



# Board of Directors Meeting Agenda

Thursday, February 1, 2024

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# Board of Directors Meeting

Thursday, February 1, 2024 at 6:00 p.m.

This meeting will be held fully in person.

The meeting will be live streamed on HCA's You Tube Channel:

<https://www.youtube.com/user/HamiltonConservation>

1. **Welcome** – Lisa Burnside
2. **Election of Officers** – Jo-Anne Rzadki
  - 2.1. Appoint Scrutineers
  - 2.2. Election of 2024 Chair
  - 2.3. Election of 2024 Vice-Chair
  - 2.4. Board Representatives to Budget & Administration Committee
  - 2.5. Board Representatives to Conservation Advisory Board
  - 2.6. Election of Chair to Conservation Advisory Board
3. **Call to Order** – Newly Appointed Chair
4. **Declarations of Conflict of Interest**
5. **Approval of Agenda**
6. **Delegations**
7. **Consent Items for Applications, Minutes and Correspondence**
  - 7.1. Applications – Development, Interference with Wetlands, Alterations to Shorelines and Watercourses Page 1
  - 7.2. Approval of Board of Directors Minutes – December 7, 2023 Page 5
  - 7.3. Approved August 10, 2023 Conservation Advisory Board Minutes – for receipt only Page 15

7.4. Letter from Minister of Natural Resources and Forestry Re. Extension Application for Transition Requirements per Ontario Regulation 687/21 dated December 13, 2023 Page 21

7.5. Letter from Minister of Natural Resources and Forestry Re. Extension of Minister's Direction for Conservation Authorities Regarding Fee Changes Associated with planning, Development and Permitting Fees, dated December 13, 2023 Page 23

**8. Foundation Briefing** Foundation Chair – Jennifer Stebbing

**9. Member Briefing**

**10. Business Arising from the Minutes**

10.1 Final Report to MNRF – Ontario Regulation 687/21 - Lisa Burnside Page 33

**11. Reports from Budget & Administration Committee and Conservation Advisory Board**

11.1. Conservation Advisory Board – December 14, 2023 – Wayne Terryberry  
(Recommendations)

11.1.1. CA 2328 HCA Shoreline Management Plan Page 57

11.1.2. CA 2329 HCA Floodplain Mapping Projects – Status Update Page 63

**12. Other Staff Reports/Memorandums**

Reports to be approved

12.1. 2024 Schedule of Meetings – Lisa Burnside Page 71

12.2. Voting Representatives to Conservation Ontario – Lisa Burnside Page 73

12.3. Appointment of the Auditor – Lisa Burnside Page 75

Memorandums to be received

12.4. Watershed Conditions Report – Jonathan Bastien Page 77

12.5. 2023 Annual Monitoring Program Summary Report – Mike Stone Page 83

12.6. Conservation Areas Experiences – Gord Costie Page 91

**13. New Business**

**14. In-Camera Items**

14.1. Confidential Report - BD/Feb 01-2024  
(Property Matter)

14.2 Confidential Verbal Discussion – BD/Feb 02-2024  
(Position/Negotiation Matter)

**15. Next Meeting – Thursday, March 7, 2024 at 6:00 p.m.**

**16. Adjournment**

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# Report

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**RECOMMENDED & PREPARED BY:** Mike Stone, MCIP, RPP, Acting Director, Watershed Management Services

**DATE:** February 1, 2024

**RE:** Permit Applications Summary Report  
Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 161/06

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HCA Regulation applications approved by staff between the dates of November 25, 2023 and January 19, 2024 are summarized in the following Permit Applications Summary Report (PASR-1/24).

## RECOMMENDATION

THAT the Board of Directors receive this Permit Application Summary Report PASR-1/24 as information.

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**HAMILTON REGION CONSERVATION AUTHORITY**

DEVELOPMENT, INTERFERENCE WITH WETLANDS, AND ALTERATIONS TO SHORELINES AND WATERCOURSES APPLICATIONS

January 20, 2024

Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Applications Report to the Board of Directors of the Hamilton Region Conservation Authority, February 01, 2024

The proposed works are subject to Ontario Regulation 161/06, and in particular Section 2, Subsection (1).

**SUMMARY ENFORCEMENT REPORT PASR 1/24**

File Number	Date Received	Date Permit Issued	Review Days	Applicant Name	Location	Application Description	Recommendation / Conditions
D/C/23/87	17-Nov-23	27-Nov-23	9		245 Mill Street Lot 13, Concession 1 Dundas	For the conversion of an existing institutional building to a medical centre	Approved subject to standard conditions.
F/F,C,A/23/91	13-Nov-23	29-Nov-23	12		952 Brock Rd Lot 7, Concession 5 Flamborough	For the construction to rebuild and expand existing garage	Approved subject to standard conditions.
H/F,A/23/94	23-Nov-23	29-Nov-23	5		470 Cootes Dr Lot 57, Concession 1 Hamilton	For the construction of wet meadow and ephemeral/vernal depression	Approved subject to standard conditions.
SC/F,C,A/23/93	16-Nov-23	04-Dec-23	20		17 Elm Ave Lot 24, Concession 4 Stoney Creek	For the construction of a 1 storey addition and mudroom addition	Approved subject to standard conditions.
H/F,C/23/92	13-Nov-23	06-Dec-23	23		6 Ambitious Crt to 863 Nebo Rd Lot 13, 14, Concession 2 Glanbrook	For Bell Project Z92325, installation of duct to pull cable to address	Approved subject to standard conditions.
A/F,C,A/23/78	02-Oct-23	11-Dec-23	27		Millcreek Court, behind 52 Millcreek Crt Lot 46, Concession 2 Ancaster	SWM Pond 17 Rehabilitation - proposal to remove accumulated sediment	Approved subject to standard conditions.

**HAMILTON REGION CONSERVATION AUTHORITY**

DEVELOPMENT, INTERFERENCE WITH WETLANDS, AND ALTERATIONS TO SHORELINES AND WATERCOURSES APPLICATIONS

January 20, 2024

Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Applications Report to the Board of Directors of the Hamilton Region Conservation Authority, February 01, 2024

The proposed works are subject to Ontario Regulation 161/06, and in particular Section 2, Subsection (1).

**SUMMARY ENFORCEMENT REPORT PASR 1/24**

H/F,C,A/23/95	12-Dec-23	15-Dec-23	5	310-328 Rymal Rd W Lot 17, Concession 8 Hamilton	For the alteration of a watercourse and construction of a residential plan of subdivision in a regulated area of Upper Ottawa Creek	Approved subject to standard conditions.
H/A/23/98	07-Dec-23	18-Dec-23	13	Lot 5-16, Concession 1 Glanbrook	Hydro One Vegetation Maintenance Glanbrook Transmission Project 10017	Approved subject to standard conditions using Hyrdo One SCR.
SC/C/23/99	14-Dec-23	10-Jan-24	20	70 Seabreeze Cres Lot 9, Concession BF Stoney Creek	For the construction of a carport addition to the existing dwelling in a regulated area of Lake Ontario	Approved subject to standard conditions.
A/F,C,A/23/74	18-Aug-23	15-Jan-24	55	Garner Rd E between Kitty Murray Ln and Barley Ln Lot 49, 50, 51, Concession 3, 4 Ancaster	Construction of the sanitary trunk sewer utilizing microtunneling and horizontal directional drilling, including all appurtenances (i.e. chambers), construction of temporary road and staging area	Approved subject to standard conditions.

## Hamilton Region Conservation Authority

### Minutes

#### Board of Directors Meeting

**December 7, 2023**

Minutes of the Board of Directors meeting held on Thursday, December 7, 2023 at 6:00 p.m., at the HCA main office, 838 Mineral Springs Road, in Ancaster, and livestreamed on YouTube.

**PRESENT:**            **Brad Clark – in the Chair**  
                         **Jeff Beattie (Webex)**            **Lisa DiCesare**  
                         **Susan Fielding**                    **Brian McHattie (Webex)**  
                         **Wayne Terryberry**                **Alex Wilson (Webex)**  
                         **Maureen Wilson (Webex)**

**Jennifer Stebbing – Foundation Chair (Webex)**

**REGRETS:**            **Craig Cassar, Matt Francis, Mike Spadafora**

**STAFF PRESENT:** **Jonathan Bastien, Lisa Burnside, Grace Correia, Scott Fleming, Matt Hall, Colin Oaks, Scott Peck, Karen Phong, Cathy Plosz, Mike Stone, Jaime Tellier, Nancy Watts, Sandra Winner**

**OTHERS:**            **None**

#### **1. Call to Order**

The Chair called the meeting to order and welcomed everyone present. The Board of Directors observed a moment of silence for Bruce Harschnitz and viewed a photo tribute of Bruce over his many years at HCA.

The Chair shared with the members, details of the official public opening of the expanded trail system at Westfield Heritage Village and dedication of the Chinmaya Trail. Representatives of the Chakraborty family, who sold the property to HCA, joined staff and Board members to cut the ribbon and explain the dedication of the trail name. In addition, 50 people from the family and Chinmaya mission were also present.

The Chair also advised of his attendance at the staff Annual General Meeting and the opportunity to hear about all of the work and achievements from the past year and to recognize staff who had reached employment service milestones. He expressed his deep appreciation on behalf of the Board for the commitment and extraordinary work of staff.

The Board welcomed Marlene Ferreira, the new Director of Human Resources and Wellness, to HCA. They also congratulated Nancy Watts and wished her well for her retirement.

## **2. Declarations of Conflict of Interest**

The Chair asked members to declare any conflicts under the Board's Governance Policy. There were none.

## **3. Approval of Agenda**

The Chair requested any additions or deletions to the agenda. Lisa Burnside advised of two addendums to the agenda, an item of correspondence from the Niagara Biosphere Reserve to be added as item 5.6, and the Interim Feedback on HCA Strategic Plan Renewal, to be added as item 7.1. Additionally, a legal matter to be discussed in camera was added as item 12.3.

**BD12, 3275**

**MOVED BY: Wayne Terryberry  
SECONDED BY: Lisa DiCesare**

**THAT the agenda be approved, as amended.**

**CARRIED**

## **4. Delegations**

There were none.

## **5. Consent Items for Applications, Minutes and Correspondence**

The following consent items were adopted:

- 5.1. Applications – Development, Interference with Wetlands, Alterations to Shorelines and Watercourses
- 5.2. Approval of Board of Directors Minutes – November 2, 2023

- 5.3. Letter from Township of Puslinch re. Hamilton Conservation Authority Resolution Regarding Reverse Changes to the Conservation Authorities Act and Ontario Wetland Evaluation System, dated November 10, 2023
- 5.4. Letter from The Corporation of the County of Prince Edward re. motion regarding support for the Province to stop the Ministry of the Environment, Conservation and Parks (MECP) proposal to expand the use of the permit-by-rule to waste Management systems, stormwater management systems, and certain water taking Activities, dated November 17, 2023
- 5.5. Letter from the Honourable Graydon Smith, Minister of Natural Resources and Forestry re. Hamilton Conservation Authority Resolution Regarding Reverse Changes to the Conservation Authorities Act and Ontario Wetland Evaluation System, dated November 22, 2023.
- 5.6. Letter from the Niagara Escarpment Biosphere Network Request for Support, dated December 5, 2023

## 6. Foundation Briefing

Jennifer Stebbing reported on the following:

The Foundation received a total of **\$151,664** in new donations from November 1<sup>st</sup> to November 30<sup>th</sup> 2023. They break down as follows:

- **\$103,005** to the Dobson-McKee Family Environment Education Fund
- **\$26,000** from the Friends of Westfield directed to priority projects at Westfield
- **\$14,984** to the Area of Greatest Need Fund, largely in response to our Fall Appeal

The remaining **\$7,675** was directed to various projects, including Westfield 103 Locomotive, Saltfleet CA Fund, and Tribute Benches.

This brings the unofficial fundraising total for the fiscal year to **\$946,680**, which exceeds their fundraising goal of \$827,849 by 14%.

### 2023 Highlights

The second instalment on the \$2 million pledge from Heritage Green Community Trust, as well as \$100,000 toward the Dobson-McKee Environmental Education Fund, contributed greatly to the Foundation's fundraising success for the year.

As a result of fundraising efforts and the generosity of our donors, the Foundation contributed approximately \$870,000 toward various HCA priority projects, including the Saltfleet wetland construction, the Outdoor Environmental Education program,

trail improvements at Westfield and Dundas Valley, interpretive signage, and plantings coordinated through the Stewardship Department. The Foundation also funded a consultant-led feasibility study to determine their internal fundraising capacity to grow the Environmental Education Fund.

### Looking Ahead

Fundraising focuses for 2024 will include continuing to fully fund the Environmental Education Program, and contributions to various other projects throughout the watershed.

In addition, the Foundation will be reviewing the feasibility study report and recommendations and initiating work on a new strategic plan.

**BD12, 3276**

**MOVED BY: Wayne Terryberry**

**SECONDED BY: Jeff Beattie**

**THAT the Foundation Briefing be received.**

**CARRIED**

## **7. Member Briefing**

### 7.1. Interim Feedback on HCA Strategic Plan Renewal

Anne Bermingham and Michael Howes of 2WA Consulting presented a summary of input collected through interviews and focus groups during the data gathering phase of the strategic plan development process. The consultants lead the members through the main themes in each section of the interim report and sought feedback on inclusion and prioritization for the next phase of the plan development process. Members noted that from the listed strategies several can be amalgamated given some cross over.

No changes to the vision or mission were noted and it was also felt that the current five strategic priority areas remain broadly relevant and can be updated as part of the renewal. Members did indicate their wish to have the new draft strategic plan return to the Board for review before it is taken for further input.

## **8. Business Arising from the Minutes**

### 8.1. Status of Municipal Agreements for Programs and Services – Verbal Update

Lisa advised the members that both the City of Hamilton and Township of Puslinch have approved and signed their Agreements with HCA for Category 2



9.1.3. BA 2328      Records and Digital Initiatives Project Manager 2024-2025  
Priorities

Susan Fielding brought forward the staff report outlining five key priorities for a two-year secondment position to focus on records and digital initiatives.

**BD12, 3279            MOVED BY: Susan Fielding  
                              SECONDED BY: Lisa DiCesare**

**THAT the Budget & Administration Committee  
recommends to the Board of Directors:**

**THAT the 2024 and 2025 priorities for the Records and  
Digital Initiatives Project Manager, as outlined in the  
report, be approved.**

**CARRIED**

9.1.4. BA 2329      2024 Mileage Compensation Rate

Susan Fielding brought forward the staff report.

**BD12, 3280            MOVED BY: Susan Fielding  
                              SECONDED BY: Wayne Terryberry**

**THAT the Budget & Administration Committee  
recommends to the Board of Directors:**

**THAT this report be received for information; and further**

**THAT the HCA mileage reimbursement rate be increased  
to .61 cents per kilometre effective January 1, 2024.**

**CARRIED**

## **10. Other Staff Reports/Memoranda**

### 10.1. City of Hamilton Natural Areas Inventory

Mike Stone presented a summary of the report and answered the members' questions.

There was discussion regarding the potential to incorporate citizen science in this project. There will be a review of available citizen science and consideration for its use in the project.

**BD12, 3281**

**MOVED BY: Brian McHattie  
SECONDED BY: Alex Wilson**

**THAT the Board of Directors endorse the Draft Collaborative Agreement, attached as Appendix A;**

**THAT staff be directed to continue to work with the City of Hamilton and Hamilton Naturalists' Club to guide the Natural Areas Inventory and provide staff representatives on the Project Steering Committee and Technical Steering Committee;**

**THAT staff be directed to initiate the recruitment and hiring process for a NAI Project Coordinator; and**

**THAT the Board of Directors allocate the funds held in reserve (\$95,000) from the previous Natural Areas Inventory to this project.**

**CARRIED**

10.2. Request for Quotation – Watercourse 11 Realignment and Fifty Point Wetland Construction

Karen Phong presented a summary of the report and answered the members' questions.

