;
- Allocates funds based on the review, scoring, and ranking of PTAC;
- Communicates to all applicants the results of the PTAC review in writing;
- Verifies that projects have been completed;
- Ensures that payment is issued to the landowner upon project administrative completion; and,
- Undertakes monitoring of the completed project as written in the funding agreement.

The Project Technical Advisory Committee (PTAC)

- Is made up of industry professionals and community volunteers;
- Ensures that the WQHIP is administered in accordance with these guidelines; and,
- Evaluates and scores each project based on the attributes listed under the Grant Application Review Process above.

The Grant Applicant

- Contacts CH WQHIP staff to verify that the proposed project meets the grant eligibility requirements;
- Contacts CH WQHIP staff to arrange an on-site consultation;



- Completes the grant application to the best of their ability. CH WQHIP staff are available to assist;
- Ensures that the information on the grant application is complete and correct;
- When signing the grant application, agrees to maintain and use the new structures in accordance with their water quality improvement or habitat enhancement plan for a period of not less than 10 years or the life of the structure;
- Ensures that the project meets all relevant local, provincial, and federal laws and regulations;
- Ensures that appropriate permits are obtained prior to construction;
- Contacts CH promptly following completion so that verification of the completed projects can be made;
- Provides receipts for materials or items purchased and copies of supporting cancelled cheques or proof of financing in order to receive the grant, including completion of the Financial Tracking Form;
- Agrees to display a conservation project sign on their property in a location visible to the public;
- Agrees to inform CH if the property is sold to a new landowner in the future;
- Agrees to transfer a copy of the approved Water Quality and Habitat Improvement Funding Application and Agreement and associated documents to the new landowner (for information purposes only) if the property is sold in the future; and
- Gives permission to CH to photograph and promote the success of a particular project to demonstrate the positive actions that are being taken by the landowners in CH's watersheds.

Note: Although Conservation Halton may provide information regarding the applicant's water quality improvement plan, habitat enhancement plan, and the practices and structures contained in the plan, it is the responsibility of the applicant to ensure that the practices and structures undertaken are suitable to the applicant's operation and technically and structurally adequate.

Conservation Halton, Bay Area Restoration Council, PTAC Members, funding agencies or other review agencies (e.g., DFO, OMAFRA, MECP, MNRF, OSCIA, Local Medical Officer of Health) are not liable for any loss arising from the use of any advice or information provided as part of or under the Water Quality and Habitat Improvement Program.



Project Guidelines

Aquatic and Terrestrial Habitat Enhancement

Grant Rate and Cap: 75% up to \$5,000

Purpose:

- To restore, enhance, or create terrestrial and/or aquatic habitat.

Eligible Projects:

- Seeding, planting, or live staking of native species (e.g., pollinator garden, riparian or pond buffer, replacement plantings)
- Habitat features (e.g., spawning substrate, turtle nesting bed, osprey platform, snake hibernaculum)
- Watercourse or stream channel reconstruction/enhancements
- Streambank stabilization



Project Details:

- Projects must obtain approvals from appropriate agencies (e.g., Conservation Halton, Municipality, etc.).
- WQHIP grants may be combined with other funding sources. Grants are not to exceed 100% of total expenses. Applicants must inform Conservation Halton staff of additional cost share funding.
- A plan is required specifying species, planting density, location, site preparation, and maintenance. For the greatest chance of success, the plan should be developed in conjunction with Conservation Halton staff or a private consultant.
- Trees must be planted in a manner that will not result in snow drift accumulation on the road. Trees should be located at least 30m back from the edge of the road.
- Proper site preparation is required for planting and seeding, including the removal of any invasive species.
- The applicant is responsible for the care and maintenance of plantings. Mowing may be needed during the establishment period to reduce competition from other vegetation.
- Appropriate native plant species are mandatory and must be approved by Conservation Halton staff. Invasive and non-native plant species are not eligible.
- Riparian zone and streambank stabilization plantings should be designed to establish a vigorous vegetative cover.
- Seeding should only take place when sufficient moisture is present, and the soil is rough enough to hold the seed.
- In some cases, native seeds, shrubs, trees, and other materials may be purchased by Conservation Halton staff at wholesale cost.

**Eligible Costs:**

- Materials, labour, equipment rentals, professional services, permits, and engineering fees
- Native seeds, plants, shrubs, and trees. Projects with herbaceous plant costs over \$6/unit, shrubs costs over \$12/unit and tree costs over \$20/unit will require strong rationale for consideration
- Tree protection (e.g., rodent guards, mulch, coco discs etc.)

Ineligible Costs:

- Commercial stock, horticultural orchard fruit trees, or Christmas tree species which are commercially marketable in less than 15 years
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business. Renting equipment may be eligible
- Purchasing equipment
- Non-native plant species
- Rip rap and gabion
- Armourstone
- New stream crossings



Education and Training

Cost-Share: 50% up to \$500

Purpose:

- To support a watershed resident in accessing an opportunity that relates to the protection, restoration, and enhancement of water, air, or soil quality, and/or fish and wildlife habitat as promoted by Conservation Halton.
- To provide support to organizations that wish to educate or train Conservation Halton watershed residents on water quality, habitat, or agri-environmental related subjects.

Eligible Projects:

- Educational and/or training course costs
- Production of new materials (e.g., brochures, pamphlets, etc.)
- Reprints and distribution of existing materials
- Development and implementation of new events (e.g., workshops, farm tours, etc.)
- Support of recurring events



Project Details:

- Applicants* will provide a plan identifying the need for the initiative, the target audience, goals and objectives, draft content, distribution plan, itemized cost estimates, timeline, and potential and secured funding.
- The plan must demonstrate that the project is a priority in the context of Conservation Halton's Water Quality and Habitat Improvement Program.
- Applicants are encouraged to seek multiple funding partners. Applicants must identify all funding (potential and received) from other partners or cost recovery aspects at the time of application.
- Applicants are encouraged to develop materials and events that address the needs of various stakeholders including agricultural, residential, commercial, and industrial.
- Projects must not duplicate the work being done or previously completed by other agencies or organizations. The Program will make use of existing educational materials and events whenever possible, providing that they adequately meet its objectives.
- Applicants are eligible for one grant per year for educational initiatives. The PTAC may consider additional project proposal applications from one group if funds remain at the end of the Program year.
- Projects initiated by for-profit companies and organizations, government or government agencies, and conservation authorities are not eligible.
- The Program will not fund projects targeted at audiences exclusively outside of Conservation Halton's watershed.
- Successful applicants will consult with Conservation Halton WQHIP staff on the final content and layout of publications and events to ensure that Program objectives are met.

**Eligible Costs:**

- Material costs
- Professional/speaker fees
- Translation
- Printing costs
- Rental of halls or equipment for events
- Permits and approvals
- Meals and non-alcoholic beverages

Ineligible Costs:

- Purchase of equipment
- On-going operating and capital costs (e.g., costs associated with an annual general meeting)
- Courses that solely benefit an individual
- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Mileage

* An 'applicant' represents the interests of their organization at its highest representative level. Therefore, individual applications, without the consent of their organization, will not be considered. Funding allocated to the applicant will be considered as funding to the entire organization and will be subject to the yearly grant maximum.



In-Stream Barrier Mitigation

Grant Rate and Cap: 75% up to \$5,000

Purpose:

- To restore or enhance aquatic habitat through the remediation of an existing impairment to fisheries habitat. Impairments may include, but are not limited to, online ponds, dams, culverts, etc.

Eligible Project Types:

- Bypass Channel
- Dam Removal
- Debris Removal
- In-stream Barrier Mitigation
- Culvert Replacement or Upgrade
- Online Pond Mitigation

Project Details:

- Projects must obtain approval from appropriate agencies (e.g. Conservation Authority, OMAFRA, DFO, MNRF, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- Project must remediate an existing water quality impairment.
- During construction all erosion control measures shall be implemented.
- For larger or more complex projects, engineered designs may be advised.
- Structures should be properly engineered to withstand expected water volume and velocities. The applicant and their contractor/engineer will be responsible for the structural integrity of the project.

Eligible Costs:

- Materials
- Labour
- Equipment rentals
- Professional services
- Permits
- Engineering and consulting fees

Ineligible Costs:

- Projects without adequate sediment control
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Installation or repair of the tile drainage system
- Maintenance of installed structures



Invasive Plant Species Control

Grant Rate and Cap: 50% - 75% up to \$5,000 (see Grant Rates and Caps in chart below)

Purpose:

- To support the implementation of best management practices to remove, control, and prevent the spread of invasive plant species and help enhance biodiversity.

Eligible Projects:

- Removal of invasive plant species such as *Phragmites*, Dog-Strangling Vine, Japanese Knotweed, Common Buckthorn, etc. For a full list of eligible species, visit www.invadingspecies.com



Note: Best Management Practices often recommend planting native tree and shrub species once the targeted invasive species population is eradicated or under control. If dealing with a large infestation, it is sometimes best to remove the invasive plant and re-plant in phases to avoid other invasive species moving in. Re-planting with native species will help jump-start natural succession and increase biodiversity in the area. Higher consideration may be given to invasive plant species control projects that are paired with a native tree, shrub, herbaceous plant and/or grass planting project application. Projects proposing non-native species alternatives and lawn alternatives post removal will not be considered. Best Management Practices for Invasive Plant Species in Ontario can be found at www.ontarioinvasiveplants.ca



Invasive Species Type	Description of Eligible Project	Grant Rate	Grant Cap
Herbaceous Plants and Grasses	Property within 100 meters of an Environmentally Significant Area (ESA), Area of Natural and Scientific Interest (ANSI), Significant Woodland, Provincially Significant Wetland (PSW) and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using Integrated Pest Management (IPM).	75%	\$5,000
Woody Shrubs			\$5,000
Trees			\$5,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$2,500
Woody Shrubs			\$5,000
Herbaceous Plants and Grasses	Property within 100 meters of an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$500
Woody Shrubs			\$1,000
Trees			\$1,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$250
Woody Shrubs			\$500
Herbaceous Plants and Grasses	Projects occurring within the floodplain of a creek. Funding to pay for contractors to remove invasive species using IPM.	75%	\$2,500
Woody Shrubs			\$5,000
Trees			\$5,000

Eligible Costs:

- Professional contracting services for removal/control of invasive plant species. Full list of eligible species found at www.invadingspecies.com
- Project costs could include the following:
 - Development of invasive plant species management plan
 - Materials, labour, equipment rentals, permits, and engineering fees
 - Use of specialized equipment for removal
 - Appropriate disposal of vegetation

Ineligible Costs:

- Major clearing of field or forest landscapes
- Purchase of cultivation equipment, including equipment used primarily for general vegetation control (e.g., tillers, mowers, etc.)
- Chemicals (herbicides), unless proven to be the most effective means of control with a support letter from technical specialist or other supporting information deemed appropriate
- Purchase of chemical spraying equipment
- Control and management of plants not identified as invasive (full list of eligible species at www.invadingspecies.com)
- Fuel costs



Rainwater Conservation

Grant Rate and Cap: 50% up to \$2,500

Purpose:

Reduce imperviousness and increase infiltration or storage of rainwater to reduce the volume and improve the quality of stormwater runoff flowing directly into local watercourses or designated natural areas and/or into the municipal sewer system.

Eligible Projects:

- Bioswales
- Infiltration trenches
- Soakaway pits/Rain gardens
- Water retention/Storage systems
- Detention basins
- Permeable pavement/pavers
- Projects that demonstrate the retention, infiltration, or conservation of rainwater



Project Details:

- Evidence of the interception of stormwater drainage from the proposed project location to the municipal system or directly to a watercourse must be present.
- Any excess flow must drain onto the applicant's property.
- Priority will be given to properties serviced by combined sewers and projects incorporating more than one project type to reduce stormwater runoff.
- Downspout disconnections and excavated projects must occur a minimum of 3 m from building foundations.
- Bioretention projects, soakaway pits, and infiltration trenches must be:
 - Located in a relatively flat area and out of areas where the water table is high;
 - Sized appropriately and with amended soils where the infiltration test has indicated the soils are poorly drained; and
 - Installed with a drain or overflow to accommodate large storm events.
- Detention basins and stormwater quality control basins must be professionally designed.

Eligible Costs:

- Materials and supplies
- Contractor labour
- Equipment rentals
- Professional services
- Permits
- Engineering and consulting fees
- Native plant species

**Ineligible Costs:**

- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Non-native plant species
- Disposal fees
- Equipment purchases



Wellhead Abandonment – City of Hamilton

Cost Share Details: 100% up to \$1,000 per well

Purpose:

- To prevent groundwater contamination via improperly abandoned or unused wells by encouraging the proper plugging of wells that are dry or no longer used.

Eligible Projects:

- Proper plugging of unused wells (dug, bored, or drilled) by a licensed well contractor.

Project Details:

- Must comply with Ontario Ministry of the Environment, Conservation and Parks (MECP) procedures for plugging or abandoning unused water wells according to Ontario Regulation 903 under the Ontario Water Resources Act.
- A drilled well inside a dug well is considered one project and therefore qualifies for one grant only.
- The contractor is required to complete a Ministry of the Environment, Conservation and Parks Well Record to document the steps taken to plug the well. A copy of the well record must be submitted upon completion to the program representative.
- If you have an existing well record for the well that you are proposing to upgrade, please include a copy with the application form. If you do not have a well record, please see below for guidance on determining if a well record exists.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Parks website: Directory of Licensed Well Contractors in Ontario <https://www.ontario.ca/page/find-licensed-well-contractors> or by contacting the Water Well Help Desk at 1-888-396-WELL (9355) or wellshelpdesk@ontario.ca

Eligible Costs:

- Licensed contractor fees
- Any labour or materials associated with proper well plugging procedures

Ineligible Costs:

- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Grant will not be paid on HST if the applicant is entitled to a HST rebate



Wellhead Abandonment - Halton Region

Cost Share Details: 50% up to \$1000 per well

****This project is offered directly through Halton Region's Residential Private Well Decommissioning Grant Program. Details can be found at:***

<https://www.halton.ca/For-Residents/Water-and-Environment/Water-Quality-Protection/Well-Water/Residential-Well-Decommissioning-Grant>



Wellhead Protection (Upgrades)

Cost Share Details: 100% up to \$1000 per well

Purpose:

- To reduce the risk of contamination of well water by implementing proper construction and maintenance practices and safeguards for existing wells.

Eligible Projects:

- Upgrading water wells to meet Ontario Regulation 903 of the Ontario Water Resources Act including:
 - Installing pitless adapter and filling drilled well pits;
 - Grading and permanently seeding soil surface to divert water away from well head;
 - Sealing annular space around well casing;
 - Upgrading or replacement of casing;
 - Extending well casing to 16" (40 cm) above finished ground level; and
 - Installing proper well head caps (vermin proof).

Project Details:

- In accordance with Regulation 903 of the Ontario Water Resources Act, any alteration to the well must be completed by a licensed well contractor. The contractor is required to complete a Ministry of the Environment, Conservation and Parks Well Record to document works undertaken on the well. A copy of the Well Record must be submitted upon completion to program staff.
- Where a contractor determines an existing well cannot be upgraded, funding may be provided for the drilling of a replacement well on the condition the old well is properly decommissioned. If a replacement well must be drilled, all reasonable attempts must be made to achieve adequate separation distances from potential sources of contamination. Conservation Halton WQHIP staff can assist with this.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Park's website: Directory of Licensed Well Contractors in Ontario: <http://www.waterwellontario.ca/>

Eligible Costs:

- Licensed contractor fees
- Materials and labour (other than that of the applicant or the applicant's family)
- Wiring and plumbing costs associated with well upgrades
- Drilling of new wells, if the existing well cannot be upgraded. To be eligible, existing wells must be properly decommissioned. Applications for well upgrades on properties which have the ability to connect to municipal water service will require additional justification and consultation with Conservation Halton staff

Ineligible Costs:

- Well pumps
- Water purification or treatment systems



- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Well upgrades in buildings. They will be considered for the well decommissioning grant

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 12

FROM: Barbara J. Veale, Director, Planning and Watershed Management

DATE: November 25, 2021

SUBJECT: **Proposed 2022 Plan Review and Permit Application Fees**
CH File Number: ADM 049

Recommendation

THAT the Conservation Halton Board of Directors **approves the proposed 2022 fees as outlined in the staff report entitled “Proposed 2022 Plan Review and Permit Application Fees,” dated November 25, 2021 with an effective date of January 1, 2022;**

And

THAT the Conservation Halton Board of Directors **directs staff to provide appropriate notice to municipalities and neighbouring conservation authorities and post the revised fee schedules to Conservation Halton’s website.**

Report

In 2018, Conservation Halton (CH) retained Watson & Associates Economists Ltd. (Watson) to undertake a Rates and Fees Study. Completed in January 2019, Watson’s analysis revealed that CH was recovering an average of 74% of the review cost for all categories of planning applications and 72% of the costs for all categories of permit applications.

In February 2019, the CH Board of Directors approved a target cost recovery rate of 100% for the review and processing of planning and permit applications. To close the gap and achieve this cost recovery target, substantial changes were made to CH’s fee schedules in March 2019. Except for two fee categories, CH’s fees were increased by 2% last year to cover inflation and increased direct and indirect costs anticipated for 2021.

CH’s fees fall into three discrete categories: 1) fees for permit applications under Ontario Regulation 162/06; 2) fees for planning applications under the Planning Act; and 3) fees for technical reviews and miscellaneous services not associated with permit or planning applications.

A majority of the proposed fees for 2022 have been carried over from 2021 with a 2% inflation increase for all file categories, except Consents, Minor Variance (Major application category only), and Environmental Assessments. Those categories were increased by 5%, 5%, and 10% respectively, as our recovery rate for those application/file types falls well below the target cost recovery rate of 100% approved by the CH Board of Directors in 2019. No other substantive changes have been made to the fees (Appendix K).

The proposed 2% increase in fees aligns with Halton municipalities and other municipalities and Conservation Authorities within the Greater Golden Horseshoe area, which are increasing fees by an inflationary rate.

The proposed fees have been reviewed with the development community through the Halton Chapter of the Building Industry and Land Development Association (Canada) (BILD), as suggested in guidelines provided by the Ministry of Natural Resources and Forestry. A response from BILD was received on November 11, 2021 (Appendix L).

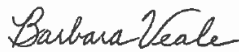
Impact on Strategic Priorities

This report supports the Momentum priority of Natural Hazards and Water.

Financial Impact

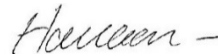
There is no financial impact to this report.

Signed & respectfully submitted:



Barbara J. Veale, Ph. D, MCIP, RPP
Director, Planning and Watershed Management

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Kellie McCormack, Associate Director, Planning & Regulations; 905-336-1158 x 2228;
kmccormack@hrca.on.ca



Appendix K

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CONSERVATION HALTON PERMIT FEES 2022 Development, Interference or Alteration Applications Pursuant to Ontario Regulation 162/06 – EFFECTIVE January 1, 2022



<u>Category</u>	<u>Type</u>		<u>2021 Fee(\$)</u>	<u>Proposed 2022(\$)-2%</u>
Letter of Permission	<i>No site visit or technical review</i>	PL(a)	\$265	\$270
(Note 1)	<i>Technical Site visit or technical review</i>	PL(b)	\$515	\$525
	<i>Technical Site visit and technical review</i>	PL(c)	\$1,680	\$1,714
Private Landowner	<i>Minor</i>	P(a)	\$515	\$525
<i>Single Residential/Single Farm</i>	<i>Intermediate</i>	P(i)	\$1,680	\$1,714
	<i>Major</i>	P(b)	\$5,474	\$5,583
Residential Multi-Unit Lots (RM)	<i>Minor</i>	RM(a) G(a) ICI(a)	\$2,000	\$2,040
Local Municipality, Utility (G)	<i>Intermediate</i>	RM(i) G(i) ICI(i)	\$4,202	\$4,286
Industrial/Commercial	<i>Major</i>	RM(b) G(b) ICI(b)	\$21,710	\$22,144
Institutional (ICI)	<i>Major Scale</i>	RM(c) G(c) ICI(c)	\$28,892	\$29,470
Fill Placement	<i>Small ($\leq 30m^3$)</i>	FP(a)	\$515	\$525
(Not Associated with a Planning Application)	<i>Medium ($> 30m^3$ but $\leq 200 m^3$)</i>	FP(b)	\$3,680 + 0.61/ m^3	\$3,746 + 0.61/ m^3
	<i>Large ($> 200 m^3$)</i>	FP(c)	\$12,610+ 1.12/ m^3	\$12,862+ 1.12/ m^3
Environmental Projects		EP	\$135	\$140
Fish Timing Window Extension		FTW	\$525	\$535
Red-Line Revisions by CH	<i>Minor (≤ 2 hr. to complete) (% of current fee)</i>			
	<i>Major (> 2 hr. to complete)</i>		\$1,617	\$1649
<u>Category</u>	<u>Type</u>		<u>2021 Fee(\$)</u>	<u>Proposed 2022(\$)</u>
Client-Driven Changes	<i>Minor Changes to applications in progress</i>		35%	35%
(% of current fee)	<i>Major Changes to applications in progress</i>		75%	75%
	<i>Minor Changes to approved permits</i>		50%	50%
	<i>Major Changes to approved permits (new permit required)</i>		100%	100%
Technical Resubmissions	<i>Percentage of current fee for each additional technical submission after 1st resubmission</i>		50%	50%
Additional Site Visit				
(Single Residential/Single Farm)			\$235	\$240
Additional Site Visit				
(Major; Major scale) (per visit)			\$1,913	\$1,950
Agreements	(Note 2)			



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CONSERVATION HALTON PERMIT FEES 2022
Development, Interference or Alteration Applications
Pursuant to Ontario Regulation 162/06 – EFFECTIVE January 1, 2022



Definitions:

Minor: works are small; no technical studies are required (e.g., accessory buildings less than 20m²; additions less than 50% floor area; on-title agreement not required; generally involving less than 30 m³ of fill; small works such as pond outlets, maintenance dredging of intermittent watercourse and simple culvert replacement; minor repairs /maintenance of shoreline protection works).

Intermediate: works require one technical study or detailed plan; an on-title agreement may be required.

Major: works require more than one technical study; an on-title agreement may be required; multi-disciplinary technical review is required

Major Scale: works are significant in scale/scope/complexity (e.g., major creek realignments; bridge crossings; significant shoreline protection works); technical studies are required; multi-disciplinary technical review is required.

Major Changes: Changes to the nature and extent of the development approved by permit including but not limited to: size, location, footprint, number of dwelling units, use of the building or structure, or grading.

Environmental Projects: Land and water stewardship projects for environmental improvement not associated with compensatory or offsetting requirements/arrangements through other approval processes.

Development: Development is defined in the *Conservation Authorities Act* to mean:

- the construction, reconstruction, erection or placing of a building or structure of any kind (e.g., all buildings, including accessory non-habitable structure such as gazebos, decks, storage sheds, docks, stairs, retaining walls, etc.),
- any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- site grading, or;
- the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere

Alteration: any works that result in changes to a watercourse, wetland or Great Lakes shoreline.

Interference: any act or instance which hinders, disrupts, degrades or impedes the natural features or hydrologic and ecologic functions of a wetland or watercourse.

General Provisions:

- All applications must be deemed complete including all technical studies and fees before the submission can be processed.
- Pre-consultation to determine the scale and scope of issues and the technical reports/studies required for the application to be deemed complete is encouraged. The applicant is responsible for undertaking required technical reports/studies. Fees determined through the pre-consultation process, including fees noted in formal checklists, are approximate only and based on the fee schedules in place and information available at the time of pre-consultation. The final fee may change at the time of submission if the technical review requirements have changed due to the availability of new information or if the fee schedule has changed subsequent to the pre-consultation.
- Fees charged are for administration purposes and are non-refundable. Permit applications will be closed if additional information/studies have been requested by Conservation Halton and no submissions have been received from the applicant within one year.
- Conservation Halton reserves the right to charge additional fees, at a rate of \$155.00/hr
- Peer reviews may be required for technical reports, as necessary. The cost of peer review will be charged to the applicant.
- Where an application exceeds one year to process due to other approval processes (e.g., site plan; Niagara Escarpment Development Permit, etc.), it may remain active for a period of two years, if there are no major revisions. Where there are major revisions, a new permit application will be required.
- Except where specifically stated in the fee schedule (e.g., Letter of Permission, Inquiries), permit fees include one site visit. For major or major-scale permits not associated with single residential/single farm applications, the fee includes three site visits. A fee will be charged for additional site visits.
- Permits will be issued for the maximum of two years. Requests for permit issuance beyond the standard two-year time period (up to 5 years) will be considered for large projects such as municipal infrastructure. These permits require approval from the Conservation Halton Board of Directors and will be subject to an additional fee of 50% for each year the permit is valid beyond the standard two-year time period.
- Permit extensions and/or renewals will not be granted. However, applicants may re-apply for re-issuance of a permit for the original approved works in accordance with the most recent technical requirements. An additional fee of 50% of the current fee will be charged for each year the re-issuance of the permit is valid (up to two years). An expired permit is not valid. A new permit is required for any work which extends beyond the expiry date at the current fee rate.
- Permits are issued to current landowners and cannot be transferred to new owners. A change in ownership will require the submission of a new, complete permit application.
- In areas under the jurisdiction of the Niagara Escarpment Commission (NEC), Conservation Halton cannot issue a permit under Ontario 162/06 until a NEC Development Permit or Exemption Letter has been issued.
- Any dispute of fee calculations that cannot be resolved through consultation with Conservation Halton's Associate Director, Planning and Regulations, Director of Planning and Watershed Management, and/or CAO's office, can be appealed to the Board of Directors:

Notes

1. Letters of Permission are issued for certain activities adjacent to wetlands as per Policies 2.39.4 and 2.40.4 in the *Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document (as amended)* or for minor works located within the regulated area but outside of the flood or erosion hazard that are less than 10 m² and require a municipal building permit, but no site visit or technical review.
2. **Restoration Agreements** will be applied where violations can be fully removed from the regulated area. An administration fee based on the current applicable category plus a 100% surcharge will be charged, except for fill removal, where an administration fee equal to the base permit application fee for fill placement will be charged. **Compliance Agreements** will be applied for violations that can meet Conservation Halton policies and regulatory requirements. An administration fee based on the current applicable category fee plus a 100% surcharge will be charged.

