



Conservation Halton Board Meeting/Annual General Meeting

Conservation Halton
2596 Britannia Road West, Burlington, ON
April 18, 2024, 1:30 PM - 4:00 PM EDT

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Conservation Halton Board Meeting Minutes

Conservation Halton

February 15, 2024, at 1:00 PM EST

@ 2596 Britannia Road, Burlington, ON L7P 0G3

1. Roll Call

Members Present

Sameera Ali
Sara Bailey
Rob Burton
Allan Elgar
Jane Fogal
Chantal Garneau
Dave Gittings
Sammy Ijaz
Gordon Krantz
Marianne Meed Ward
Rory Nisan
Gerry Smallegange (Chair)
Shawna Stolte
Alvin Tedjo

Absent

Cameron Kroetsch
Sue McFadden
Alex Wilson
Maureen Wilson

Absent with Regrets

Cathy Duddeck (Vice Chair)
Kristina Tesser Derksen

Staff Present

Hassaan Basit, President & CEO/Secretary-Treasurer
Garner Beckett, Executive Director, Conservation Halton Foundation
Adriana Birza, Senior Advisor, Office of the President & CEO
Craig Machan, Director, Parks & Operations
Kellie McCormack, Director, Planning & Regulations
Marnie Piggot, Director, Finance
Plezzie Ramirez, Director, Human Resources
Barb Veale, Senior Director, Watershed Management & Climate Change
Mark Vytvytskyy, Chief Operating Officer
Justin Wei, Senior Manager, Finance
Kim Barrett, Senior Specialist, Research & Sustainability, Ecology
Leah Smith, Policy and Special Initiatives Lead, Planning & Regulations
Robyn Koutrouliotis, Admin. Assistant, Office of the President & CEO

The Chair called the meeting to order at 1:06 p.m.

2. Disclosure of Pecuniary Interest

There were **no disclosures of pecuniary interest.**

3. Acceptance of Agenda

CH 01 01

Moved by: Allan Elgar
Seconded by: Chantal Garneau

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

Carried

4. CEO Verbal Update

The President & CEO provided an update on various areas of the organization.

Financial

Grants

From Q4 2023 to present, Conservation Halton (CH) has received \$655,580 in grants. Staff is awaiting decisions on an additional \$903,000 in outstanding grants.

Crawford Lake Visitor Centre

CH received a \$2.4 million grant from the Investing in Canada Infrastructure Program (ICIP) for the Crawford Lake Visitor Centre project.

Glen Eden

Glen Eden opened on January 5, 2024, with over 20,000 visits to date, despite mild weather conditions.

Risk Mitigation

Risk Mitigation Update for Employee Safety and Compliance

Adjustments have been made to the Enterprise Risk Management (ERM) Committee by adding new functional areas for risk identification and mitigation.

Glen Eden Risk Assessment

A risk assessment conducted by BrokerLink, the insurance provider for Glen Eden, identified the park as the highest-ranking ski resort in its portfolio that includes almost all Canadian ski hills.

People

2024 Momentum Action Planning

Momentum Action Planning for 2024 is complete.

Staff Awards

The President & CEO thanked Board members Gordon Krantz and Kristina Tesser Derksen for attending the recent CH staff awards event. More than 150 nominations were submitted for nine (9) award categories.

Parks

Maple Season

Maple Season will run from March 2, 2024, through April 7, 2024.

Tap-a-Tree Event

During Maple Season, staff hosts a special Tap-a-Tree event at Mountsberg Conservation Area for CH Board members and local dignitaries. The event is a great opportunity to learn about one of CH's most popular family programs and celebrate the start of Maple Season. The event will include a sugarbush tour with the CH education team, taking part in a tree-tapping demonstration, sampling different kinds of maple syrup, a wagon ride, a Connected Campaign announcement, and a pancake lunch. A formal invitation will be circulated shortly.

Winterlit

The Winterlit event is now complete and, despite the mild weather, hosted over five thousand (5000) guests.

CEO Office

CH Board Representation for City of Hamilton

The Chair and staff representatives met with the CH Board appointees for the City of Hamilton (the City) to address meeting schedule conflicts. There are no City Council or committee meeting conflicts with the October 31, 2024, CH Board meeting. The City representatives have been offered the option to attend all 2024 CH Board meetings virtually. The June 2024 Board meeting has been moved to Friday, June 21 to further accommodate the schedule of Hamilton Councillors appointed to the CH Board. Board member Alex Wilson will attend CH Governance & Risk Committee meetings as his schedule permits. Hamilton members have not attended any CH events since their appointment in 2022. The June and October meetings should work with their schedules and discussions can be had at the Board prior to finalizing the 2025 meeting schedule later this year.