**BD12, 3282**

**MOVED BY: Lisa DiCesare  
SECONDED BY: Wayne Terryberry**

**THAT the quotation for the Watershed 11 Realignment and Fifty Point Wetland Construction submitted by Anthony's Excavation Central Inc. be accepted at a cost not to exceed \$593,841.31 including HST.**

**CARRIED**

10.3. Environmental Registry of Ontario Comments - Proposed Amendment to the Niagara Escarpment Planning and Development Act and Proposal to Return Lands to the Greenbelt

Scott Peck presented a summary of the memorandum and answered the members' questions.

**BD12, 3283**

**MOVED BY: Susan Fielding  
SECONDED BY: Lisa DiCesare**

**THAT the memorandum entitled Environmental Registry of Ontario Comments - Proposed Amendment to the Niagara Escarpment Planning and Development Act and Proposal to Return Lands to the Greenbelt be received.**

**CARRIED**

#### 10.4. Watershed Conditions Report

Jonathan Bastien presented a summary of the memorandum and answered the members' questions. Since the writing of the report, a Low Water Response assessment indicated a blend of normal and level 1 low water conditions for the watershed. Given the time of year and decreased pressures on watercourses, such as water takings, staff continue to monitor the situation at this time.

**BD12, 3284**

**MOVED BY: Wayne Terryberry  
SECONDED BY: Alex Wilson**

**THAT the memorandum entitled Watershed Conditions Report be received.**

**CARRIED**

#### 10.5. Conservation Areas Experiences Update

Scott Peck provided a summary of the memorandum.

**BD12, 3285**

**MOVED BY: Wayne Terryberry  
SECONDED BY: Lisa DiCesare**

**THAT the memorandum entitled Conservation Areas Experiences Update be received.**

**CARRIED**

### 11. New Business

There was none.

## 12. In-Camera Items

**BD12, 3286**

**MOVED BY: Susan Fielding  
SECONDED BY: Wayne Terryberry**

**THAT the Board of Directors moves *in camera* for matters of law, personnel and property.**

**CARRIED**

**During the *in camera* session, one property matter, one personnel matter, and one legal matter were discussed.**

### 12.1. Confidential Verbal Update – BD/Dec 01-2023 (Property Matter)

Lisa Burnside provided a verbal update regarding a property matter and answered the members' questions.

**BD12, 3287**

**MOVED BY: Lisa DiCesare  
SECONDED BY: Alex Wilson**

**THAT the confidential verbal update entitled BD/Dec 01-2023 be received and remain in camera.**

**CARRIED**

### 12.2. Confidential Report – BD/Dec 02-2023 (Personnel Matter)

Lisa Burnside provided a summary of the report regarding a personnel matter and answered the members' questions.

**BD12, 3288**

**MOVED BY: Wayne Terryberry  
SECONDED BY: Jeff Beattie**

**THAT the confidential report entitled BD/Dec 02-2023 be approved and remain in camera.**

**CARRIED**



# HAMILTON CONSERVATION AUTHORITY

## Conservation Advisory Board

### MINUTES

**August 10, 2023**

Minutes of the Conservation Advisory Board meeting held on Thursday, August 10, 2023 at 4:00 p.m., at Fifty Point Conservation Area, 1479 Baseline Road, Winona.

**PRESENT:** Wayne Terryberry – in the Chair  
 Lisa DiCesare  
 Haley McRae  
 Cortney Oliver

Brian McHattie  
 Sherry O'Connor

Brad Clark – Ex-Officio

**REGRETS:** Tyler Cunningham, Natalie Faught

**STAFF PRESENT:** Lisa Burnside, Grace Correia, Gord Costie, Lindsay Davidson, Scott Fleming, Liam Fletcher, Matt Hall, Bruce Harschnitz, Jasmine Marinelli, Lesley McDonell, Scott Peck, Karen Phong, Jonathan Roberts, Mike Stone, Jaime Tellier, and Nancy Watts

**OTHERS:** Media – Richard Leitner

#### 1. Welcome

The Chair called the meeting to order and welcomed everyone present.

#### 2. Site Tours

##### 2.1. Fifty Point CA Watercourse and Pond Restoration Project

Scott Peck provided an overview of the watercourse and pond restoration project. The watercourse diversion and wetland creation will mitigate flooding from Watercourse-11 along Windermere Road and facilitate a self-sustaining fishery within the existing ponds. Funding for the project has been allocated from the 2022 operating surplus. Staff are also applying for grants to support the project.

Archeological assessments for the project are complete and did not result in any findings. Permission from Fisheries and Oceans Canada is the only remaining approval required for the project. Staff do not anticipate any challenges to the approval as the project is creating fish habitat. Matt Hall advised CAB that the capital division will be installing a new accessible fishing dock , allowing all user groups to enjoy enhanced fishing opportunities. Staff will be preparing promotional materials to communicate the scope and value of the project to patrons.

## 2.2. Fifty Point Entrance Improvements

Gord Costie shared details of improvements to the entrance of the Conservation Area. Fifty Point is the smallest but one of the busiest conservation areas within HCA. Access to the area was a common theme in comments in the recently completed master plan. To expedite entrance to the area, a third lane and second gatehouse were added. Additionally, online advanced day-pass sales has also been launched. Matt Hall advised CAB that additional improvements are planned for the remaining roadway into the area. The intent is to better accommodate pedestrian, cyclist, and vehicular users.

### **3. Declaration of Conflict of Interest**

The Chair asked members to declare any conflicts under the HCA Administrative By-law. There were none.

### **4. Approval of Agenda**

The Chair requested any additions or deletions to the agenda.

**CA 2320            MOVED BY: Lisa DiCesare  
                          SECONDED BY: Brian McHattie**

**THAT the agenda be approved.**

**CARRIED**

### **5. Delegations**

There were none.

### **6. Election of Vice Chair**

Wayne Terryberry reviewed the election procedures. He then called for nominations for the 2023 Vice-Chair of the Conservation Advisory Board.

**Nominated: Sherry O'Connor**

**By – Mover: Cortney Oliver**

Wayne called for nominations twice more. Having no further nominations, he asked Sherry O'Connor if she accept the nomination. The election for the office of Conservation Advisory Board Vice-Chair for 2023 was then closed and the position acclaimed with the following resolution.

**CA 2321            MOVED BY: Cortney Oliver  
                          SECONDED BY: Haley McRae**

**THAT nominations for the 2023 Vice-Chair of the Conservation Advisory Board be closed and Sherry O'Connor be confirmed as Vice-Chair of the Hamilton Conservation Authority Conservation Advisory Board for 2023.**

**CARRIED**

## **7. Chairman's Report on Board of Directors Actions**

The following recommendations from the Conservation Advisory Board were approved at the July 6, 2023 Board of Directors meeting.

CA 2318 Proposal to Terminate HCA Water Quality Monitoring Related to Darling Ingredients Effluent Discharge to Christie Lake

CA 2319 Fifty Point Watercourse and Pond Restoration Project Update / Final Design

## **8. Approval of Minutes of Previous Meeting**

### **8.1. Minutes – Conservation Advisory Board (June 8, 2023)**

**CA 2322            MOVED BY: Sherry O'Connor  
                          SECONDED BY: Haley McRae**

**THAT the minutes of the June 8, 2023 Conservation Advisory Board meeting be approved.**

**CARRIED**

## 9. Business Arising from the Minutes

There was none.

## 10. Staff Reports/Memorandums

### 10.1. Oak Wilt Mapping & Work Plan

Lesley McDonell provided a summary of the report and answered the members' questions.

The need for public education on Oak Wilt was discussed. The Canadian Food Inspection Agency (CFIA) has released material that HCA can promote on our social media. Staff are continuing to monitor CFIA to understand if a fungicide prevention plan will be recommended. Currently, CFIA is recommending mechanical separation of roots.

**CA 2323**            **MOVED BY: Lisa DiCesare**  
**SECONDED BY: Cortney Oliver**

**THAT the Conservation Advisory Board recommends to the Board of Directors:**

**THAT the Oak Wilt Mapping and Work Plan as detailed in this report be approved, and further;**

**THAT the Oak Wilt Mapping and Work Plan be incorporated into the HCA's Invasive Species Strategy update.**

**CARRIED**

### 10.2. HCA Trail Guide Mobile App Project Update

Jasmine Marinelli presented a summary of the report and answered the members' questions.

A QR code to the trail app will be on the main trailhead signage and on the HCA website. There is potential to add other HCA-related messaging to the app content.

**CA 2324**            **MOVED BY: Brian McHattie**  
**SECONDED BY: Haley McRae**

**THAT the Conservation Advisory Board recommends to the Board of Directors:**

**THAT the Trail Guide Mobile App Project Update be received and further;**

**THAT staff continue to expand the App to other major HCA conservation areas as part of operational work plans.**

**CARRIED**

### **11. New Business**

There was none.

### **12. Next Meeting**

The next meeting of the CAB is scheduled for Thursday, October 12, 2023 at 4:00 p.m., at the HCA Main Administration Office – Woodend Auditorium.

### **13. Adjournment**

On motion, the meeting was adjourned.

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Ministry of Natural  
Resources and Forestry

Office of the Minister

99 Wellesley Street West  
Room 6630, Whitney Block  
Toronto ON M7A 1W3  
Tel: 416-314-2301

Ministère des Richesses  
naturelles et des Forêts

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93-2023-1094

December 13, 2023

Lisa Burnside  
Chief Administrative Officer  
Hamilton Region Conservation Authority  
c/o [Jaime.Tellier@conservationhamilton.ca](mailto:Jaime.Tellier@conservationhamilton.ca)

Dear Lisa Burnside,

Thank you for your application on behalf of the Hamilton Region Conservation Authority (HRCA) seeking an extension of time beyond the January 1, 2024 transition date for the purposes of subsections 25 (1.3) and 27 (1.3) of the *Conservation Authorities Act* (CAA), to meet the transition requirements outlined in Ontario Regulation 687/21: Transition Plans and Agreements under the CAA (O. Reg. 687/21).

After careful consideration, I am satisfied that your application demonstrates that additional time is required to conclude a cost apportioning agreement for a program or service that will be provided beyond January 1, 2024 pursuant to subparagraph 10 (1) 2 (i) of O. Reg. 687/21. I am therefore granting the HRCA an extension until March 31, 2024 to meet its transition requirements.

If there are questions about this extension, please feel welcome to reach out to the Conservation Authorities Unit at [ca.office@ontario.ca](mailto:ca.office@ontario.ca).

Sincerely,

The Honourable Graydon Smith  
Minister of Natural Resources and Forestry

c: Conservation Authority Office (via [ca.office@ontario.ca](mailto:ca.office@ontario.ca))

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Ministry of Natural  
Resources and Forestry

Ministère des Richesses  
naturelles et des Forêts

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December 13, 2023

**TO:** All Conservation Authorities

**SUBJECT:** Extension of Minister’s Direction for Conservation Authorities Regarding Fee Changes Associated with Planning, Development and Permitting Fees

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I am writing with regards to conservation authority fees for the 2024 year. As you are aware, a Minister’s Direction (“Direction”) was issued on December 28, 2022, directing conservation authorities not to change fees for programs and services associated with planning, development and permitting for the 2023 calendar year. I have provided a copy of this previous direction for your reference.

Pursuant to my authority under subsection 21.3 (1) of the *Conservation Authorities Act*, I am issuing a new Direction that extends the previous Direction for the upcoming year (attached to this letter as Attachment A). The Direction will be in effect from January 1, 2024 to December 31, 2024 and applies to fees for the same programs and services specified in the Direction that was in effect for 2023.

If you have any questions, please contact Jennifer Keyes, Director, Resources Planning and Development Policy Branch, at 705-761-4831 or [jennifer.keyes@ontario.ca](mailto:jennifer.keyes@ontario.ca).

Sincerely,

The Honourable Graydon Smith  
Minister of Natural Resources and Forestry

c: The Honourable Paul Calandra, Minister of Municipal Affairs and Housing  
The Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks

**Minister's Direction Issued Pursuant to Section 21.3 of the *Conservation Authorities Act*  
(this "Direction")**

**WHEREAS** section 21.2 of the *Conservation Authorities Act* permits a Conservation Authority to charge a fee for a program or service if the program or service is included in the Minister's list of classes of programs and services in respect of which a Conservation Authority may charge a fee;

**AND WHEREAS** subsections 21.2 (6) and 21.2 (7) of the *Conservation Authorities Act* provide that a Conservation Authority shall adopt a written fee policy that includes a fee schedule listing the programs and services that it provides in respect of which it charges a fee, and the amount of the fee charged for each program or service or the manner in which the fee is determined (a "**Fee Schedule**");

**AND WHEREAS** subsection 21.2 (10) of the *Conservation Authorities Act* provides that a Conservation Authority may make a change to the list of fees set out in the fee schedule or to the amount of any fee or the manner in which a fee is determined, provided the authority shall give notice of the proposed change to the public in a manner it considers appropriate;

**AND WHEREAS** section 21.3 of the *Conservation Authorities Act* provides the Minister with the authority to give a written direction to an authority directing it not to change the amount of any fee it charges under subsection 21.2 (10), in respect of a program or service set out in the list referred to in subsection 21.2 (2), for the period specified in the direction;

**NOW THEREFORE** pursuant to the authority of the Minister of Natural Resources and Forestry under section 21.3, the Conservation Authorities set out under Appendix "A" of this Direction (the "**Conservation Authorities**" or each, a "**Conservation Authority**") are hereby directed as follows:

**Fee Changes Prohibition**

1. Commencing on the Effective Date and for the duration of the Term of this Direction, a Conservation Authority is prohibited from making a change under subsection 21.2 (10) of the *Conservation Authorities Act* to the amount of any fee or the manner in which a fee is determined in its fee schedule if such a change would have the effect of changing the fee amount for the programs and services described in paragraphs 2 and 3 of this Direction.

**Program and Service Fees Impacted**

2. This Direction applies to any fee set out in the Fee Schedule of a Conservation Authority, including without limitation fees for any mandatory program or service

(Category 1), municipal program or service (Category 2), or Conservation Authority recommended program or service (Category 3) related to reviewing and commenting on planning and development related proposals, applications, or land use planning policies, or for Conservation Authority permitting.

3. For greater certainty, this Direction applies to any fees in respect of the following programs or services provided under the Mandatory Programs and Services regulation ([O. Reg. 686/21](#)):
  - a. Section 6: programs and services related to reviewing applications and proposals under the *Aggregate Resources Act*, *Drainage Act*, *Environmental Assessment Act*, and the *Niagara Escarpment Planning and Development Act*, for the purpose of commenting on the risks related to natural hazards arising from the proposal,
  - b. Section 7: programs and services related to ensuring that decisions under the *Planning Act* are consistent with the natural hazards policies in the policy statements issued under section 3 of the *Planning Act* and are in conformance with any natural hazard policies included in a provincial plan as defined in section 1 of that Act,
  - c. Section 8: programs and services related to Conservation Authority duties, functions, and responsibilities to administer and enforce section 28 and its regulations, section 28.0.1, and section 30.1 of the *Conservation Authorities Act*,
  - d. Paragraph 4 of subsection 13 (3): programs and services related to reviewing and commenting on any proposal made under another Act for the purpose of determining whether the proposal relates to a significant drinking water threat or may impact any drinking water sources protected by a source protection plan, and
  - e. Subparagraph 4 iv of section 15: programs and services related to reviewing and commenting on proposals made under other Acts for the purpose of determining the proposal's impact on the Lake Simcoe Protection Plan and the Lake Simcoe watershed.