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CONSERVATION HALTON FEES FOR OTHER SERVICES 2022

January 1, 2022

CATEGORY	2022 2% FEE (unless otherwise noted)	HST	TOTAL 2022 FEE (rounded)	2021 FEE
<u>Fees Not Requiring HST</u>				
Solicitor, Real Estate, Appraiser Inquiries (Note 1)	\$350.00		\$350.00	\$345.00
Clearance/No Objection Letters				
No Site Visit	\$140.00		\$140.00	\$135.00
With Site Visit (<i>visual inspection</i>)	\$240.00		\$240.00	\$235.00
With Site Visit (<i>staking; field assessment</i>)	\$435.00		\$435.00	\$425.00
With Site Visit & Technical Review (<i>includes review of one report; additional reviews are charged at the rate of \$685.00 per submission</i>)	\$700.00		\$700.00	\$685.00
Pre-Application Requests (no permit or planning application has been submitted) (Private Landowner Single Residential, Single Farm) (Note 2)				
With Site Visit (<i>visual inspection</i>)	\$240.00		\$240.00	\$235.00
With Site Visit (<i>staking; field assessment</i>) (per visit)	\$435.00		\$435.00	\$425.00
With One Technical Review	\$700.00		\$700.00	\$685.00
Pre-Application Requests (no permit or planning application has been submitted) (Other) (Note 2)				
With Site Visit (<i>visual inspection</i>) (per visit/per staff person)	\$240.00		\$240.00	\$235.00
With Site Visit (<i>staking; field assessment</i>) (per visit/per staff person)	\$435.00		\$435.00	\$425.00
With One Technical Review	\$1955.00		\$1955.00	\$1915.00
<u>Fees Requiring HST</u>				
Hard Copy Maps (per property)	\$18.58	\$2.42	\$21.00	\$20.00
Photocopies (per sheet up to 11" x17")	\$0.93	\$0.12	\$1.05	\$1.00
Technical Review - EIR/FSS/SIS (or equivalent)				
Base Fee (≤ 25ha)	\$10,938.05	\$1,421.95	\$12,360.00	\$12,118.00
Base Fee (> 25ha but ≤ 50ha)	\$21,882.30	\$2,844.70	\$24,727.00	\$24,242.00
Base Fee (> 50ha)	\$32,831.86	\$4,268.14	\$37,100.00	\$36,371.00
Per gross hectare (Note 3)	\$451.33	\$58.67	\$510.00	\$500.00
Terms of Reference Technical Review	\$1,597.35	\$207.65	\$1,805.00	\$1,770.00
10% Increase to all EA Fees				
EA Review (Notes 4 & 5)				
Master Plan	\$14,955.75	\$1,944.25	\$16,900.00	\$15,634.00
Individual EA	\$14,955.75	\$1,944.25	\$16,900.00	\$15,364.00
Schedule A or A+				-
Schedule B (or equivalent)	\$6,231.86	\$810.14	\$7,042.00	\$6,402.00
Schedule C (or equivalent)	\$9,969.92	\$1,296.08	\$11,266.00	\$10,242.00
EA Addendum Reports	\$2,631.86	\$342.14	\$2,974.00	\$2,704.00
Niagara Escarpment Plan Amendments (Applicant Driven)	\$17,147.79	\$2,229.21	\$19,377.00	\$18,998.00
Parkway Belt Applications	\$3,215.04	\$417.96	\$3,633.00	\$3,562.00
			HST # 10746 2483 RT001	

DRAFT
CONSERVATION HALTON FEES FOR OTHER SERVICES 2022
January 1, 2022

Notes

1. Solicitor, real estate, or appraiser inquiries for information specific to a PIN (Property Identification Number) will be charged the inquiry fee for each PIN.
2. The pre-application fee will be deducted from the cost of an application, **if** it is received within **one (1) year** of completing the site visit or technical review. Additional technical submissions received for review prior to a formal application will be charged separately and no additional deduction will be made.
3. A gross hectare is calculated based on the geographic extent of the study area.
4. When technical reviews of studies associated with an EA, EIR/FSS/SIS (or equivalent) go beyond two submissions, a graduated fee of 25% of the current fee (up to \$13,750) for the third submission and 50% of the current fee (up to \$28,600) for subsequent submissions will be charged.
5. Review fees do not apply for Region of Halton infrastructure projects as the Region funds a CH Regional Infrastructure Team.



CONSERVATION HALTON PLAN REVIEW FEES 2022 **DRAFT**

EFFECTIVE January 1, 2022



APPLICATION TYPE	CATEGORY	2022 FEE - 2% (unless otherwise noted)	HST (\$)	TOTAL 2022 FEE (\$)	TOTAL 2021 FEE (\$)
Subdivisions - Residential/Condominium Multi-Residential/Mixed Use (Note 1)	Base fee	\$ 6,396.46	\$ 831.54	\$ 7,228.00	\$ 7,086.00
	Residential per unit/lot fee				
	Residential per unit/lot (≤ 25 units/lots)	\$ 288.50	\$ 37.50	\$ 326.00	\$ 320.00
	Residential per unit/lot (26-100 units/lots)	\$ 231.86	\$ 30.14	\$ 262.00	\$ 257.00
	Residential per unit/lot (101-200 units/lots)	\$ 184.96	\$ 24.04	\$ 209.00	\$ 205.00
	Residential per unit/lot (200+ units/lots)	\$ 146.02	\$ 18.98	\$ 165.00	\$ 162.00
	Per net hectare (Note 1)				
	≤ 2 ha	\$ 6,670.80	\$ 867.20	\$ 7,538.00	\$ 7,390.00
	> 2 ha but ≤ 5 ha	\$ 5,192.92	\$ 675.08	\$ 5,868.00	\$ 5,753.00
	> 5 ha but ≤ 10 ha	\$ 4,156.64	\$ 540.36	\$ 4,697.00	\$ 4,605.00
	> 10 ha	\$ 3,395.58	\$ 441.42	\$ 3,837.00	\$ 3,762.00
	Clearances per phase (tech review required) (Note 2)	\$ 3,518.58	\$ 457.42	\$ 3,976.00	\$ 3,898.00
	Clearances per phase (no tech review required)	\$ 1,182.30	\$ 153.70	\$ 1,336.00	\$ 1,329.00
Subdivisions - Industrial/Commercial	Base fee	\$ 6,396.46	\$ 831.54	\$ 7,228.00	\$ 7,086.00
	Per net hectare	\$ 6,240.71	\$ 811.29	\$ 7,052.00	\$ 6,914.00
	Clearances per phase (tech review required) (Note 2)	\$ 3,518.58	\$ 457.42	\$ 3,976.00	\$ 3,898.00
	Clearances per phase (no tech review required)	\$ 1,182.30	\$ 153.70	\$ 1,336.00	\$ 1,329.00
Subdivisions - Revisions/Redlines					
Official Plan Amendments	Major/Intermediate (Note 3)	\$ 3,689.38	\$ 479.62	\$ 4,169.00	\$ 4,087.00
	Minor (Note 3)	\$ 800.88	\$ 104.12	\$ 905.00	\$ 887.00
Zoning By-Law Amendments	Large (> 2 ha)	\$ 17,145.13	\$ 2,228.87	\$ 19,374.00	\$ 18,994.00
	Major	\$ 6,164.60	\$ 801.40	\$ 6,966.00	\$ 6,829.00
	Intermediate	\$ 4,076.99	\$ 530.01	\$ 4,607.00	\$ 4,517.00
	Minor	\$ 1,184.96	\$ 154.04	\$ 1,339.00	\$ 1,313.00
Consents (5% Increase)	Large (> 2 ha)	\$ 17,145.13	\$ 2,228.87	\$ 19,374.00	\$ 18,994.00
	Major	\$ 6,164.60	\$ 801.40	\$ 6,966.00	\$ 6,829.00
	Intermediate	\$ 4,076.99	\$ 530.01	\$ 4,607.00	\$ 4,517.00
	Minor	\$ 1,184.96	\$ 154.04	\$ 1,339.00	\$ 1,313.00
Minor Variances	Major	\$ 3,975.22	\$ 516.78	\$ 4,492.00	\$ 4,277.00
	Intermediate (staking or one technical review)	\$ 2,866.37	\$ 372.63	\$ 3,239.00	\$ 3,085.00
	Minor	\$ 2,100.88	\$ 273.12	\$ 2,374.00	\$ 2,261.00
Site Plans - Single Residential	Major	\$ 1,767.26	\$ 229.74	\$ 1,997.00	\$ 1,902.00
	Intermediate (staking, visual assessment or one technical review)	\$ 590.27	\$ 76.73	\$ 667.00	\$ 654.00
	Minor (visual inspection)	\$ 238.94	\$ 31.06	\$ 270.00	\$ 265.00
	Minor (no site visit or technical review)	\$ 135.40	\$ 17.60	\$ 153.00	\$ 150.00
Site Plans - Commercial/Industrial/ Institutional/Multi-Residential > 2ha	Major	\$ 1,716.81	\$ 223.19	\$ 1,940.00	\$ 1,902.00
	Intermediate (staking, visual assessment, or one technical review)	\$ 590.27	\$ 76.73	\$ 667.00	\$ 654.00
	Minor (visual inspection)	\$ 238.94	\$ 31.06	\$ 270.00	\$ 265.00
	Minor (no site visit or technical review)	\$ 135.40	\$ 17.60	\$ 153.00	\$ 150.00
Site Plans - Commercial/Industrial/ Institutional/Multi-Residential < 2ha	Major (per gross ha)	\$ 5,893.81	\$ 766.19	\$ 6,660.00	\$ 6,529.00
	Intermediate	\$ 10,290.27	\$ 1,337.73	\$ 11,628.00	\$ 11,400.00
	Minor	\$ 2,144.25	\$ 278.75	\$ 2,423.00	\$ 2,375.00
	Clearance (technical review required) (note 3)	\$ 3,977.88	\$ 517.12	\$ 4,495.00	\$ 4,407.00
	Clearance (no technical review required)	\$ 1,352.21	\$ 175.79	\$ 1,528.00	\$ 1,498.00
Municipal Site Alteration Applications	Major	\$ 10,223.01	\$ 1,328.99	\$ 11,552.00	\$ 11,325.00
	Intermediate	\$ 6,642.48	\$ 863.52	\$ 7,506.00	\$ 7,359.00
	Minor	\$ 1,431.86	\$ 186.14	\$ 1,618.00	\$ 1,586.00
	Clearance (technical review required) (Note 3)	\$ 1,806.19	\$ 234.81	\$ 2,041.00	\$ 2,001.00
	Clearance (no technical review required)	\$ 769.91	\$ 100.09	\$ 870.00	\$ 853.00
Applicant-Driven Revisions (requiring re-circulation)	Major/Intermediate	\$ 3,298.23	\$ 428.77	\$ 3,727.00	\$ 4,129.00
	Minor	\$ 910.62	\$ 118.38	\$ 1,029.00	\$ 1,009.00
	Prior to draft plan approval (note 5)	\$ 9,323.89	\$ 1,212.11	\$ 10,536.00	\$ 10,329.00
Resubmission Due to incomplete application	Major changes (% of current fee)	75%			75%
	Minor changes (% of current fee)	25%			25%
Technical Study/Design Resubmission	% of current applicable application fee	\$ 10,255.75	\$ 1,333.25	\$ 11,589.00	\$ 11,362.00
Additional Site Visit	Third Submission (Note 4)	25% up to \$13,050.00			25% up to \$12,750.00
	Subsequent Submissions (per submission) (Note 4)	50% up to \$27,050.00			50% up to \$26,520.00
File reactivation (inactive for 2 or more years)	Single residential/Single farm (private landowner)	\$ 238.94	\$ 31.06	\$ 270.00	\$ 265.00
	Commercial/Industrial/Institutional/Residential	\$ 2,161.76	\$ 43.24	\$ 2,205.00	\$ 2,162.00
Aggregate Extraction Technical Review Associated with a Planning Application	Minor (Note 5)	\$ 541.59	\$ 70.41	\$ 612.00	\$ 600.00
	Intermediate/Major (Note 5)	\$ 1,092.92	\$ 142.08	\$ 1,235.00	\$ 1,211.00
		\$ 83,231.86	\$ 10,820.14	\$ 94,052.00	\$ 92,208.00

HST # 10746 2483 RT001

CONSERVATION HALTON PLAN REVIEW FEES 2022

January 1, 2022

DEFINITIONS

Minor: The application is within or adjacent to the area of interest to Conservation Halton (e.g., natural heritage, natural hazard areas), but no technical studies are required by Conservation Halton

Intermediate: One technical study is required for review by Conservation Halton

Major: More than one technical study is required for review by Conservation Halton

Incomplete Submission: The application has not met all Conservation Halton's requirements as indicated in the checklist generated through the municipal pre-consultation process, including fees

Applicant-Driven Revision: An amendment or revision to an application initiated by the applicant after municipal approval has been granted

Gross Hectare: The entire area subject to a planning application or technical study

Net Hectare: The total developable area of the property including development blocks, roads, parks, schools, and stormwater management facilities, but excluding areas regulated by Conservation Halton (CH) or other natural heritage system (NHS) areas.

GENERAL

- **Plan Review Fees** – Conservation Halton's plan review fee will be paid to the municipality when the application is filed. Other review fees will be paid directly to Conservation Halton.
- **Pre-application Technical Review** – A fee will apply for the review of a technical study/analysis where a planning submission has not yet been submitted as outlined on **Schedule B – Fees for Other Services**. This fee will be paid directly to Conservation Halton and must be paid prior to review. The review of one technical submission prior to a formal application will be deducted from the cost of the planning application at the time it is submitted. Any additional technical submissions received for review prior to a formal application will be charged separately and no additional deduction will be made.
- **Pre-consultation** – Applicants are encouraged to consult with CH staff prior to the submission of a planning application to confirm the nature and extent of the information required and the appropriate fee. CH reserves the right to request a pre-consultation fee. This fee will be deducted from the application fee if a formal application is submitted within **12 months (one year)** of the pre-consultation.
- **Concurrent Applications** – Planning applications submitted concurrently for the same property will be charged at 100% of the highest fee rate and 75% of the fee rate for each additional planning application. Fees for the technical review of EIR/FSS/SIS's or equivalent studies will be charged separately. Where it has been agreed by the municipality and Conservation Halton that concurrent planning applications can be submitted and reviewed concurrently with an EIR/FSS/SIS or an equivalent study for the same property, the technical review fee will be charged at 100% of the fee rate and the planning applications will be charged 75% of the current fee rate.
- **Peer Review Fees** – The cost for peer review of technical submissions will be borne by the applicant.
- **Additional Fees** – CH reserves the right to request additional fees, at a rate of \$175/hour (inclusive of HST). Additional fees are required for all applicant-initiated revisions.
- **Fee Appeal Process:** - Any dispute of fee calculations that cannot be resolved through consultation with Conservation Halton's Senior Manager, Planning and Regulations, Director of Planning and Watershed Management, and/or CAO's office, can be appealed to the Board of Directors:

NOTES

1. **Subdivision Fees** – In addition to the base fee, 1) the per unit graduated fee applies to the areas of the plan that contain residential singles, duplexes, standard townhouses, and lane-based townhouses, 2) the net hectare fee applies to the areas of the plan that contain multi-unit/mixed use residential (including, but not limited to, stacked townhouses, back-to-back townhouses, live-work units, and medium and high-rise units), industrial/commercial/institutional uses, and 3) the net hectare fee applies to all other blocks as identified in the Net Hectare definition above.

Subdivision fees include: 1) review of first and second submissions of all studies and technical analysis required to support draft plan approval; subsequent submissions will be charged as per the current CH Planning Fee Schedule, 2) one site visit prior to draft plan approval, 3) three (3) consultation meetings, 4) preparation of draft plan conditions, 5) review of the first and second submissions of all detailed design drawings and other submissions required to clear draft plan conditions; subsequent submissions will be charged as per the current CH Planning Fee Schedule, and 6) up to 2 site visits during the detailed design process (if required). The subdivision fee assumes a single phase of detailed design and registration. If the subdivision is phased after draft plan approval, additional fees for the review of detailed design at a rate of 15% of the current total subdivision fee will apply. All works associated with municipal site alteration applications and CH permit applications are separate from the subdivision review process and associated fees.

2. **Revision and Clearance Fees** – Fees will be paid directly to CH and must be paid prior to issuance of revised draft conditions, removal of a holding provision under an attendant zoning by-law, or the final clearance letter (registration, pre-servicing and assumption). A draft plan modification fee will be applicable to applicant-driven revisions to a subdivision or condominium application. The prescribed fee assumes a standard approach to the issuance of the CH clearance. Should the applicant want to consider a different approach, CH will charge additional fees to cover administrative and any legal costs. The payment of additional fees does not guarantee that the alternative approach will be accepted.
3. **Additional Subdivision Fees** – Where a subdivision has received draft plan approval, but conditions have not been cleared for a period of one (1) year after draft plan approval, CH reserves the right to request an additional plan review fee which represents the difference between the subdivision fee paid at the time of the initial review and the current subdivision fee. Similarly, where a subdivision has been draft plan approved and applicant-driven revisions are submitted subsequent to the approval, an additional plan review fee will be required.
4. **Technical Study/Design Resubmission** – A fee will be charged directly to the applicant when technical reviews of required studies, plans, drawings and models go beyond two submissions. A graduated fee of 25% of the current fee for the third submission and 50% of the current fee for subsequent submissions will be charged.
5. **File Reactivation** – A file reactivation fee will be charged for applications that have been inactive for two or more years. This fee will be charged in addition to the difference in the application fee paid with the original submission and the current approved fee. After five (5) years of inactivity, any technical or planning review will be charged the full current application submission fee.
6. **Large Official Plan Amendments/Zoning Bylaw Amendments** – A “large” fee will be required where the site is > 2ha and a stormwater management facility and/or watercourse realignment is proposed, or the application is supported by a comprehensive study (e.g. EIR/FSS/SIS or equivalent).

November 11, 2021

Ms. Barbara Veale
Director, Planning and Watershed Management
Conservation Halton
2596 Britannia Road West
Burlington, ON
L7P 0G3

Sent via email to bveale@hrca.on.ca

Dear Ms. Veale,

RE: Conservation Halton's Proposed 2022 Planning and Permitting Fee Schedules

The Building Industry and Land Development Association (BILD) is in receipt of Conservation Halton's (CH) proposed 2022 Planning and Permitting Fee Schedules, which we understand will be brought forward to the Board of Directors for approval later this month. In advance of Board's consideration, we would like to provide the following acknowledgements on behalf of the BILD Halton Chapter.

To begin, we would like to take this opportunity to thank you, Leah Smith and Kellie McCormack for the establishment of the joint working group struck by CH and BILD in the beginning of 2021. This working group has proven to be a successful forum for collaboration, and we look forward to our future discussions.

In this regard, we have apprised our members of the draft revisions to the 2022 fee schedules that we acknowledge are a result of an inflationary increase of 2% for all fee categories. At this time, our members have not expressed any apprehensions with the aforementioned revisions, and as such find the proposed 2022 Planning and Permitting Fees as reasonable.

Thank you for the opportunity to provide this correspondence, and should you have any questions please contact the undersigned.

Sincerely,



Shane Cooney, MCIP, RPP, MLA
BILD Halton Chapter Co-Chair



Kevin Singh
BILD Halton Chapter Co-Chair

The Building Industry and Land Development Association is an advocacy and educational group representing the building, land development and professional renovation industry in the Greater Toronto Area. BILD is the largest home builders' association in Canada, and is affiliated with the Ontario Home Builders' Association and the Canadian Home Builders' Association. It's 1,500 member companies consists not only of direct industry participants but also of supporting companies such as financial and professional service organizations, trade contractors, as well as manufacturers and suppliers of home-related products.

REPORT TO: Conservation Halton's Board of Directors

REPORT NO: CHBD 08 21 13

FROM: Barbara J. Veale, Director, Planning and Watershed Management

DATE: November 25, 2021

SUBJECT: Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021
CH File No.: ADM 363

Recommendation

THAT the Conservation Halton Board of Directors **approves the "Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021"**.

And

THAT the Conservation Halton Board of Directors **receives for information the Staff report entitled "Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021"**

Executive Summary

Conservation Halton (CH) staff is seeking approval from CH's Board of Directors for the 'Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021' (Appendix M). These guidelines will provide applicants with a clear and transparent understanding of CH's requirements and expectations for technical engineering submissions associated with stormwater management. It is anticipated that the Guidelines will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. From 2018 to 2021, staff engaged with municipal partners, neighbouring conservation authorities, and select BILD-identified consultants, and consulted with the broader public. Valuable feedback was obtained and incorporated into the final version.

Report

Background

Conservation Halton's (CH) previous strategic plan "Metamorphosis", as well as the current plan "Momentum", establish targets and measures for a range of CH's programs and services, including targets for planning and permit response times. Over the past few years, several initiatives have been carried out by the Planning and Regulations team to streamline plan review and permitting processes and to improve service delivery, including updating and developing new technical submissions guidelines.

Technical submissions guidelines will provide applicants with a clear and transparent understanding of CH's requirements and expectations for technical submissions. They will provide direction and

outline approaches that can be used to satisfy CH's planning and permitting requirements and Board-approved policies. It is anticipated that these guidelines will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. The guidelines are specific to CH and do not replace or supersede federal, provincial, or municipal requirements.

In June 2021, the CH Board approved technical submissions guidelines for Landscaping and Rehabilitation Plans. Guidelines for Slope Stability Assessments for Valleys will be brought forward to the Board for approval in early 2022.

The purpose of this report is to provide the Board with an update on and to seek approval for the attached 'Conservation Halton Guidelines for Stormwater Management Engineering Submissions'.

Purpose and Objectives of Guidelines

The purpose of the 'Conservation Halton Guidelines for Stormwater Management Engineering Submissions' is to:

- Identify CH's regulatory and technical requirements for a SWM submission; and
- Outline CH's key expectations for SWM design.

The document focuses primarily on CH's expectations related to the water resources engineering aspects of stormwater management plans. However, other disciplines may also provide relevant direction for certain aspects of stormwater management, such as ecology, hydrogeology, fluvial geomorphology, and geotechnical engineering.

These guidelines will apply to all stormwater management submissions associated with planning and permitting applications and provide guidance to qualified professionals tasked with preparing stormwater management plans. Adherence to the guidelines will help CH staff assess the technical merits of a stormwater management plan and facilitate quicker and more consistent reviews.

Overview of Guidelines

The document is divided into six sections and supporting appendices:

Section 1 – Introduction – Outlines CH's role in hydrology and SWM review and how it relates to the planning and regulatory process.

Section 2 – Stormwater Management Objectives and Criteria – Outlines CH's objectives and criteria for water quantity, quality, stream erosion, and water balance.

Section 3 – Stormwater Management Practices – Outlines requirements related to specific SWM infrastructure elements.

Section 4 – Hydrologic Modelling Requirements – Outlines the technical recommendations for hydrologic modelling and associated hydraulic calculations.

Section 5 – Submission Requirement Checklists – Outlines the components needed for various technical reports (e.g., Functional Servicing Report).

Section 6 – References – Lists the various documents reviewed in preparation of this document.

Appendix A – Rainfall Data – Provides available rainfall data for municipalities within CH’s watershed.

Appendix B – Typical Hydrologic/Hydraulic Parameters and Equations – Provides a quick reference of standard values/equations used in hydrology and hydraulic modelling accepted by CH.

Key Stakeholder Engagement and Public Consultations

Starting in summer 2018 through to 2021, staff engaged in focused consultations with municipal partners, conservation authorities within the Greater Golden Horseshoe, and select BILD-identified consultants. Broader public consultation was carried out in late spring 2021, including broadcasts via social media, email blasts, and posting a draft of the document on CH’s website publicly for a 30-day comment period.

Valuable feedback was obtained through meetings, discussions, and written correspondence. Key feedback included requests for more direction on CH’s requirements, clarification on some of the described approaches and need for flexibility. The feedback received was incorporated into the final version.

Recommendation

The ‘Conservation Halton Guidelines for Stormwater Management Engineering Submissions’ outline CH’s expectations and minimum requirements when stormwater management is required. It is anticipated that use of these Guidelines will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. Staff recommends that the Board of Directors approve these Guidelines. Once approved, these Guidelines will be publicly accessible on CH’s webpage and used by CH staff in the engineering review of stormwater management submissions.

Impact on Strategic Priorities

This report supports the Momentum priorities of Science, Conservation and Restoration, and Natural Hazards and Water.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Barbara Veale
Director, Planning and Watershed Management

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Janette Brenner, Senior Manager, Water Resources Engineering.
905-336-1158 x2262; jbrenner@hrca.on.ca



Conservation Halton Guidelines for Stormwater Management Engineering Submissions

November 2021 Version 1.0

Appendix M



CONSERVATION HALTON GUIDELINES

Conservation Halton (CH) strives to protect life and property from natural hazards such as flooding and erosion and to prevent environmental degradation, loss of natural features and their ecological and hydrological functions, and to pollution near or within natural features. To do this, CH undertakes a wide range of programs and services. In the planning and development process, CH exercises its roles and responsibilities in accordance with the Province's Policies and Procedures for Conservation Authority Plan Review and Permitting Activities (2010), including:

- A regulatory agency under Section 28 of the *Conservation Authorities Act*;
- A body with delegated authority under Section 3 of the Provincial Policy Statement, to represent the 'Provincial Interest' regarding natural hazards in the review of municipal policy documents and planning applications under the *Planning Act*;
- A public commenting body under the *Planning Act*, *Clean Water Act* and other Acts and Provincial Plans;
- A service provider for environmental advice and technical clearance to municipalities in accordance with signed Memoranda of Agreement;
- A resource management agency operating on a local watershed basis; and
- A landowner in the watershed.