June CH Board Meeting/Board Tour

The June Board meeting/Board Tour has been moved to Friday, June 21, 2024, from 10:00 a.m. to 4:00 p.m.

5. Presentations

- 5.1. Restoration of Sixteen Mile Creek (Bill Grierson, Landowner)

6. Consent Items

- 6.1. Approval of DRAFT November 23, 2023, Conservation Halton Board Meeting Minutes
- 6.2. Purchasing Activity – October 1, 2023, to December 31, 2023 (CHB 01 24 01)
- 6.3. Status of Conservation Halton's Regulatory, Spill Flood Hazard, and Land Use Planning Policy Reviews (CHB 01 24 02)
- 6.4. Permits & Letters of Permission issued under Ontario Regulation 162/06 from October 1 to December 31, 2023 (Q4 2023) (CHB 01 24 03)
- 6.5. Reid Road Reservoir Quarry Update (CHB 01 24 04)

- 6.6. Advancing Natural Asset Management Practices in the Grindstone Creek Watershed (CHB 01 24 05)

7. Action Items

- 7.1. Proposed reconstruction and expansion of a two-storey dwelling within 7.5 metres of the floodplain associated with Lower Wedgewood Creek, 466 Drummond Road, Town of Oakville (CHB 01 24 06)

CH 01 02 Moved by: Dave Gittings
Seconded by: Sammy Ijaz

THAT the Conservation Halton Board **approves the issuance of a permit for the reconstruction and expansion of a two-storey dwelling within 7.5 metres of the floodplain associated with Lower Wedgewood Creek, 466 Drummond Road, Town of Oakville (CH File No. RAPP-9058);**

And

THAT the Conservation Halton Board **receives the staff report entitled “Proposed reconstruction and expansion of a two-storey dwelling within 7.5 metres of the floodplain associated with Lower Wedgewood Creek, 466 Drummond Road, Town of Oakville (CH File No. RAPP-9058)”.**

Carried

- 7.2. Regulatory Allowance Policy Update (CHB 01 24 07)

Leah Smith, Policy and Special Initiatives Lead, Planning & Regulations, provided an overview of the draft regulatory allowance policies for public release and engagement.

The Board inquired about the feasibility of creating a standalone consulting business unit. Staff noted developers and municipal partners have shown interest in contracting consulting services from CH and provided a brief overview of legal considerations. Staff will bring a report to a future Board meeting.

The Board discussed the potential implications of the proposed *Get It Done Act* on the regulatory allowance policy.

CH 01 03 Moved by: Rory Nisan
Seconded by: Sameera Ali

THAT the Conservation Halton Board **endorses the draft policies for public release and engagement, as presented in the staff report entitled “Regulatory Allowance Policy Update”;**

And

THAT the Conservation Halton Board **receives the staff report entitled “Regulatory Allowance Policy Update”.**

Carried

- 7.3. Updated Conservation Halton Technical Submission Guidelines (CHB 01 24 08)

CH 01 04 Moved by: Chantal Garneau

Seconded by: Marianne Meed Ward

THAT the Conservation Halton Board **approves the updated versions of the technical submission guidelines entitled “Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2024”, “Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2024”, and “Conservation Halton Guidelines for Slope Stability Assessments for Valleys, 2024”;**

And

THAT the Conservation Halton Board **receives for information the staff report entitled “Updated Conservation Halton Technical Submission Guidelines, 2024”.**

Carried

7.4. Watershed-Based Resource Management Strategy Workplan, Timeline, and Status Update (CHB 01 24 09)

CH 01 05 Moved by: Dave Gittings
Seconded by: Rob Burton

THAT the Conservation Halton Board **receives for information the staff report entitled, “Watershed-Based Resource Management Strategy Workplan, Timeline, and Status Update”;**

And

THAT the Conservation Halton Board **approves the proposed 2024 workplan and timeline for developing the Watershed-Based Resource Management Strategy.**

Carried

7.5. Watershed Climate Change Vulnerability and Risk Assessment (CHB 01 24 10)

CH 01 06 Moved by: Alvin Tedjo
Seconded by: Gordon Krantz

THAT the Conservation Halton Board **receives for information the staff report entitled “Watershed Climate Change Vulnerability and Risk Assessment”;**

And

THAT the Conservation Halton Board **endorses the recommendations included in the report entitled “Watershed Climate Change Vulnerability and Risk Assessment”.**

Carried

8. Other Business

8.1 Request to the Ministry of Natural Resources and Forestry for an exemption on the terms of the Chair and Vice Chair of the Conservation Halton Board

CH 01 07 Moved by: Rob Burton
Seconded by: Marianne Meed Ward

THAT the Conservation Halton Board **requests the Minister of Natural Resources and Forestry (MNR) to grant an exemption to subsection 17(1.3) and (1.2) of the**

Conservation Authorities Act (CAA) pursuant to the Minister's authority under clauses 17(1.3) (a) and (b) for the chair and vice-chair positions in 2024 and 2025.