### **Application**

4. This Direction, applies to all Conservation Authorities in Ontario, listed in Appendix "A" to this Direction.
5. For greater certainty, this Direction also applies to the Conservation Authorities listed in Appendix "A" to this Direction when such Conservation Authorities are meeting as a source protection authority under the *Clean Water Act, 2006*.

### **Effective Date and Term**

6. This Direction is effective from January 1, 2024 (the "**Effective Date**").

7. The term of this Direction is the period from the Effective Date to December 31, 2024 (the “**Term**”).

**Amendments**

8. This Direction may be amended in writing from time to time at the sole discretion of the Minister.

**HIS MAJESTY THE KING IN RIGHT OF ONTARIO**  
as represented by the  
**Minister of Natural Resources and Forestry**



The Honourable Graydon Smith  
Minister of Natural Resources and Forestry  
December 13, 2023

**Ministry of Natural  
Resources and Forestry**

Office of the Minister

99 Wellesley Street West  
Room 6630, Whitney Block  
Toronto, ON M7A 1W3  
Tel.: 416-314-2301

**Ministère des Richesses  
naturelles et des Forêts**

Bureau du ministre

99, rue Wellesley Ouest  
Bureau 6630, Édifice Whitney  
Toronto ON M7A 1W3  
Tél.: 416 314-2301



December 28, 2022

**TO:** Conservation authorities as listed in the Attachment A “Minister’s Direction to Not Change Fees”

**SUBJECT:** Minister’s direction for conservation authorities regarding fee changes associated with planning, development and permitting fees

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In support of Ontario’s Housing Supply Action Plan: 2022-2023, the province made a series of legislative changes through the *More Homes Built Faster Act, 2022* (Bill 23) to help achieve the goal of building 1.5 million homes over the next 10 years. These changes accelerate housing development approvals while continuing to protect Ontario families, communities, and critical resources. A number of these changes affect conservation authorities and are intended to support faster and less costly approvals, streamline conservation authority processes, and help make land suitable for housing available for development.

To this end, pursuant to subsection 21.3 (1) of the *Conservation Authorities Act*, which is in effect January 1, 2023, I am issuing a Minister’s Direction (“Direction”), attached to this letter as Attachment “A”. Subsection 21.3 (1) provides that the “Minister may give a written direction to an authority directing it not to change the amount of any fee it charges under subsection 21.2 (10), in respect of a program or service set out in the list referred to in subsection 21.2 (2), for the period specified in the direction.”

The purpose of this Direction, which is effective from January 1, 2023 to December 31, 2023, is to require a conservation authority not to change the amount of the fee it charges or the manner in which it determines the fee for any program or service that may be provided by the conservation authority. This relates to reviewing and commenting on planning and development related proposals or land use planning policies, or for permits issued by conservation authorities. For greater certainty, the “Prescribed Acts – subsections 21.1.1 (1.1) and 21.1.2 (1.1) of the Act” regulation (O. Reg. 596/22), effective January 1, 2023, prohibits a CA from providing a municipal (Category 2) or other (Category 3) program or service related to reviewing and commenting on a proposal, application, or other matter

made under prescribed Acts. This regulation therefore precludes the charging of a fee by a conservation authority for these specific programs or services provided under subsections 21.1.1 (1) or 21.1.2 (1.1) of the *Conservation Authorities Act*.

The conservation authorities listed in Appendix A of the Direction are encouraged to make the Direction publicly available on the Governance section of their websites.

Pursuant to subsection 21.2 (3) of the Act, I am also re-distributing the Minister's list of classes and programs and services in respect of which conservation authorities may charge a fee along with this Direction, with editorial changes to reflect the recent legislative and regulatory changes.

If you have any questions, please contact Jennifer Keyes, Director, Resources Planning and Development Policy Branch, at [Jennifer.Keyes@ontario.ca](mailto:Jennifer.Keyes@ontario.ca) or 705-761-4831.

If it is in the public interest to do so, I will provide further direction or clarification at a later date related to the matters set out in this Direction.

Sincerely,



The Honourable Graydon Smith  
Minister of Natural Resources and Forestry

c: The Honourable Steve Clark, Minister of Municipal Affairs and Housing  
The Honourable David Piccini, Minister of the Environment, Conservation and Parks

**Minister’s Direction Issued Pursuant to Section 21.3 of the *Conservation Authorities Act*  
(this “Direction”)**

**WHEREAS** section 21.2 of the *Conservation Authorities Act*, in effect on January 1, 2023, permits a Conservation Authority to charge a fee for a program or service if the program or service is included in the Minister’s list of classes of programs and services in respect of which a Conservation Authority may charge a fee;

**AND WHEREAS** subsections 21.2 (6) and 21.2 (7) of the *Conservation Authorities Act* provide that a Conservation Authority shall adopt a written fee policy that includes a fee schedule listing the programs and services that it provides in respect of which it charges a fee, and the amount of the fee charged for each program or service or the manner in which the fee is determined (a “**Fee Schedule**”);

**AND WHEREAS** subsection 21.2 (10) of the *Conservation Authorities Act* provides that a Conservation Authority may make a change to the list of fees set out in the fee schedule or to the amount of any fee or the manner in which a fee is determined, provided the authority shall give notice of the proposed change to the public in a manner it considers appropriate;

**AND WHEREAS** section 21.3 of the *Conservation Authorities Act* provides the Minister with the authority to give a written direction to an authority directing it not to change the amount of any fee it charges under subsection 21.2 (10), in respect of a program or service set out in the list referred to in subsection 21.2 (2), for the period specified in the direction;

**NOW THEREFORE** pursuant to the authority of the Minister of Natural Resources and Forestry under section 21.3, the Conservation Authorities set out under Appendix “A” of this Direction (the “**Conservation Authorities**” or each, a “**Conservation Authority**”) are hereby directed as follows:

**Fee Changes Prohibition**

1. Commencing on the Effective Date and for the duration of the Term of this Direction, a Conservation Authority is prohibited from making a change under subsection 21.2 (10) of the *Conservation Authorities Act* to the amount of any fee or the manner in which a fee is determined in its fee schedule if such a change would have the effect of changing the fee amount for the programs and services described in paragraphs 2 and 3 of this Direction.

**Program and Service Fees Impacted**

2. This Direction applies to any fee set out in the Fee Schedule of a Conservation Authority, including without limitation fees for any mandatory program or service (Category 1), municipal program or service (Category 2), or Conservation Authority recommended program or service (Category 3) related to reviewing and commenting on

planning and development related proposals, applications, or land use planning policies, or for Conservation Authority permitting.

3. For greater certainty, this Direction applies to any fees in respect of the following programs or services provided under the Mandatory Programs and Services regulation ([O. Reg. 686/21](#)):
  - a. Section 6: programs and services related to reviewing applications and proposals under the *Aggregate Resources Act*, *Drainage Act*, *Environmental Assessment Act*, and the *Niagara Escarpment Planning and Development Act*, for the purpose of commenting on the risks related to natural hazards arising from the proposal,
  - b. Section 7: programs and services related to ensuring that decisions under the *Planning Act* are consistent with the natural hazards policies in the policy statements issued under section 3 of the *Planning Act* and are in conformance with any natural hazard policies included in a provincial plan as defined in section 1 of that Act,
  - c. Section 8: programs and services related to Conservation Authority duties, functions, and responsibilities to administer and enforce section 28 and its regulations, section 28.0.1, and section 30.1 of the *Conservation Authorities Act*,
  - d. Paragraph 4 of subsection 13 (3): programs and services related to reviewing and commenting on any proposal made under another Act for the purpose of determining whether the proposal relates to a significant drinking water threat or may impact any drinking water sources protected by a source protection plan, and
  - e. Subparagraph 4 iv of section 15: programs and services related to reviewing and commenting on proposals made under other Acts for the purpose of determining the proposal's impact on the Lake Simcoe Protection Plan and the Lake Simcoe watershed.

### **Application**

4. This Direction, applies to all Conservation Authorities in Ontario, listed in Appendix "A" to this Direction.
5. For greater certainty, this Direction also applies to the Conservation Authorities listed in Appendix "A" to this Direction when such Conservation Authorities are meeting as a source protection authority under the *Clean Water Act, 2006*.

### **Effective Date and Term**

6. This Direction is effective from January 1, 2023 (the "**Effective Date**").
7. The term of this Direction is the period from the Effective Date to December 31, 2023 (the "**Term**").

**Amendments**

8. This Direction may be amended in writing from time to time at the sole discretion of the Minister.

**HIS MAJESTY THE KING IN RIGHT OF ONTARIO  
as represented by the  
Minister of Natural Resources and Forestry**



The Honourable Graydon Smith  
Minister of Natural Resources and Forestry  
December 28, 2022

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# Memorandum

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**MEETING DATE:** February 1, 2024

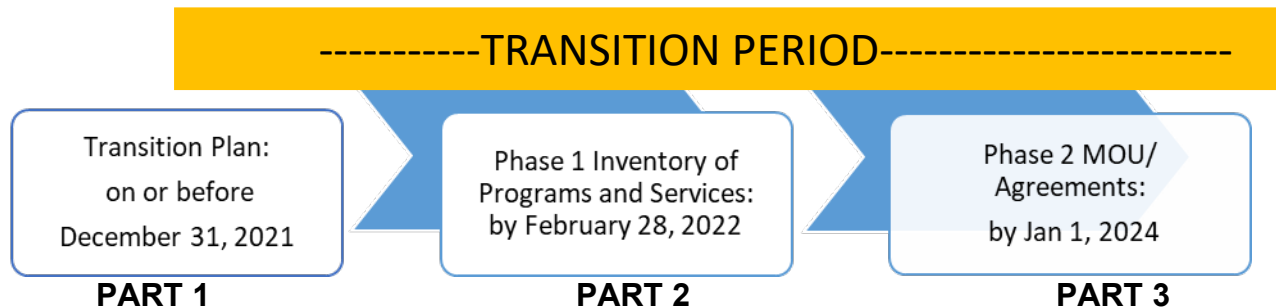
**RE:** Final Report to MNR – Ontario Regulation 687/21

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## BACKGROUND & PURPOSE

On October 7, 2021, Ontario Regulation 687/21: Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the *Conservation Authorities Act* was passed.

The key components and deadlines for [Transition Plan and Agreements Regulation \(O.Reg. 687/21\)](#) are illustrated in Figure 1 below. As required, HCA developed and approved a Transition Plan and Inventory of Programs and Services in Part 1 and Part 2 as noted below. The inventory is based on the three categories identified in the Regulation which include (1) Mandatory, (2) Municipally requested, and (3), Other programs and services an Authority determines are advisable.



HCA currently is in part 3 of the Transition period.

The purpose of this memorandum is to inform the board of the final required report for the MNR that was submitted January 31, 2024.

## **STAFF COMMENT**

As required under Ontario Regulation 687/21 and identified in HCA's Transition Plan, Conservation Authorities must submit to participating municipalities and MNR a final version of the programs and services inventory and confirm that the CA has entered into all necessary cost apportioning agreements on or before January 31, 2024.

Staff have prepared the attached report which was submitted January 31, 2024 to meet the report deadline confirming that HCA has entered into the required Agreements for category 2 and 3 programs and services utilizing municipal funding from our two participating municipalities, including the final programs and services inventory and a link to the Agreements on HCA's website. As required by the *Act*, the Agreements must be made available to the public and have been posted on the HCA website along with the inventory of programs and services.

An extension was received by the Province if needed, to have the Agreements approved and executed by the councils of both the Township of Puslinch and City of Hamilton, however, this was not required and both Agreements were signed prior to year end.

## **STRATEGIC PLAN LINKAGE**

The proposed updates refer directly to the HCA Strategic Plan 2019-2023:

- **Strategic Goal – Organizational Excellence**

## **AGENCY COMMENTS – N/A**

## **LEGAL/FINANCIAL IMPLICATIONS**

There is no financial impact to the 2024 budget as Agreements were secured for category 2 and 3 programs and services identified for municipal funding in the HCA Board approved inventory of programs and services.

The Agreements for both participating municipalities span five years, from January 1, 2024 until December 31, 2028. The Agreements may be renewed for an unlimited number of additional five-year terms following review within six months of the end-date.

## **CONCLUSIONS**

This final submission now concludes the three-year transition period process and HCA has five-year Agreements secured with its two participating municipalities for funding specified category 2 and 3 programs and services as noted in the inventory.



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*HCA Final Report to the  
Ministry of Natural Resources and  
Forestry (MNRF)*

*As required for Conservation  
Authority Act Amendments*

[Transition Plan and Agreements Regulation \(O.Reg. 687/21\)](#)

*January 31, 2024*

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## HCA Final Report Details – January 31, 2024

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As required by Ontario Regulation 687/21 *Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the Act*:

1. The final version of the HCA Inventory of Programs and Services is attached as appendix A.
2. HCA confirms that it has entered into Agreements with both the City of Hamilton and Township of Puslinch and these can be found here:

**<https://conservationhamilton.ca/required-publications-under-the-conservation-authorities-act/>**



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## *HCA Inventory of Programs & Services*

### *As required for Conservation Authority Act Amendments*

*HCA Board approved January 20, 2022*

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Amended with Board approval March 2, 2023  
Final amendments upon Municipal Agreement December, 2023

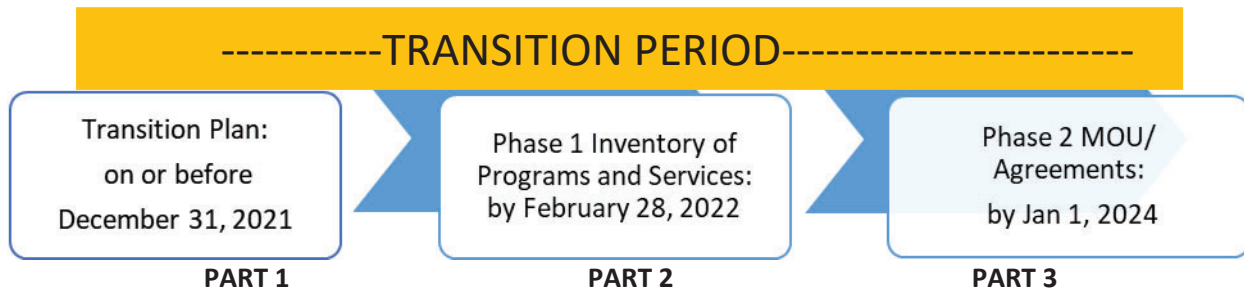
## BACKGROUND

On October 7th, 2021, three (3) new regulations were instituted under the *Conservation Authorities Act*.

- Ontario Regulation 686/21: Mandatory Programs and Services.
- Ontario Regulation 687/21: Transition Plans and Agreements for Programs and Services
- Ontario Regulation 688/21: Rules of Conduct in Conservation Areas.

The recently proclaimed provisions within the *Conservation Authorities Act* and these accompanying regulations establish the requirements for Transition Plans and Agreements for Programs and Services (see Section 21.1.2 of the Act and [Regulation 687/21](#)).

The key components and deadlines for the Transition Plan are illustrated in the figure below. The purpose of the transition period is to provide conservation authorities and municipalities the time to address changes to the budgeting and levy process prior to implementation of the new provisions on January 1st, 2024.



In order to be in compliance with Regulation 687/21, the HCA Board of Directors approved the HCA Transition Plan at its November 4<sup>th</sup>, 2021 meeting, following the requirements set out by MECP.

As shown in the figure above, the Board approved Inventory of Programs and Services is required by February 28th, 2022.