CH's Planning and Regulations staff (i.e., environmental planners, regulations officers, ecologists, water resource engineers, technologists, and hydrogeologists) work together on interdisciplinary teams to deliver timely and comprehensive reviews and advice to provincial agencies, municipalities and landowners across CH's jurisdiction.

Section 28 (1) of the Conservation Authorities Act allows conservation authorities to make regulations to protect life and property from natural hazards. CH's regulation is Ontario Regulation 162/06. Under Ontario Regulation 162/06, CH regulates:

- All development in or adjacent to river or stream valleys, wetlands, and surrounding lands where development could interfere with the hydrologic function of the wetland, Lake Ontario shorelines, and hazardous lands such as karst, and any prescribed allowances;
- Alterations to a river, creek, stream, or watercourse; and
- Interference with wetlands.

Permission is required from CH for undertaking any works within regulated areas. Any development, which in the opinion of the CA, does not affect the control of flooding, erosion, pollution, conservation of land, or dynamic beaches may be approved or approved with conditions. Interference to watercourses and wetlands may be approved, approved with conditions, or refused. CH's Board-approved Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document outlines the policies and technical requirements which must be met before permission may be granted. As part of a CH permit application, an applicant must demonstrate that CH's Board-approved policies and technical standards can be met.

CH also provides technical advice to its municipal partners on a range of environmental matters, including stormwater management (SWM) and natural heritage, through service agreements or Memoranda of Understanding/Agreement (MOU/MOA). Technical advice is also provided to municipal partners in CH's capacity as a public commenting body and a resources management agency.

These Guidelines provide clear expectations regarding the criteria and approaches that are acceptable to CH and are used by staff to assess the technical merits of the SWM plan. Applicants proposing stormwater management (SWM) works should follow these Guidelines. By doing so, more efficient, and consistent reviews, fewer resubmissions, and faster approvals are anticipated.

These Guidelines are specific to CH and do not replace or supersede any other federal, provincial, or municipal requirement.

OBJECTIVE	<p>The purpose of the Stormwater Management Engineering Submission Guidelines is to:</p> <ul style="list-style-type: none"> • Identify CH's regulatory and technical requirements for a SWM submission • Outline CH's key expectations for SWM design
APPLICATION & USE	<p>Applies to all stormwater management engineering submissions associated with <i>Planning Act</i> and <i>Ontario Regulation 162/06</i> applications. These Guidelines have been developed for:</p> <ul style="list-style-type: none"> • Qualified professionals such as water resource engineers and other qualified persons tasked to guide the preparation of SWM plans • CH staff to assess the technical merits of SWM plans and to facilitate quicker, more consistent reviews
ADDITIONAL REFERENCE MATERIALS (to be read in conjunction with this document)	<ul style="list-style-type: none"> • Ontario Regulation 162/06 Halton Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, 2006 • Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document (November 26, 2020). • Municipal Stormwater Management/Engineering Guidelines/Standards • Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, draft, 2021 • Requirements for Completion of Hydrogeological Studies to Facilitate Conservation Halton's Reviews, November 2014 • Stormwater Management Planning and Design Manual (MOE, 2003) • Low Impact Development Stormwater Management Planning and Design Wiki Guide (CVC and TRCA) • Erosion and Sediment Control Guidelines for Urban Construction (TRCA, 2019) • Approaches to Manage Regulatory Event Flow Increases Resulting from Urban Development (TRCA, 2016) • Halton-Hamilton Source Protection Plan • MECP Source Protection Information Atlas
VERSION	<p>Version 1.0</p> <p>This version of the Stormwater Management Engineering Submission Guidelines was presented and approved by the CH Board of Directors on November 25, 2021.</p> <p>The Guidelines may be updated from time to time. For more information, visit https://www.conservationhalton.ca/policies-and-guidelines.</p>

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Abbreviations

The following table lists the various abbreviations used within this document:

TABLE 0-1: LIST OF ABBREVIATIONS

BMP	Best Management Practice	CH	Conservation Halton
CVC	Credit Valley Conservation	EIR/FSS	Environmental Impact Report/Functional Servicing Study
LID	Low Impact Development	MECP	Ministry of the Environment, Conservation and Parks
MESP	Master Environmental Servicing Plan	MOE	Ministry of the Environment
MOA	Memorandum of Agreement	MOU	Memorandum of Understanding
OP	Official Plan	OPA	Official Plan Amendment
O. Reg. 162/06	Ontario Regulation 162/06	SIS	Subwatershed Impact Study
SP	Secondary Plan	SWM	Stormwater Management
SWMP	Stormwater Management Pond	SWMPDM	Stormwater Management Planning and Design Manual
SWP	Source Water Protection	SWS	Subwatershed Study
TRCA	Toronto and Region Conservation Authority	TSS	Total Suspended Solids
WS	Watershed Study	ZBA	Zoning Bylaw Amendment

Section 1 Introduction

The purpose of the Guidelines for Stormwater Management (SWM) Engineering Submissions is to:

- Identify Conservation Halton's (CH) regulatory and technical requirements for a SWM submission; and
- Outline CH's key expectations for SWM design.

This document focuses primarily on CH's expectations related to water resources engineering aspects of SWM. Other disciplines may also be relevant such as ecology, hydrogeology, fluvial geomorphology, and geotechnical engineering. Where this is the case, a reference to the appropriate guideline is included within the text.

1.1 Guideline Outline

This document has been divided into six sections and supporting appendices:

- **Section 1 – Introduction** – Outlines CH's role in hydrology and SWM review and how it relates to the planning and regulatory process.
- **Section 2 – Stormwater Management Objectives and Criteria** – Outlines CH's objectives and criteria for water quantity, quality, stream erosion, and water balance.
- **Section 3 – Stormwater Management Practices** – Outlines requirements related to specific SWM infrastructure elements.
- **Section 4 – Hydrologic Modelling Requirements** – Outlines the technical recommendations for hydrologic modelling and associated hydraulic calculations.
- **Section 5 – Submission Requirement Checklists** – Outlines the components needed for various reports (e.g., Functional Servicing Report).
- **Section 6 – References** – Lists the various documents reviewed in preparation of this document.

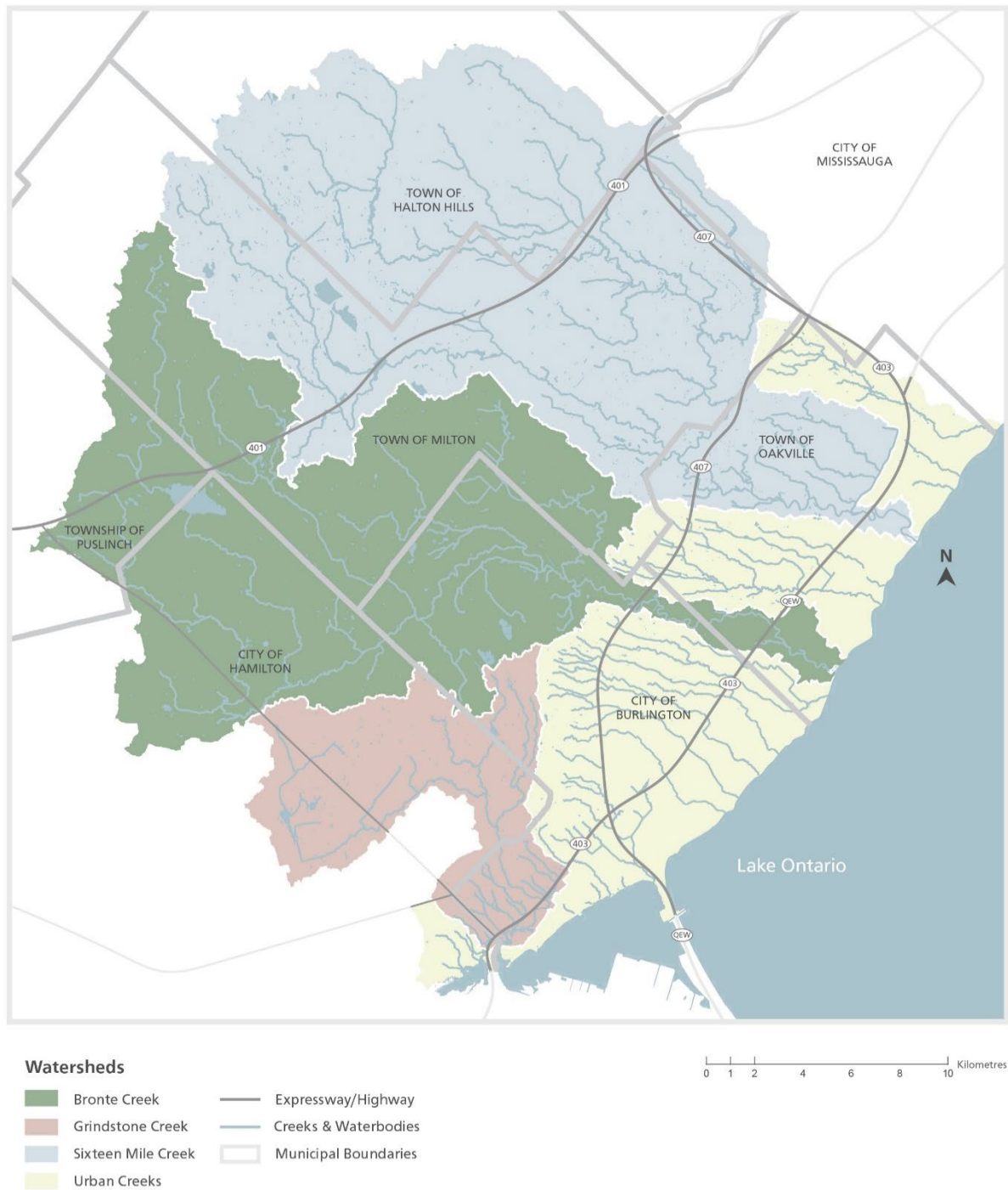
These Guidelines are specific to CH and do not replace or supersede any other federal, provincial, or municipal requirement.

1.2 Conservation Halton's Role in Reviewing Hydrology and Stormwater Management

CH protects, manages, and enhances the area within its jurisdiction (see Figure 1-1) through a wide variety of programs and services, including the administration of regulations and the provision of planning services.

Under Ontario Regulation 162/06 (O. Reg. 162/06), CH regulates:

- All development in or adjacent to river or stream valleys, wetlands and surrounding lands where development could interfere with the hydrologic function of the wetland, Lake Ontario shorelines, or hazardous lands such as karst and any associated allowances;
- Alterations to a river, creek, stream, or watercourse; and
- Interference with wetlands.

FIGURE 1-1: CONSERVATION HALTON WATERSHED

Source: Conservation Halton.

Permission is required from CH for undertaking any development within regulated areas. “Development” means,

- a) the construction, reconstruction, erection or placing of a building or structure of any kind,
- b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- c) site grading, or
- d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

Permission from CH is required for construction of storm water infrastructure or any associated work within an area regulated under the Regulation. These works may include outlet pipes/swales, emergency spillways, grading, or the entire facility.

CH's Board-approved *Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document* (November 26, 2020) outlines the policies and technical requirements which must be met before permission may be granted. As part of a CH permit application, an applicant must demonstrate that CH's Board-approved policies and technical requirements can be met to the satisfaction of CH.

CH also provides technical advice to its municipal partners on a range of environmental matters, including SWM, through service agreements or Memoranda of Understanding/Agreement (MOU/MOA). Technical advice is also provided to municipal partners in CH's capacity as a public commenting body and a resources management agency.

CH's review of proposed SWM works provides for a streamlined and integrated assessment of the merits of the proposal that is linked to CH's roles and responsibilities.

1.3 Stormwater Management and Planning Processes

The level of SWM related detail required in each study depends on the scale and scope of the development proposal or stage in the planning process. SWM-related studies should reflect existing and proposed land use(s) and the scale and scope required to support the planning application or planning studies under other legislation (e.g., Environmental Assessment Act). Studies should also be in-keeping with higher-level studies (e.g., Subwatershed Plans, Environmental Implementation Reports/Functional Servicing Studies, Master Environmental Servicing Plans, Environmental Assessments, etc.), where applicable.

The following provides an overview of the SWM-related studies required to support various planning documents and applications under the *Planning Act* or other legislation. As the scale and scope of land development varies widely, pre-consultation with CH and the municipality, as well as relevant Provincial ministries, is strongly recommended.

Watershed Studies (WSs) and Subwatershed Studies (SWSs) are valuable resources and supporting studies for municipalities when developing and updating their Official Plans (OPs) and Secondary Plans. A comprehensive Terms of Reference (TOR) guides the scope and components of these studies. Typically, TOR are developed collaboratively to ensure the technical requirements of both the municipalities and CH are met. Typically, WSs are carried out to gain a broad understanding of the ecosystem's functions and status, including the role and appropriate management of stormwater. SWSs build upon the recommendations made within the higher-level WS following the same ecosystem approach but at a greater level of detail for a smaller area (typically Secondary Plan).

In addition to other matters such as ecology and hydrogeology, a SWS should demonstrate how SWM planning will:

- Ensure systems are optimized, feasible, and financially viable over the long term;
- Minimize, or where possible, prevent increases in contaminant loads in the receiving watercourse or wetland;
- Minimize changes in water balance and erosion;
- Prepare for the impacts of a changing climate;
- Minimize, or where possible prevent, increases in peak surface water flows in the receiving watercourses;
- Mitigate risks to human health and safety, property, and the environment; and,
- Promote SWM best practices, including stormwater attenuation and re-use, water conservation and efficiency, and Low Impact Development (LID) techniques.

The SWS should identify management and implementation strategies to meet the above objectives and establish acceptable practices, applications, targets, and SWM facility location(s) at a conceptual level. The SWS should also provide guidance on the requirements of future studies.

An **Environmental Implementation Report (EIR)/Subwatershed Impact Study (SIS)/Municipal Environmental Servicing Plan (MESP)** or similar study typically supports Tertiary or “Block” Plans, Official Plan Amendments (OPA), Zoning By-law Amendments (ZBA), and Draft Plans of Subdivision/Condominium. An EIR/SIS/MESP involves a more detailed assessment of many components, including conceptual SWM designs and grading plans. Typically, an EIR/SIS/MESP is used to demonstrate how a specific development concept will comply with the applicable SWS recommendations while addressing/evaluating all lands within a given subcatchment area. TOR for these studies are key, and preferably determined at the SWS stage. CH should be involved in the development of the TOR, including when work is being scoped.

OPA, ZBA, and Draft Plans of Subdivision/Condominium, are normally also supported by a **Functional Servicing Report (FSR)** as outlined in this document. The FSR may be combined with an EIR or EIS/EIA. Detailed Subdivision/Condominium Designs and Site Plans are normally supported by a **SWM Brief/Design Report** as outlined in this document. The requirements for an FSR and other SWM reports are provided in Section 5.

CH typically defers SWM requirements and reviews for Consents (Severances), Minor Variances, and Single Lot Residential Development (<0.5 ha) to municipal staff; however, CH may recommend technical evaluations and SWM controls depending on the location, size and complexity of the site.

Environmental Assessments, under the *Environmental Assessment Act*, are generally undertaken to support municipal, provincial, and federal infrastructure projects. These documents should identify potential stormwater impacts of the evaluated alternatives as well as mitigation measures. The document should also outline the SWM requirements associated with the preferred alternative.

These guidelines apply to new projects proposed, following CH Board approval of these guidelines. For legacy projects that have remained active, CH encourages incorporation of the new criteria, requirements and recommendations, where appropriate. Otherwise, CH will be consistent with past direction for the duration of the *Planning Act*/Permit application or Environmental Assessment study as well as for subsequent planning and permitting stages for the same project. In cases where legislation or Federal/Provincial direction change; when it is necessary to protect public safety; or when required by updated technical reports and policies (e.g., 5-year Official Plan reviews, SWS updates, new CA regulations and associated policies), different approaches may be required.

Section 2 Stormwater Management Criteria and Objectives

A SWM strategy should assess the impacts of proposed development with respect to flooding, erosion/sediment transport, and stormwater quality, as well as hydrogeologic and ecologic conditions. The recommended strategy should demonstrate how impacts will be mitigated and SWM objectives addressed.

The following is a list of some of the key documents that provide guidance to the proponent for SWM submissions:

- *Stormwater Management Planning and Design Manual*, Ministry of the Environment (March 2003)
- *Low Impact Development Stormwater Management Planning and Design Wiki Guide*, Credit Valley Conservation and Toronto and Region Conservation Authority
- Toronto and Region Conservation Authority, *Erosion and Sediment Control Guide for Urban Construction* (2019)
- *Erosion and Sediment Control Inspection and Monitoring (CAN/CSA-W202-18)*, CSA Group (October 2018)
- *Approaches to Manage Regulatory Event Flow Increases Resulting from Urban Development*, Toronto and Region Conservation Authority (2016)
- *Halton-Hamilton Source Water Protection Plan and Mapping*
- Municipal SWM/Engineering Guidelines/Standards (both local and Regional)
- Hamilton Harbour Remedial Action Plan

2.1 Treatment Train

CH encourages the use of a treatment train approach in addressing SWM requirements. The treatment train approach involves providing controls at multiple locations (i.e., treatment at source, along the conveyance system, and at the end-of-pipe outlet). A treatment train may be required to meet the multiple objectives of water quality, water quantity, water balance and erosion control. Multiple methods could be used to achieve this goal.

2.2 Water Quantity

Stormwater quantity control is intended to protect life and property from increased flood risk, which could result from increased peak flows and/or increased runoff volume.

Quantity control requirements are typically established through a SWS, which assesses the effects of cumulative development impacts within the subwatershed. Where a current SWS is unavailable, site-specific stormwater quantity control criteria will be established through consultation with CH and the municipality. The applicant may be required to prepare a scoped SWS (i.e., a limited study) or other study that assesses cumulative impacts. The type of study and its limits would be determined through pre-consultation.

If the scale of development does not warrant a completion of a scoped SWS or SWS update, CH typically recommends that post-development peak flow rates not exceed corresponding pre-development rates for the 1:2-year, 1:5-year, 1:10-year, 1:25-year, 1:50-year and 1:100-year storms. If there is a known deficiency in the downstream conveyance system (e.g., undersized pipes, insufficient overland flow paths), an insufficient downstream outlet, or specific municipal requirements, additional quantity controls (i.e., over-controlling outflows to less than the existing conditions) may be required. This requirement should be identified through pre-consultation with the municipality.

Safe conveyance of the Regulatory flow from a SWM facility to a sufficient receiving system, must be provided such that there will be no adverse effects on downstream lands. The Regulatory flow is the greater of the uncontrolled 100-year or Regional (Hurricane Hazel) flows. A sufficient receiver typically consists of a watercourse or lake, though a wetland may also be an acceptable discharge location for clean controlled runoff. A public right-of-way may also be an acceptable receiver, provided the applicant has written permission from the municipality.

2.2.1 Regulatory Storm Control

The need for Regulatory Storm control is typically determined at a watershed or subwatershed-level of study based on a flood risk assessment. Several studies have identified the requirement for quantity control for the Regulatory Storm within CH's jurisdiction. If not stated in a higher-level document, consultation with CH and the municipality is recommended to confirm if Regulatory Storm control is required. CH follows the approaches outlined in the document *Approaches to Manage Regulatory Event Flow Increases Resulting from Urban Development* (Toronto and Region Conservation Authority, 2016) except for flooding of internal roadways within additional storage areas and a minimum freeboard based on fetch length for off-line SWM facilities.

2.3 Water Quality

Contaminants such as nutrients, pesticides, and petroleum tend to build up on urban surfaces over drier periods. During wet weather, runoff has the potential to pick up these contaminants and convey them to downstream receiver(s) (e.g., stream, wetland, groundwater, etc.).

The objective of water quality control is to protect and/or enhance water quality through the removal/management of pollutants such as suspended solids, increased temperature and excess nutrients. Quality control requirements are typically established through a SWS. Where a current SWS is unavailable, site specific water quality criteria should be confirmed through consultation with CH and the municipality, as well as MECP where Species at Risk-occupied and/or contributing habitat is present.

Proponents should check if the project is planned to be in a Vulnerable Area as defined under the Clean Water Act, 2006 using the MECP Source Protection Information Atlas (<https://www.gisapplication.lrc.gov.on.ca/SourceWaterProtection>). In CH's jurisdiction, there are certain zones of the municipal wellhead protection areas and water quality issue contributing areas are where activities (e.g., stormwater management facilities) could be assessed as significant level risk (to drinking water sources), and therefore mandatory source protection plan policies would apply. Policy tools vary and include land use planning, conditions in environmental compliance approvals, etc. The onus is on the proponent to meet the requirements of the local source protection plan.

2.3.1 Total Suspended Solids

It is recommended that all SWM strategies within CH's jurisdiction provide a minimum of 80% Total Suspended Solids (TSS) removal, in accordance with *Enhanced* (formerly Level 1) standard of treatment as defined by the Ministry of the Environment *Stormwater Management Planning and Design Manual* (SWMPDM) (MOE, 2003). This applies unless an alternative criterion has been established through a higher-level planning study, by municipal or provincial requirements, or through additional studies.

A multi-component approach, composed of two or more stormwater quality management techniques, should be implemented to achieve the TSS removal criteria. It is recommended that a primary Best Management Practice (BMP) provide pre-treatment by removing larger particles while a secondary BMP should remove finer particles. CH will accept adequately designed stormwater wet ponds, wetlands, and hybrid ponds as standalone measures that can meet the TSS removal criteria; however, the use of LID techniques in conjunction with these facilities is strongly encouraged to improve the level of treatment and extend the design life of the end-of-pipe facility. Filtration facilities may also be acceptable as a standalone measure if site constraints preclude implementing a multi-component approach, subject to approval by CH and the municipality.

2.3.2 Temperature

Increased water temperature can cause significant degradation of aquatic habitat and greatly impact the area's ecology. The discharge of thermally enriched (i.e., "warmed") runoff is of particular concern when directed to sensitive features such as designated or identified coldwater systems (based on fish community and habitat present).

Higher-level studies generally identify areas that will require consideration of thermal impacts (e.g., areas that support species at risk) and the need for thermal mitigation in the SWM strategy. In the absence of the higher-level studies, consultation with CH, the municipality and the Ministry of Environment, Conservation and Parks (MECP) may be needed to determine the requirement for thermal mitigation and establish adequate mitigation measures.

2.3.3 Phosphorus

The increased contribution of phosphorus from both stormwater and wastewater discharge has been identified as a water quality concern for Lake Ontario. This is of special concern for Hamilton Harbour/Burlington Bay. Recent efforts put forward by the Hamilton Harbour Remedial Action Plan have focused on watershed-wide activities to address non-point source phosphorous loads through greater incorporation of LID techniques and erosion controls during site alteration.

To address phosphorus loadings throughout the watershed, the specific need for phosphorus reductions should be assessed in higher-level studies such as watershed and subwatershed studies. In the absence of higher-level studies, phosphorus reduction through SWM measures would not be required by CH but is encouraged.

Development applications should follow the requirements from the higher-level studies. A multi-component approach that incorporates infiltration, settling and/or filtration-based solutions is recommended. *Enhanced* (Level 1) TSS removal has been identified as a reasonably effective method to remove phosphorus; however alternative measures will be considered.

2.3.4 Other Contaminants

There are numerous other contaminants in stormwater that should be considered when designing a treatment system. Urban stormwater may contain elevated levels of nutrients, bacteria, heavy metals, oil and grease, pesticides, and salt. For high-risk sites such as gas stations, manufacturing facilities, etc. or those sites discharging to a sensitive receiver, the SWM strategy should identify all contaminants that will be targeted for management/removal. In developing the strategy, it is recommended that the designer understand how each contaminant interacts with runoff and the feasibility of removal.

A contaminant of concern is salt. This is due to the inherent difficulty of removing the contaminant from runoff via traditional SWM practices. CH's long-term monitoring has shown increasing levels of salt accumulation/concentration within watercourses. To address these concerns, the proponent is strongly encouraged to consider methods that will reduce salt application at the source (e.g., salt management plans; see Transportation Association of Canada's Syntheses of Best Practices Road Salt Management and Lake Simcoe Region Conservation Authority's Parking Lot Design Guidelines to Promote Salt Reduction).

2.4 Stream Erosion Control

Development can alter the rate and quantity (i.e., flow and volume) of water that enters a receiving watercourse, as well as the amount of sediment transported in the system. The objective of stream erosion control is to prevent excess erosion or sedimentation (i.e., changes to the rate of natural or existing erosion) and associated risks to property/infrastructure.

An erosion threshold assessment will typically be required at the watershed, subwatershed, or EIR/FSS/SIS/MESP study level. The erosion assessment should be completed by a qualified professional using scientifically defensible models, and current industry standards. A field assessment of channel features, forms, and sensitivity should be done by walking the watercourse throughout the subject site and downstream to the extent reasonably anticipated to be impacted by proposed development (as feasible, recognizing site access constraints). Erosion assessments are typically terminated at the first major confluence or the point where the site represents approximately 10% of the contributing area of the system. Multiple methodologies should be used to establish thresholds and targets and should include the total work performed on the channel and not simply review/match duration of exceedance. More detailed information on CH submission requirements for erosion threshold assessments will be provided in future fluvial geomorphology guidelines.

In the absence of higher-level studies establishing erosion control requirements, a site-specific erosion study may be required. CH and the municipality should be consulted about the need and scope for an erosion study.

The following are typical scenarios where an erosion study would likely be required to support large-scale new development:

- If development is proposed upstream of a known erosion area,
- If development is proposed to discharge to small watercourses, or
- If flow diversions are proposed.

Where higher-level studies have not specified requirements and a site-specific erosion study is not warranted, CH typically recommends that the runoff from a 25 mm design storm be retained or detained and released over a period of at least 24 hours for sites, even those sites that outlet directly to a storm sewer. For smaller sites, it is sufficient for submissions to demonstrate that the use of parking lot/pipe storage, infiltration, evapotranspiration, and on-site re-use of runoff has been applied to the extent feasible to reduce erosion potential.