9. In Camera

CH 01 08

Moved by: Jane Fogal
Seconded by: Shawna Stolte

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

Carried

- 9.1. Legal Matter (CHB 01 24 11)
- 9.2. Legal Matter (CHB 01 24 12)
- 9.3. Personnel Matter (CHB 01 24 13)
- 9.4. Legal Matter (CHB 01 24 14)
- 9.5. Legal Matter (CHB 01 24 15)

CH 01 09

Moved by: Sara Bailey
Seconded by: Sammy Ijaz

THAT the Conservation Halton Board **reconvene in public forum.**

Carried

10. Adjournment

CH 01 10

Moved by: Sara Bailey

THAT the Conservation Halton Board meeting **be adjourned at 2:48 p.m.**

Carried

Signed by:

Hassaan Basit, President & CEO/Secretary-Treasurer

Date:

April 18, 2024

Conservation Halton Board Inaugural Meeting Minutes

Conservation Halton

February 15, 2024, at 1:00 PM EST

@ 2596 Britannia Road, Burlington, ON L7P 0G3

1. Roll Call

Members Present

Sameera Ali
Sara Bailey
Rob Burton
Allan Elgar
Jane Fogal
Chantal Garneau
Dave Gittings
Sammy Ijaz
Gordon Krantz
Marianne Meed Ward
Rory Nisan
Gerry Smallegange (Chair)
Shawna Stolte
Alvin Tedjo

Absent

Cameron Kroetsch
Sue McFadden
Alex Wilson
Maureen Wilson

Absent with Regrets

Cathy Duddeck (Vice Chair)
Kristina Tesser Derksen

Staff Present

Hassaan Basit, President & CEO/Secretary-Treasurer
Garner Beckett, Executive Director, Conservation Halton Foundation
Adriana Birza, Senior Advisor, Office of the President & CEO
Craig Machan, Director, Parks & Operations
Kellie McCormack, Director, Planning & Regulations
Marnie Piggot, Director, Finance
Plezzie Ramirez, Director, Human Resources
Barb Veale, Senior Director, Watershed Management & Climate Change
Mark Vytvytsky, Chief Operating Officer
Shelly Datseris, Manager, Communications & Marketing
Justin Wei, Senior Manager, Finance
Robyn Koutrouliotis, Admin. Assistant, Office of the President & CEO

The Chair called the meeting to order at 2:58 p.m.

2. Disclosure of Pecuniary Interest

There were **no disclosures of pecuniary interest.**

3. Acceptance of Agenda

CH 02 01

Moved by: Rob Burton
Seconded by: Allan Elgar

THAT the Conservation Halton Inaugural Board Meeting Agenda **be accepted as distributed.**

Carried

4. Consent Items

4.1. Induction of Members for 2024

Date of Term to expire in **February 2027 as-per the *Conservation Authorities Act*.**

(4.1) A member shall be appointed for a term of up to four years, as may be determined by the council that appoints the member or, in the case of a member appointed under subsection (4), by the Minister. 2017, c. 23, Sched. 4, s. 12 (2); 2020, c. 36, Sched. 6, s. 2 (6).

4.2. Conservation Halton Board Advisory Committee Membership 2024 (CHB 02 24 01)

The consent items **were adopted.**

5. Election of Officers

The Chair and Vice Chair of the Conservation Halton Board will also be the Chair and Vice Chair of the Halton Region Source Protection Authority.

The Conservation Halton President & CEO/Secretary-Treasurer assumed the role of the Chair.

The President & CEO/Secretary-Treasurer advised that the Elections would be conducted in accordance with Section 10 of the *Conservation Authorities Act*.

Only current members of the Authority may vote.

5.1. Appointment of Scrutineers 2024

The President & CEO/Secretary-Treasurer called for a motion to **appoint Election Scrutineers to count the ballots for the election of Chair and Vice Chair.**

CH 02 02

Moved by: Rob Burton
Seconded by: Allan Elgar

THAT Adriana Birza and Robyn Koutrouliotis **appointed as scrutineers in the event of an election and that all ballots be destroyed by the scrutineers afterward.**

Carried

5.2. Election of Chair 2024

The President & CEO/Secretary-Treasurer called for nominations for the position of Chair of the Conservation Halton Board for the year 2024.