The Board approved inventory of programs and services is required to be circulated to HCA's participating municipalities, the City of Hamilton and Township of Puslinch and be published on the conservation authority's website or made available to the public by other means. The inventory may be amended after the February 28<sup>th</sup> deadline based on feedback received from participating municipalities during the balance of the transition phase from the February 28, 2022 deadline to December 31, 2023. Upon agreement to the inventory, municipal partners will need to enter into formal agreements for any Category 2 and 3 programs and services where municipal levy or funding is proposed to be used.

## HCA Tables of Programs and Services Natural Hazards Management Program

**MECP is requesting that EACH program and service is categorized into one of 3 categories, as follows:**

1. Mandatory programs and services (*defined in regulation*; where *municipal levy could be used without any agreement*)
  2. Municipal programs and services at the request of a municipality (*with municipal funding through an MOU/agreement*)
  3. Other programs and services. Programs and services an authority determines are advisable (*use of municipal levy requires an MOU/agreement with participating municipalities*)
- \* A program/service that is identified as mandatory is eligible but not required to receive municipal funding  
\* More than one category may apply to programs

**Program/Service and (subservices)  
The Program/service is in bold and the subservice below.**

**Description**

Category  
1 – Mandatory  
2- Municipal  
3- Other

Category classification concerns (V\* or N\*\*)  
\*Document any concerns for submission to MECP  
\*\*for Category 1 only; refer to section of O.Reg. 686/21 that applies as the required explanation

Funding mechanism- % contributions (e.g., provincial, federal, municipal funding, municipal levy, and self-generated revenue).

Estimated Annual cost (based on 2022 budget figures or other amount with explanation)

Program/Service provided date (prior or post Feb 2022) (indicate present or future).

**Natural Hazard Management – see 21.1 (1) 1.1 of the Conservation Authorities Act, Sections 1-8 of the Mandatory Programs and Services Regulation O.R. 686/21**

NH1	NH2
Section 28.1 Permit Administration and compliance activities	Review under Other Legislation
<p>1</p> <p>Reviewing and processing permit applications, associated technical reports, site inspections, communication with applicants, agents, and consultants. Legal expenses for regulations and compliance.</p>	<p>1</p> <p>Input to the review and approval processes under other applicable law, (e.g. Environmental Assessment Act, Drainage Act, Aggregate Resources Act, Niagara Escarpment Planning and Development Act proposals) with comments related to natural hazards, wetlands, watercourses and Sec.28 permit requirements.</p>
<p>N - Section 8 O. R 686/21</p> <p>62%</p> <p>Self-generated Revenue 38%</p>	<p>N – Section 6 O. R 686/21</p> <p>100%</p> <p>Self-generated Revenue proposed as advisable in the future for Niagara Escarpment Planning &amp; development Act Proposals</p>
\$401,000	\$58,500
Currently provided	Currently provided

<p><b>NH3</b> Municipal Plan Input and Review</p>	<p>Technical information and advice to municipalities on circulated municipal land use planning applications (Official Plan and Zoning By-law Amendments, Subdivisions, Consents, Minor Variances). Input to municipal land-use planning documents (OP, Comprehensive ZB, Secondary plans) related to natural hazards, on behalf of MNRF (delegated to CAs in 1983)</p>	<p>1, 2</p>	<p>N – Section 7 O. R 686/21</p>	<p>Municipal Levy 62% Self-generated Revenue 38%</p>	<p>\$401,000</p>	<p>Currently provided</p>
<p><b>NH4</b> Flood Forecasting and Warning</p>	<p>Daily data collection and monitoring of weather forecasts, provincial &amp; local water level forecasts and watershed conditions. Flood event forecasting. Flood warning and communications. Maintenance of equipment.</p>	<p>1</p>	<p>N – Section 2 O. R 686/21</p>	<p>Provincial Funding 36% Municipal Levy 64%</p>	<p>\$126,400</p>	<p>Currently provided</p>
<p><b>NH5</b> Flood and Erosion Control Infrastructure Operation and Management  NOTE: Operational and Asset management plans to be completed on or before December 31, 2024 per requirements in Section 5 of the <a href="#">Mandatory Programs and Services Regulation</a></p>	<p>Water &amp; erosion control infrastructure and low flow augmentation.</p>	<p>1</p>	<p>N – Section 5 O. R 686/21</p>	<p>Provincial Funding 36% Municipal Levy 64%</p>	<p>\$99,400  Cost to be determined for management plan</p>	<p>Currently Provided  Asset mgmt. plan to be developed</p>
<p><b>NH6</b> Flood Plain Mapping</p>	<p>Data collection, analysis and identification of areas susceptible to riverine or coastal flooding to create mapping products to delineate flood-prone areas.</p>	<p>1</p>	<p>N – Section 1 O. R 686/21</p>	<p>Reserves 100% Capital Block Funding Self-generated Funding</p>	<p>\$106,000</p>	<p>Currently Provided</p>

<p><b>NH7</b> Ice Management Services</p> <p>NOTE: Ice Management Plan(s) to be completed as necessary on or before December 31, 2024 per requirements in Section 4 of the <a href="#">Mandatory Programs and Services Regulation</a></p>	<p>Frazil ice formation forecasting in Spencer Creek in Dundas, including potential standby equipment.</p>	<p>1</p>	<p>N – Section 4 O. R 686/21</p>	<p>Municipal Levy 100%</p>	<p>\$20,400</p> <p>Costs to be determined for ice mgmt. plan</p>	<p>Currently Provided</p> <p>Ice mgmt. plan to be developed</p>
<p><b>NH8</b> Low water response</p>	<p>Conditions monitoring/analysis. Technical &amp; administrative support to the Water Response Team representing major water users and decision makers, who recommend drought response actions.</p>	<p>1</p>	<p>N – Section 3 O. R 686/21</p>	<p>Municipal Levy 100%</p> <p>Provincial Funding 0% (when available)</p>	<p>\$8,200</p>	<p>Currently provided</p>
<p><b>NH9</b> Natural Hazards Technical Studies and Information Management</p>	<p>Data collection and study of designs to mitigate natural hazards. Development and use of systems to collect and store data and to provide spatial geographical representations of data.</p>	<p>1</p>	<p>N – Section 1 O. R 686/21</p>	<p>Provincial Funding 0%</p> <p>Municipal Levy 100%</p>	<p>\$396,100</p>	<p>Currently Provided</p>
<p><b>NH10</b> Natural Hazards Communications, Outreach and Education</p>	<p>Promoting public awareness of natural hazards including flooding, drought, and erosion. Public events, materials. Social media services. Media relations.</p>	<p>1</p>	<p>N Section 1 O. R 686/21</p>	<p>Provincial Funding 36%</p> <p>Municipal Levy 64%</p>	<p>\$25,600</p>	<p>Currently Provided</p>
<p><b>HCA provides no additional programs (Category 2 or 3 – CA Specific) related to Natural Hazards</b></p>						

## Conservation Lands and Conservation Areas

**MECP is requesting that EACH program and service is categorized into one of 3 categories, as follows:**

1. Mandatory programs and services (*defined in regulation*; where *municipal levy could be used without any agreement*)
2. Municipal programs and services. Programs and services at the request of a municipality (with *municipal funding through an MOU/agreement*)
3. Other programs and services. Programs and services an authority determines are advisable (use of *municipal levy requires an MOU/agreement with participating municipalities*)

*\*A program/service that is identified as mandatory is eligible but not required to receive municipal funding  
\*More than one category may apply to programs*

Program/Service and (subservices) <i>The Program/service is in bold and the subservice below.</i>	Description	Category 1 – Mandatory 2- Municipal 3- Other	Category classification concerns (Y* or N**) <i>*Document any concerns for submission to MECP **for Category 1 only; refer to section of O.Reg. 686/21 that applies as the required explanation</i>	Funding mechanism- % contributions (e.g., provincial, federal, municipal funding, and self-generated revenue).	Estimated Annual cost (based on 2022 budget figures or other amount with explanation)	Program/Service provided date (prior or post Feb 2022) (indicate present or future)
<b>Conservation Authority Lands and Conservation Areas</b> see 21.1 (1) ii of the <i>Conservation Authorities Act</i> : <a href="#">Sections 9-1 of the Mandatory Programs and Services Regulation O.R. 686/21</a>						
<b>CL1</b> Section 29 Minister's regulation <a href="#">Rules for Conduct in Conservation Areas</a> (O. Reg. 688/21)	Conservation areas enforcement/compliance Legal expenses for regulation and compliance	1	N Section 9 O. R 686/21	Municipal Levy 40% Self-Generated Revenue 60%	\$222,100	Currently provided
<b>CL2</b> Conservation Area Strategy  NOTE: Strategy to be completed on or before <b>December 31, 2024</b> per requirements in Section 10 of the <a href="#">Mandatory Programs and Services Regulation</a>	Guiding principles, objectives, including for an authority's land acquisition and disposition strategy, land use categories on conservation authority owned land, recommended management principles for different land categories, etc.	1	N Section 10 O. R 686/21	Municipal Levy	Cost to be determined for management plan	Strategy to be developed

<p><b>CL3</b> Land Inventory</p> <p>NOTE: Inventory to be completed on or before <b>December 31, 2024</b> per requirements in Section 11 of the <a href="#">Mandatory Programs and Services Regulation</a></p>	<p>Development of an inventory containing information for every parcel of land owned or controlled by the Authority.</p>	<p>1</p>	<p>N Section 11 O. R 686/21</p>	<p>Municipal Levy</p>	<p>Cost to be determined for management plan</p>	<p>Inventory to be created</p>
<p><b>CL4</b> Management, operation and Maintenance of CA owned lands</p>	<p>Management and Maintenance of HCA owned lands Includes: Stewardship and restoration, Master and management plans, hazard tree and invasive species management and, Ecological monitoring Programs and services to maintain any facilities, trails or other amenities that support public access and recreational activities in conservation areas and that can be provided without the direct support or supervision of staff employed by the authority or by another person or body</p>	<p>1,2</p>	<p>N Section 9 O. R 686/21</p>	<p>Municipal funding through Capital block funding for major maintenance received from City of Hamilton 31%  Municipal Levy 69%</p>	<p>\$3,190,300</p>	<p>Currently Provided</p>
<p><b>Additional programs (Category 2 or 3 – CA Specific) related to CA Lands (e.g. a recreational activity is provided on the parcel that requires the direct support or supervision of staff employed by the authority or by another person or body, or commercial logging is carried out on the parcel)</b></p>						
<p><b>CL5</b> Management, operation and maintenance of CA owned lands for active recreation</p>	<p>Management and maintenance of HCA owned lands in order to connect communities and residents with active outdoor recreation opportunities such as camp sites, marina, pavilions, boat rentals, concessions and</p>	<p>3</p>	<p>N</p>	<p>Self-Generated Revenue 88%  Municipal funding through Capital block funding for special projects received from City of Hamilton 12%</p>	<p>\$8,099,720</p>	<p>Currently Provided</p>

	other assets that can be provided with the direct support or supervision of staff employed by the authority or by another person or body								
<b>CL6</b> Outdoor Environmental Education	Program Development and Delivery	3	N				Self-Generated Revenue 100%	\$302,700	Currently Provided
<b>CL7</b> Cultural Heritage Education and Experiences	Program Development and Delivery at Westfield Heritage Village	2	N				Municipal levy - city of Hamilton 100%	\$623,600	Currently Provided
<b>CL8</b> Land Lease and Agreement Management 44	Management of land leases and property agreements for agricultural leases and house rentals, as well as temporary third-party agreements on HCA owned or managed property for events, weddings, film shoots, day camps, group picnics, etc.	2, 3	N				Self-Generated Revenue 26% Mgmt. fee cost as per agreement with City of Hamilton for Confed Beach Park 74%	\$538,200	Currently Provided
<b>CL9</b> Land Acquisition Program	Acquisition of lands containing important natural heritage features, or natural hazards or strategically aligned with existing HCA lands as identified in the Land acquisition and securement policy.	3	N				Self-Generated Revenue Reserves	The range of land acquisition cost in any given year in the last 5 years ranges from \$0 when no lands were acquired up to \$530K in 2021.	Currently Provided

<p><b>CL10</b> Partnership Building and Volunteer Support</p>	<p>Development and management of mutually beneficial community partnerships, (e.g. "friends of" Nations (e.g. deer harvest) volunteer events (e.g. garbage pick-up, plantings, invasive species removal etc.) and collaboration and work with partners on shared goals and objectives (Cootes to Escarpment, Hamilton Burlington Trails Council, Bruce Trail Conservancy etc).</p>	<p>3</p>	<p>N</p>	<p>Self-Generated Revenue 100%</p>	<p>\$152,500</p>	<p>Currently Provided</p>
<p><del>CL</del> <b>CL11</b> Hamilton Conservation Foundation</p>	<p>Support for the foundation which raises awareness, funds and resources for HCA programs and services related to natural lands conservation, education and cultural heritage as well as special projects.</p>	<p>3</p>	<p>N</p>	<p>Self-Generated Revenue 100%</p>	<p>\$393,300</p>	<p>Currently Provided</p>

## Drinking Water Source Protection

**MECP is requesting that EACH program and service is categorized into one of 3 categories, as follows:**

1. Mandatory programs and services (*defined in regulation*; where *municipal levy could be used without any agreement*)
2. Municipal programs and services at the request of a municipality (*with municipal funding through an MOU/agreement*)
3. Other programs and services an authority determines are advisable (*use of municipal levy requires an MOU/agreement with participating municipalities*)

*\*A program/service that is identified as mandatory is eligible but not required to receive municipal funding*

*\*More than one category may apply to programs*

Program/Service and (subservices) <i>The Program/service is in bold and the subservice below.</i>	Description	Category 1 – Mandatory 2- Municipal 3- Other	Category classification concerns (Y* or N**) <i>*Document any concerns for submission to MECP **for Category 1 only; refer to section of O.Reg. 686/21 that applies as the required explanation</i>	Funding mechanism- % contributions (e.g., provincial, federal, municipal funding, municipal levy, and self-generated revenue).	Estimated Annual cost (based on 2022 budget figures or other amount with explanation)	Program/ Service provided date (prior or post Feb 2022) (indicate present or future)
<b>DW1</b> Source protection authority role as set out in the Clean Water Act.	Source Protection Area/Region, tech support, SPC support, SPA reports and meetings, activities required by the Clean Water Act and regulations. Assisting in the co-ordination and implementation of the source protection plan that applies to the authority's source protection area. Where the authority considers it advisable, reviewing and commenting on any proposal made under another Act that is circulated to the authority for the purpose of determining,	1	N Section 13 O. R 686/21	Provincial Funding 100%  Per agreement, All costs processed through Conservation Halton	\$0	Currently provided

**Drinking Water Source Protection** see 2.1.1 (1) 1. iii of the Conservation Authorities Act; Section 13 of the [Mandatory Programs and Services Regulation O.R. 686/21](#)

	<p>i. whether the proposal relates to a significant drinking water threat that is governed by the plan, or</p> <p>ii. the proposal's potential impact on any drinking water sources protected by the plan.</p>					
<b>Additional programs (Category 2 or 3 – CA Specific) related to Drinking Water Source Protection</b>						
<b>DW2</b> Stewardship	Well decommissioning	2	N	Municipal levy/Municipal funding	Costs range year to year depending on number of private landowner applications	Currently provided

## Water Quality & Quantity Monitoring

**MECP is requesting that EACH program and service is categorized into one of 3 categories, as follows:**

1. Mandatory programs and services (defined in regulation; where municipal levy could be used without any agreement)
2. Municipal programs and services. Programs and services at the request of a municipality (with municipal funding through an MOU/agreement)
3. Other programs and services. Programs and services an authority determines are advisable (use of municipal levy requires an MOU/agreement with participating municipalities)