2.5 Water Balance

Water balance requirements are to be considered on both a site scale and a feature-based scale. Regardless of scale, the objective of a water balance is:

- To replicate as closely as possible existing hydrologic conditions by maintaining a balance between infiltration, runoff and evapotranspiration;
- To maintain as closely as possible groundwater and base flow regimes; and
- To ensure long-term sustainability of hydrological/ecological form and function of natural features.

2.5.1 Site Infiltration Water Balance

Urbanization generally increases impervious land cover which, unless mitigated, results in reduced infiltration, which may subsequently result in lowering of the water table, a decrease in discharge to watercourses and wetlands, or negatively impact other users of groundwater. Application of water balance criteria should aim to replicate or maintain the existing hydrogeologic functions and minimize potential negative impacts to groundwater.

In the absence of criteria specified in higher-level studies, refer to *Requirements for completion of hydrogeological studies to facilitate Conservation Halton's reviews* and consult with CH staff.

2.5.2 Feature-based Water Balance

Increased impervious areas can also result in increased runoff volumes and/or decreased groundwater flows directed to natural features such as wetlands or watercourses. Grading and servicing can change drainage patterns. For example, the use of end-of-pipe SWM facilities transfer runoff to a single discharge point which may direct flows away from natural features. These changes in runoff can impact these natural features and/or their functions.

Feature-based water balances establish a natural feature's ecological and hydrological function(s) and demonstrate how these functions will be maintained during and post-development. Typically, the SWM strategy should maintain the existing quantity, timing, duration and frequency of surface water and groundwater contributions on a monthly, seasonal, and annual basis to maintain pre-development functions of the natural feature. CH is in the process of creating guidelines with respect to wetland water balance assessments. CH staff should be consulted prior to design.

2.6 Diversions

CH requires maintenance of existing watershed boundaries and drainage patterns unless there are extenuating circumstances or where a higher-level study supports a diversion (i.e., re-direction of flows from one drainage basin to another).

Should the applicant put forward a drainage diversion or modification of drainage basin boundaries, the impact of the proposed changes must be assessed holistically, considering both the 'losing' and 'gaining' systems. The impacts of water takings and land use changes must be evaluated relative to maintenance of baseflow, quality/sensitivity of ecological habitat, maintenance of geomorphic functions, risk to flooding and erosion, and impacts to water users. The analysis should consider the anticipated changes in flow frequency (including seasonal changes), timing, duration, peak, volume, and quality and should be supported through supporting analysis. Opportunities must be investigated to mitigate a diversion from one subwatershed to another through an equal offsetting diversion.

Given the inherent complexities, consultation with CH and the municipality is required to establish site specific requirements related to any proposed diversions. Note that disciplines other than water resources engineering play a role in drainage diversions and impacts to natural features will need to be considered.

2.7 Climate Change

Climate change is the long-term modification of weather conditions (e.g., temperature, precipitation, wind, etc.). It can involve changes in average conditions and changes in weather predictability. As a result of climate change, Ontario is experiencing more frequent variation in temperature, wind patterns, and precipitation events.

In recent years, southern Ontario has experienced intense storms that have caused flooding and resulted in large economic and physical damages to infrastructure. The frequency and severity of storm and flood events is anticipated to escalate in the coming years. Thus, stormwater infrastructure should be designed with due consideration of possible changes. Anticipated impacts that will affect SWM strategies include:

- Shift in seasonal flows (e.g., reduced spring freshet, longer periods of low flow in summer, increased precipitation and flows in fall/winter);
- Reduced level of service provided by existing infrastructure due to more intense rainfall or blockage because of more frequent freeze/thaw cycles;
- Increased urban flooding (surcharging sewers, basements, roadways, and an inability to achieve design control levels within centralized facilities);
- Increased thermal impacts of stormwater on the receiving water body;
- Increased occurrence of algae blooms; and
- More sediment transport due to intense rainfall.

Provincial and municipal policies encourage consideration of climate change in stormwater management, including infrastructure design. Watershed studies, subwatershed studies and Master Plans, are important vehicles for considering the implications of climate change on SWM. These studies should assess the implications of climate change and include recommendations for climate resiliency for future developments and retrofits of existing SWM assets. The assessment/recommendations should demonstrate that the design performance of the SWM infrastructure is maintained over the lifespan of the asset. Due to the uncertainty of climate change on SWM, adaptive management is strongly encouraged.

Proponents are directed to consult with the municipality for direction on how to address climate change resiliency and adaptive management in their SWM design.

2.8 Summary – Criteria & Objectives

Table 2.1 provides a summary of the SWM criteria and objectives for water quantity, quality, stream erosion and water balance. The proponent should follow the requirements of current higher-level studies (e.g. SWS) and in instances where a higher-level study is not available, consult with the municipality and CH.

TABLE 2-1: SUMMARY – SWM CRITERIA AND OBJECTIVES

Criteria / Objective	Key Information
Treatment Train	<ul style="list-style-type: none"> • Use of a treatment train approach is encouraged, and may be required, to meet multiple SWM objectives.
Water Quantity	<ul style="list-style-type: none"> • Use the targets and sizing criteria established in higher-level studies. • Confirm the need for Regulatory controls through higher-level studies or through consultation with CH/municipality. • In the absence of current higher-level studies, control post-development flows to pre-development levels for 1:2-year through 1:100-year storm events. Overcontrol may be required where downstream capacity constraints exist. • Provide safe conveyance of Regulatory Storm from a SWM facility.

Criteria / Objective	Key Information
Water Quality	<ul style="list-style-type: none"> • Use the multi-component approach, to the extent possible. • Proponents should check if the project is planned to be in a drinking water vulnerable area. • Provide minimum 80% Total Suspended Solids (TSS) removal to an <i>Enhanced</i> (formerly Level 1) standard of treatment unless alternative criterion has been established. • Include methods to reduce phosphorus as directed by higher-level studies. • Provide thermal mitigation as directed by higher-level studies or, in the absence of current direction, evaluate temperature impacts and the need for thermal mitigation. • Evaluate for high-risk sites, other contaminants present and the need for removal.
Stream Erosion Control	<ul style="list-style-type: none"> • Use the erosion control criteria established in current higher-level studies. • Consult with CH and municipality to determine the need for site specific erosion study, where there are no higher-level studies. • Use 24-hour detention of the 25 mm storm, where an erosion study is not required.
Water Balance	<ul style="list-style-type: none"> • Follow requirements of higher-level documents and <i>Requirements for completion of hydrogeological studies to facilitate Conservation Halton's review</i> for overall site water balance. • Consult with CH regarding feature-based water balance requirements.
Diversion	<ul style="list-style-type: none"> • Maintain existing watershed boundaries and drainage patterns unless there are extenuating circumstances and supporting analysis is provided or where diversion is supported by a higher-level study. • Consult with CH to establish site specific SWM requirements for any proposed diversions.
Climate Change	<ul style="list-style-type: none"> • Watershed studies, subwatershed studies and Master Plans, should consider climate change and plan/design development for climate resilience. Consult with the municipality for direction on how to address climate change in SWM design.

Section 3 Stormwater Management Practices

This section summarizes CH's expectations related to infrastructure elements typically included as part of a stormwater management strategy. These expectations should also complement the requirements in the following documents:

- The guidelines and criteria set out in the Ministry of the Environment *Stormwater Management Planning and Design Manual* (March 2003), as well as any supporting documents such as the forthcoming Low Impact Development guidelines;
- Requirements/recommendations of relevant watershed/subwatershed studies; and
- Municipal guidelines and standards (both local and Regional).

This section does not provide a comprehensive list of SWM practices. CH will consider alternative methods/approaches through consultation, subject to approval by the municipality.

CH recommends SWM strategies for nearly projects be coordinated.

CH requires that SWM infrastructure be in accordance with CH's *Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document* (November 26, 2020). These policies require that most SWM infrastructure, excluding outfalls/spillways, be located outside of areas regulated by CH.

Where the placement of SWM infrastructure within CH's regulated area is necessary, permission is required from CH. The applicant must consult with CH to determine the feasibility/acceptability of the proposed location, as well as site-specific design requirements prior to applying for a permit under O. Reg. 162/06.

3.1 Low Impact Development Techniques

CH encourages the use of LID techniques in SWM strategies, where appropriate. Studies have shown that appropriately operated and maintained LID techniques have multiple positive impacts which are noted in the table below (not all benefits are experienced depending on the LID technique used or how it is considered in the SWM strategy). It is strongly recommended that the applicant consult with CH and the municipality to assess where and what LID techniques will be supported by all parties and if/how they may be credited in any SWM analysis.

TABLE 3-1: LID TECHNIQUE BENEFITS

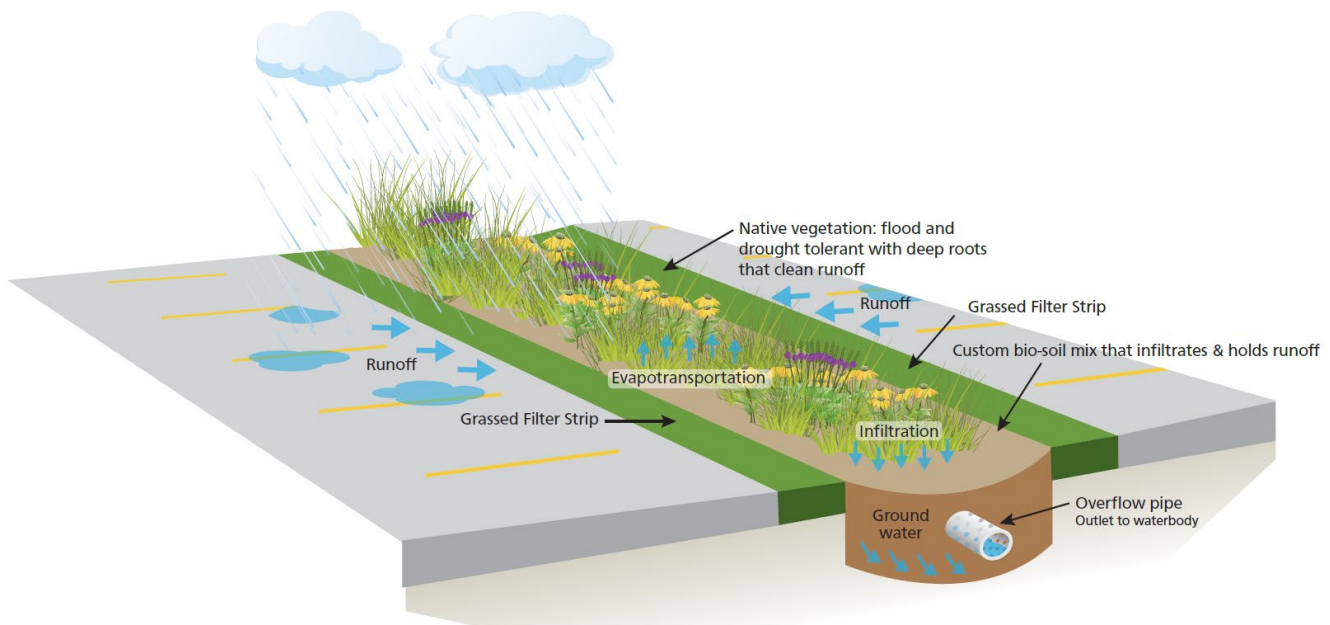
Category	Potential Benefit(s)
Environmental	<ul style="list-style-type: none"> • Helps manage increased runoff volumes to wetlands. • Maintains hydrologic functions of streams and wetlands. • Protects downstream resources. • Mitigates increased runoff volumes resulting from proposed diversions. • Recharges groundwater. • Improves water quality. • Helps reduce potential erosion. • Reduces impacts to and promotes sustainability of ecological habitat. • Improves air quality. • Mitigates the heat island effect through increased vegetation which provides shading of impervious surfaces, deflects radiation from the sun, and releases moisture into the atmosphere.

Category	Potential Benefit(s)
Infrastructure	<ul style="list-style-type: none"> • LID techniques reduce drawdown times in downstream end-of-pipe SWM facilities. • Retrofit areas lacking formal SWM controls. • Provides resiliency to adapt to the negative impacts of climate change. • Reduces volume of runoff and thermal loading of SWM facilities. • Reduces nuisance flooding related to poorly graded sites or lack of storm outlet.
Social	<ul style="list-style-type: none"> • Improves human well-being through increased green space, reduced noise levels, and enhanced aesthetics. • Increases road safety through traffic calming and aligns with objectives of creating 'Complete Streets' in urban areas https://www.completestreetsforcanada.ca/. • Boosts property values.

Source: Sustainable Technologies Evaluation Program; USEPA.

Of value are LIDs techniques that provide lot level controls as they retain rainfall where it falls (e.g., rain gardens/bioretention cells, green roofs, and water reuse; see Figure 3-1). Nevertheless, it is recognized that the use of infiltration techniques may not be suitable in certain instances, due to land use (e.g., gas stations), soil conditions (e.g., high water table) or area sensitivity (e.g., Vulnerable Areas as defined under the Clean Water Act, 2006 – municipal wellhead protection areas and water quality issue contributing area).

FIGURE 3-1: EXAMPLE OF LOT LEVEL CONTROL (BIOSWALE)



Source: Conservation Halton.

There are many manuals available which can assist in informing the location and design of LID techniques. CH currently uses the Toronto and Region Conservation Authority (TRCA) and Credit Valley Conservation (CVC) *Low Impact Development Stormwater Planning and Design Wiki Guide* (https://wiki.sustainabletechnologies.ca/wiki/Main_Page) to guide LID techniques technique.

Information to be provided within the SWM report includes a description of the design objectives (i.e., water quality, erosion and/or quantity control) and confirmation of site appropriateness such as land use and existing site conditions. Of note, the applicant should ensure that the LID technique design is supported by geotechnical and hydrogeological investigations following the TRCA/CVC guide. Calculations supporting the LID technique designs must also be provided by a qualified engineer.

3.2 Oil/Grit Separator Units

Oil/grit separator (OGS) units, where recommended as part of the stormwater quality management system, should be incorporated into a multi-component approach (i.e., combined with other quality control measures such as LID techniques) to provide adequate treatment and build infrastructure resiliency. Placement of the OGS is dependent on the other measures used, but typically should be placed upstream of the LID techniques. OGS units will only be accepted as standalone quality controls where it is demonstrated that additional methods are unfeasible, such as on small redevelopment sites or, due to building code setbacks.

CH accepts the removal efficiency of OGS units as accredited by ETV Canada. At present, no ETV Canada certified unit can reach 80% TSS removal. For non-accredited units, CH only accepts a credit of 50% TSS removal efficiency for units sized to provide 80% TSS removal. In either case, the remaining fraction of TSS removal should be provided using other methods described in this section. For example, an OGS unit and grassed swales (see LID techniques).

OGS units should be sized to capture and treat at least 90% of the runoff volume that occurs on the site on a long-term average basis.

Sizing calculations and documentation regarding certification/re-certification must be provided in the SWM report for any proposed unit. The sizing calculations should include TSS removal percentage, percentage annual runoff treated, particle size distribution (CH recommends use of the ETV distribution) and particle specific gravity used in sizing. Maintenance requirements should also be outlined.

3.3 Filtration Units

Filtration units are water quality control devices which generally remove finer particles than OGS units through physical/mechanical separation and may be a preferable water quality control device. Filtration units may be accepted as standalone quality controls where it is demonstrated that additional methods are unfeasible, such as on small redevelopment sites or, due to building code setbacks.

Some units have been certified according to ETV Canada as achieving an 80% TSS removal. CH accepts the removal efficiency of filtration units as accredited by ETV Canada. For non-accredited units, CH provides a credit of 50% TSS removal. The remaining fraction of TSS removal should be provided using other methods described in this section.

Sizing calculations and documentation regarding certification/re-certification must be provided in the SWM report for any proposed unit. The sizing calculations should include percentage TSS removal, percentage annual runoff treated, particle size distribution and particle specific gravity used in sizing. Maintenance requirements should also be outlined.

3.4 Rooftop Storage

Flat building roofs, such as on commercial or industrial buildings, can be designed to store runoff and dampen/reduce the structure's peak flow rate. Where rooftop storage is proposed and permitted by the municipality, controls should be integrated with the building's design to prevent/discourage removal.

The type of control to be installed should be specified in the SWM report/brief with supporting manufacturer's design information provided in the appendix. Sizing calculations should be provided outlining the number and placement of the controls, release rate, ponding volume, and drawdown time. These must be for individual structures as well as for the entire roof. Clogging of the control structures (typically 50% blockage) should be considered in the design.

Rooftop runoff is generally considered "clean" and can be discharged directly to a receiving watercourse/wetland or infiltrated without additional water quality treatment, although polishing through a vegetative filter is recommended. "Clean" rooftop runoff should be separated from contaminated runoff to reduce loading on the quality control system, if possible.

3.5 Parking Lot and Underground Storage

Sites can use aboveground/parking lot ponding or underground storage for the purpose of quantity control. Underground storage can consist of oversized pipes (super pipes), precast or cast-in-place concrete tanks, or individual pre-manufactured units.

The system should be designed to minimize the opportunities for controls to be removed and, where possible and allowed, the controls providing quantity control (i.e., orifice tube, maintenance hole, etc.) should be located such that it is partly on public lands.

Sizing calculations for any orifice/pipe restrictions should be provided. A stage-storage-discharge chart indicating all storm events is recommended and should contain elevations, equations used, coefficients of discharge, orifice and weir details, tailwater, surface area and resulting volume, and drawdown times.

If underground storage is proposed to provide Regulatory Storm control, it must be supported by the municipality and CH and evaluated through higher-level studies for land use planning. The facility should be in public ownership, or the municipality should have an ability to ensure appropriate operation and maintenance of a privately-owned facility for all infrastructure life stages. Sizing for the facility must take into consideration the potential for storm stacking, as outlined in Section 3.7.2.

The design drawings should provide details of these restrictions and their outlet. The maximum ponding extent, elevation, and storage volume should be provided at each ponding location and shown on a drawing.

3.6 Consideration of New Technologies

To foster innovation in stormwater management, new products and emerging technologies are encouraged. New technologies should be supported through background documentation, pilot studies, monitoring and adaptive management. Consult with municipalities and CH early in the design process to establish requirements for approval.

3.7 Stormwater Management Ponds

Stormwater management ponds (SWMPs) may be designed to provide water quantity, water quality, and erosion control. Depending on the requirements of the study area and the specific systems, as well as municipal design standards, SWMPs can be configured as a dry pond, wet pond, wetland, or hybrid wet pond/wetland. The majority of SWMPs are in municipal ownership.

In general, all SWMPs must be supported by a design report and detailed drawings. Calculations supporting the stage-storage-discharge curve (i.e., elevations, equations used, coefficients of discharge, orifice and weir details, tailwater, surface area and resulting volume, storm events, drawdown times, etc.), sediment forebay, and length-to-width ratio should be provided. The figures/drawings must show the emergency spillway, erosion protection, pond outlet control structure details, the outfall and at least one cross-section through the facility. The amount of detail required for a SWMP design directly corresponds to the scope of work for the project/study.

3.7.1 Outlet Control Structure

The details of the outlet control structure should be provided within the SWM report as well as on an appropriate engineering drawing. The outlet control components should be designed in such a way that they cannot be readily removed or altered (see Figure 3-2).

FIGURE 3-2: EXAMPLE OF DESIRED OUTLET CONTROL COMPONENTS



Source: Conservation Halton.

The pond design should consider potential blockage of all low flow and grated outlet structures (typically 50%); however, if there is a potential for larger debris being transferred through the system, additional blockage considerations may need to be analyzed.

Analysis must be provided that demonstrates the facility is able to meet the required level of quantity control under both free-flowing conditions and under submerged outlet conditions (i.e., tailwater conditions) resulting from flooding within the receiving watercourse system. It should further be demonstrated that the facility operation provides sufficient capacity under both conditions (i.e., the emergency spillway at the facility outlet would not convey flows under either condition). Tailwater effects can be analyzed assuming Regulatory Storm flood elevations within the channel for the full range of storm events controlled within the SWMP. The analysis may alternatively assume a static tailwater condition at the outlet whereby the water surface elevation within the receiving watercourse corresponds to the return period of the design storm being assessed. Other analytical methods can be considered.

3.7.2 Emergency Spillway and Freeboard

The emergency overflow spillway for a SWMP should be designed to safely convey the greater of the uncontrolled 100-year peak or Regional Storm flow to the receiving system. If the required spillway size is considered infeasible due to local constraints, additional discussions with the municipality and CH will be required to determine the acceptable conveyance capacity of the emergency spillway, and any additional

flood protection which may be required for properties adjacent to the facility during an overflow condition. A piped system may be considered/required for valleys with high and/or unstable slopes.

The proposed design should be supported with calculations demonstrating the full length of the flow path has been designed with adequate capacity including freeboard and erosion resistance along the entire flow path. Drawings must include details for the proposed spillway through plan, profile, and cross-sectional views.

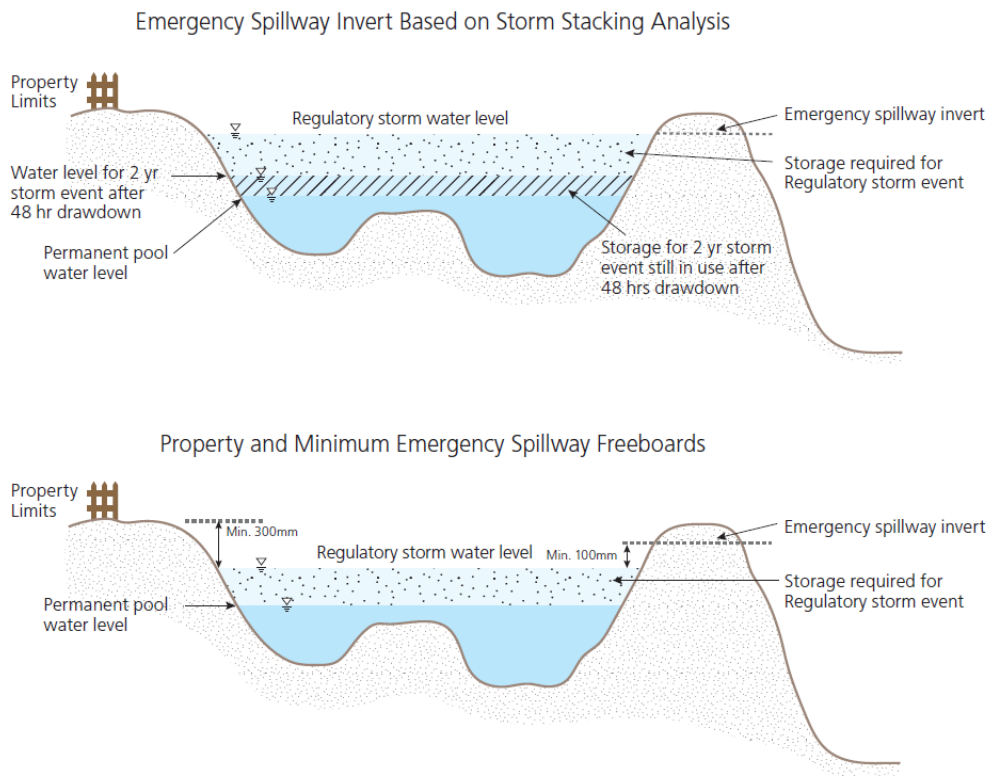
A minimum of 0.3 m of freeboard should be provided above the greater of the Regional Storm or 100-year designed operating water surface elevation in the pond to the edge/limit of the pond block. This requirement applies to all SWMP, including those not designed specifically for Regulatory Storm quantity control.

Where higher-level studies, such as the North Oakville Creeks Subwatershed Study or the Sixteen Mile Creek Areas 2 and 7 Subwatershed Update Study, credit Regulatory Storm Control facilities in land use planning and regulatory flood hazard mapping:

- Storage calculations for the Regulatory Storm should presume a 2-year design storm occurred 48 hours prior to the Regulatory Storm, with the emergency overflow invert elevation set above the resulting Regulatory Storm maximum water surface elevation; and,
- The emergency overflow invert elevation must also be a minimum of 100 mm above the normal Regulatory Storm water surface elevation (i.e., the water surface elevation calculated based on an assumption that all flood storage above the permanent pool was available prior to the Regulatory Storm occurring). CH recommends that this criterion apply to all SWM ponds.

Figure 3-3 provides a visual representation of the above.

FIGURE 3-3: FREEBOARD & EMERGENCY SPILLWAY PLACEMENT FOR REGULATORY STORM CONTROL PONDS



Source: Conservation Halton.

3.7.3 Geotechnical Considerations

A geotechnical report is required to support the SWMP design at the detailed design stage. For Regulatory Storm control facilities with berm heights more than 0.5 m (either on pond or valley sides) and/or berm top widths less than 7.5 m, the supporting geotechnical (i.e., slope stability) analysis should verify that the structure has been designed to withstand all static and dynamic forces and conditions (including groundwater) anticipated for all foreseeable conditions (e.g., during construction (undrained); permanent pool (drained); steady state full pond (undrained); and rapid drawdown (undrained)). This analysis should be based on a geotechnical site investigation considering an adequate number of representative boreholes and standpipe piezometers/monitoring wells. The need for seismic analysis is to be determined by the qualified professional based on standard industry practices and an understanding of the project's risks.

Construction notes for the SWMP berms, slopes and liners must be included on the engineering drawings (e.g., material composition, compaction percentage, moisture, lift thickness, etc.).

It is recommended that the excavated pond subgrade be inspected by qualified professionals to confirm geotechnical design recommendations and/or provide design refinements prior to pond completion.