It was Moved by Rory Nisan that Gerry Smallegange be nominated for the position of Chair to the Conservation Halton Board for 2024.

The President & CEO/Secretary-Treasurer called for nominations a second time. There were no nominations.

The President & CEO/Secretary-Treasurer called for nominations a third time. There were no nominations.

The President & CEO/Secretary-Treasurer called for a motion to close nominations for the position of Chair of the Conservation Halton Board for 2024.

CH 02 03 Moved by: Rob Burton
Seconded by: Rory Nisan

THAT nominations be **closed for the position of Chair of the Conservation Halton Board for 2024.**

Carried

Gerry Smallegange confirmed he would allow his name to stand and thanked all present.

The President & CEO/Secretary-Treasurer Declared Gerry Smallegange, by acclamation, to the position of Chair, Conservation Halton Board 2024.

5.3. Election of Vice Chair 2024

The President & CEO/Secretary-Treasurer called for nominations for the position of Vice Chair of the Conservation Halton Board for the year 2024.

It was Moved by Marianne Meed Ward that Cathy Duddeck be nominated for the position of Vice Chair to the Conservation Halton Board for 2024.

The President & CEO/Secretary-Treasurer called for nominations a second time. There were no nominations.

The President & CEO/Secretary-Treasurer called for nominations a third time. There were no nominations.

The President & CEO/Secretary-Treasurer called for a motion to close nominations for the position of Vice Chair of the Conservation Halton Board for 2024.

CH 02 04 Moved by: Gordon Krantz
Seconded by: Rob Burton

THAT nominations be **closed for the position of Vice Chair of the Conservation Halton Board for 2024.**

Carried

Ms. Cathy Duddeck advised the President & CEO/Secretary-Treasurer in writing, in advance of the election, of her willingness to accept the nomination as-per the Procedure for Election of Officers in the Halton Region Conservation Authority General Membership By-law (No. 2018-01).

The President & CEO/Secretary-Treasurer Declared Cathy Duddeck, by acclamation, to the position of Vice Chair, Conservation Halton Board 2024.

6. Other Business

CH 02 05 Moved by: Sammy Ijaz
Seconded by: Shawna Stolte

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

Carried

6.1. In Camera Verbal Update

CH 02 06 Moved by: Rob Burton
Seconded by: Chantal Garneau

THAT the Conservation Halton Board **reconvene in public forum.**

Carried

7. Adjournment

CH 02 07 Moved by: Rob Burton

THAT the Inaugural meeting of the Conservation Halton Board **be adjourned at 4:45 p.m.**

Carried

Signed by: Hassaan Basit, President & CEO/Secretary-Treasurer
Date: April 18, 2024

Finance & Audit Committee Meeting Minutes

Conservation Halton

April 4, 2024, at 9:00 AM EDT

@ Zoom meeting:

<https://us02web.zoom.us/j/82799713884?pwd=RDMrTVhlZ0FyM0dVOGdlld09EbUwvUT09>

1. Roll Call

Members Present: Sameera Ali
Rob Burton
Cathy Duddeck
Chantal Garneau

Absent with Regrets: Gerry Smallegange

Absent: Alvin Tedjo

Guest Present: Stacey Stahlmann, KPMG
Jenalle Vanhie, KPMG

Staff Present: Hassaan Basit, President & CEO/Secretary-Treasurer
Adriana Birza, Senior Advisor, Office of the President & CEO
Marnie Piggot, Director, Finance
Robyn Koutrouliotis, Admin. Assistant, Office of the President & CEO
Justin Wei, Senior Manager, Finance

Vice Chair Sameera Ali assumed the role of Chair and called the meeting to order at 9:29 a.m.

2. Disclosure of Pecuniary Interest

There were **no disclosures of pecuniary interest.**

3. Approval of Agenda

FA 01 01 Moved by: Cathy Duddeck
Seconded by: Chantal Garneau

THAT the Finance & Audit Committee agenda **be approved as distributed.**

Carried

4. Consent Items

There were **no consent items.**

5. Action Items

5.1 2023 Year End Budget Variance Report (FA 01 24 01)

FA 01 02 Moved by: Rob Burton
Seconded by: Cathy Duddeck

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board that the allocation of the 2023 operating surplus of \$5,045,061 to the following Reserves be approved:**