*\*A program/service that is identified as mandatory is eligible but not required to receive municipal funding*

*\*More than one category may apply to programs*

Program/Service and (subservices) <i>The Program/service is in bold and the subservice below.</i>	Description	Category 1 – Mandatory 2- Municipal 3- Other	Category classification concerns (Y* or N**) <i>*Document any concerns for submission to MECP **for Category 1 only; refer to section of O.Reg. 686/21 that applies as the required explanation</i>	Funding mechanism- % contributions (e.g., provincial, federal, municipal funding, municipal levy, and self-generated revenue).	Estimated Annual cost (based on 2022 budget figures or other amount with explanation)	Program/ Service provided date (prior or post Feb 2022) (indicate present or future)
<b>WQ1</b> Provincial Water Quality Monitoring Network (PWQMN)	A long-standing (50+ year) CA/MECP partnership for stream water quality monitoring. CA takes water samples; MECP does lab analysis and data management	1	N Section 12 O. R 686/21	Municipal Levy 100%	\$130,300	Currently provided
<b>WQ2</b> Provincial Groundwater Monitoring Network (PGMN)	A long-standing (20+ year) CA/MECP partnership for ground water level and quality monitoring. CA maintains equipment, data transfer to MECP, water sampling; MECP provides equipment, standards, data management.	1	N Section 12 O. R 686/21	Municipal Levy 100%	\$130,300	Currently provided

<b>Additional programs (Category 2 or 3 – CA Specific) related to Water Quality &amp; Quantity</b>						
<b>WQ3</b> Aquatic Monitoring Program – non-HCA lands	Aquatic monitoring on 3-year cycle basis (OBBN, temperature and fish collection).	2	Y This is a long-term monitoring program that also takes place on HCA lands and is addressed in CL4 above. The overall program is utilized by HCA, City of Hamilton and consultants and helps identify aquatic health on a watershed basis. If funding were not available for private lands aspect, it would impact the overall program, long term data collected and HCA's ability to establish trends and assess overall aquatic watershed health.	Municipal levy 100%	\$130,300	Currently provided
<b>WQ4</b> Water Quality Monitoring - City	Water quality and erosion site monitoring for City of Hamilton  City of Hamilton Groundwater Monitoring Well Inspections  City of Hamilton Groundwater Monitoring Well Water Quality Sampling	2	N	Municipal funding direct City of Hamilton 100%	\$56,000	Currently provided

<p><b>WQ5</b> Water Quality Monitoring – COA and HHRAP</p>	<p>City of Hamilton E. Coli Sampling Program at PWQMN Sites Greenville Surface Water Monitoring</p>	<p>2,3</p>	<p>N</p>	<p>Municipal funding direct city of Hamilton as needed Provincial Funding- MECF</p>	<p>\$75,000</p>	<p>Currently provided</p>
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## Core Watershed-based Resource Management Strategy

MECP is requesting that **EACH program and service is categorized into one of 3 categories, as follows:**

1. Mandatory programs and services (*defined in regulation*); where *municipal levy could be used without any agreement*)
2. Municipal programs and services. Programs and services at the request of a municipality (*with municipal funding through an MOU/agreement*)
3. Other programs and services. Programs and services an authority determines are advisable (*use of municipal levy requires an MOU/agreement with participating municipalities*)

*\*A program/service that is identified as mandatory is eligible but not required to receive municipal funding*

*\*More than one category may apply to programs*

Program/Service and (subservices) <i>The Program/service is in bold and the subservice below.</i>	Description	Category 1 – Mandatory 2- Municipal 3- Other	Category classification concerns (Y* or N**) <i>*Document any concerns for submission to MECP **for Category 1 only; refer to section of O.Reg. 686/21 that applies as the required explanation</i>	Funding mechanism- % contributions (e.g., provincial, federal, municipal funding, municipal levy, and self-generated revenue).	Estimated Annual cost (based on 2022 budget figures or other amount with explanation)	Program/ Service provided date (prior or post Feb 2022) (indicate present or future)
<p><b>Core Watershed-based Resource Management Strategy</b> see 2.1.1 (1) 2 of the <i>Conservation Authorities Act</i>; Section 12(4)-(9) of the <i>Mandatory Programs and Services Regulation</i> O.R. 686/21</p>						
<p><b>CW1</b> Strategy Development</p> <p>NOTE: Strategy to be completed on or before December 31, 2024 per requirements in 12(4)-(9) of the <i>Mandatory Programs and Services Regulation</i></p>	<p>Develop guiding principles and objectives that inform the design and delivery of programs and services the CA is required to provide</p> <p>Collate/compile existing resource management plans, watershed plans, studies and data.</p> <p>Strategy development, implementation &amp; annual reporting</p> <p>A review of programs and services provide for the purposes of compliance with CA Act</p> <p>Develop a process for periodic</p>	1	N	Municipal levy	Cost to be determined for strategy development	<p>Strategy to be developed.</p> <p>Some information currently provided in the form of HCA Strategic plan, HCA Annual reports and Watershed Reports cards.</p> <p>Future work required to incorporate all requirements.</p>

	<p>review including procedures to engage/ consult with stakeholders and the public. Strategy development must include a stakeholder and public consultation component The Watershed based resource management strategy must be made public on the CA website.</p>					
<b>Additional Programs/Services (Category 2 &amp; 3; CA specific)</b>						
<b>Watershed and Integrated Shoreline Management Planning/Science and Reporting</b>						
<p><b>CW2</b> Sub-watershed planning</p>	<p>Partner developed plan which identifies streams, wetlands, forests, groundwater recharge areas, and other natural areas. It includes an inventory of plants, animals, birds, and other species. Information on stream flows, water quality, groundwater movement and other natural features is also included. The plan contains policies and implementation actions to protect, enhance and improve the health of the area.</p>	2	N	<p>Municipal Levy 100%</p> <p>Projects undertaken Upon request</p>		<p>Undertaken previously and will be provided in the future upon request</p>

<p><b>CW3</b></p> <p>Watershed Monitoring Program</p>	<p>Planning and undertaking an ecological monitoring program on a watershed basis to support the objectives of both HCA and our two municipal partners. This includes the collection, storage, assessment and distribution of ecological data and information regarding watershed conditions and health and participation on any working groups.</p>	<p>2</p>	<p>N</p>	<p>Municipal Levy 100%</p>	<p>\$229,100</p>	<p>Currently provided</p>
<p><b>CW4</b></p> <p>Watershed Stewardship and Restoration (Urban, rural &amp; Agriculture)</p>	<p>Apply for and manage external funding, promote private land stewardship, outreach, provide advice and design assistance to property owners. Implementation of watershed plan stewardship recommendations.</p>	<p>2</p>	<p>N</p>	<p>Municipal Levy 100%</p>	<p>\$338,000</p>	<p>Currently provided</p>
<p><b>CW5</b></p> <p>Climate change impact assessment /Planning and Policies</p>	<p>Identification of vulnerability or risk, and the development of mitigation and adaptation policies and corporate climate change initiatives</p>	<p>1 and/or 2</p>	<p>N Section 1 O.R 686/21</p>	<p>Municipal Levy 100%</p>	<p>\$129,900</p>	<p>Currently provided</p>

## Enabling Program Services

<b>Enabling Program Services</b> <i>NOTE: methodology for inclusion of these types of services will be finalized once Phase 2 regulations are released</i>	
Corporate Services	<i>Administrative, human resources, operating and capital costs which are not directly related to the delivery of any specific program or service, but are the overhead and support costs of a conservation authority.</i>
Financial Services	Accounting and payroll
Legal Expenses	Costs related to agreements/contracts, administrative by-law updates
Communications and Marketing	Supporting delivery of products and programs through communication platforms and promotion of revenue generating activities; websites creation and maintenance
Governance	Supporting CA Boards, Advisory Committees, Office of CEO/CAO/GM and Senior Management
Asset Management	Asset management planning, facilities & property management
Information Technology Management/ GIS	Data management, records retention. Development and use of systems to collect and store data and to provide spatial geographical representations of data.

## List of Municipal MOU or Agreements for Category 2 Programs and Services Details of Municipal Agreements

Ontario Regulations 687/21 – Transition Plans and Agreements for Programs and Services Under Section 21.1.1.2 of the Act  
Section 6 Subsection 5 requirements

(5) For each Category 2 program or service listed in the inventory under clause (2) (a), the authority shall include the following information:

1. The name of the municipality on behalf of which the program or service is provided.
2. The date on which the authority and the municipality entered into a memorandum of understanding or another agreement with respect to the provision of the program or service.
3. *NOTE:* Modified and/or additional MOUs will need to be negotiated with municipalities. Future updates to the Programs and Services Inventory listing will reflect the status of MOUs

Programs & Services Inventory	Category 1-Mandatory 2-Municipal P&S 3-Other	Name of the Municipality	Description	Memorandum of Understanding (MOU)/Agreement Status	Date Entered and
NH3	2	City of Hamilton	Planning application and technical review services	March 1, 2013 – 2018 with renewal provision for a further 5 years	
NH3	2	County of Wellington	Planning application and technical review services	November 1, 2017 – no expiry noted	
CL4	2	Town of Flamborough	Operation and Maintenance of Middletown Trail (LaFarge 2000 Trail)	July 16, 1999 – 50-year term	
CL4	2	Town of Stoney Creek	Operation and Maintenance of Powerline Trail (Dofasco 2000 Trail)	December 14, 1999 – 50-year term	
CL7	2	City of Hamilton	Westfield Heritage Village program delivery and development Funding Agreement	January 1, 2024 – December 31, 2028	
CL8	2	City of Hamilton	Confederation Beach Park Management Agreement	January 1, 2017 – December 31, 2026 with City provision to extend up to 2 additional & consecutive periods of 5 years each providing written notice	
DW2	2	City of Hamilton & Township of Puslinch	Well decommissioning	January 1, 2024 – December 31, 2028	
WQ3	2	City of Hamilton & Township of Puslinch	Aquatic monitoring program on non-HCA lands	January 1, 2024 – December 31, 2028	
WQ4	2	City of Hamilton	Water Monitoring Program Data Collection	January 1, 2024 – December 31, 2028	
WQ5	2	City of Hamilton	Water Quality Monitoring – CAO and HHRAP	January 1, 2024 – December 31, 2028	
CW2	2	City of Hamilton & Township of Puslinch	Sub watershed planning	January 1, 2024 – December 31, 2028	
CW3	2	City of Hamilton & Township of Puslinch	Watershed Monitoring Program	January 1, 2024 – December 31, 2028	
CW4	2	City of Hamilton & Township of Puslinch	Watershed Stewardship and Restoration	January 1, 2024 – December 31, 2028	
CW5	2	City of Hamilton & Township of Puslinch	Climate Change Impact/Planning and Policies	January 1, 2024 – December 31, 2028	

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# Report

**TO:** Conservation Advisory Board

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**RECOMMENDED BY:** T. Scott Peck, MCIP, RPP, Deputy Chief Administrative Officer

**PREPARED BY:** Mike Stone, MCIP, RPP, Acting Director, Watershed Management Services

Jonathan Bastien, PEng, Manager, Water Resources Engineering

Alex Nizharadze, PEng, Water Management Specialist

**MEETING DATE:** December 14, 2023

**RE:** Hamilton Conservation Authority Shoreline Management Plan

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## STAFF RECOMMENDATION

**THAT the Conservation Advisory Board recommends to the Board of Directors:**

**THAT the Draft Shoreline Management Plan be received as information;**

**THAT staff be directed to make the Draft Shoreline Management Plan available for public and stakeholder review and comment; and**

**THAT the final version of the Shoreline Management Plan based on the public input received then be returned to the Board for adoption.**

## BACKGROUND & PURPOSE

The Hamilton Conservation Authority's (HCA) watershed includes approximately 42 km of shoreline along Lake Ontario and Hamilton Harbour. This area extends from Fifty

Point Conservation Area at the east end of the watershed to the Woodland Cemetery at the west end of Hamilton Harbour (Figure 1).



**Figure 1 – HCA Shoreline**

Source: Zuzek Inc, October 2023

Shorelines are dynamic areas, and subject to influence from naturally occurring processes and forces of erosion, sediment transport and deposition, fluctuating water levels, wind and waves. As a result of these conditions, areas that lie along the Lake Ontario shoreline, including Hamilton Harbour, may be subject to hazardous conditions, including flooding hazards, erosion hazards and dynamic beach hazards.

The western end of the Lake Ontario shoreline within the HCA watershed consists of an approximately 8 km continuous stretch of dynamic beach, which is largely in public ownership (Hamilton Beach). The eastern half of the shoreline and Hamilton Harbour are predominantly in private ownership and developed; the shoreline in these areas has also largely been hardened, with a wide variety of flood and erosion protection structures in place. Interest in property re-development and infilling along this portion of the shoreline has created challenges and resulted in increased risks to public safety and property damage, aggravation of hazardous conditions, and impacts to coastal processes.

The provincial legislative and regulatory framework recognizes there are significant risks associated with development in shoreline areas. As a result, the overall objective of both provincial and HCA policy is to generally direct development to areas outside of shoreline hazard areas. In considering proposals for development on the shoreline, it is necessary to consider and account for the combined landward limits of the flooding, erosion and dynamic beach hazards in order to mitigate, to the greatest extent possible, the potential effects of these hazards on property and human safety, to ensure existing

hazardous conditions are not aggravated, and to provide for the maintenance of coastal processes and conservation of sensitive ecosystems.

Since 2006, HCA has regulated development in areas adjacent to the Lake Ontario and Hamilton Harbour shoreline that may be affected by flooding, erosion or dynamic beaches under Ontario Regulation 161/06 (HCA's Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses) made under the Conservation Authorities Act, R.S.O. 1990. The hazard limits associated with Great Lakes shorelines are delineated based on the Ontario Ministry of Natural Resources and Forestry (MNRF) standards and criteria, and consist of the furthest landward extent of the aggregate of all applicable hazards.

HCA's Planning & Regulation Policies and Guidelines (October 6, 2011) describe how the flooding, erosion and dynamic beach hazard limits are determined based on the provincial standards and criteria, and in consideration of existing available technical information and data. While HCA does map estimated hazard limits for the shoreline and their associated regulated areas, some of the information on which hazard limits are based has become outdated, and current and comprehensive mapping is not available to staff.

Given the above, HCA undertook to have a Shoreline Management Plan (SMP) prepared to assist in defining hazard limits and regulating development along the shoreline. The major objectives of the SMP include:

- Update coastal hazard mapping using the best available data and technical analyses for the entire HCA shoreline of Lake Ontario and Hamilton Harbour.
- Protect new development from coastal hazards, and ensure that it does not impact the environmental features and functions of the shoreline.
- Minimize danger to life and property damage from flooding, erosion, and associated hazards along the shoreline.
- Ensure that the shoreline development adequately addresses hazards through a combination of public and private management and development alternatives;
- Increase the resilience of coastal communities including climate change considerations.
- Incorporate nature-based options to reduce coastal hazards.

In response to a competitive Request for Proposals (RFP), Zuzek Inc., in partnership with SJL Engineering Inc. (SJL) and the Danish Hydraulic Institute (DHI), were retained by HCA in November 2021 to complete the Shoreline Management Plan.

## STAFF COMMENT

Zuzek Inc. has completed a Shoreline Management Plan (SMP) for the Hamilton Conservation Authority. The SMP was completed over the 2021-23 period. Key components of the study included:

- Field data collection, including collection of oblique photographs of the entire shoreline and bathymetric data.
- Technical work and assessment to establish long-term recession (erosion) rates and update statistical analysis of lake levels. Numerical modelling tools were used to evaluate spatial variability in storm surge and nearshore wave conditions in the lake and harbour.
- Based on the outputs from the data collection and technical analysis, updated mapping was produced for the flooding, erosion, and dynamic beach hazards.
- Development of reach specific management recommendations for 8 shoreline reaches, based on the study principles of sustainable coastal development, integrated coastal management, and resilient coastal communities.