3.7.4 Thermal Mitigation

SWMPs such as wet ponds have been shown to increase effluent temperatures as much as 5°C (MOE, 2003). Where the downstream receiver is cold or cool water habitat, it is recommended that efforts be made to minimize temperature impacts so that the ambient stream temperatures are met or are within acceptable ecological requirements. Similar practices are encouraged for SWM facilities that discharge to warm water habitats. Where Species at Risk-occupied and/or contributing habitat is present, MECP will direct temperature mitigation measures required.

Potential thermal mitigation measures are listed below in Table 3.2. Consultation with the municipality is highly recommended to identify an appropriate approach within their jurisdiction.

TABLE 3-2: THERMAL MITIGATION MEASURES

Design Component	Mitigation Measure
Pond Design	<ul style="list-style-type: none"> • Use a northwest-southeast orientation of the longest axis to maximize shading, where possible. Discussion with CH is recommended to determine the best orientation. • Maximize the pond length to width ratio based on pond block dimensions, not flow path, to enhance the effectiveness of plantings to shade the surface area of the pond. • Ensure the volume of water in the permanent pool between 1.5 m to 3.0 m depth (not applicable for wetlands) is at least equivalent to the volume of water generated by a 10 mm storm event. • Use a reverse-slope bottom draw outlet design, within the deeper pool area. • Use cooling trenches, where effective from a length and siting perspective. • Minimize the use of stone/concrete in the outlet channel design to minimize solar warming. • Use long buried concrete outlet pipes (+100 m).

Design Component	Mitigation Measure
Landscaping	<ul style="list-style-type: none"> • Increase canopy cover within the SWM facility (particularly along the west and south sides) in accordance with the municipal and CH Landscaping Guidelines. • Create peninsulas within the ponds sufficiently large to support tree canopy growth. • Include a 3 m wide shelf around the perimeter of the pond at the permanent pool, creating a 0.3 m deep wetland planting area. (Slope can vary and may coincide with safety shelves.) • Enhance riparian vegetation along the drainage path between the SWM facility outlet and the receiving watercourse.
Upstream Works	<ul style="list-style-type: none"> • Incorporate LID techniques that promote infiltration to groundwater.

3.7.5 Ownership of Regulatory Storm Control Ponds

For Regulatory Storm control ponds that have been credited by municipalities and CH in higher-level studies for land use planning and regulatory flood hazard mapping, CH requires either public ownership of the facility or evidence that the municipality has the legal right to ensure the proper operation and maintenance of a privately-owned facility.

3.8 Outfalls

Outfalls provide the discharge point for SWM facilities, typically to a receiving watercourse or drainage feature (e.g., storm sewer, ditch, etc.). All outfalls proposed within regulated areas will require a permit from CH under O. Reg. 162/06. Figure 3-4 provides examples of outfalls within regulated areas. An outfall permit checklist should be obtained through permit pre-consultation with CH staff.

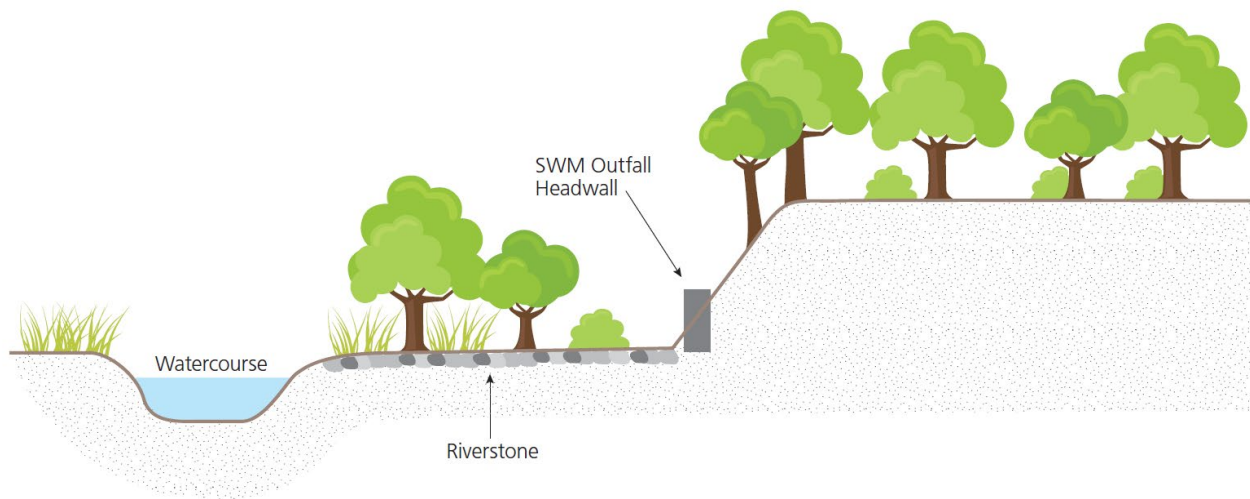
CH discourages the construction of new outfalls within regulated areas unless required to support the flow regime of the natural heritage system and justified to CH's satisfaction in accordance with O. Reg. 162/06. However, greenfield development will typically require a new outfall to the natural system. Where permitted, storm outfalls should be sited and designed to minimize impacts to the natural heritage features, address valley slope stability, protect watercourse embankments and ensure no wetland interference as per CH Board-approved policies.

Where feasible, outfall entry points into a valley should generally be placed co-incident with the valley toe, minimally above the bankfull channel (i.e., above the 2-year flood elevation) and outside of the 100-year erosion limit (see Figure 3-5). The outfall (and where required any constructed conveyance channel) should be positioned such that flows are directed down current with the receiving watercourse. A site visit with CH staff and the designer is recommended to confirm any new outfall locations.

New storm sewer outfalls proposed within valley systems with slopes greater than 6 metres in height should be designed to protect the natural integrity of the valley slope (i.e., slope stability). This normally includes the use of a drop shaft and tunneling but other methods will be considered depending on site circumstances. The outfall may also be designed to accommodate emergency flows. Where the outfall construction impacts a valley slope (even when installed utilizing trenchless technologies), the outfall permit application must be supported with a geotechnical analysis demonstrating the outfall will not negatively impact stability of the existing slope. Refer to CH's *Slope Stability Assessment Submission Guidelines* for additional information in this regard.

FIGURE 3-4: EXAMPLES OF OUTLETS WITHIN CH REGULATED AREAS

Source: Conservation Halton.

FIGURE 3-5: DESIRED OUTFALL LOCATION

Source: Conservation Halton.

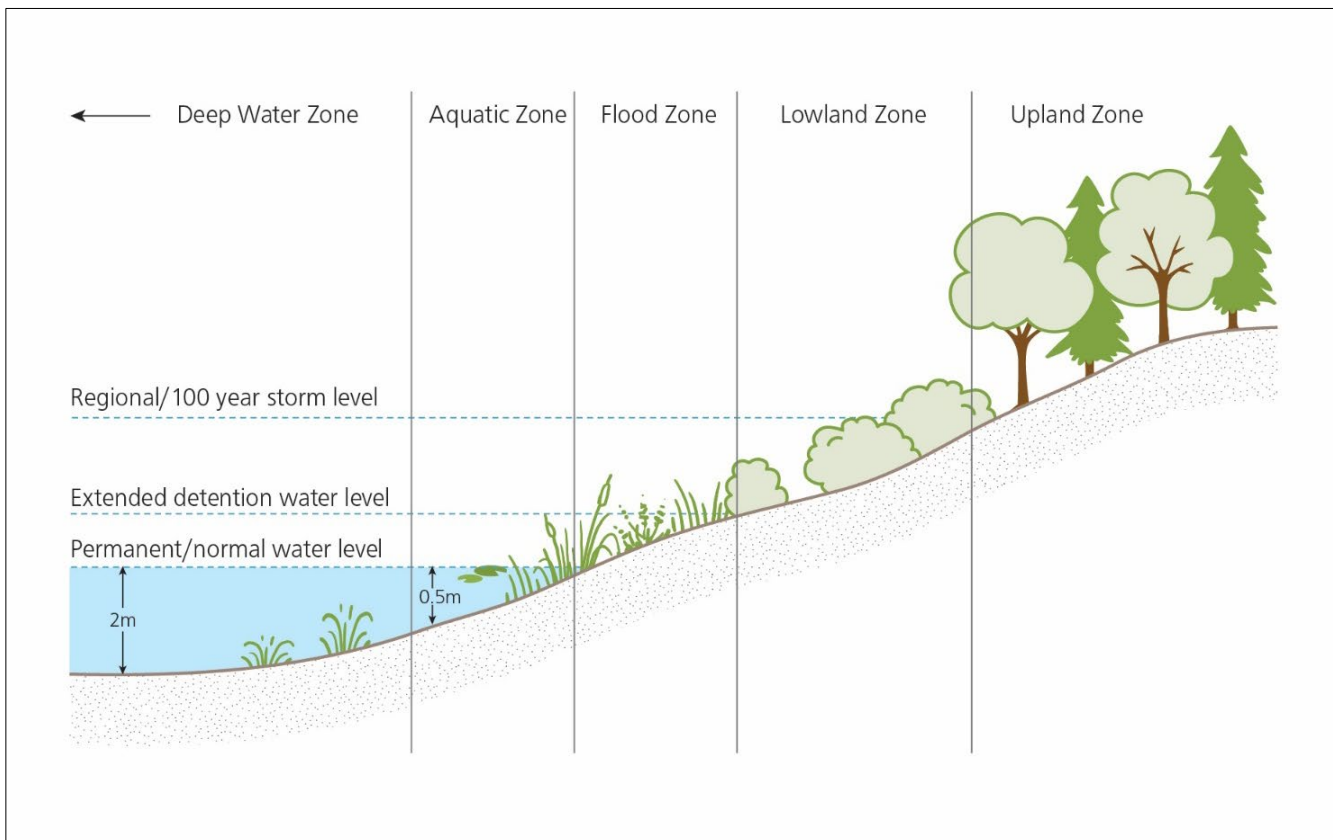
The outfall design must include calculations demonstrating adequate erosion protection under maximum discharge velocity conditions. CH does not support the use of riprap near watercourses; rounded stone (i.e., riverstone or subangular) is required. All analysis supporting the design must be included within the submission.

Restoration plans should be included for any areas disturbed by the installation of the outfall or conveyance channel.

3.9 Landscaping

Landscaping and the selection of appropriate vegetation is an essential component of a SWM strategy. With proper design, plantings contribute to the proper functioning of SWM facilities without impeding the performance of critical design elements or future facility maintenance. CH has specific requirements for planting which can be found in the *Guidelines for Landscaping and Rehabilitation Plans* (July 2021) (Figure 3-6). CH has endorsed alternate landscaping criteria that should be used instead of CH's guidelines in select areas within the watershed. CH staff should be consulted in this regard.

FIGURE 3-6: POND LANDSCAPE ZONES



Source: Conservation Halton.

3.10 Monitoring

Monitoring of the SWM practices implemented is key in ensuring that the desired criteria (e.g., quantity control, quality control, etc.) have been met by the SWM strategy and to provide insight for future designs. Monitoring protocols are set by each municipality, generally through higher-level studies, in consultation with CH as well as part of the MECP Environmental Certificate of Approval. Until the end of the monitoring period, CH requires monitoring reports to be provided within 3 months of the end of the reporting period (e.g., annual monitoring reports within 3 months of year-end). Additional monitoring of SWM works within a regulated area may be established through the permit approval process.

3.11 Summary – Stormwater Management Practices

Table 3.3 provides a summary of CH's recommendations related to SWM practices/infrastructure elements typically included in a SWM strategy.

TABLE 3-3: SUMMARY - SWM PRACTICES

SWM Practice	Key Information
Low Impact Development Techniques	<ul style="list-style-type: none"> • Use LID techniques where appropriate and feasible to do so. • Refer to the TRCA / CVC LID Stormwater Planning and Design wiki guide. • Consult with CH and municipality. • Describe design objectives, confirm site appropriateness, and provide design calculations.
Oil/Grit Separator Units	<ul style="list-style-type: none"> • Incorporate into a multi-component approach. • Size facilities to capture and treat at least 90% of the runoff volume on a long-term average basis. • Apply the removal efficiency of units accredited by ETV Canada. • Apply a maximum of 50% TSS removal efficiency to non-accredited units. • Include sizing calculations and documentation of certification/re-certification.
Filtration Units	<ul style="list-style-type: none"> • Incorporate in a multi-component approach unless additional methods are unfeasible. • Apply the removal efficiency of units accredited by ETV Canada. • Apply a maximum of 50% TSS removal efficiency to non-accredited units. • Include sizing calculations and documentation of certification/re-certification.
Rooftop Storage	<ul style="list-style-type: none"> • Integrate controls with the building's design to prevent/discourage alteration or removal, where allowed by the municipality. • Include sizing calculations outlining number and placement of the controls, release rate, ponding volume, and drawdown time. • Include the type of control proposed and supporting manufacturer's design information.
Parking Lot and Underground Storage	<ul style="list-style-type: none"> • Design system to minimize opportunities to remove controls. • Include sizing calculations for all orifice/pipe restrictions (stage-storage-discharge chart). Design drawings showing locations of restrictions, outlets and maximum ponding elevations are needed.
Consideration of New Technologies	<ul style="list-style-type: none"> • CH is supportive of pilot projects and experimental approaches provided there is monitoring and adaptive management. • Final acceptance of these technologies will require consultation and approval of the municipality as well as CH.

SWM Practice	Key Information
SWM Ponds	<ul style="list-style-type: none"> • Include calculations supporting the design and detailed drawings (e.g., calculations supporting the stage-storage-discharge curve, sediment forebay sizing, and length-to-width ratio). • Show the emergency spillway, erosion protection, pond outlet control structure details, the outfall and at least one cross-section through the facility in figures/drawings. • Provide the level of detail for a SWM plan that directly corresponds to the scope of work for the project/study. • Include the specific requirements for control structure, emergency spillway, geotechnical evaluation, and thermal mitigation.
Outfalls	<ul style="list-style-type: none"> • Site and design outfalls to minimize impacts to the natural environment address valley slope stability, protect watercourse embankments and ensure no wetland interference. • Position, where feasible, the outfall such that it is co-incident with the valley toe, outside the 100-year erosion limit, and above the bankfull channel with flows directed downstream along the receiving watercourse. • Provide calculations demonstrating adequacy of erosion protection measures under maximum discharge velocity.
Landscaping	<ul style="list-style-type: none"> • Follow Conservation Halton's <i>Guidelines for Landscaping and Rehabilitation Plans</i> (July 2021) and municipal guidelines.
Monitoring	<ul style="list-style-type: none"> • Follow the protocols outlined by a higher-level study, the municipality, and MECP or as established through the permit approval process. Submit monitoring reports within 3 months of the end of the monitoring period (including annual reports within 3 months of the year end).

Section 4 Hydrologic Modelling Requirements

This section discusses hydrologic modelling and associated hydraulic calculations. This section should be read in conjunction with the most up-to-date municipal requirements.

Hydrologic modelling is used to approximate the runoff response of a watershed to various climatic conditions under varying land use scenarios (e.g., pre-development, post-development, etc.). The results from hydrologic analyses are used to demonstrate the adequacy of a SWM strategy for erosion and quantity controls.

This section provides limited direction with respect to hydrologic analysis in support of regulatory flood hazard mapping. While it is encouraged that the same parameters be used to support both SWM and floodplain mapping assessments within the same study, different parameters may be required to meet the needs/circumstances of both assessments. Further information will be provided in CH's Guidelines for Floodplain Alterations and Mapping Submissions.

This section presents procedures, computational methods, and parameters that are commonly accepted industry standards supported by CH; however, it is the consulting engineer's responsibility to select an appropriate method and/or justify the parameters used. If the consulting engineer selects an alternative computational method or parameter, an explanation for its use should be provided. In these situations, consultation should be undertaken with CH and municipal staff.

4.1 Software and Documentation

Commonly available hydrologic modelling software should be preferably used. The use of open source (Public Domain) software is recommended. Use of specific software (or model) may be required by a higher-level study. Where appropriate, different models may be considered to achieve different objectives (e.g., subwatershed model, SWM pond design). Modelling should be completed using the most current version of the software unless otherwise requested or agreed upon. For sites less than 5 hectares in total area, a manual calculation method, such as the Rational Method, may be used.

All input parameters should be tabulated within the design report with their sources cited. All model input and output files shall be submitted to CH in digital format (pdf and executable). A model schematic should be provided to facilitate interpretation of the model input and output files. Documentation within the model is recommended. At a minimum, the model should provide the name of the modeller, company, date of the model, purpose of model run (e.g., existing, proposed uncontrolled, proposed controlled, etc.), and the source of topographic data. If there are many digital files, a README file or equivalent is required.

The technical submission should contain enough information such that a qualified professional can replicate the results of the submission. Submitted modelling, calculations, drawings, and reports should be stand-alone documents and contain all key information including documentation obtained from other approved reports that is necessary to support the analysis.

For large or complex areas, applicants should obtain municipal and CH's support of the existing/pre-development conditions models before advancing to post-development analyses.

4.2 Hydrologic Analysis Components

There are several key components that a hydrologic analysis should include as a minimum.

4.2.1 Catchment Delineation

Catchments should be delineated under both pre- and post-development surface drainage conditions. Key features such as ponds, railways, roads, culverts, undrained depressions, wetlands, etc., must be included. The discretization process should be based on field reconnaissance, topographic mapping, aerial photography, and site survey. The best level of topographic data available should be used. LIDAR/DTM data is recommended for watershed/subwatershed studies while total station site survey or equivalent is recommended for subdivision or site plan level modelling. There may be additional information available within approved reports such as watershed/subwatershed studies, EIR/SIS/MESPs, and Area Specific Plans.

Sources must be documented for all topographic and survey data used in the analysis. Reference information should include map title, author, publisher, scale, datum, publishing date and date flown or surveyor name and survey date.

Separate pre- and post-development (interim and ultimate conditions) catchment plans should be submitted in support of the modelling. Catchment plans should be consistent with the modelling completed. Catchment areas should be plotted over pre- or post-development contours and be labelled with catchment ID (consistent with modelling), catchment area, and % impervious/runoff coefficient. Flow direction arrows and the location(s) of outlets should also be shown. Post-development catchment area plans should include proposed land use conditions. A detailed digital (pdf) copy of the labelled catchment drainage area plan(s) should be included as part of the digital submission. A copy of the drainage area plan(s) suitable for insertion into CH's Geographic Information System should be submitted.

4.2.2 Rainfall Input

When assessing hydrology as part of a SWS or other higher-level study, a variety of rainfall distributions for Design Storms should be modelled, and justification provided for the temporal rainfall distribution(s) recommended for use in the study. For continuous modelling, actual historical rainfall records at the nearest available station should be used. A minimum record of 20 years is required.

The rainfall simulation (i.e., single event modelling with Design Storms or continuous modelling with flood frequency analysis) used in the higher-level planning studies should generally be used in subsequent studies (e.g., SWM report for a subdivision). Should an alternate rainfall method be selected, the rationale for the selection must be validated and justified. It is recommended a rainfall sensitivity analysis be undertaken to support this justification. For the sizing of SWMPs, the 24-hour Chicago design storm distribution should be considered with a suite of storm lengths and distributions in accordance with municipal guidelines to demonstrate peak flow control and calculate required storage volumes.

Rainfall amounts should be based on the Intensity-Duration-Frequency (IDF) curves for the precipitation station identified within the municipality's requirements. IDF information is provided in Appendix A1 through A6. Municipalities should be contacted to confirm the most current IDF data to use and determine if the modeler will need to consider specific historical storm events.

The Regional Storm (Hurricane Hazel) must also be modelled. CH preference is to model the last 12 hours of the Hurricane Hazel storm event assuming pre-saturated soils. However, the full 48-hour storm event could be used if the results are properly assessed (e.g., rainfall distribution and reasonable runoff volume). Depending on the size of the catchment area, areal reduction factors may be applicable. The Hurricane Hazel distribution and areal reduction factors are provided within Appendix A7.

The rainfall time step should be no larger than 1/5 (20%) of the smallest basin's approximate time to peak.

4.2.3 Hydrologic Parameters

Sources and rationale for the selection of all hydrologic parameter values should be provided, especially those factors affecting runoff generation (i.e., percentage impervious coverage, soil infiltration method and related parameters, etc.), and factors affecting hydrograph shape (i.e., flow length, Manning's Roughness Coefficients, etc.). All hydrologic parameters should be compared to the applicable higher-level planning study(s) or confirmed through consultation.

Values/approaches typically acceptable to CH are found in Appendix B1 through B12; however, while approaches and values are given, it is recognized that the values are not uniformly applicable. Typical values may need to be refined for several reasons (e.g., to represent watershed topography, software model, routing approach, event return period, model purpose, etc.). Model calibration and validation using local data, completed during the higher-level study to improve accuracy of the model results, may have adjusted parameters. References and justification should be provided for values selected.

Imperviousness

An accurate estimate of the percentage of imperviousness within catchments is very important as hydrologic models are generally sensitive to this parameter. This parameter will impact the proposed stormwater runoff volumes and consequently the land requirements and volume of the SWM facilities.

Impervious areas should be determined by sampling a representative area in each catchment for higher-level studies. For detailed level studies, they should be calculated by using the draft plan to calculate an overall imperviousness based on estimated maximum development envelopes and road configuration. Conservative assumptions for future amenity areas should be applied. Typical values for imperviousness are found in Appendix B1.

Rainfall Abstractions

Initial Abstraction (Ia) should be set for both the impervious and pervious areas within modelled catchments.

Three methods for determining infiltration have commonly been applied within CH's jurisdiction: 1) the Horton method, 2) the Soil Conservation Service (SCS) curve number method, and 3) the Green-Ampt method. To allow for a direct comparison of impacts between existing and future conditions, consistent infiltration approaches should be applied during both pre-development and post-development model scenarios. Typical values for rainfall abstractions are found in Appendix B2 through B6. Modelling for the 1:2 through 1:100-year storm events should consider average soil moisture; however, saturated conditions must be considered when modelling the Regional Storm event. For example, using the SCS method, AMC II should be used for 1:2 through 1:100 year and AMC III should be used for 12-hr Hurricane Hazel.

A thorough understanding of these methodologies is required to ensure their proper application within the hydrologic modelling. This is especially important where the hydrologic modelling has not been validated against suitable monitoring data.

Time of Concentration

Hydrograph time of concentration values can be determined based on the Airport Method (for catchments with a runoff coefficient less than 0.40) or the Bransby-Williams Equation (for catchments with a runoff coefficient greater than or equal to 0.40). The equations and design charts for these methods are provided within Appendix B7 and B8. Other technically sound and well documented methods, such as the Uplands Method, are also acceptable as the standardized equations may not accurately represent site conditions or be consistent with municipal criteria.

The time to peak should be calculated as two-thirds of the time of concentration (or $t_p = 0.67 t_c$).

The hydrograph computation time step (DT) should be no greater than 1/5 of the catchment time to peak (i.e., $DT = 0.2 t_p$) but not less than the rainfall time step.

Overland Flow Length & Catchment Widths

Various hydrologic software requires that overland flow length and/or catchment widths be provided as an input parameter for each subcatchment. Overland flow length for pervious areas in an un-calibrated watershed can generally be estimated using the equation available in Appendix B9. Other approaches can be used where justified to CH staff satisfaction.

4.2.4 Channel Routing

Channel routing elements should be considered in the hydrologic model as determined by site conditions. Channel routing is most applicable to large-scale watershed and subwatershed hydrologic modelling. Rating curves and travel times used in the routing should be determined by hydraulic calculations of the backwater profile or by procedures available in the approved model software (e.g., Modified Pulse, Muskingum method, etc.). Alternatively, a stage-storage relationship can be generated using HEC-RAS. The routing methodology applied and technical justification for the associated routing parameters should be included in the report text of the submission.

Cross-section information used to define channel routing elements should be obtained from sufficiently detailed DTM data or field surveys. Cross-sections should be extended such that flows do not exceed the rating curve; however, cross-sections should not be substantially larger than the wetted width associated with the largest modelled storm.

The routing time step must be determined relative to the smallest channel section and be equal to the hydrograph time step at a maximum. Selected Manning's Roughness Coefficients for overland flow should be in accordance with the values in Appendix B10 and supported in the submission documentation.

4.2.5 Reservoir Routing

Many hydrologic modelling packages include several reservoir/storage routing tools, including modelling for natural storage areas and SWMP. When modelling natural features such as wetlands, reservoir routing commands are typically applied over the full range of storms, up to the Regional Storm. Routing/storage elements associated with SWMPs are generally applied only when modelling the 1:2 year through 1:100-year events. These however may be applied when modelling the Regional Storm, if the pond has been designed specifically to provide Regional Storm controls and meets all CH, municipal and provincial criteria for such a pond (see Section 3.6).

Where routing has been used, documentation should be provided discussing the routing used, the source data for the routing element, and any assumptions made when determining the routing of flows, especially for natural storage areas.

Outlet orifice and emergency spillway details should be provided along with a stage-storage-discharge table. The table should include the following for each storm event: maximum water surface elevation; maximum storage volume used; peak discharge rates; and approximate drawdown time.

Discharge equations should be used for free-flowing hydraulic structures such as orifices, weirs and spillways and are provided in Appendix B11. When calculating orifice discharge in an outlet structure, the orifice equation should only be applied for water levels above the centroid of the orifice. Flow rates for water levels below the orifice centroid should be calculated using the weir equation. Typical discharge coefficients are provided in Appendix B11.

4.3 Rational Method

The Rational Method can be used for developments which are less than 5 hectares in total area and consideration for the effects of detention/SWM are not required (the methodology is limited in this regard). The rainfall intensity should be based on the IDF curves and time of concentration identified within the municipality's SWM standards/guidelines. The municipality should be contacted to confirm the most current IDF data to use. The Rational Method equation and runoff coefficients are provided in Appendix B12.

4.4 Summary – Hydrologic Modelling Requirements

Table 4.1 provides a summary of the requirements for hydrologic modelling undertaken to support the SWM strategy proposed.