- **\$600,000 to the WMSS Stabilization Reserve**
- **\$400,000 to the Property Management Reserve**
- **\$326,358 to the Building Reserve**
- **\$200,000 to the Digital Transformation Reserve**
- **\$200,000 to the Vehicle and Equipment Reserve**
- **\$100,000 to the Legal Reserve**
- **\$100,000 to the Land Securement Reserve**
- **\$28,000 to the Stewardship and Restoration Reserve**
- **\$2,967,193 to the Conservation Areas Capital Reserve**
- **\$123,510 to the Conservation Areas Revenue Stabilization Reserve**

And

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board that the transfer of \$40,118 to the Debt Financing Charges Reserve for the 2023 budget amount in excess of actual 2023 debt financing charges be approved;**

And

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board the transfer of \$189,744 from the Conservation Areas Capital Reserve and \$10,231 from the Building Reserve be approved for PSAB 3280 Asset Retirement Obligation accounting standards adoption;**

And

THAT the Conservation Halton Finance & Audit Committee **receives for information the staff report entitled “2023 Year End Budget Variance Report – Operating”.**

Carried

5.2 2023 Investments and Investment Revenue (FA 01 24 02)

FA 01 03 Moved by: Chantal Garneau
Seconded by: Rob Burton

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board that the allocation of investment revenue of \$1,764,086 as noted in the report be approved.**

Carried

5.3 2023 Year End Capital Projects Update (FA 01 24 03)

FA 01 04 Moved by: Cathy Duddeck
Seconded by: Rob Burton

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board the closing of capital projects noted in the Capital Project Summary Financial Appendix be approved;**

And

THAT the Conservation Halton Finance & Audit Committee **receives for information the staff report entitled “2023 Year End Capital Projects Update”.**

Carried

5.4 2023 Audited Financial Statements (FA 01 24 04)

FA 01 05 Moved by: Chantal Garneau
Seconded by: Rob Burton

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board the audited financial statements for the year ended December 31, 2023, be approved as presented.**

Carried

5.5 Appointment of Auditor for 2024 (FA 01 24 05)

FA 01 06 Moved by: Cathy Duddeck
Seconded by: Chantal Garneau

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board the reappointment of KPMG LLP as auditor for Conservation Halton for the 2024 fiscal year.**

Carried

5.6 Budget Principles Revised April 2024 (FA 01 24 06)

FA 01 07 Moved by: Rob Burton
Seconded by: Cathy Duddeck

THAT the Conservation Halton Finance & Audit Committee **recommends to the Conservation Halton Board the Budget Principles Revised April 2024 be approved.**

Carried

6. Other Business

There was **no other business.**

7. Adjournment

FA 01 08 Moved by: Cathy Duddeck

THAT the Finance & Audit Committee meeting **be adjourned at 9:36 a.m.**

Carried

Signed by:

Hassaan Basit, President & CEO/Secretary-Treasurer

Date:

April 18, 2024

DRAFT

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 01

FROM: Barbara J. Veale, Senior Director, Watershed Management & Climate Change

DATE: April 18, 2024

SUBJECT: **The great urban shift: Climate change is predicted to drive mass species turnover in cities**

Recommendation

THAT the Conservation Halton Board **receives for information the staff report entitled “The great urban shift: Climate change is predicted to drive mass species turnover in cities”.**

Report

On March 27, 2024, “The great urban shift: Climate change is predicted to drive mass species turnover in cities” was published in the journal PLoS ONE. This paper was authored by Alessandro Filazzola of the University of Toronto and Apex Resource Management Solutions, in collaboration with Conservation Halton (CH), Credit Valley Conservation (CVC) and Toronto and Region Conservation Authority (TRCA) staff.

Biodiversity and climate change are interrelated global crises, the effects of which are already being seen in CH’s watersheds (CHB 07 23 09). This study used “big data” from the Global Biodiversity Information Facility (GBIF) open access science platform to model the effects of climate change on the projected distribution of over 2,000 animal species across sixty (60) Canadian and American cities. Locally, the City of Hamilton is projected to lose fifty-six (56) to 206 species and gain 147 to 320 species, depending on which climate change scenario comes to pass. Some changes will be discernible over the lifespan of an individual residing in the same place over several decades.

While the modeling does not consider other important features that influence where species live (such as predator-prey species interactions or physical barriers to migration), it is a wakeup call that some familiar species of 2024 may be absent in 2100 because of climate change. It is also a reminder of the power that individuals, businesses, and communities have in shaping the trajectory of greenhouse gas emissions to minimize the environmental, economic, and social impacts of climate change.