HCA staff reviewed and provided comment on a first draft of the SMP in May and June 2023. Based on study work completed and HCA comments, the report was updated and revised. The final report was submitted on October 20, 2023. Key findings and recommendations of the SMP include:

- The Lake Ontario shoreline within the HCA watershed is highly erosive, especially on the lake bottom at the toe of existing shoreline protection structures. Maintenance or upgrading of existing shoreline protection structures will be a forever commitment to protect existing dense residential development. Over time, the erosion and flooding hazards may become too severe to support ongoing residential development.
- Hamilton Beach provides almost 8 km of public open space, a waterfront trail, and sandy beaches. The historical sediment sources for this beach have all but disappeared and littoral drift is negatively impacted by lakefill barriers and harbour jetties, which will lead to further management challenges during periods of high lake levels, such as beach, dune, and bank erosion. The implementation of nature-based solutions to increase the resilience of the beach are encouraged, such as dune restoration and beach nourishment, avoiding hard armouring of the shoreline where possible.
- The shoreline in the harbour port lands and recreational amenities in the harbour are all heavily armoured. These shoreline protection structures should be monitored regularly with maintenance completed in a timely manner. Where possible, habitat

enhancement projects, such as rock shoals and islands, should be incorporated into future shoreline protection and maintenance projects.

- Monitoring of the bluffs fronting the Woodland Cemetery in Reach 8 should be completed annually, as signs of slope instability were observed. The shoreline is presently unprotected. Given the low wave energy environment and shallow conditions close to shore, there may be opportunities for innovative nature-based solutions that will protect the bluffs from further erosion and enhance nearshore habitat.

The SMP provides the HCA with updated coastal hazard mapping of its shoreline based on the latest technical information and data, and will assist the HCA in administering its regulation of development on the shoreline under Ontario Regulation 161/06.

The Shoreline Management Plan is a technical document. Notwithstanding, as part of the process to develop and finalize the Shoreline Management Plan, public consultation was included as a requirement to inform the public and stakeholders, including the City of Hamilton, of the findings of the document and to obtain comments. Staff intend to post the Draft Shoreline Management Plan on the HCA's web commenting platform known as "Bang the Table". From the comments received, the Draft Shoreline Management Plan will be finalized and brought forward to a future Board of Directors meeting for adoption.

## **STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2023:

- **Strategic Priority Area – Water Management**
  - Initiatives – Complete Lakeshore Management Plan.

## **AGENCY COMMENTS**

Not Applicable.

## **LEGAL/FINANCIAL IMPLICATIONS**

Not Applicable.

## **CONCLUSIONS**

The Lake Ontario and Hamilton Harbour shoreline within HCA's watershed is impacted by flooding, erosion and dynamic beach hazards. HCA regulates the shoreline to help

minimize and mitigate the potential for damage to property as a result of hazards. To assist in the management and regulation of the shoreline, HCA retained Zuzek Inc. to complete a SMP. The SMP provides the HCA with updated coastal hazard mapping of its shoreline based on the latest technical information and data, and makes management recommendations on a reach specific basis to assist the HCA in administering its regulation of development on the shoreline under Ontario Regulation 161/06. The Draft Shoreline Management Plan will be made available for public and agency comment and will be finalized and brought forward to a future Board of Directors meeting for adoption.

# Report

**TO:** Conservation Advisory Board

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**RECOMMENDED BY:** T. Scott Peck, MCIP, RPP, Deputy Chief Administrative Officer

**PREPARED BY:** Jonathan Bastien, PEng, Manager, Water Resources Engineering

**MEETING DATE:** December 14, 2023

**RE:** Hamilton Conservation Authority Flood Plain Mapping Projects – Status Update

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## STAFF RECOMMENDATION

**THAT the Conservation Advisory Board recommends to the Board of Directors:**

**THAT the draft flood plain mapping reports and draft flood plain maps be made available for public and stakeholder review and comment; and**

**THAT the flood plain mapping reports and flood plain maps, based on the public input received, be brought forward for adoption by the Board of Directors.**

## BACKGROUND

The objective of flood plain management is to prevent the loss of life, minimize property damage and social disruption and encourage a coordinated approach to the use of land and the management of water. The components of flood plain management include directing development away from flood plains through land use planning and regulation of development, protection through structural measures, and emergency response through flood forecasting and warning.

HCA regulates watercourse flood plains to help minimize and mitigate the potential for loss of life and damage to property as a result of flood hazards. Flood plain mapping is a critical tool for HCA in achieving this objective.

Flood plain mapping is typically based on:

- Regulatory storm event (100-year design event or Hurricane Hazel historic storm)
- Historic storm information and does not account for climate change at this time
- Hydrology (Flows) account for rain, thunderstorm, and snow melt events (as required)
- Future land use projections (as per Official Plan)
- Does not account for flow-reduction due to flood control / SWM / storage in the storm sewer system
- Does not account for flooding effects of debris / ice jams during a storm

Additionally, flood plain mapping is typically developed or updated to account for:

- Updated topographic mapping, hydraulic analysis, and hydrologic analysis (including use of more recent land use and climate data) to represent current and future conditions
- Enhanced reproducibility and defensibility
- Extended coverage to additional reaches of watercourses
- Advances in modeling technology
- Production of digital flood plain maps, as opposed to hardcopy maps
- Adherence to a consistent standard

Currently, HCA has existing guidelines regarding the following, to guide the development of flood plain mapping:

- Background Information Report
- Mapping Check / Survey Work

- Hydrology (approach, QA/QC, documentation, preferred parameter values, calibration / verification, etc.)
- Hydraulics (approach, QA/QC, documentation, preferred parameter values, calibration / verification, etc.)
- Flood plain maps

## **STAFF COMMENT**

HCA has a long-term program to systematically improve and expand our flood plain mapping. Currently, the following flood plain mapping studies are ongoing by external consultants:

- Stoney Creek & Battlefield Creek
- Stoney Creek Numbered Watercourses
- Redhill Creek

Maps showing the flood plain mapping study areas are provided in Figures 1 to 3. These three flood plain mapping studies are expected to be completed in draft form in the first quarter of 2024. The studies will develop reports detailing the modeling completed as well as summarizing the peak flows and flood levels at key locations. Flood plain maps detailing the extents of the expected regulatory flooding will also be produced.

HCA staff will review and provide comments on drafts of the reports and flood plain maps, which will then be accounted for in final versions.

These flood plain mapping studies will provide the HCA with updated watercourse flood hazard mapping based on the latest technical information and data and will assist the HCA in administering its regulation of development adjacent to watercourses under Ontario Regulation 161/06.

The flood plain mapping reports and flood plain maps are technical documents. Notwithstanding, as part of the process, public consultation is included as a requirement to inform the public and stakeholders of the findings of the document and to obtain comments. The City of Hamilton and Township of Puslinch will be included in this consultation process. Staff intend to post the reports and flood plain maps on the HCA's web commenting platform known as "Bang the Table". From the comments received, the reports and flood plain maps will be finalized and brought forward to a future Board of Directors meeting for adoption.

## **STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2023:

- **Strategic Priority Area – Water Management**
  - Initiatives – Complete floodplain mapping update program

## **AGENCY COMMENTS**

Not Applicable.

## **LEGAL/FINANCIAL IMPLICATIONS**

Not Applicable.

## **CONCLUSIONS**

HCA regulates watercourse flood plains to help minimize and mitigate the potential for loss of life and damage to property as a result of flood hazards. To assist in the management and regulation of watercourse flood plains, HCA has retained consultants to complete flood plain mapping studies. The flood plain mapping provides the HCA with updated flood hazard mapping based on the latest technical information and data and assists the HCA in administering its regulation of development adjacent to watercourses under Ontario Regulation 161/06.

Three flood plain mapping studies are currently ongoing and expected to be completed in the first quarter of 2024. The flood plain mapping reports and flood plain maps will be made available for public and stakeholder, including the City of Hamilton and Township of Puslinch, comment and will be finalized and brought forward to a future Board of Directors meeting for adoption.

Figure 1 – Stoney Creek & Battlefield Creek Flood Plain Mapping Study Area

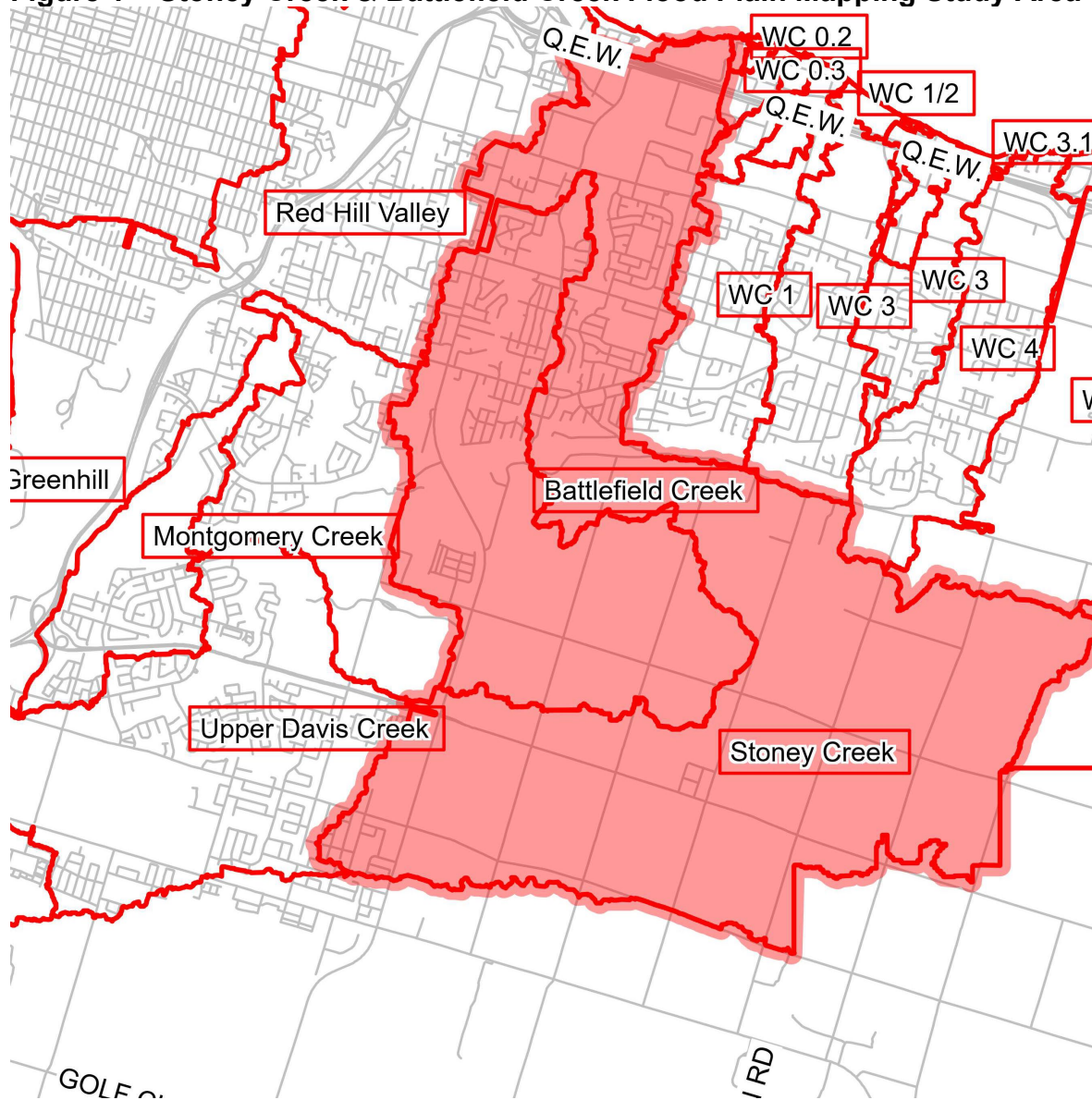
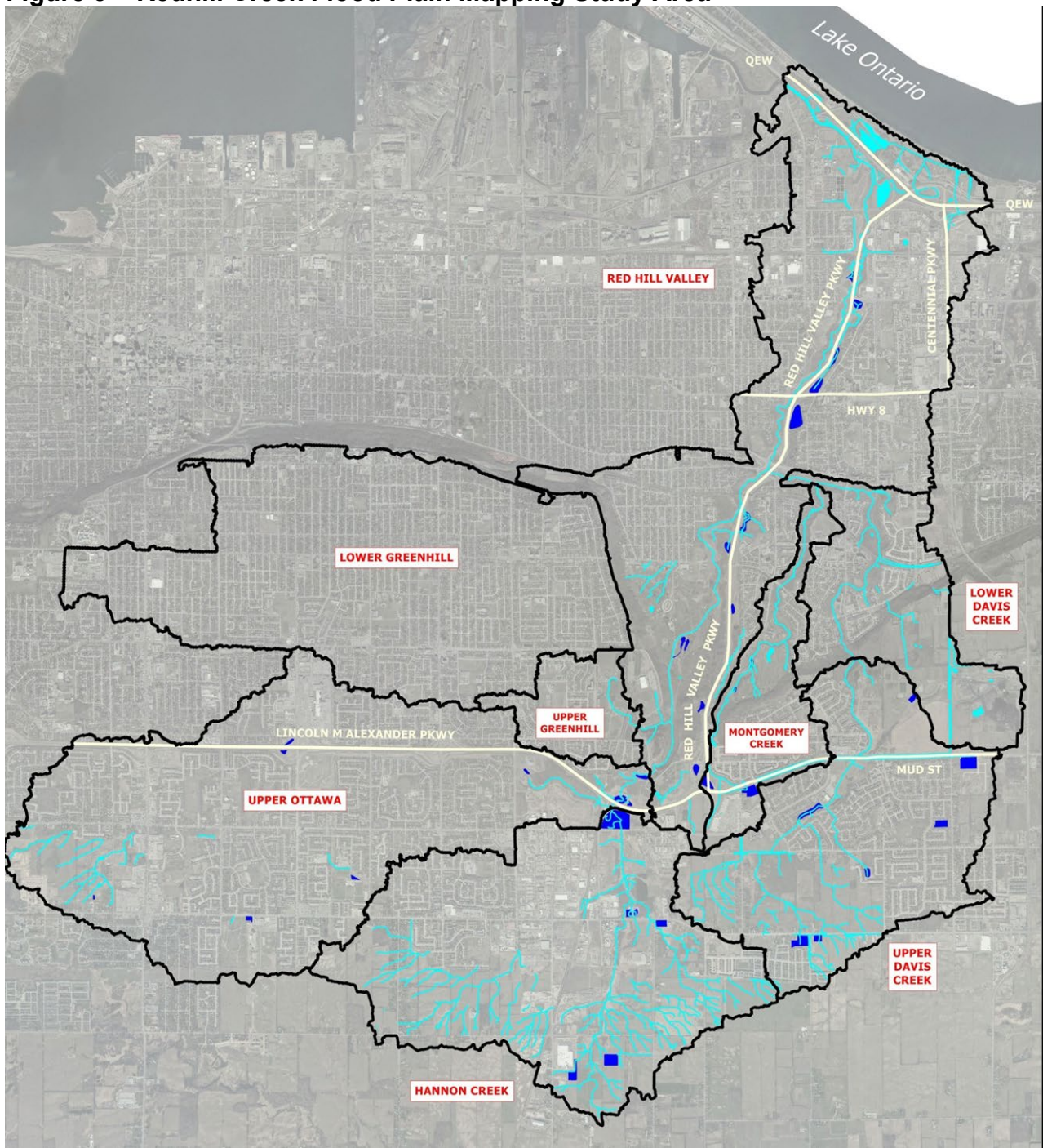


Figure 2 – Stoney Creek Numbered Watercourses Flood Plain Mapping Study Area



Figure 3 – Redhill Creek Flood Plain Mapping Study Area



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# Report

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**MEETING DATE:** February 1, 2024

**RE:** 2024 Schedule of Board of Directors Meetings

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## **STAFF RECOMMENDATION:**

**THAT the Board of Directors' 2024 Meeting Schedule contained within this report be approved.**

## **PURPOSE & BACKGROUND**

The purpose of this report is to establish the HCA Board of Directors' 2024 meeting schedule for as per Annual General Meeting (AGM) requirements, internal business planning purposes and public awareness.