TABLE 4-1: SUMMARY – HYDROLOGIC MODELLING REQUIREMENTS

Modelling Component	Key Information
Software & Documentation	<ul style="list-style-type: none"> • Use software (or model) required by a higher-level study or use a commonly available modelling software in the absence of higher-level study requirements. • Tabulate all input parameters within the design report with their sources cited. • Submit all model input and output files in both digital and hard copy formats. • Include summary tables demonstrating that targets will be met. • Provide a model schematic to facilitate interpretation of the model input and output files. • Obtain municipal and CH approval of pre-development condition models before submitting post-development analyses for large or complex areas.
Hydrologic Analysis Components	<ul style="list-style-type: none"> • Delineate catchments under both pre- and post- development conditions. • Include base topographic mapping, flow direction arrows, the location(s) of outlets and key features in the catchment depictions. • Use the rainfall distribution included in higher-level planning studies. • Base rainfall amounts on municipal IDF curves. • Model the Regional Storm. • Provide sources and rationale for the selection of all hydrologic parameter values and compare them to the applicable higher-level planning studies or confirm them through pre-consultation with the municipality and CH. • Include channel routing in the hydrologic model as determined by site conditions and include the routing methodology applied and technical justification for the associated routing parameters. • Provide documentation where routing has been used, including the assumptions, especially for natural storage areas.
Rational Method	<ul style="list-style-type: none"> • The Rational Method may be acceptable for developments less than 5 hectares in area. • Base the rainfall intensity on the IDF curves and time of concentration identified within the municipality's SWM standards/guidelines.

Section 5 Submission Document Requirements

This section outlines the information needed to satisfy CH with respect to SWM for specific *Planning Act* applications. The items listed below do not replace municipal or provincial requirements. While the following components and format are suggested for inclusion, the report may follow a different format, or a component may be presented in a separate report and referenced in the subject report. Additional details are provided within Sections 2.0 to 4.0 of this document.

CH Permit Application Checklists should be used for submission requirements for infrastructure and grading works proposed within an area regulated under O. Reg. 162/06.

5.1 Functional Servicing Report (OPAs, ZBAs, Draft Plan of Subdivision/Condominium)

A Functional Servicing Report (FSR) will be required to support the issuance of conditions for Subdivision Draft Plan Approval as well as to support approval of Official Plan and Zoning By-law Amendments. The FSR may be combined with an EIR or EIS/EIA. The purposes of these reports are to show, at a conceptual level, the following:

- Location/design criteria for SWM infrastructure and LID techniques;
- SWM blocks are sufficiently sized to address the required level of treatment;
- SWM facilities drain to appropriate outlets; and
- development lots/blocks do not encroach into natural hazards, regulated areas or protected natural heritage areas in accordance with CH and municipal policies.

While other information such as water and sanitary servicing are contained with an FSR, the components listed in Table 5.1 are related to CH's review for SWM.

TABLE 5-1: FUNCTIONAL SERVICING REPORT (OPAS, ZBAS, DRAFT PLAN OF SUBDIVISION/CONDOMINIUM)

Item Number	Components
1	Project Description This section of the FSR should include a description of the development that is proposed for the site.
2	Referenced Drainage Studies/Background Reports This section of the FSR should outline all background reports relevant to the development, including but not limited to: <ul style="list-style-type: none"> • Approved Watershed, Subwatershed Studies • Approved Subwatershed Impact Study/Environmental Implementation Report/Master Environmental Servicing Plan • Approved SWM reports for same site and nearby developments (for peak flow analysis)
3	List of Design Criteria (refer to Section 2.0 for details) This section of the FSR should list the design criteria for the development, including but not limited to: <ul style="list-style-type: none"> • Water quality control • Erosion control • Water quantity control • Water balance – overall site • Water balance – feature based*

Item Number	Components
4	<p>Site Conditions</p> <p>This section should provide a description of existing and proposed site conditions, including but not limited to:</p> <ul style="list-style-type: none"> • Identified limits of development • Hazard constraints mapping <ul style="list-style-type: none"> ○ Topographic details ○ Meander belt allowance for unconfined¹ systems – fluvial geomorphic study ○ Slope stability allowance for confined¹ systems – geotechnical engineering study or conservative stable slope assessment based on acceptable principles ○ Floodplain delineation/refinement ○ Adjacent regulated allowances • Natural Heritage System • Preliminary grading plans
5	<p>Site Hydrology and Hydraulics (Pre- and Post-Development) (refer to Section 4.0 for details)</p> <p>This section should characterize site hydrology and hydraulics under both pre- and post-development conditions and should include the following:</p> <ul style="list-style-type: none"> • Topographic maps showing the following for pre-development and post-development (interim and ultimate) conditions: <ul style="list-style-type: none"> ○ Sub-basin boundaries ○ External contributing drainage areas ○ Development drainage area ○ Preliminary major and minor drainage patterns ○ Land use ○ Watercourses and drainage features ○ Points of discharge from the site ○ Existing on and off-site drainage facilities, including overland swales • Input parameters (hydrologic analysis) in tabular format • Output summary (hydrologic analysis) in tabular format • Hydrologic calculations (Appendix) • Detailed hardcopy of any modelling as well as digital copy (Appendix)
6	<p>Stormwater Management Strategy (refer to Section 3.0 for details)</p> <p>The section of the FSR should outline the functional stormwater management strategy for the site, including but not limited to:</p> <ul style="list-style-type: none"> • Proposed technologies • Justification for choice of proposed technologies • Summary table(s) demonstrating that quality, erosion and quantity design criteria will be met • Preliminary calculations (Appendix) • Preliminary design plans in accordance with municipal requirements

Item Number	Components
7	<p>Hydrogeology</p> <p>This section should characterize the site's hydrogeologic conditions and identify any requirements and constraints.</p> <ul style="list-style-type: none"> • Refer to CH's <i>Requirements for Completion of Hydrogeological Studies to Facilitate Conservation Halton's Reviews</i> • Detailed water balance including identification of any mitigation measures and locations • Confirmation that preliminary LID technique & SWMP designs are appropriate for existing groundwater, soil and bedrock conditions (e.g., depth to seasonally high-water table; depth to bedrock; disruption of shallow groundwater flow to areas of groundwater discharge, etc.) and the requirement for any specific mitigation measures (e.g., use of subdrain within bioretention facility)
8	<p>Water Balance for Site Specific Feature*</p> <p>This section of the FSR should provide water balance requirements and the proposed strategy for specified natural features.</p> <ul style="list-style-type: none"> • Preliminary water balance to specific natural heritage feature (evaluating impacts of changes to hydrologic functions including flow rate, volume, timing, duration, etc.) • Identification of mitigation measures and potential locations
9	<p>Baseline Monitoring Program (if applicable)</p> <p>This section should outline the final detailed baseline monitoring program, including but not limited to:</p> <ul style="list-style-type: none"> • Reference applicable higher-level planning studies • Outline detailed baseline monitoring required prior to any Site Alteration, if applicable • Identify monitoring plan components to be finalized during detail design
10	<p>Future Study Requirements</p> <p>This section of the FSR should outline any commitments for detailed design.</p>
11	<p>Summary and Conclusions</p>
<p>Note:</p> <ul style="list-style-type: none"> - All reports and engineering plans must be signed, stamped and dated by a Professional Engineer, except for any fluvial geomorphological reports which should be signed, stamped and dated by a Professional Geoscientist. - Contact CH for current digital drawing submission requirements. <p>* Pre-consultation with CH before design is strongly recommended</p> <p>1 - Confined systems mean those systems where the watercourse is contained within valleys greater than or equal to 2 metres in height. Unconfined systems mean those systems where the watercourse is contained within valleys less than 2 metres in height.</p>	

5.2 SWM Design Report (Subdivision Detailed Design)

The purpose of this report is to provide detailed calculations, methodology, background criteria, and engineering drawings to support the detailed subdivision design. Typically, the report is an expansion of the earlier FSR. This is required to obtain clearance of draft plan conditions to support Registration of a Plan of Subdivision. This information is also required for permit issuance, where applicable. The same report and relevant drawings should be provided through both approval processes.

TABLE 5-2: SWM DESIGN REPORT (SUBDIVISION DETAILED DESIGN)

Item Number	Components
1	<p>Project Description</p> <p>This section of the SWM Design Report should include a description of the development that is proposed for the site.</p>
2	<p>Referenced Drainage Studies/Background Reports</p> <p>This section of the SWM Design Report should outline all background reports relevant to the development, including but not limited to:</p> <ul style="list-style-type: none"> • Approved Watershed, Subwatershed Studies • Approved Subwatershed Impact Study/Environmental Implementation Report/Master Environmental Servicing Plan • Functional Servicing Report. • Approved SWM reports for same site and near by developments (for peak flow analysis)
3	<p>List of Design Criteria (refer to Section 2.0 for details)</p> <p>This section of the SWM Design Report should list the design criteria for the development, including but not limited to:</p> <ul style="list-style-type: none"> • Water quality control • Erosion control • Water quantity control • Water balance – overall site • Water balance – feature based*
4	<p>Site Conditions</p> <p>This section should provide a description of existing and proposed site conditions, including but not limited to:</p> <ul style="list-style-type: none"> • Identified limits of development • Hazard constraints mapping <ul style="list-style-type: none"> ○ Topographic details ○ Meander belt allowance for unconfined systems¹ – fluvial geomorphic study ○ Slope stability allowance for confined systems¹ – geotechnical engineering study or conservative stable slope assessment based on acceptable principles ○ Floodplain delineation/refinement ○ Adjacent regulated allowances • Natural Heritage System • Detailed grading plans

Item Number	Components
5	<p>Site Hydrology and Hydraulics (Pre- and Post-Development) (refer to Section 4.0 for details)</p> <p>This section should characterize site hydrology and hydraulics under both pre- and post-development conditions and should include the following:</p> <ul style="list-style-type: none"> • Topographic map showing the following for pre-development and post-development (interim and ultimate) conditions: <ul style="list-style-type: none"> ○ Sub-basin boundaries ○ External contributing drainage areas ○ Development drainage area ○ Major and minor drainage patterns ○ Land use ○ Watercourses and drainage features ○ Points of discharge from the site ○ Existing on and off-site drainage facilities, including overland swales • Input parameters (hydrologic analysis) in tabular format • Output summary (hydrologic analysis) in tabular format • Detailed hydrologic calculations (Appendix) • Detailed hardcopy of any modelling as well as digital copy (Appendix)
6	<p>Stormwater Management Strategy (refer to Section 3.0 for details)</p> <p>The section of the SWM Design Report should outline the detailed stormwater management strategy for the site, including but not limited to:</p> <ul style="list-style-type: none"> • Proposed technologies • Justification of proposed technologies • Summary table(s) demonstrating that quality, erosion and quantity design criteria will be met • Detailed calculations (Appendix) • Detailed design plans in accordance with municipal requirements sufficient for construction
7	<p>Hydrogeology</p> <p>This section should characterize the site's hydrogeologic conditions and identify any requirements and constraints.</p> <ul style="list-style-type: none"> • Refer to CH's <i>Requirements for Completion of Hydrogeological Studies to Facilitate Conservation Halton's Reviews</i> • Detailed design of any infiltration facilities required to maintain pre-development water balance • Confirmation that SWM and infiltration facilities are designed appropriately for hydrogeological conditions (e.g., soil types and depth to seasonally high-water table)

Item Number	Components
8	<p>Water Balance for Site Specific Feature*</p> <p>This section of the SWM Design Report should provide water balance requirements and the proposed strategy for specified natural features.</p> <ul style="list-style-type: none"> Detailed water balance to specific natural heritage feature (evaluating impacts of changes to flow rate, volume, timing, duration, etc.) Identification of mitigation measures and locations
9	<p>Erosion and Sediment Control Plans</p> <p>The proposed erosion and sediment control measures to be used on-site should be outlined in this section and supported with drawings.</p> <ul style="list-style-type: none"> <i>Erosion and Sediment Control Guide for Urban Construction (TRCA 2019)</i> <i>Erosion and Sediment Control Inspection Guide (TRCA, 2008)</i>
10	<p>Revegetation/Landscape Plans</p> <p>While not a section of the report, landscape drawings will need to be provided with the document.</p> <ul style="list-style-type: none"> Refer to Conservation Halton's <i>Guidelines for Landscaping and Rehabilitation Plans (draft, 2021)</i>. Refer to any specific municipal restoration guidelines.
11	<p>Monitoring Plan</p> <p>This section should outline the proposed monitoring program, if required, including but not limited to:</p> <ul style="list-style-type: none"> Provide detailed information on items to be monitored and the process to be followed or reference relevant documents Location plans for all monitoring sites
12	<p>Summary and Conclusions</p>
<p>Note:</p> <ul style="list-style-type: none"> - All reports and engineering plans must be signed, stamped and dated by a Professional Engineer, except for any fluvial geomorphological reports which should be signed, stamped and dated by a Professional Geoscientist. - Contact CH for current digital drawing submission requirements. <p>* Pre-consultation with CH before design is strongly recommended</p> <p>1 - Confined systems mean those systems where the watercourse is contained within valleys greater than or equal to 2 metres in height. Unconfined systems mean those systems where the watercourse is contained within valleys less than 2 metres in height.</p>	

5.3 SWM Brief (Site Plan)

The purpose of this submission is to obtain approval for individual site plans. The type of report(s) and level of detail will be dependent on the complexity of the project. This information is also required for permit issuance, where applicable. The same report and relevant drawings should be provided through both approval processes.

TABLE 5-3: SWM BRIEF (SITE PLAN)

Item Number	Components
1	Project Description This section of the SWM Brief should include a description of the development that is proposed for the site.
2	Referenced Drainage Studies/Background Reports This section of the SWM Brief should outline all background reports relevant to the development, including but not limited to: <ul style="list-style-type: none"> • Approved Watershed, Subwatershed Studies • Approved Subwatershed Impact Study/Environmental Implementation Report/Master Environmental Servicing Plan • Approved SWM reports for same site and nearby developments (for peak flow analysis)
3	List of Design Criteria (refer to Section 2.0 for details) This section of the SWM Brief should list the design criteria for the development, including but not limited to: <ul style="list-style-type: none"> • Water quality control • Erosion control • Water quantity control • Water balance – overall site • Water balance – feature based*
4	Site Conditions This section should provide a description of existing and proposed site conditions, including but not limited to: <ul style="list-style-type: none"> • Identified limits of development • Hazard constraints mapping <ul style="list-style-type: none"> ○ Topographic details ○ Meander belt allowance for unconfined systems¹ – fluvial geomorphic study ○ Slope stability allowance for confined systems¹ – geotechnical engineering study ○ Floodplain delineation/refinement ○ Adjacent regulated allowances • Natural Heritage System • Detailed grading plans

Item Number	Components
5	<p>Site Hydrology and Hydraulics (Pre- and Post-Development) (refer to Section 4.0 for details)</p> <p>This section should characterize site hydrology and hydraulics under both pre- and post-development conditions and should include the following:</p> <ul style="list-style-type: none"> • Topographic map showing the following for pre-development and post-development (interim and ultimate) conditions: <ul style="list-style-type: none"> ○ Sub-basin boundaries ○ External contributing drainage areas ○ Development drainage area ○ Major and minor drainage patterns ○ Land use ○ Watercourses and drainage features ○ Points of discharge from the site ○ Existing on and off-site drainage facilities, including overland swales • Input parameters (hydrologic analysis) in tabular format • Output summary (hydrologic analysis) in tabular format • Detailed hydrologic calculations including Rational method modelling (Appendix)
6	<p>Stormwater Management Strategy (refer to Section 3.0 for details)</p> <p>The section of the /SWM Brief should outline the stormwater management strategy for the site, including but not limited to:</p> <ul style="list-style-type: none"> • Proposed technologies • Justification for choice of proposed methods • Summary table(s) demonstrating that quality, erosion and quantity design criteria will be met • Detailed calculations (Appendix) • Detailed design plans in accordance with municipal requirements sufficient for construction
7	<p>Hydrogeology</p> <p>This section should characterize the site's hydrogeologic conditions and identify any requirements and constraints.</p> <ul style="list-style-type: none"> • Refer to CH's <i>Requirements for Completion of Hydrogeological Studies to Facilitate Conservation Halton's Reviews</i> • Detailed design of any infiltration facilities required to maintain pre-development water balance • Confirmation that SWM and infiltration facilities are designed appropriately for hydrogeological conditions (e.g., soil types and depth to water table)

Item Number	Components
8	<p>Water Balance for Site Specific Feature*</p> <p>This section of the SWM Design Report should provide water balance requirements and the proposed strategy for specified natural features.</p> <ul style="list-style-type: none"> Detailed water balance to specific natural heritage feature (evaluating impacts of changes to flow rate, volume, timing, duration, etc.) Identification of mitigation measures and locations
9	<p>Erosion and Sediment Control Plans</p> <p>The proposed erosion and sediment control measures to be used onsite should be outlined in this section and supported with drawings.</p> <ul style="list-style-type: none"> <i>Erosion and Sediment Control Guide for Urban Construction (TRCA 2019)</i> <i>Erosion and Sediment Control Inspection Guide (TRCA, 2008)</i>
10	<p>Revegetation/Landscape Plans</p> <p>While not a section of the report, landscape drawings will need to be provided with the document.</p> <ul style="list-style-type: none"> Refer to Conservation Halton's <i>Guidelines for Landscaping and Rehabilitation Plans (draft, 2021)</i>. Refer to any specific municipal guidelines.
11	<p>Monitoring Plan</p> <p>This section, if required, should outline the proposed monitoring program, including but not limited to:</p> <ul style="list-style-type: none"> Provide detailed information on items to be monitored and the process to be followed or reference relevant documents
12	<p>Summary and Conclusions</p>
<p>Note:</p> <ul style="list-style-type: none"> - All reports and engineering plans must be signed, stamped and dated by a Professional Engineer, except for any fluvial geomorphological reports which should be signed, stamped and dated by a Professional Geoscientist. - Contact CH for current digital drawing submission requirements. <p>* Pre-consultation with CH before design is strongly recommended</p> <p>1 - Confined systems mean those systems where the watercourse is contained within valleys greater than or equal to 2 metres in height. Unconfined systems mean those systems where the watercourse is contained within valleys less than 2 metres in height.</p>	

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Appendix A Rainfall Data

Provided below are available rainfall data for municipalities within Conservation Halton's watershed taken from their municipal engineering standards; however, **consult with the municipality to confirm the current information.**

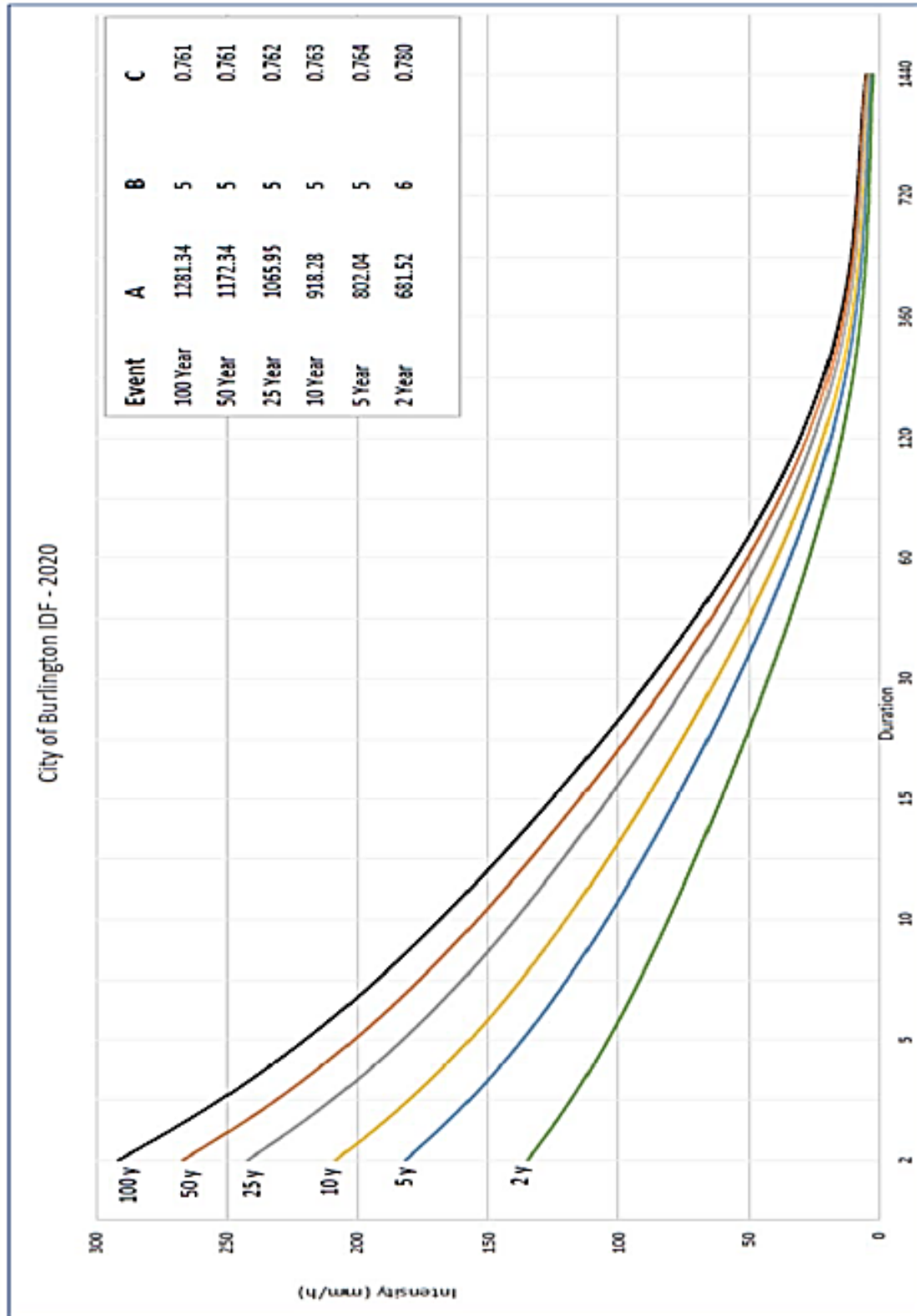
A1 City of Burlington

Source: *City of Burlington Stormwater Management Design Guidelines*, City of Burlington, 2020).

IDF curves derived from 54 years of historical rainfall data from the RBG meteorological station with a +15% climate change adjustment.

TABLE A-1: CITY OF BURLINGTON, 2100 PROJECTED RAINFALL INTENSITIES

5-year Event					
	Existing	Historic*	RCP 2.6	RCP 4.5	RCP 8.5
	88.09	88.2	95.01	97.20	102.37
% Increase compared to Existing	N/A	0.12	7.85	10.34	16.21
	141.89	141.11	151.92	153.82	163.11
% Increase compared to Existing	N/A	-0.88	10.56	8.4	14.85

FIGURE A-1: CITY OF BURLINGTON, INTENSITY-DURATION-FREQUENCY CURVES

**TABLE A-2: CITY OF BURLINGTON, RAINFALL INTENSITY
EQUATION COEFFICIENTS**

	A	b	c
2	681.52	6.0	0.780
5	802.04	5.0	0.764
10	918.28	5.0	0.763
25	1065.95	5.0	0.762
50	1172.34	5.0	0.761
100	1281.34	5.0	0.761

$$i = \frac{A}{(t_d + b)^c}$$

Where: i = Rainfall intensity (mm/hr)
 t_d = Duration (hr)
 A, b and c = constants

A2 Town of Halton Hills

Source: Town of Halton Hills, *Town of Halton Hills Subdivision Manual*, 1999.