The paper is available online ([“The great urban shift: Climate change is predicted to drive mass species turnover in cities”](#)). It has been featured in several media stories:

- [“Lots of new animals are heading for your city, study suggests.”](#) *CBC*
- [“Climate change expected to drive shifts in urban birds, animals, bugs.”](#) *CityNews Toronto*
- [“North American cities may see a dramatic shift in urban wildlife species due to climate change.”](#) *Courthouse News Service*

- [“Cities Can Expect Mass Species Turnover in a Warming World.”](#) *Bloomberg*

Impact on Strategic Priorities

This report supports the Momentum priority of “Science, Conservation and Restoration” as it uses environmental science, collaborative research, and collective data to protect the integrity and strengthen the resilience of our ecosystems.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Barbara J. Veale
Senior Director, Watershed Management & Climate Change

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Barbara J. Veale, Senior Director,
Watershed Management & Climate Change
bveale@hrca.on.ca, 905-336-1158 x 2273

PREPARED BY:

Kim Barrett, Senior Specialist, Research & Sustainability

Attachments:

Attachment 1: The great urban shift: Climate change is predicted to drive mass species turnover in cities.

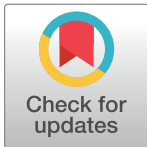
RESEARCH ARTICLE

The great urban shift: Climate change is predicted to drive mass species turnover in cities

Alessandro Filazzola^{1,2*}, Marc T. J. Johnson^{1,3}, Kimberly Barrett⁴, Sue Hayes⁵, Namrata Shrestha⁵, Laura Timms⁶, James Scott MacIvor^{1,7}

1 Centre for Urban Environments, University of Toronto Mississauga, Mississauga, Ontario, Canada, **2** Apex Resource Management Solutions, Ottawa, Ontario, Canada, **3** Department of Biology, University of Toronto Mississauga, Mississauga, Ontario, Canada, **4** Conservation Halton, Burlington, Ontario, Canada, **5** Toronto and Region Conservation Authority, Concord, ON, Canada, **6** Department of Watershed Knowledge, Credit Valley Conservation, Mississauga, Ontario, Canada, **7** Department of Biological Sciences, University of Toronto Scarborough, Toronto, Ontario Canada

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OPEN ACCESS

Citation: Filazzola A, Johnson MTJ, Barrett K, Hayes S, Shrestha N, Timms L, et al. (2024) The great urban shift: Climate change is predicted to drive mass species turnover in cities. PLoS ONE 19(3): e0299217. <https://doi.org/10.1371/journal.pone.0299217>

Editor: Muhammad Khalid Bashir, University of Agriculture Faisalabad, PAKISTAN

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Data Availability Statement: The data that was used during this study was already publicly available. The occurrence records for species were obtained from Global Biodiversity Information Facility (www.gbif.org) and a list of the data citations used can be found in [S2 Table](#). The climate data was acquired from ClimateNA (www.climatena.ca/). All code will be made publicly available upon manuscript acceptance at <https://github.com/afilazzola/GreatUrbanShift>. Code used for analyses and data visualization can be found at <https://afilazzola.github.io/GreatUrbanShift/>.

Abstract

Human experiences with nature are important for our culture, economy, and health. Anthropogenically-driven climate change is causing widespread shifts in biodiversity and resident urban wildlife are no exception. We modelled over 2,000 animal species to predict how climate change will impact terrestrial wildlife within 60 Canadian and American cities. We found evidence of an impending *great urban shift* where thousands of species will disappear across the selected cities, being replaced by new species, or not replaced at all. Effects were largely species-specific, with the most negatively impacted taxa being amphibians, canines, and loons. These predicted shifts were consistent across scenarios of greenhouse gas emissions, but our results show that the severity of change will be defined by our action or inaction to mitigate climate change. An impending massive shift in urban wildlife will impact the cultural experiences of human residents, the delivery of ecosystem services, and our relationship with nature.

Introduction

Nature is an integral element of cities globally. Over half the world's population live in cities and the wildlife that people observe within their respective urban realm represents the species with which they have the most direct familiarity [1, 2]. We value these urban species because they provide a benefit in terms of delivering ecosystem services, such as supporting mental well-being, providing pollination or pest removal, and recreation [3–6]. Iconic species can also be emblematic of the community within cities [7], such as the animal species used as mascots for sports teams or represented on governmental flags. However, anthropogenic impacts such as climate change can threaten the presence of species in cities [8], making iconic and familiar species at risk of extirpation from the communities they represent. Just like the California grizzly bear is extinct from where it is displayed prominently on the state flag, with climate change,

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the floodgates are open and many other emblematic species are at risk of extirpation from the communities they represent [9, 10]. In other instances, gradual changes in species composition can go unnoticed between generations of human residents because of changing expectations of what constitutes the natural environment, i.e., the shifting-baseline syndrome [11–13]. Thus, future generations of urban dwellers may be unaware that the wildlife they experience in their home cities is different than what exists today. Alternatively, the shift of urban species may be so substantial and within a single generation that it will be clearly noticeable among residents.