The HCA Administrative By-law provides that the calendar of regular Board meetings for the year is approved at the Annual General Meeting (AGM). Under Section C (11) Meeting Procedures –Meeting Schedule and Annual General Meeting, it indicates the Board will meet 10 times per year beginning at 6:00 p.m. on the first Thursday of the months of February, March, April, May, June, July, September, October, November and December.

## **STAFF COMMENT**

The meeting schedule below for the 2024 Board of Directors maintains the meeting schedule in the Administrative By-laws.

**2024 Board of Directors Meeting Dates with 6pm start time:**

<b>February 1, 2024</b>	<b>July 4, 2024</b>
<b>March 7, 2024</b>	<b>September 5, 2024</b>
<b>April 4, 2024</b>	<b>October 3, 2024</b>
<b>May 2, 2024</b>	<b>November 7, 2024</b>
<b>June 6, 2024</b>	<b>December 5, 2024</b>

Note that Source Protection Authority Board meetings for 2024 will be added as required to the above meeting dates to coincide with a regular Board of Directors meeting.

At the May 4, 2023 Board of Directors meeting, a motion was approved to create an annual schedule of Section 28 hearing dates, to be held as needed, and that the hearings be scheduled for days separate from regular Board meetings. It was also decided to designate the hearing dates on alternate months from Conservation Advisory Board meetings.

The following are the 2024 dates designated for Section 28 hearings starting at 6pm (and canceled if there is no hearing):

- Thursday, January 11 – Cancelled
- Thursday, March 14
- Thursday, May 9
- Thursday, July 11
- Thursday, September 12
- Thursday, November 14

**STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2024:

- **Strategic Priority Area – Organizational Excellence**

**AGENCY COMMENTS – N/A**

**LEGAL/FINANCIAL IMPLICATIONS**

There are no new or additional financial implications posed by adoption of the Board of Directors' 2024 Meeting Schedule as presented.

**CONCLUSIONS**

The Board of Directors meeting dates for 2024 provide for 10 meetings. The Chair may call for additional meetings as necessary or cancel meetings due to lack of agenda items. Section 28 hearing dates will be cancelled if not required.



# Report

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**MEETING DATE:** February 1, 2024

**RE:** Appointment of Voting Representatives to Conservation Ontario

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## STAFF RECOMMENDATION

**THAT the following members be appointed to Conservation Ontario for 2024:**

**Designate:** Chair  
**Alternate:** Vice Chair  
**Second Alternate:** Chief Administrative Officer  
**Third Alternate:** Deputy Chief Administrative Officer; and further

**THAT Conservation Ontario be advised of these appointments.**

## PURPOSE & BACKGROUND

The purpose of this report is to establish the voting representatives to Conservation Ontario as per Annual General Meeting (AGM) requirements, internal business planning purposes and awareness for Conservation Ontario.

As noted in the HCA Administrative By-Law in Section 11C, Meeting Procedures, the Authority at the Annual General Meeting shall include in its course of business the appointment of the voting delegates to Conservation Ontario.

Conservation Ontario is a non-profit association that represents Ontario’s 36 Conservation Authorities. Conservation Ontario is directed by a Council comprised of appointed and elected municipal/citizen officials from the 36 Conservation Authorities Boards of Directors.

## **STAFF COMMENT**

The HCA has traditionally designated the Chair as the voting representative to Conservation Ontario with alternates. Conservation Ontario holds quarterly meetings in the Toronto area, at a central location for the 36 conservation authorities. During winter months, the meetings may be held virtually. The meeting dates for 2024 have been set for:

- Monday, April 15
- Monday, June 24
- Monday, September 23
- Monday, December 9
- 

## **STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2023:

- **Strategic Priority Area – Organizational Excellence**

**AGENCY COMMENTS – N/A**

## **LEGAL/FINANCIAL IMPLICATIONS**

There are no new or additional financial implications posed by adoption of the Board of Directors' appointment of voting representatives as presented.

## **CONCLUSIONS**

All Conservation Authorities designate voting delegates to Conservation Ontario. It is recommended that HCA continue with its designation of the Chair with noted alternates.

# Report



**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**RECOMMENDED AND PREPARED BY:** Scott Fleming, Director of Finance and Central Support Services

**MEETING DATE:** February 1, 2024

**RE:** Appointment of Auditors

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## STAFF RECOMMENDATION

**THAT the Hamilton Conservation Authority appoints Grant Thornton as its auditors for the 2024 fiscal year.**

## PURPOSE & BACKGROUND

The purpose of this report is to appoint the auditors for the HCA for the 2024 year as per Annual General Meeting (AGM) requirements and for internal business planning.

As noted in the HCA Administrative By-Law in Section B, Governance, (7), Appointment of Auditor, the Board of Directors at the Annual General Meeting shall include in its course of business the appointment of the auditor for the upcoming year.

## STAFF COMMENT

Grant Thornton was awarded a five-year contract for audit services in 2020 following an RFP process. In addition to the HCA, they also carry out the audit of the Hamilton Conservation Foundation and review the statements of Confederation Beach Park prepared as required by the Management Agreement between the HCA and the City of Hamilton.

As part of their service, a senior representative of the firm attends the Budget & Administration Committee and/or Board of Directors meeting when the respective year Audited Financial Statement are presented. All services provided last year and in previous years were considered to have been undertaken in a competent and professional manner.

### **STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2024:

- **Strategic Priority Area – Organizational Excellence**

### **AGENCY COMMENTS**

Not applicable

### **LEGAL/FINANCIAL IMPLICATIONS**

Total fees paid to Grant Thornton in 2022 were \$45,900.00 which was the third year of the current contract of audit services spanning the years 2020 through 2024. Fees for the 2023 and 2024 audit are set at \$47,700.00 and \$48,600.00 respectively. There is one year remaining on the existing contract, after which we will conduct an open tender for audit services for 2025 through 2029.

### **CONCLUSION**

Grant Thornton has provided excellence service to HCA and there is no rationale to terminate the existing contract.



# Memorandum

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**RECOMMENDED BY:** Mike Stone, MA, MCIP, RPP – Acting Director, Watershed Management Services

**PREPARED BY:** Jonathan Bastien, P.Eng. – Manager, Water Resources Engineering

**DATE:** February 1, 2024

**RE:** Watershed Conditions Report

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## SYNOPSIS

During the period of November 27<sup>th</sup> 2023 to January 22<sup>nd</sup> 2024, there were no observations, reports, or expectations of significant watercourse flooding events or Lake Ontario shoreline flooding events. However, a winter rain event on January 9<sup>th</sup> warranted issuing messages and additional monitoring of elevated watercourse conditions.

Currently, there are also no observations, reports, or expectations that significant watercourse flooding or significant water safety concerns are occurring.

Current watercourse flows range from at baseflow conditions to elevated above baseflow conditions but below the adopted thresholds for significant water safety concerns. The average monthly flows for January so far have ranged between slightly above to significantly above long-term averages. However, it is believed that ice conditions within the creeks have artificially affected flow readings during January, thus there is some level of uncertainty as to the actual flows.

Currently, there are no observations, reports, or expectations that significant Lake Ontario shoreline flooding is occurring.

The Lake Ontario mean daily water level averaged across the entire lake is currently about 3 cm above average for this time of year.

Current Christie Lake and Valens Lake reservoir levels are within the preferred winter operating levels.

The most recent drought assessment indicated that normal conditions are an appropriate overall characterization of the watershed.

There are no significant rainfall and/or snowmelt events (+20 mm in a day) forecasted for the watershed over the next 2 weeks, at this time. In the next 9 days, no significant Lake Ontario shoreline flooding is expected, at this time. HCA staff will continue to undertake monthly drought assessments, and coordinate with the Hamilton Low Water Response Team as required if drought conditions are identified.

## **CURRENT WATERSHED CONDITIONS – January 22<sup>nd</sup>, 2024**

### Current Flows in Major Area Watercourses

There are no observations, reports, or expectations that significant watercourse flooding or significant water safety concerns are occurring at this time. Current flows range from at baseflow conditions to elevated above baseflow conditions but below the adopted thresholds for significant water safety concerns. However, it is believed that ice conditions within the creeks are artificially affecting current readings, thus there is some level of uncertainty as to the actual flows. The five available streamflow gauges are Upper Spencer Creek at Safari Road, Middle Spencer Creek at Highway 5, Lower Spencer Creek at Market Street, Ancaster Creek at Wilson Street and Red Hill Creek at Barton Street.

The average monthly flows for January so far have ranged between slightly above to significantly above long-term averages. Again, it is believed that ice conditions within the creeks have artificially affecting readings during January, thus there is some level of uncertainty as to the actual average monthly flows. Monthly flow in Upper Spencer Creek at Safari Road has been 156% of long-term averages (considered above average). Monthly flow Middle Spencer Creek at Highway 5 has been 176% of long-term averages (considered well above average). Monthly flow in Lower Spencer Creek at Market Street has been 150% of long-term averages (considered above average). Monthly flow in Ancaster Creek at Wilson Street has been 122% (considered slightly above average). Monthly flow in Red Hill Creek at Barton Street has been 235% (considered significantly above average).

December 2023 average flows were near long-term averages. Monthly flow in Upper Spencer Creek at Safari Road was 90% of long-term averages. Monthly flow Middle Spencer Creek at Highway 5 was 93% of long-term averages. Monthly flow in Lower Spencer Creek at Market Street was 100% of long-term averages. Monthly flow in Ancaster Creek at Wilson Street was 96%. Monthly flow in Red Hill Creek at Barton Street was 100%.

November 2023 average flows ranged between slightly below to well below long-term averages. Monthly flow in Upper Spencer Creek at Safari Road was 81% of long-term averages (considered slightly below average). Monthly flow Middle Spencer Creek at Highway 5 was 61% of long-term averages (considered below average). Monthly flow in Lower Spencer Creek at Market Street was 80% of long-term averages (considered slightly below average). Monthly flow in Ancaster Creek at Wilson Street was 81% (considered slightly below average). Monthly flow in Red Hill Creek at Barton Street was 52% (considered well below average).

October 2023 average flows were predominantly below to well below long-term averages. Monthly flow in Upper Spencer Creek at Safari Road was 59% of long-term averages (considered below average). Monthly flow Middle Spencer Creek at Highway 5 was 53% of long-term averages (considered well below average). Monthly flow in Lower Spencer Creek at Market Street was 42% of long-term averages (considered well below average). Monthly flow in Red Hill Creek at Barton Street was 55% (considered below average). The exception was Ancaster Creek at Wilson Street, where monthly flow was 82% (considered slightly below average). This is due to the fact that the Ancaster area received higher amounts of rain (15 to 50% more) over the month, compared to the other gauges.

### Current Lake Ontario Water Levels

At this time, there are no observations, reports, or expectations of significant Lake Ontario shoreline flooding. The Lake Ontario mean daily water level in the Hamilton area was 74.61 m to 74.62 m IGLD85 as of yesterday. The Lake Ontario mean daily water level averaged across the entire lake (74.61 m IGLD85 as of yesterday) is about 3 cm above average for this time of year.

### Current Storages in HCA Reservoirs

Current Christie Lake levels (765.71 ft) are within the preferred winter operating levels (765.3 to 765.8 ft).

Current Valens Lake levels (274.33 m) are within the preferred winter operating levels (274.15 to 274.40m).

### Current Soil Conditions

Surface and root-zone soils are considered moist to wet, and are fully frozen across the watershed.

## **RECENT STORM EVENTS**

During the period of November 27<sup>th</sup> 2023 to January 22<sup>nd</sup> 2024, there were no observations, reports, or expectations of significant watercourse flooding events or Lake Ontario shoreline flooding events.

However, a winter rain event warranted issuing messages and additional monitoring of watercourse conditions.

### Potential for Watercourse Flooding During Winter Rain Event

*January 8<sup>th</sup> to 15<sup>th</sup>*

Prior to this event, 25 to 40 mm of mixed precipitation was forecasted for the Hamilton area. Given the combination of rain and snow forecasted, as well as the mostly frozen soil conditions within the watershed at that time, there was considerable uncertainty as to the amount of runoff that would occur. HCA staff continued to monitor watercourse and weather conditions closely, and reassessed the potential for flooding. There were water safety concerns during this event in some watercourses, due to elevated water levels and flows. Also, localized watercourse flooding of low-lying areas that typically flood during higher water levels is expected to have occurred in some watercourses.

However, there were no received observations, reports, or expectations of significant watercourse flooding.

HCA engineering staff issued the following messages related to this winter rain event, to communicate the potential watercourse flooding and water safety concerns to the City and public:

- Flood Watch - Watercourse Flooding on January 8<sup>th</sup>
- Updated Flood Watch - Watercourse Flooding on January 12<sup>th</sup>
- Termination of Updated Flood Watch – Watercourse Flooding on January 15<sup>th</sup>

## **RECENT WATERSHED LOW WATER CONDITIONS**

The most recent drought assessment (including data up to December 31) indicated that normal conditions are an appropriate overall characterization of the watershed.

## **FORECASTED WATERSHED CONDITIONS**

### Watercourse Flooding

There are currently no significant rainfall and/or snowmelt events (+20 mm in a day) forecasted for the watershed over the next 2 weeks. HCA staff continue to monitor conditions and forecasts routinely. Resultant water levels and flows from currently

anticipated rain and snowmelt are not expected to result in significant watercourse flooding.

#### Lake Ontario Shoreline Flooding

In the next 9 days, no significant Lake Ontario shoreline flooding is expected. According to International Lake Ontario – St. Lawrence River Board information, weather conditions, including temperatures and precipitation, will primarily determine the rate and magnitude of water level fluctuations over the coming weeks.

#### Watershed Low Water Conditions

HCA staff will continue to undertake monthly drought assessments, and coordinate with the Hamilton Low Water Response Team as required if drought conditions are identified.

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# Memorandum

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**PREPARED BY:** T. Scott Peck, MCIP, RPP, Deputy Chief Administrative Officer  
Mike Stone, MA, MCIP, RPP, Acting Director, Watershed Management Services  
Jonathan Bastien, P.Eng., Manager, Water Resources Engineering  
Stacey Van Opstal, Water Monitoring Technologist  
Lesley McDonnell, Acting Supervisor, Stewardship & Ecological Services  
Colin Oaks, Aquatic Ecologist

**MEETING DATE:** February 1, 2024

**RE:** 2023 Annual Monitoring Program Summary

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## BACKGROUND & PURPOSE

Watershed Management Services (WMS) staff bring a Watershed Conditions Report to the monthly HCA Board of Directors meetings. The purpose of the Watershed Conditions Report is to provide a summary of any recent or forecasted storm events, flooding or drought, and to identify current conditions in major creek systems, water levels in Lake Ontario and operating levels and storage capacity in HCA's reservoirs.