TABLE A-3: TOWN OF HALTON HILLS, INTENSITY-DURATION-FREQUENCY VALUES

Compilation of AES Hydrometeorological Division data for Toronto International Airport, Fergus Shand Dam and Heart Lake (weighted by total years of record)

Duration min	2 Year mm/hr (mm)*	5 Year mm/hr (mm)*	10 Year mm/hr (mm)*	25 Year mm/hr (mm)*	50 Year mm/hr (mm)*	100 Year mm/hr (mm)*
5	104.64 (8.72)	135.36 (11.28)	155.64 (12.97)	181.44 (15.12)	200.40 (16.70)	219.36 (18.28)
10	73.08 (12.18)	94.68 (15.78)	109.02 (18.17)	127.08 (21.18)	140.46 (23.41)	153.78 (25.63)
15	61.60 (15.40)	82.88 (20.72)	97.04 (24.26)	114.84 (28.71)	128.08 (32.02)	141.24 (35.31)
30	41.22 (20.61)	56.96 (28.48)	67.40 (33.70)	80.58 (40.29)	90.32 (45.16)	100.06 (50.03)
60	24.23 (24.23)	35.32 (35.32)	42.68 (42.68)	51.97 (51.97)	58.85 (58.85)	65.69 (65.69)
120	14.73 (29.45)	21.23 (42.45)	25.54 (51.07)	30.98 (61.97)	35.01 (70.01)	39.02 (78.03)
360	6.51 (39.05)	9.11 (54.63)	10.83 (64.96)	13.00 (78.00)	14.61 (87.67)	16.22 (97.29)
720	3.76 (45.16)	5.21 (62.49)	6.17 (73.98)	7.37 (88.49)	8.27 (99.25)	9.16 (109.95)
1440	2.44 (58.49)	3.01 (72.21)	3.56 (85.50)	4.26 (102.26)	4.78 (114.69)	5.29 (127.05)

* The bracketed value is the total precipitation over the time interval

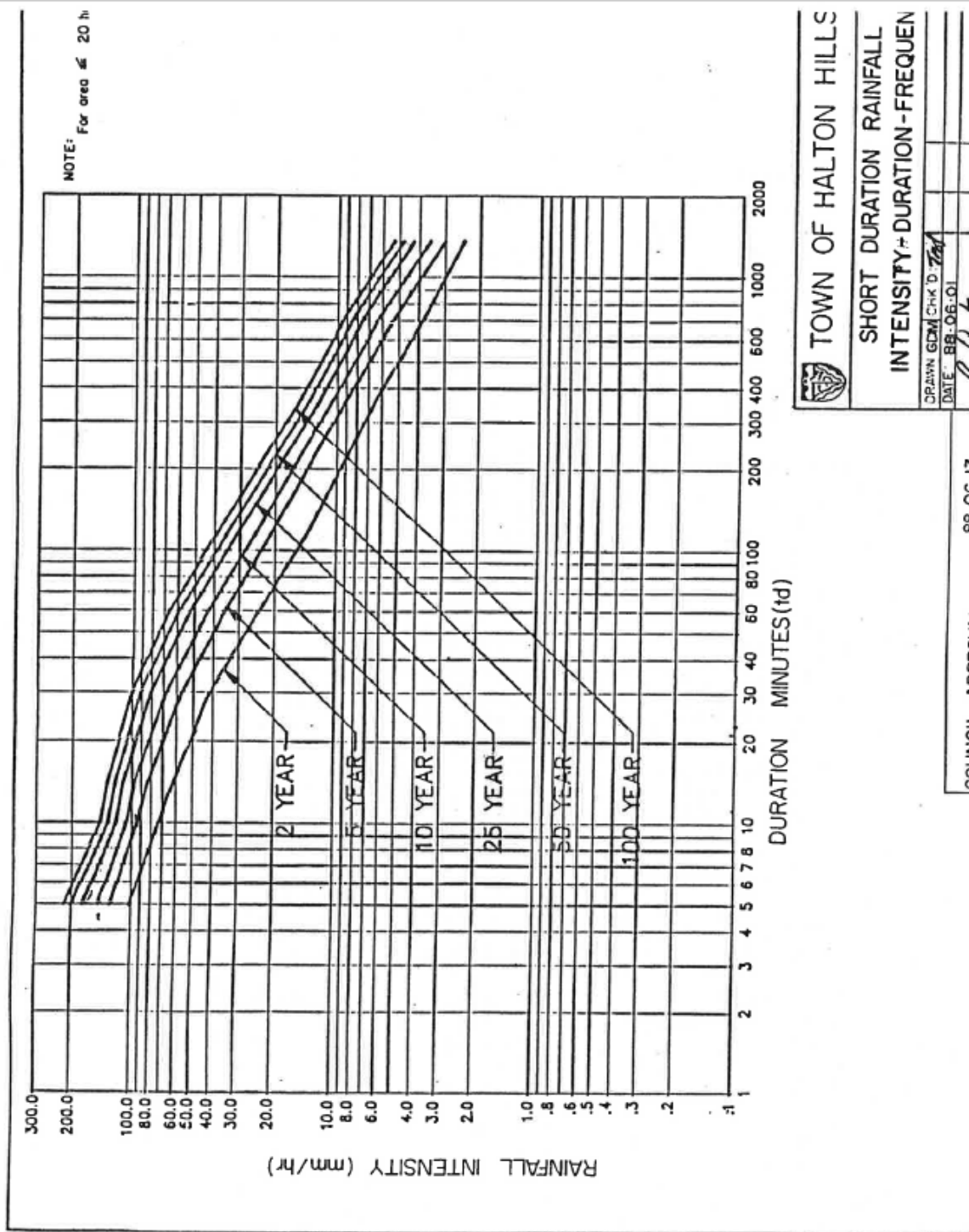
TABLE A-4: TOWN OF HALTON HILLS, RAINFALL INTENSITY EQUATION COEFFICIENTS

	A	b	c
2	586.10	6.0	0.760
5	946.46	7.0	0.788
10	1173.48	8.0	0.794
25	1363.91	8.0	0.789
50	1622.45	9.0	0.797
100	1777.20	9.0	0.795

$$i = \frac{A}{(t_d + b)^c}$$

Where: i = Rainfall intensity (mm/hr)
 t_d = Duration (hr)
 A, b and c = constants

FIGURE A-2: TOWN OF HALTON HILLS, SHORT DURATION INTENSITY-DURATION-FREQUENCY CURVES



A3 City of Hamilton

Source: City of Hamilton, *Comprehensive Guidelines and Financial Policies Manual*, 2018.

TABLE A-5: CITY OF HAMILTON, INTENSITY-DURATION-FREQUENCY VALUES, MOUNT HOPE

Duration min	2 Year mm/hr	5 Year mm/hr	10 Year mm/hr	25 Year mm/hr	50 Year mm/hr	100 Year mm/hr
5	102.7	140.1	165.0	196.3	219.6	242.4
10	72.1	100.4	119.1	142.8	160.4	177.8
15	58.4	81.2	96.3	115.4	129.5	143.6
30	39.5	55.2	65.6	78.6	88.3	97.9
60	24.7	36.2	43.8	53.4	60.6	67.7
120	15.0	22.2	26.9	33.0	37.4	41.9
360	6.6	9.4	11.3	13.6	15.3	17.0
720	3.7	5.2	6.2	7.5	8.4	9.3
1440	2.2	3.0	3.5	4.2	4.6	5.1

TABLE A-6: CITY OF HAMILTON, RAINFALL INTENSITY EQUATION COEFFICIENTS, MOUNT HOPE

	A	b	c
2	646.0	6.0	0.781
5	1049.5	8.0	0.803
10	1343.7	9.0	0.814
25	1719.5	10.0	0.823
50	1954.8	10.0	0.826
100	2317.4	11.0	0.836

$$i = \frac{A}{(t_d + b)^c}$$

Where: i = Rainfall intensity (mm/hr)
 t_d = Duration (hr)
 A , b and c = constants

TABLE A-7: CITY OF HAMILTON, INTENSITY-DURATION-FREQUENCY VALUES, ROYAL BOTANICAL GARDENS

Duration min	2 Year mm/hr	5 Year mm/hr	10 Year mm/hr	25 Year mm/hr	50 Year mm/hr	100 Year mm/hr
5	94.6	122.2	140.6	163.7	180.9	198.0
10	68.3	89.2	100.2	120.8	133.8	146.7
15	55.7	74.3	86.7	102.2	113.8	125.2
30	36.2	47.2	54.5	63.7	70.5	77.3
60	22.1	27.6	31.2	35.7	39.1	42.5
120	14.3	18.6	21.4	25.0	27.7	30.4
360	6.0	8.5	10.2	12.3	13.9	15.4
720	3.5	4.9	5.8	7.0	7.8	8.6
1440	2.1	2.8	3.3	3.8	4.3	4.7

TABLE A-8: CITY OF HAMILTON, RAINFALL INTENSITY EQUATION COEFFICIENTS, ROYAL BOTANICAL GARDENS

	A	b	c
2	595.5	6.0	0.778
5	688.2	5.0	0.753
10	748.0	4.5	0.740
25	867.0	4.5	0.737
50	947.3	4.5	0.733
100	1036.1	4.5	0.733

* Please note the following: The City of Hamilton has adopted the Mount Hope IDF relationship. The Royal Botanical Gardens IDF relationship has been provided in addition to the Mount Hope IDF relationship for the purpose of Watershed and Subwatershed Studies and Master Drainage Plans.

TABLE A-9: CITY OF HAMILTON, 3-HOUR CHICAGO DISTRIBUTION DESIGN STORM HYETOGRAPHS, MOUNT HOPE

Time Step (min)	Rainfall Intensity (mm/hr)					
	2	5	10	25	50	100
10	2.85	3.90	4.57	5.46	6.03	6.61
20	3.20	4.41	5.20	6.23	6.89	7.57
30	3.67	5.10	6.04	7.76	8.04	8.89
40	4.32	6.07	7.23	8.74	9.69	10.77
50	5.29	7.55	9.06	11.02	12.24	13.70
60	6.93	10.08	12.20	14.96	16.65	18.78
70	10.32	15.37	18.80	23.26	25.95	29.53
80	21.58	32.79	40.38	50.04	56.09	63.97
90	73.99	103.04	122.29	146.10	164.61	181.81
100	22.24	33.80	41.62	51.58	57.82	65.94
110	10.92	16.31	19.98	24.74	27.61	31.44
120	7.38	10.77	13.06	16.04	17.86	20.17
130	5.64	8.09	9.72	11.85	13.16	14.76
140	4.60	6.51	7.76	9.41	10.44	11.62
150	3.91	5.47	6.48	7.82	8.66	9.59
160	3.42	4.73	5.58	6.70	7.42	8.17
170	3.04	4.18	4.91	5.87	6.49	7.13
180	2.75	3.75	4.39	5.24	5.79	6.33

TABLE A-10: CITY OF HAMILTON, 6-HOUR CHICAGO DISTRIBUTION DESIGN STORM HYETOGRAPHS, MOUNT HOPE

Time Step (min)	Rainfall Intensity (mm/hr)					
	2	5	10	25	50	100
10	1.59	2.10	2.41	2.83	3.12	3.35
20	1.68	2.22	2.56	3.01	3.31	3.56
30	1.77	2.36	2.72	3.20	3.53	3.81
40	1.89	2.52	2.91	3.43	3.78	4.09
50	2.02	2.70	3.13	3.70	4.08	4.42
60	2.17	2.92	3.39	4.02	4.43	4.81
70	2.35	3.18	3.71	4.40	4.86	5.28
80	2.58	3.50	4.09	4.87	5.38	5.87
90	2.85	3.90	4.57	5.46	6.03	6.61
100	3.20	4.41	5.20	6.23	6.89	7.57
110	3.67	5.10	6.04	7.26	8.04	8.89
120	4.32	6.07	7.23	8.74	9.69	10.77
130	5.29	7.55	9.06	11.02	12.24	13.70
140	6.93	10.08	12.20	14.96	16.65	18.78
150	10.32	15.37	18.80	23.26	25.95	29.53
160	21.58	32.79	40.38	50.04	56.09	63.97
170	73.99	103.04	122.29	146.10	164.51	181.81
180	22.24	33.80	41.62	51.58	57.82	65.94
190	10.92	16.31	19.98	24.74	27.61	31.44
200	7.38	10.77	13.06	16.04	17.86	20.17
210	5.64	8.09	9.72	11.85	13.16	14.76
220	4.60	6.51	7.76	9.41	10.44	11.62

TABLE A-10: CITY OF HAMILTON, 6-HOUR CHICAGO DISTRIBUTION DESIGN STORM HYETOGRAPHS, MOUNT HOPE

Time Step (min)	Rainfall Intensity (mm/hr)					
	2	5	10	25	50	100
230	3.91	5.47	6.48	7.82	8.66	9.59
240	3.42	4.73	5.58	6.70	7.42	8.17
250	3.04	4.18	4.91	5.87	6.69	7.13
260	2.75	3.75	4.39	5.24	5.79	6.33
270	2.51	3.41	3.98	4.73	5.22	5.70
280	2.32	3.13	3.64	4.32	4.77	5.18
290	2.15	2.89	3.36	3.98	4.39	4.76
300	2.01	2.69	3.12	3.69	4.07	4.40
310	1.89	2.52	2.92	3.44	3.79	4.10
320	1.79	2.37	2.74	3.23	3.56	3.84
330	1.69	2.24	2.59	3.04	3.35	3.61
340	1.61	2.13	2.45	2.88	3.17	3.41
350	1.54	2.03	2.33	2.73	3.01	3.23
360	1.47	1.93	2.22	2.60	2.86	3.07

TABLE A-11: CITY OF HAMILTON, 3-HOUR CHICAGO DISTRIBUTION DESIGN STORM HYETOGRAPHS, ROYAL BOTANICAL GARDENS

Time Step (min)	Rainfall Intensity (mm/hr)					
	2	5	10	25	50	100
10	2.70	3.85	4.66	5.55	6.27	6.86
20	3.04	4.30	5.19	6.17	6.97	7.52
30	3.47	4.88	5.87	6.97	7.87	8.61
40	4.09	5.69	6.81	8.08	9.12	9.97
50	5.00	6.88	8.19	9.71	10.94	11.96
60	6.54	8.86	10.46	12.38	13.92	15.23
70	9.71	12.84	14.97	17.69	19.84	21.70
80	20.22	25.81	29.53	34.75	38.75	42.38
90	68.88	89.56	103.39	120.81	133.42	145.92
100	20.84	26.57	30.38	35.74	39.84	43.58
110	10.28	13.54	15.76	18.62	20.87	22.82
120	6.96	9.39	11.06	13.09	14.71	16.09
130	5.33	7.31	8.68	10.29	11.58	12.67
140	4.36	6.04	7.22	8.57	9.66	10.56
150	3.70	5.19	6.23	7.40	8.35	9.13
160	3.24	4.57	5.50	6.54	7.39	8.08
170	2.88	4.10	4.95	5.88	6.65	7.27
180	2.61	3.72	4.51	5.37	6.07	6.64

TABLE A-12: CITY OF HAMILTON, 6-HOUR CHICAGO DISTRIBUTION DESIGN STORM HYETOGRAPHS, MOUNT HOPE

Time Step (min)	Rainfall Intensity (mm/hr)					
	2	5	10	25	50	100
10	1.51	2.22	2.72	3.24	3.68	4.02
20	1.59	2.33	2.86	3.41	3.86	4.23
30	1.69	2.46	3.01	3.59	4.07	4.45
40	1.79	2.61	3.19	3.80	4.31	4.71
50	1.92	2.78	3.39	4.04	4.58	5.01
60	2.06	2.98	3.63	4.33	4.90	5.36
70	2.24	3.22	3.91	4.66	5.27	5.77
80	2.44	3.50	4.25	5.06	5.72	6.26
90	2.70	3.85	4.66	5.55	6.27	6.86
100	3.04	4.30	5.19	6.17	6.97	7.62
110	3.47	4.88	5.87	6.97	7.87	8.61
120	4.09	5.69	6.81	8.08	9.12	9.97
130	5.00	6.88	8.19	9.71	10.94	11.96
140	6.54	8.86	10.46	12.38	13.92	15.23
150	9.71	12.84	14.97	17.69	19.84	21.70
160	20.22	25.81	29.53	34.75	38.75	42.38
170	68.88	89.56	103.39	120.81	133.42	145.92
180	20.84	26.57	30.38	35.74	39.84	43.58
190	10.28	13.54	15.76	18.62	20.87	22.82
200	6.96	9.39	11.06	13.09	14.71	16.09
210	5.33	7.31	8.68	10.29	11.58	12.67
220	4.36	6.04	7.22	8.57	9.66	10.56

TABLE A-12: CITY OF HAMILTON, 6-HOUR CHICAGO DISTRIBUTION DESIGN STORM HYETOGRAPHS, MOUNT HOPE

Time Step (min)	Rainfall Intensity (mm/hr)					
	2	5	10	25	50	100
230	3.70	5.19	6.23	7.40	8.35	9.13
240	3.24	4.57	5.50	6.54	7.39	8.08
250	2.88	4.10	4.95	5.88	6.65	7.27
260	2.61	3.72	4.51	5.37	6.07	6.64
270	2.38	3.42	4.15	4.94	5.59	6.12
280	2.20	3.17	3.85	4.59	5.19	5.68
290	2.04	2.96	3.60	4.29	4.86	5.31
300	1.91	2.77	3.39	4.03	4.57	5.00
310	1.80	2.62	3.20	3.81	4.32	4.72
320	1.70	2.48	3.03	3.61	4.10	4.48
330	1.61	2.36	2.89	3.44	3.90	4.27
340	1.53	2.25	2.75	3.28	3.73	4.07
350	1.46	2.15	2.64	3.14	3.57	3.90
360	1.40	2.06	2.53	3.02	3.42	3.75

A4 Town of Milton

Source: Town of Milton, *Engineering and Parks Standards*, 2019.

TABLE A-13: TOWN OF MILTON, INTENSITY-DURATION-FREQUENCY VALUES

AES Toronto Pearson International Airport, 39 years of Record, 1950 – 1990

Duration min	2 Year mm/hr	5 Year mm/hr	10 Year mm/hr	25 Year mm/hr	50 Year mm/hr	100 Year mm/hr
5	107.4	141.5	164.2	192.7	213.9	235.0
10	79.0	103.5	119.8	140.3	155.5	170.6
15	65.3	86.5	100.7	118.5	131.7	144.8
30	43.0	57.0	66.3	78.0	86.7	95.4
60	24.3	32.2	37.5	44.1	49.0	53.9
120	14.2	19.2	22.5	26.7	29.8	32.8
360	6.2	8.5	10.1	12.1	13.5	15.0
720	3.5	4.9	5.9	7.1	7.9	8.8
1440	2.0	2.8	3.3	4.0	4.6	5.1

TABLE A-14: TOWN OF MILTON, RAINFALL INTENSITY EQUATION COEFFICIENTS

	A	b	c	Correlation Coefficient
2	779	6	0.8206	0.99985036
5	959	5.7	0.8024	0.99982256
10	1089	5.7	0.7955	0.99978510
25	1234	5.5	0.7863	0.99976364
50	1323	5.3	0.7786	0.99976825
100	1435	5.2	0.7751	0.99974784

$$i = \frac{A}{(t_d + b)^c}$$

Where: i = Rainfall intensity (mm/hr)
 t_d = Duration (hr)
 A, b and c = constants

A5 City of Mississauga

Source: City of Mississauga Transportation and Works Department, *Development Requirements Manual*, 2020.

TABLE A-15: CITY OF MISSISSAUGA, RAINFALL INTENSITY EQUATION COEFFICIENTS

	A	b	c
2	610	4.6	0.78
5	820	4.6	0.78
10	1010	4.6	0.78
25	1160	4.6	0.78
50	1300	4.7	0.78
100	1450	4.9	0.78

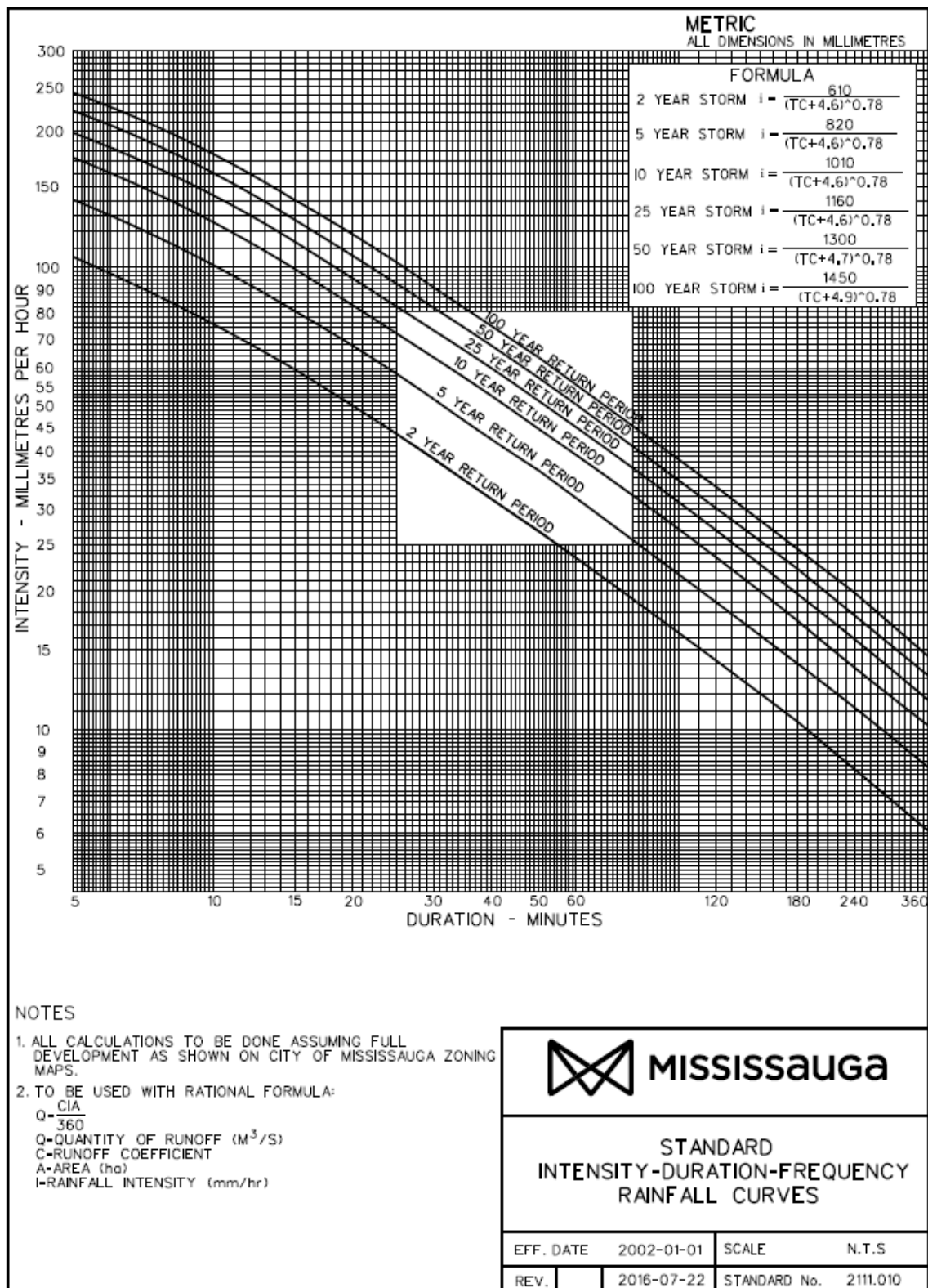
$$i = \frac{A}{(t_d + b)^c}$$

Where: i = Rainfall intensity (mm/hr)
 t_d = Duration (hr)
 A, b and c = constants

TABLE A-16: CITY OF MISSISSAUGA, INTENSITY-DURATION-FREQUENCY VALUES

Duration min	2 Year mm/hr	5 Year mm/hr	10 Year mm/hr	25 Year mm/hr	50 Year mm/hr	100 Year mm/hr
5	104.51	140.49	173.04	198.74	220.93	242.53
10	75.36	101.30	124.77	143.31	159.75	176.31
15	58.89	80.51	99.17	113.89	127.13	140.69
30	38.45	51.68	63.66	73.11	81.75	90.77
60	23.62	31.76	39.11	44.92	50.28	55.95

FIGURE A-3: CITY OF MISSISSAUGA, STANDARD INTENSITY-DURATION-FREQUENCY RAINFALL CURVES



A6 Town of Oakville

Source: Town of Oakville Development Engineering Department, *Development Engineering Procedures and Guidelines*.

TABLE A-17: TOWN OF OAKVILLE, INTENSITY DURATION FREQUENCY VALUES

AES Toronto Pearson International Airport, 39 years of Record, 1950 - 1990

Duration min	2 Year mm/hr	5 Year mm/hr	10 Year mm/hr	25 Year mm/hr	50 Year mm/hr	100 Year mm/hr
5	117.0	164.0	194.0	233.0	262.0	291.0
10	80.0	108.0	126.0	149.0	166.0	183.0
15	65.0	90.0	107.0	129.0	145.0	160.0
30	41.0	58.0	69.0	83.0	93.0	103.0
60	25.0	35.0	41.0	48.0	54.0	60.0
120	15.0	20.0	23.0	27.0	30.0	33.0
360	6.1	8.1	9.4	11.0	12.0	13.0
720	3.6	4.6	5.3	6.2	6.8	7.5
1440	2.0	2.5	2.9	3.4	3.7	4.1

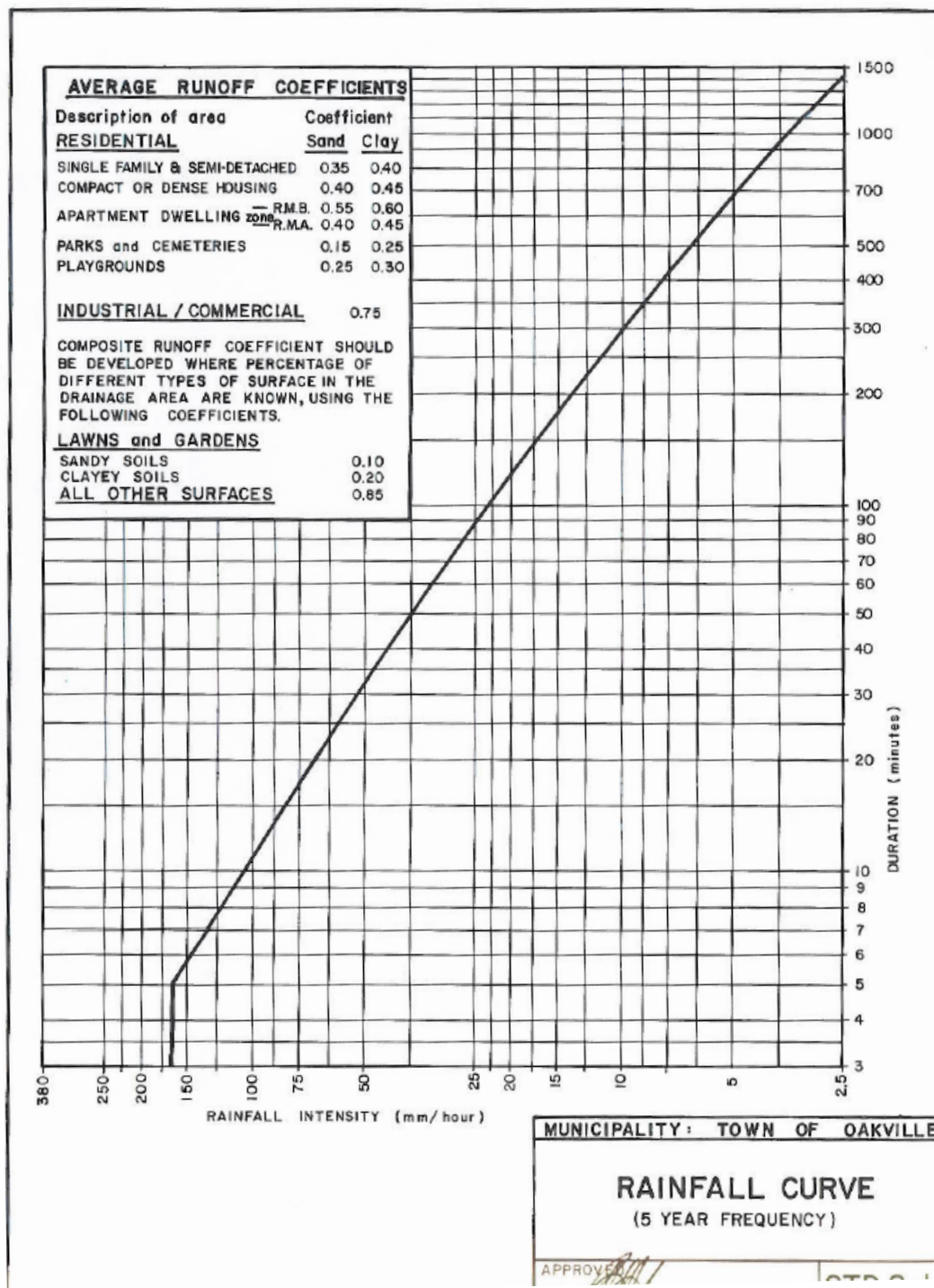
**TABLE A-18: TOWN OF OAKVILLE, RAINFALL INTENSITY
EQUATION COEFFICIENTS**

	A	b	c
2	725	4.8	0.808
5	1170	5.8	0.843
10	1400	5.8	0.848
25	1680	5.6	0.851
50	1960	5.8	0.861
100	2150	5.7	0.861

$$i = \frac{A}{(t_d + b)^c}$$

Where: i = Rainfall intensity (mm/hr)
 t_d = Duration (hr)
 A, b and c = constants

FIGURE A-4: TOWN OF OAKVILLE, RAINFALL CURVE (5-YEAR FREQUENCY)



A7 Hurricane Hazel Distribution and Areal Reduction

Source: O. Reg. 162/06

TABLE A-19: HURRICANE HAZEL DISTRIBUTION

	Depth (mm)	Percent of 12 hour
First 36 hours	73	
37 th hour	6	3
38 th hour	4	2
39 th hour	6	3
40 th hour	13	6
41 st hour	17	8
320	13	6
43 rd hour	23	11
44 th hour	13	6
45 th hour	13	6
46 th hour	53	25
47 th hour	38	18
48 th hour	13	6
Total	285	100

TABLE A-20: AREAL REDUCTION

Drainage Area (km ²)	Percentage	Drainage Area (km ²)	Percentage
0 to 25	100.00	2501 to 2700	69.0
26 to 45	99.2	2701 to 4500	64.4
46 to 65	98.2	4501 to 6000	61.4
66 to 90	97.1	6001 to 7000	58.9
91 to 115	96.3	7001 to 8000	57.4
116 to 140	95.4		
141 to 165	94.8		
166 to 195	94.2		
196 to 220	93.5		
221 to 245	92.7		
246 to 270	92.0		
271 to 450	89.4		
451 to 575	86.7		
576 to 700	84.0		
701 to 850	82.4		
851 to 1000	80.8		
1001 to 1200	79.3		
1201 to 1500	76.6		
1501 to 1700	74.4		
1701 to 2000	73.3		
2001 to 2200	71.7		
2201 to 2500	70.2		

Appendix B Typical Hydrologic/Hydraulic Parameters and Equations

B1 Total Impervious Area and Directly Connected Impervious Area

Total Impervious Area (TIMP) – The percentage of the total impervious area. Directly Connected Impervious Area (XIMP) – The percentage of the directly connected impervious area.