Anthropogenically-driven climate change is threatening species globally [14, 15], and cities are no exception. There has been repeated evidence that climate change will cause widespread shifts in a range of species and from all types of taxa [16–19]. While climate change is moving species across the continents (e.g., poleward and into higher elevations) [18–21], city boundaries are relatively fixed in space and are therefore likely to undergo climate driven changes in biodiversity patterns. For instance, common migratory songbirds in backyards have begun moving poleward in response to warming winter temperatures in North American cities [22]. Certain bioregions will also have greater vulnerability to climate change, including areas of North America where many major cities are located—such as temperate mixed forests and boreal coniferous forests [23]. Within the coming decades, we may observe significant species turnover (i.e., changes in the abundances and occurrence of species) in some areas as rapid climate change affects community assembly and species dispersal [10, 24]. As a result, an individual who lives a lifetime within the same city will likely observe changes in the species that occur around them. Some research has already projected significant changes in the composition of urban plants and bird species for European cities in the next 60 years [25, 26]. However, an examination of the potential shifts in community composition from climate change for all animal taxa in cities has not been comprehensively conducted in North America.

Here, we provide a synthesis of the extent that climate change is anticipated to have on biodiversity within cities. We hypothesized that climate change will drive a significant turnover in the composition of urban species in Canadian and American cities causing a *great urban shift* by the end of the century as species ranges track shifting temperature and precipitation patterns. We modelled the historic and future species distributions for 2,019 terrestrial animal species found in 60 cities in Canada and the United States. These 60 cities represent highly developed urban areas each with a population over 400,000 in the core municipal area (S1 Table). We selected species based on the frequency of verified observations per city (i.e., $n > 10$ individuals per city) by researchers and community scientists. Future climate models included an ensemble of six global circulation models (GCMs) and under three shared socio-economic pathways (SSPs) predicted until the end of the century (2081–2100). We compared the change in predicted occurrence of species based on climate suitability between historical and future climates to determine the species and cities that are expected to be most affected. Although it was not the original motivation for our study, our analyses allowed us to compare the differences in species native status (i.e., native vs. exotic) and IUCN Red List status (<https://www.iucnredlist.org/>), since these species have important conservation implications.

Methods

City and species selection

We chose the 60 most populated cities in Canada and the United States, which all have populations over 400,000 people (S1 Table). In each of these 60 cities, we created a 20 x 20 km quadrat around the centroid of the municipal boundary. For consistency, we picked this quadrat size for all cities regardless of the municipal boundaries to capture the core urban areas of selected

cities. The size of this quadrat also minimized placement outside of the city boundaries or in large waterbodies. Using the Global Biodiversity Information Facility (GBIF; <https://www.gbif.org/>), we downloaded all species records for terrestrial animals found within that quadrat. All records of species occurrences used and their associated databases can be found at [S2 Table](#). The term “terrestrial” here is meant to represent animals that do not spend their entire life cycle in water (e.g., fish, cetaceans) and thus would include semi-aquatic organisms (e.g., amphibians, dragonflies) and flying organisms (e.g., bats, birds). Species records were filtered to include all animal species that have at least ten records within the last ten years for any of the 60 cities, indicating the species has been observed enough times that it was not incidental. Many target taxa were observed in multiple cities, such as hawks (*Accipiter* spp., Accipitridae), dabbling ducks (*Anas* spp., Anatidae), and bumble bees (*Bombus* spp., Apidae) but some species were found unique to only one city, such as the bark anole lizard (*Anolis distichus*) in Miami or Strand’s carpenter bee (*Xylocopa strandi*) in Houston. There was a bias in the species list towards taxa that are larger and more identifiable, as is typically found in community science, but also in traditional science [27].

In total, we found 2,259 unique species that matched our criteria. For each of these species, we used GBIF to download all occurrences between 2000 and 2020 for all North America. We selected this area, larger than Canada and the USA where our selected cities are present, to capture the total climatic niche and range of conditions that each selected species can occupy. In total, we downloaded over 18.4 million occurrence records from GBIF with a median of 1,059 records per species (minimum 10 records, maximum 138,746 records). Although there were large differences in records per species, our modelling approach was robust to infrequently surveyed species [28, 29] such that similar confidence could be treated among model results.