The monitoring program that provides the data (rain gauge, stream flow gauge, weather monitoring, soil and snow conditions and reservoir data) that is used to complete the Watershed Conditions Report supports HCA's mandated role to monitor and advise our municipal partners and the public regarding current conditions in watercourses/ waterbodies, significant weather events, and potential natural hazard risks resulting from these conditions. The effective reporting timing for these weather-related flooding issues is monthly.

In response to the presentation of the Watershed Conditions Report at the October 5, 2023 Board of Directors meeting, additional reporting on water quality and stewardship activities was requested. Staff advised they would review the request and report back to the Board at a future meeting to determine parameters and a schedule for such reporting to be effective.

Staff brought a report to the November 2, 2023 Board of Directors regarding their further review of the matter. The report noted that in addition to the water resources monitoring work undertaken in support of HCA's natural hazard mandate and the preparation of the monthly Watershed Conditions Report, that HCA also undertakes terrestrial and aquatic ecological monitoring and water quality monitoring programs which help to inform the assessment of longer-term trends in watershed health and to identify stewardship/restoration opportunities. It is important to note these monitoring programs are not a spills response or wildlife management program, and that generally, any remedial actions are typically undertaken by other agencies/groups.

The November 2 Board report also noted that HCA's water quality data is shared with the City of Hamilton and is reported on annually to our partners through the Hamilton Harbour Remedial Action Plan, and further, that water quality and ecological monitoring data is also used to inform the HCA's Watershed Report Card, which is completed every 5 years. The report noted the effective reporting timing for this environmental monitoring is annually, and that as such, staff would work to prepare these reports for the Board to be presented annually at the December Board of Directors meetings commencing in 2024. In response to discussion regarding the report presentation, staff further agreed to prepare a report summarizing 2023 monitoring work to be presented at the February 2024 Board of Directors meeting.

The purpose of this report is to provide a summary of monitoring program activities and key findings from 2023.

## **STAFF COMMENTS**

HCA undertakes terrestrial and aquatic ecological monitoring and water quality monitoring programs to collect data regarding watershed conditions and to help inform the assessment of long-term trends in watershed health. A summary of each monitoring program and its key findings from 2023 is presented below.

### **Water Quality Monitoring Program**

The water quality (chemistry) monitoring programs undertaken by HCA WMS staff provide essential information regarding the current state of water quality in key streams and groundwater areas within the watershed. Maintaining these programs over extended periods of time allows HCA to assess changes and trends in water quality. In addition, the data and assessments provide valuable information to assist HCA and partners/others (e.g. City of Hamilton, Ministry of Environment, Conservation & Parks (MECP), academia, development consultants) with their water quality programs,

activities and decision making. A summary of 2023 results from HCA's three water quality monitoring programs is presented below.

### ***Hamilton Harbour Remedial Action Plan Water Quality Monitoring of Main Tributaries to Cootes Paradise***

HCA's program focuses on collecting surface water quality samples and identifying water quality contributions to Cootes Paradise from key watercourses. Water quality samples collected and reviewed by HCA staff identify potential key sources of watercourse-delivered nutrient, sediment and *E. coli*, determines annual averages and long-term trends in watercourse concentrations, and monitors the effects of implemented remedial actions.

All sampling sites had samples in 2023 that exceeded the total phosphorus, *E. coli* and total suspended solid targets. The Chedoke Creek sampling exceeded the total phosphorus and *E. coli* targets for all or nearly all samples. Spencer Creek, Borers Creek and Ancaster Creek sites exceeded the targets for total phosphorus and *E. coli* between 6 to 14 of the 19 samples. For all sampling sites, less than half of samples collected exceeded the total suspended solids target. Generally total suspended solids concentrations were highest on sampling days that experience precipitation and as a result surface ground water runoff and erosion.

Under this monitoring program, the long-term data collected to date indicates that Spencer Creek annual average concentrations of total phosphorus, *E.coli*, and total suspended solids are improving. Spencer Creek *E.coli* annual average concentrations are nearing the targets of 200 CFU/100 mL. Spencer Creek site has had some years where the average annual concentration for *E.coli* and total suspended solids are below the targets.

Borers Creek annual average concentrations of total phosphorus, *E.coli* and total suspended solids are improving. *E.coli* values at this site are often near the target concentration. This site has had some years where the annual concentrations are below the total suspended solids objective of 25 mg/L. Total phosphorus annual average concentrations are consistently above the target concentration of 0.03 mg/L.

Ancaster Creek annual average concentrations of total phosphorus, *E.coli* and total suspended solids are improving at the three downstream sampling locations. These three locations consistently experience annual average concentrations near or below the targets for *E.coli*. These sites also have some years where the average annual total suspended solids concentration is below the target. The most upstream site along Ancaster Creek at Rousseaux Street has annual average concentrations for *E.coli* that are well above the other Ancaster sites. Annual concentrations of *E.coli* at this site appear to be improving, however the period of record for this site is only 6 years. For the most upstream site on Ancaster Creek, annual average total suspended solids concentrations have remained relatively stable and below the delisting objective of 25 mg/L.

Chedoke Creek has historically experienced high total phosphorus and *E.coli* concentrations. Annual average concentrations for Chedoke Creek sample sites of total phosphorus and *E.coli* are well above targets. Increasing total suspended solid concentration trends since 2018 have been noted for the most downstream Chedoke Creek sampling site. Varying concentration trends since 2018 have been noted for the other Chedoke Creek sampling sites. All Chedoke sites have a have number of years where the average annual total suspended solids concentration is below the target. Chedoke Creek is a highly impacted system. These impacts include municipal infrastructure (sewer cross-connections and combined sewer overflows), urban runoff, and concrete channelization including sections of the watercourse that are buried underground.

### ***Provincial Water Quality Monitoring Network (PWQMN) and Provincial Groundwater Monitoring Network (PGMN)***

HCA's focus for these programs is on the collection of water quality samples on behalf of MECP. However, sampling results (provided by MECP) are used by HCA staff for the HCA Watershed Report Card water quality assessments every 5 years. Surface water quality grades for subwatersheds from the latest Watershed Report Card (2023) were two graded 'B', six graded 'C', eight graded 'D' and five graded 'F'. Subwatersheds with higher grading tend to be in areas with more natural cover. Groundwater quality grades from the latest Watershed Report Card (2023) were four wells graded 'A', one well graded 'B' and two wells graded 'C' for nitrate + nitrite concentrations. While three wells graded 'A', one well graded 'B' and three wells graded 'F' for chloride concentrations.

### **Terrestrial Resource Monitoring Program**

The Terrestrial Resource Monitoring Program (TRMP) was developed in 2012 to establish a long-term consistent approach to monitoring forest health in the watershed. The program is closely based on the monitoring methodology developed by Environment Canada in its Ecological Monitoring and Assessment Network (EMAN), and aims to determine the status and trend of hardwood forests following terrestrial indicators of ecological integrity (EI) through time and throughout the watershed. In addition to EMAN, HCA Ecology staff also undertake monitoring activities targeting specific invasive species and to track the success of restoration projects completed by HCA.

Ecological monitoring using standardized data collection protocols at regular intervals allows changes in natural systems over time to be documented, and provides information which can be used by HCA, partners and others, to identify emerging issues, restoration opportunities and help guide management decisions. A summary of 2023 results from the TRMP is presented below.

### ***Ecological Monitoring and Assessment Network (EMAN)***

On a year-by-year basis ten of the TRMP's thirty-nine EMAN monitoring plots are surveyed. Surveys document tree species, size and health. Ground vegetation within plots is also recorded by species. Metrics completed from this work include tree health, snag abundance, tree mortality, native plant richness, invasive species occurrence, mean coefficient of conservatism, spring ephemeral diversity and tree regeneration. While the EMAN monitoring protocol does not lend itself easily to year-over-year reporting given only a subset of data is gathered each year, more comprehensive analysis can be completed based on multi-year data. HCA Ecology staff are in the process of compiling and analyzing EMAN data from the 2013-2020 period. Notwithstanding this, a summary of 2023 EMAN survey findings is presented below.

Ten plots were monitored in 2023, including two plots at each of Valens CA, Dundas Valley CA, Felker's Falls CA and Iroquoia Heights CA, and one plot at Borer's CA and one plot at the Crerar Forest (public lands). Sugar maple was the most common species recorded during 2023 surveys. Dead or dying Ash species were also common. Of the 132 plant species recorded, 96 species (73%) were native and 36 species (27%) non-native. Invasive species were recorded, including Common buckthorn in all plots, and garlic mustard in 60% of plots. Forest regeneration was noted in all plots, with Sugar maple and ash species being the most common.

### ***Invasive Species Monitoring***

Three different invasive tree pests are actively surveyed for on HCA owned lands, Spongy Moth, Hemlock Woolly Adelgid (HWA) and Oak Wilt. Each of these are considered threats to tree health and in turn the structure, composition and overall biodiversity of our forests. Oak Wilt and HWA surveys aim to detect the presence/absence of these invasive tree pests on our lands. Spongy Moth egg mass surveys help staff predict the expected level of tree defoliation across known locations of these tree pests.

Neither Oak wilt or HWA were detected during 2023 surveys. Spongy moth is a cyclical tree pest that was at its peak across Ontario in 2022. Since then, the numbers of these insects have declined. Egg mass survey results from the winter 2022 - 2023 period suggested that defoliation forecasts for HCA Conservation Areas in 2023 were expected to range from moderate to severe. HCA ecology staff also conduct forest canopy photo monitoring in five different Conservation Areas with monthly visits (May – September) to the same locations with pictures taken of the canopy. Comparing the forecasted defoliation to the photo monitoring results shows that while some areas were predicted to experience a severe defoliation, only the upper canopy leaves were impacted and the lower canopy branches and smaller trees maintained their leaf cover. This lessens the impact on overall tree health.

### **Aquatic Resource Monitoring Program**

The Aquatic Resource Monitoring Program (ARMP) was developed in 2004 to establish a long-term consistent approach to monitoring aquatic systems throughout the watershed. The ARMP focuses on monitoring parameters that are indicators of ecological health. The program integrates chemical (water chemistry via benthic macro-invertebrate community composition), biological (fish populations and communities) and physical (fish habitat, channel morphology) assessments within all major watersheds to allow for assessment of overall watershed health and comparison of results over time.

ARMP survey work is undertaken at sites across the watershed on a three-year cycle, which includes annual sites (sampled each year) and additional sites sampled in alternating years (year 1, year 2 and year 3 sites). The ARMP aims to improve knowledge regarding the health and composition of fisheries and fish habitat, allow for the quantification of changes in fisheries and fish habitat over time, and to provide information that supports the review of development applications and helps to inform decision making.

HCA Ecology staff are in the process of compiling and analyzing all available ARMP data from 2000 to present on a subwatershed basis to allow for long-term trend identification. Notwithstanding this, a summary of 2023 ARMP survey findings is presented below.

### ***Fisheries***

Both electrofishing and seine netting sampling techniques are utilized to sample fish given the diversity of watercourses/waterbodies found within the HCA watershed. Electrofishing is generally applied in smaller streams that have woody debris and undercut banks, while seine netting is used in the reservoirs. HCA staff follow a modified version of the Ontario Streams Assessment Protocol (OSAP) for its electrofishing surveys. Twenty-one sites were sampled for fish in 2023 (thirteen annual sites, five year 2 sites and three sites at Conservation Areas in support of Master Plan work). A total of 1693 fish were captured, representing 35 different species. Notable catches for 2023 included two Bowfin at Lower Spencer Creek, which had last been recorded here in 2018, and Northern Pike at Spencer Creek at Highway 5. Tadpole Madtom and Iowa Darter were recorded at Conservation Area Master Plan sampling sites.

In assessing the fisheries data recorded at the annual sampling sites in 2023, HCA ecology staff have calculated Index of Biotic Integrity (IBI) ratings for each sample location. The IBI method is a multivariate indicator of stream health, which utilizes metrics such as species richness, indicator species, trophic composition, fish abundance, and fish condition to give an indication of stream health. Five of the thirteen annual sampling sites received a 'Good' rating, seven sites a 'Fair' rating, and one site a 'Poor' rating.

### ***Benthic Invertebrates***

HCA follows the Ontario Benthos Biomonitoring Network (OBBN) protocol for the sampling of benthic invertebrates ('benthics'), and analyzes findings using the Family Biotic Index (FBI) methodology. Given benthics are less able to readily move about the stream as compared to fish species, it is assumed they are a better indicator of physical, chemical, and biological conditions at the site level. Benthics were collected at 24 sites in 2023. However, samples are still being identified and processed in the HCA lab and there are no results available at this time.

For interest, the results of the analysis from the Watershed Report card (2023), which was based on benthic data from 2018-2022, found that one subwatershed was graded 'B', four graded 'C', eight graded 'D' and seven graded 'F'. FBI scores and associated letter grades are based on averages for an entire creek/subwatershed system, and are not necessarily an indication of poor water quality throughout an entire system.

### **STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2024:

- **Strategic Priority Area – Water Management**
  - Initiatives – Work with the City of Hamilton, and our partners on the Hamilton Harbour Remedial Action Plan to address nutrient and sediment loading within the Hamilton Harbour Watershed
  
- **Strategic Priority Area – Natural heritage Conservation**
  - Initiatives - Continue and expand the aquatic and terrestrial monitoring programs

### **AGENCY COMMENTS**

N/A

### **LEGAL/FINANCIAL IMPLICATIONS**

There are no budget implications resulting from the monitoring programs, as current programming is covered under existing funding arrangements as required with the City of Hamilton and Township of Puslinch as either category 1 or 2 programs, and/or with support from the MECP.

## **CONCLUSIONS**

In order to provide additional information regarding watershed conditions, HCA staff will bring an annual report to the Board of Directors each December to summarize monitoring results from the year. While it may be possible to provide some comments regarding watershed health based on annual monitoring results, identifying changes in conditions and longer-term trends based on annual data does have limitations. More detailed assessment and meaningful conclusions regarding changes in watershed health require a longer time frame, more similar to the five-year reporting cycle of the Watershed Report Card.

# Memorandum

**TO:** Board of Directors

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**PREPARED BY:** Gordon R. Costie

**MEETING DATE:** February 1, 2024

**RE:** Conservation Areas Experiences Update

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## BACKGROUND:

HCA provides high quality, diverse conservation areas that promote outdoor recreation, health and well being and strengthen public awareness of the importance of being in or near our conservation areas.

## STAFF REPORTING COMMENTS

- HCA Conservation Areas – all of the areas remain open year-round from sunrise to sunset daily. Staff are on site maintaining the roads and keeping the parking lots open for safe winter access. Winter is a great time to visit a conservation area for traditional winter activities such as hiking, bird watching, disc golf, or for on-ice activities like ice fishing and ice skating should conditions become available at select locations. Note : view the HCA winter and ice safety information link for updates...  
[HCA Winter and Ice Safety Information - Hamilton Conservation Authority \(conservationhamilton.ca\)](https://conservationhamilton.ca)
- Valens Lake Conservation Area – Winter camping and cabin rentals continue to trend in this conservation area no matter how cold or how much snow is in the forecast. Staff are doing a great job keeping up with the pent-up demand for this unique experience in the great outdoors. The winter campers and the Drumlin Cabin renters absolutely love their winter wonderland setting at Valens Lake Conservation Area.

- Family Day Weekend – February 17, 18, 19 – All HCA Conservation Areas open for self-guided winter activities throughout the long weekend. Gatehouses will be staffed to welcome visitors and answer questions on permitted activities for each of the areas. This long weekend is featuring Westfield Heritage Village Conservation Area as the go-to recommendation for families wanting to get into winter. Come discover the newly unveiled 6.7-kilometer forested trail system, explore three new bridge crossings, and experience the ever-popular village setting with over 30 historical buildings – all part of this terrific Conservation Area offering.