TABLE B-1: TIMP & XIMP VALUES

Land Use	XIMP	TIMP
Parks		
Village Square/Parkette	28	35
Neighbourhood Park	16	20
Open Space		
NHS	0	5
Utility Corridor	0	2
SWM Ponds ¹	50	50
Institutional		
School	60 ² / 30 ³	75
Church	60 ² / 30 ³	75
Employment / Commercial	85	85
Industrial	90	90
Mixed Use	80	80
Impervious Surfaces (i.e., roads, parking)	99	99
Residential ⁴		
Rural Estate (> 0.3 ha lot)	16	20
Detached	50	70
Townhouses / Medium	55	75
Condominiums / High	65	85

* Public roads are included as part of other land uses within development blocks.

- 1 While the permanent pools of SWM ponds are impervious, this value includes the entire pond block. However, if impermeable liners are included that extend beyond the permanent pool, this number may need revision.
- 2 Roof leaders connected to impervious areas (e.g., driveway) and to storm sewer for XIMP calculations.
- 3 Roof leaders are connected to pervious area (e.g., lawn) for XIMP calculations.
- 4 Numbers within older developments may need refinement

Source: Developed in house

B2 Initial Abstraction Values

TABLE B-2: INITIAL ABSTRACTION VALUES

Land Use	Ia (mm)
Impervious	2
Open Space / Green Space / Lawns	5
Crop / Cultivated	7
Pasture / Meadow	8
Woods/Woodlot/Forest	10
Wetlands	15

* Please note that if grade lot control is implemented, initial abstractions can be adjusted accordingly
Source: Technical Guidelines for Flood Hazard Mapping, (EWRG for CA Steering Committee, 2017)

B3 Horton's Infiltration Equation Parameters

TABLE B-3: HORTON'S PARAMETERS

Soil Group	f _o (mm/hr)	f _c (mm/hr)	K (1/hr)
A	250	25	2
B	200	13	2
C	125	5	2
D	75	3	2

Source: SWMHYMO User's Manual (J.F. Sabourin and Associates Inc., December 1998) – Note these parameters may not be appropriate for use in floodplain mapping studies. Further direction will be provided in CH's Guidelines for Floodplain Alterations and Mapping Submissions.

B4 Soil/Land Use Curve Numbers**TABLE B-4: SCS CURVE NUMBERS**

Land Use	Soil Group			
	A	B	C	D
Agriculture / Nursery ¹	67	78	85	89
Buildings ²	98			
Bedrock ³	98			
Cemetery / Golf Course	49	69	79	84
Commercial & Business District (85% imp.) ⁴	89	92	94	95
Dirt Areas (e.g., Confinement Yard)	72	82	87	89
Extraction	98			
Field / Meadow / Pasture	49	69	79	84
Forest / Plantation ¹	36	60	73	79
Grass / Highway Median	49	69	79	84
Hedge Row / Orchard	45	66	77	83
Industrial (72% imp.) ⁴	81	88	91	93
Institutional (50% imp.) ⁴	71	80	88	90
Open Water	98			
Residential ⁴				
High Density	89	92	94	95
Medium / Low Density ⁵ (65% imp.)	77	85	90	92
Trailer Park	71	80	88	90
Rural	51	69	79	84
SWM Pond	50			

TABLE B-4: SCS CURVE NUMBERS

Land Use	Soil Group			
	A	B	C	D
Transportation (Roads, Railway, Parking)	98			
Wetland / Marsh	50			

- 1 Values should be refined further based on hydrologic condition as per the MTO Design Chart, if warranted by the nature of the study/available information.
- 2 Building footprints
- 3 100% bedrock
- 4 Represents a composite value. For solely pervious areas, use “Grass” values.
- 5 Values can be refined for older neighbourhoods.

Source: Developed in house

B5 SCS Curve Number Relationships for Different Antecedent Moisture Conditions

AMC I – A condition of soils where the soils are dry but not to the wilting point. This is the lowest runoff potential.

AMC II – The average case.

AMC III – Heavy or light rainfall and low temperatures having occurred during the previous five days. This is the highest runoff potential.

TABLE B-5: SCS CURVE NUMBER RELATIONSHIPS

CN @ AMC II	AMC I	AMC III	CN @ AMC II	AMC I	AMC III
100	100	100	60	40	78
99	97	100	59	39	77
98	94	99	58	38	76
97	91	99	57	37	75
96	89	99	56	36	75
95	87	98	55	35	74
94	85	98	54	34	73
93	83	98	53	33	72

TABLE B-5: SCS CURVE NUMBER RELATIONSHIPS

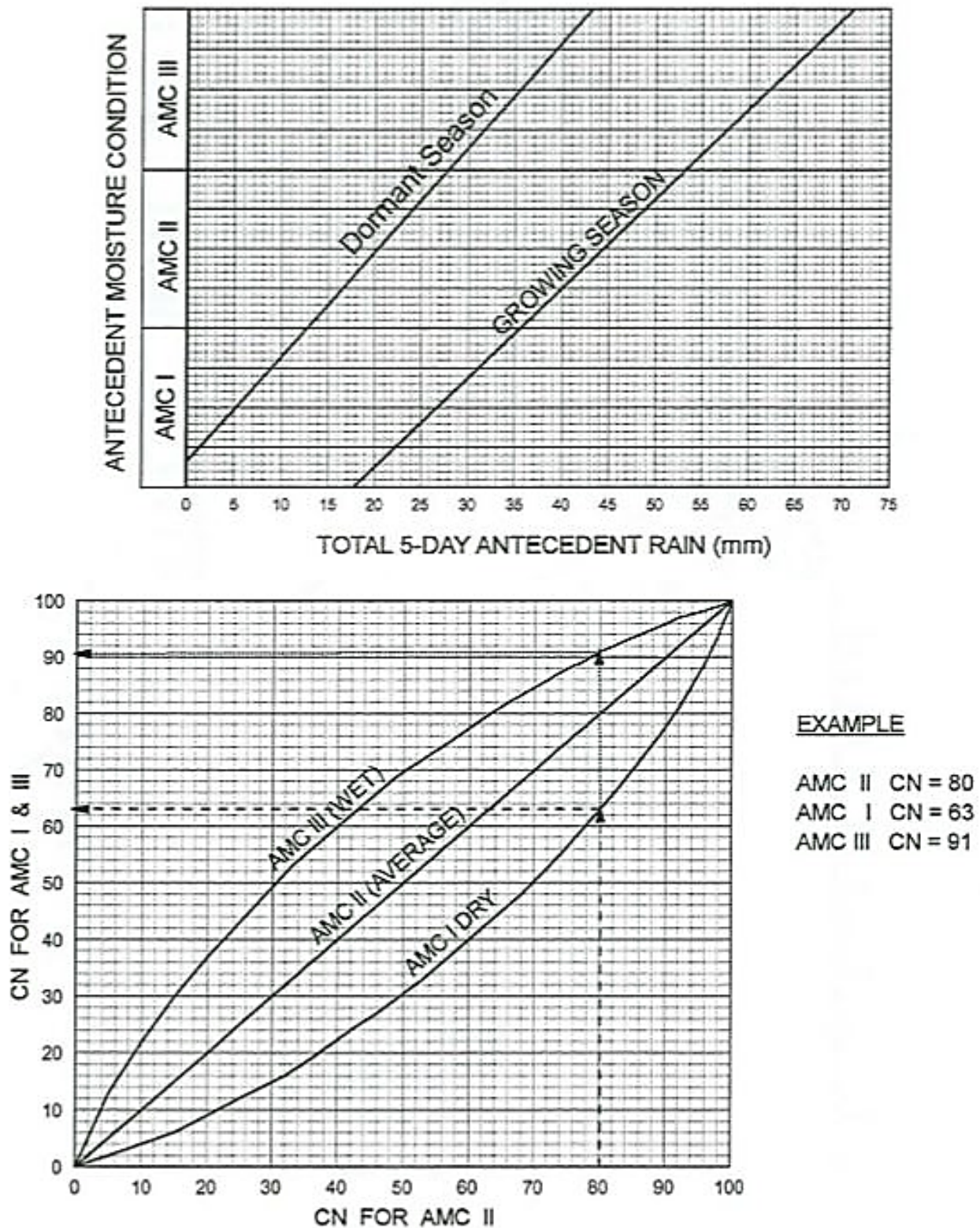
CN @ AMC II	AMC I	AMC III	CN @ AMC II	AMC I	AMC III
92	81	97	52	32	71
91	80	97	51	31	70
90	78	96	50	31	70
89	76	96	49	30	69
88	75	95	48	29	68
87	73	95	47	28	67
86	72	94	46	27	66
85	70	94	45	26	65
84	68	93	44	25	64
83	67	93	43	25	63
82	66	92	42	24	62
81	64	92	41	23	61
80	63	91	40	22	60
79	62	91	39	21	59
78	60	90	38	21	58
77	59	89	37	20	57
76	58	89	36	19	56
75	57	88	35	18	55
74	55	88	34	18	54
73	54	87	33	17	53
72	53	86	32	16	52
71	52	86	31	16	51
70	51	85	30	15	50
69	50	84	25	12	43

TABLE B-5: SCS CURVE NUMBER RELATIONSHIPS

CN @ AMC II	AMC I	AMC III	CN @ AMC II	AMC I	AMC III
68	48	84	20	9	37
67	47	83	15	6	30
66	46	92	10	4	22
65	45	82	5	2	13
64	44	81	0	0	0
63	43	80			
62	42	79			
61	41	78			

Source: Modern Sewer Design, Corrugated Steel Pipe Institute (1996)

FIGURE B-1: ANTECEDENT MOISTURE CONDITIONS



Source: Drainage Design Standards (MTO, 1995-1997)

B6 Green-Ampt Method Parameters

TABLE B-6: GREEN-AMPT PARAMETERS

Soil Group	IMD (mm/mm)	S_u (mm)	K_s (mm/hr)
A	0.34	100	25
B	0.32	300	13
C	0.26	250	5
D	0.21	180	3

Source: Drainage Design Standards (MTO, 1995-1997)

B7 Airport Equation

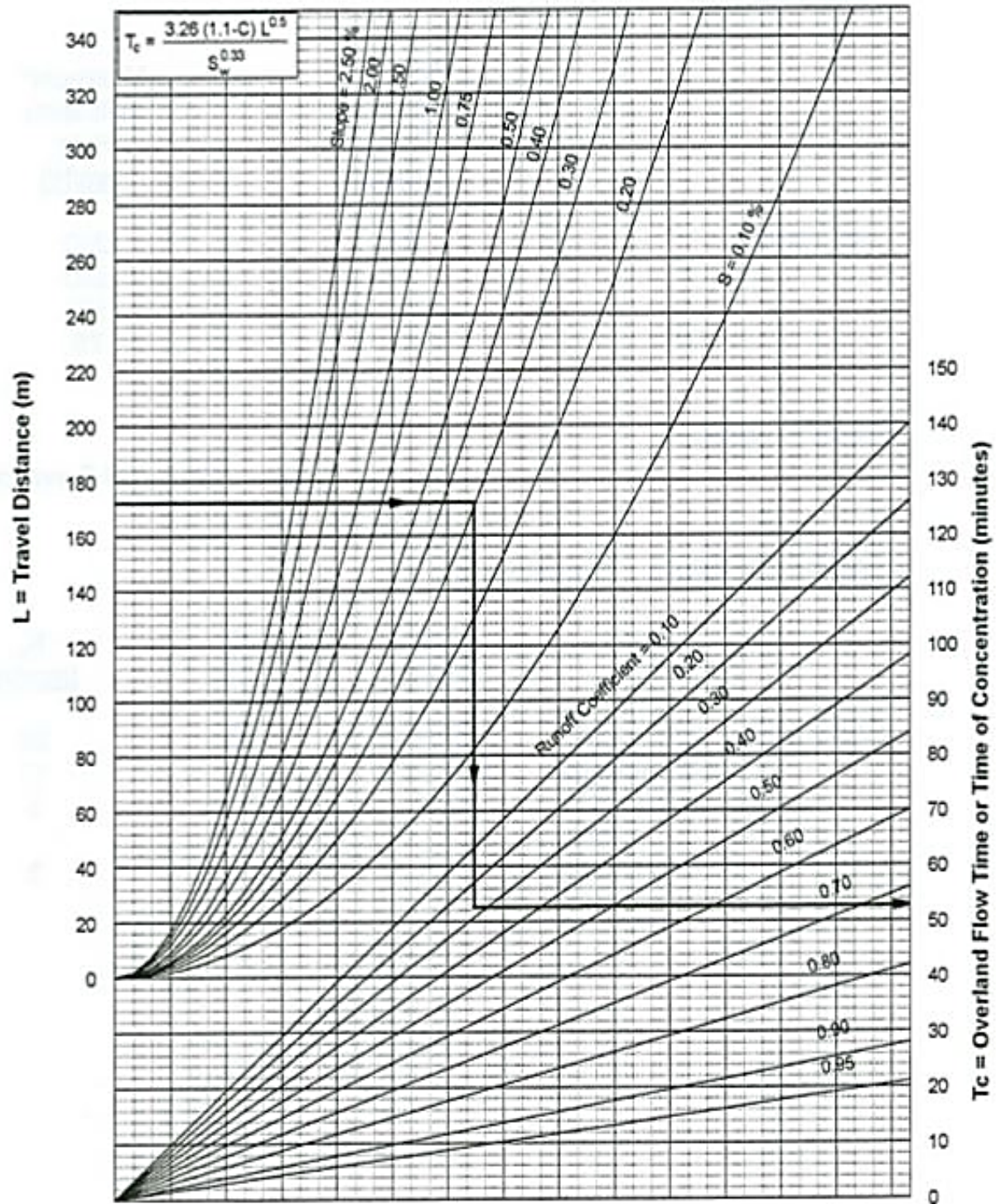
Generally applicable for subcatchments with runoff coefficients less than 0.4

$$T_c = 3.26(1.1 - C)L^{0.5}S_w^{-0.33}$$

Where:

- T_c = Time of Concentration (min)
- C = Runoff Coefficient
- L = Catchment Length (m)
- S_w = Catchment Slope (%)

FIGURE B-2: TIME OF CONCENTRATION – AIRPORT METHOD



Source: Drainage Design Standards (MTO, 1995-1997)

B8 Bransby-Williams Equation

Generally applicable for subcatchments with runoff coefficients greater than 0.4.

$$T_c = 0.057LS_w^{-0.2}A^{-0.1}$$

Where:

- T_c = Time of Concentration (min)
- L = Catchment Length (m)
- S_w = Catchment Slope (%)
- A = Catchment Area (ha)

Source: Drainage Design Standards (MTO, 1995-1997)

B9 Overland Flow Length & Catchment Widths

$$LGI = \sqrt{(A / 1.5)}$$

Where:

- LGI = overland flow length (m)
- A = catchment area (m²)

$$SW = (2 - S_k)L$$

Where:

- SW = catchment width (m)
- S_k = skew factor = $(A_2 - A_1) / A_t$
- A_2 = largest area to one side of channel (ha)
- A_1 = area to the other side of the channel (ha)
- A_t = total catchment area (ha)
- L = length of main drainage channel (m)

Example – For a perfectly symmetrical watershed, $S_k = 0$ as $A_2 = A_1$

Source: Visual OTTHYMO v.2.4 Reference Manual (December 2011).

B10 Manning's Roughness – Overland Flow (i.e., non-channelized flow)

TABLE B-7: MANNING'S ROUGHNESS

Land Use	n
Impervious areas	0.013
Crop / Cultivated	0.300
Meadow	0.350
Woodlot	0.600
Lawns	0.250

Source: Technical Guidelines for Flood Hazard Mapping (EWRG for CA Steering Committee, 2017)

B11 Weir and Orifice Equations and Coefficients

Orifice

$$Q = CA\sqrt{2g\Delta h}$$

Where:

- Q = discharge / flow rate (m³/s)
- C = discharge coefficient
- A = orifice area (m²)
- g = acceleration due to gravity (9.81 m/s²)
- Δh = differential head measured from the centroid of the orifice (m)

Sharp Crested Weir with End Contractions (used for example on DICB inlets operating under weir flow)

$$Q = C(L - 0.2\Delta h)\Delta h^{1.5}$$

Where:

- Q = discharge / flow rate (m³/s)
- C = discharge coefficient
- L = crest length of the weir (m)
- Δh = differential head measured from the centroid of the weir crest (m)

Rectangular Broad Crested Weir and Sharp Crested Weir without End Contractions

$$Q = CL\Delta h^{1.5}$$

Where:

- Q = discharge / flow rate (m³/s)
- C = discharge coefficient
- L = weir length (m)
- Δh = differential head measured from the centroid of the weir (m)

Trapezoidal Broad Crested Weir (Emergency Spillways)

$$Q = C(L - 0.1n\Delta h)\Delta h^{1.5}$$

Where:

- Q = discharge / flow rate (m³/s)
- C = discharge coefficient
- L = length of weir (bottom length + side slope * Δh)
- n = number of side contractions
- Δh = differential head measured from the centroid of the weir (m)

Partial Pipe Flow

To sufficiently model the hydraulics of a SWM pond outlet control structure, partial pipe flow should be considered. Partial pipe flow below the orifice centroid should be included in the calculations.

TABLE B-8: HYDRAULIC EQUATION COEFFICIENTS (METRIC UNITS)

Application	Coefficient
Orifice	0.63
Orifice Tube	0.80
Sharp Crested Weir	1.7
Rectangular Broad Crested Weir (SWMP and Dam Spillway)	1.5 (or using equation)
Rectangular Broad Crested Weir (Road Crossing)	1.5

Source: CH standard values

Rectangular Broad Crested Weir Coefficient Equation (applicable until $H/L = 0.6$)

$$C = \frac{(-1.04E^{04} + 3.42E^{06}x)}{(1 + 2.13E^{06}x - 2.35E^{05}x^2)}$$

Where: C = Discharge Coefficient
 X = Head Divided by the Downstream Length of the Weir (H/L)

Triangular Broad Crested Weir Coefficient (applicable until $H/L = 0.6$)

$$C = \frac{(-1.01E^{-05} + 1.44E^{02}x)}{(1 + 1.15E^{02} - 4.77x^2)}$$

Where: C = Discharge Coefficient
 X = Head Divided by the Downstream Length of the Weir (H/L)

B12 Rational Method

$$Q = \frac{CiA}{360}$$

Where: Q = discharge / flow rate (m³/s)
 C = runoff coefficient
 i = rainfall intensity (mm/hr)
 A = contributing drainage area (ha)

TABLE B-9: RUNOFF COEFFICIENTS

Land Use		RC (Urban)	Soil Group, where applicable (Rural)		
			A-AB	B-BC	C-CD-D
Agriculture / Nursery ¹	Rolling (5-10%)		0.30	0.45	0.60
	Flat (0-5%)		0.22	0.35	0.55
Buildings ²		0.95			
Bedrock ³		0.95			
Cemetery / Golf Course			0.10	0.15	0.20
Commercial & Business District (85% imp.)		0.90			
Dirt Areas (e.g., Confinement Yard)		0.50			
Extraction		0.95			
Field / Meadow / Pasture	Rolling (5-10%)		0.15	0.35	0.45
	Flat (0-5%)		0.10	0.28	0.40
Forest / Plantation	Rolling (5-10%)		0.12	0.30	0.42
	Flat (0-5%)		0.08	0.25	0.35
Grass / Highway Median			0.10	0.15	0.20
Hedge Row / Orchard	Rolling (5-10%)		0.12	0.30	0.42
	Flat (0-5%)		0.08	0.25	0.35
Industrial		0.90			
Institutional		0.90			
Low Impact Development	Refer to manufacturer specifications and consultation with Conservation Halton and municipal staff				
Residential					

TABLE B-9: RUNOFF COEFFICIENTS

Land Use	RC (Urban)	Soil Group, where applicable (Rural)		
		A-AB	B-BC	C-CD-D
High Density	0.80			
Medium / Low Density ⁴	0.70			
Estate	0.40			
Trailer Park	0.55			
Rural Residential	0.40			
Transportation (Roads, Railway, Parking)	0.95			
SWM Pond	0.05			
Open Water	0.05			
Wetland / Marsh	0.05			

1 Corn system

2 Building footprints

3 100% bedrock

4 Conservation Halton would consider alternate values, particularly in older residential neighbourhoods

Source: Developed in house

To account for a decrease in available perviousness during major storms, the recommended factors as identified within the Ministry of Transportation Drainage Design Standards (1995-1997) shall be used. For storms having a return period of more than 10 years, runoff coefficients shall be increased as follows. Note that RC cannot exceed 1.0.

- 25-year event – add 10%
- 50-year event – add 20%
- 100-year event – add 25%

Conversion Equation (Runoff Coefficient to Percent Impervious)

$$i = \frac{(C - 0.2)}{0.7} \times 100$$

Where: i = Percent Impervious
 C = Runoff Coefficient

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 08 21 14

FROM: Garner Beckett, Executive Director, CH Foundation and Board of Directors,
CH Foundation

DATE: November 25, 2021

SUBJECT: Re-appointment of Members to the Conservation Halton Foundation
Board of Directors

Recommendation

THAT the Conservation Halton Board of Directors **approves the re-appointment of the following individuals, as members to the Conservation Halton Foundation Board of Directors for a two-year term ending September 2023:**

- Ms. Suzanne Bevan
- Mr. George Caines
- Mr. Galen Naidoo Harris
- Ms. Catherine Mulvale
- Mr. Bryden Tait
- Mr. Jim Sweetlove
- Mr. Ed Wells
- Ms. Jane Wilcox

Report

Maintaining a strong and committed Board of Directors is a key Foundation priority for 2022 and beyond. The individuals named above have demonstrated a commitment to the values and long-term strategic objectives of both Conservation Halton and the Conservation Halton Foundation. These individuals have helped to guide the Foundation through a difficult two-year period and should be credited with much of the Foundation's current success and growth.

The individuals named above have all demonstrated an interest in renewing their position on the Board of Directors and a commitment to the mission and vision of the organization.

The Conservation Halton Foundation Board of Directors approved a motion recommending the appointment of the above individuals at the Foundation Board meeting dated November 17th. In accordance with the Foundation's By-Laws, all members must be formally appointed to the Foundation Board by the Conservation Halton Board of Directors.

Impact on Strategic Priorities

This report supports the Momentum priority of Organizational Sustainability

A strong governing body within the Conservation Halton Foundation will ensure continued success and revenue growth for the Foundation.

Financial Impact

There is no financial impact

Signed & respectfully submitted:



Garner Beckett
Executive Director, Foundation

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Garner Beckett, 905 336 1158 x 2256, gbeckett@hrca.on.ca