There have been reported issues with the reliability of GBIF data concerning the accuracy of records in time, space, and species identification [30, 31]. While no one approach can be applied to solve all issues associated with GBIF records [30], steps can be taken to minimize the impact and increase confidence [32]. We recognize that the size of our dataset makes verification of every individual record impractical, and thus despite our efforts, some amount of inaccuracy will remain. For all records, we restricted occurrence to North America, which removes common errors associated with coordinates labelled as zero or mistakenly entered records (e.g., latitude and longitude swapped). Our analysis was not reliant on time, therefore temporal issues, such as mismatches in months or days, would not be impactful on our results. We removed all records in the oceans and removed duplicates. Removing duplicates will also mitigate issues such as when records are reported as the centroid or capital of a country since, if inaccurate, would only represent one out of potentially thousands of records. Similarly, inaccuracies in species identification may remain within the dataset, but we expect that the occurrence of relatively few incorrect methods would have a small impact on our large dataset distributed across Canada and the US.

Climate variables

We used a series of future climate models to capture the range of potential outcomes for the end of the century (2081–2100) under different greenhouse gas emission scenarios. All data climate models, data management, and statistical analyses were conducted in R Version 4.1.0 [33]. We downloaded 24 bioclimatically relevant variables from ClimateNA [34, 35] that represent down-scaled climate variables in 4.6 km grid cells. In addition to the current climate conditions (1990–2020), we also downloaded an eight-model ensemble of future climate condition [34]. These models were all selected under the Coupled Model Intercomparison Project Phase 6 (CMIP6) and include the global circulation models (GCM) that are more representative of the North American climate [34]. Using an ensemble model provides a more

conservative estimate of climate change effects on species distributions because it reduces model-specific anomalies [36]. We downloaded the future climate conditions for 2081–2100 under three shared socioeconomic pathways (SSP 1–26, SSP 3–70, SSP 5–85). We selected the three SSP scenarios to represent a range of outcomes based on action to reduce greenhouse gas emissions including sustainable development (SSP 1–26), barriers to mitigating climate emissions and a lack of regional cooperation (SSP 3–70), and continued development of fossil fuels and land (SSP 5–85) [37]. These SSPs represent the latest framework for future climate projections that considers uncertainty in both the climate outcomes from greenhouse gas emissions (i.e., Representative Concentration Pathways; RCPs) [38] and socioeconomic development in the absence of policies to mitigate climate change [37]. In North America, SSP 1–26 and SSP 5–85 both project increased urbanization although for different reasons with the former under high density development and the latter under increased urban sprawl [39]. The SSP 3–70 projects a relatively little land cover change to urban [39].

Species distribution modelling

We conducted species distribution modelling for each species to determine the historic climatic niche and use these models to predict their future range. For each species, we conducted corrections for survey bias, minimized spatial autocorrelation, and automated model tuning to quantify the relationship with climate. We used Maximum Entropy (MaxEnt) [40] because our data represents presence-only data and thus requires the generation of pseudo-absences [41]. MaxEnt is a machine learning algorithm that predicts the suitable conditions for a species by modelling the relationship of occurrence records to a set of environmental variables [40]. The GBIF occurrence records are collated from a series of community science sources (e.g., iNaturalist, eBird) and museum specimens. These records typically have unequal sampling efforts favouring areas with greater accessibility such as along roads and in parks, as well as under sampling in difficult-to-access areas such as mountains [42, 43] and private property. To account for unequal sampling, we conducted two methods for bias correction: spatial thinning and restricting background points. Spatial thinning is one of the most effective methods for accounting for sampling bias in MaxEnt [44] and involves removing multiple observations within a certain distance to approximate a systematic sampling of the target species. We spatially thinned our dataset by overlaying a 25 x 25 km raster (i.e., 5 factor larger) and by removing multiple occurrences within the same cell. We also restricted the background records (i.e., pseudo-absences) which has been observed to improve MaxEnt performance when the occurrences occupy an area smaller than the total study area [45].

Using the randomly generated background points, spatially filtered occurrence records, and climate variables without collinearity, we conducted MaxEnt modelling for each species. Since MaxEnt is a presence-only analysis, background points (i.e., pseudo absences) need to be generate in a manner that accurately captures climate conditions with the geographic study area. These background points serve to quantify the available climate conditions to be used as a comparative distribution against the climate conditions specific to the presence records. Spatial autocorrelation, the lack of independence between occurrence records, is a frequent problem when working with spatial environmental datasets [46] including species distribution models [47–49]. Without compensating for spatial autocorrelation, species distribution models tend to overestimate the accuracy of the model and suggest the results that are more reliable than is true [49]. For details on our methods in calculating background points, conducting spatial filtering, and removing collinear variables, see [S1 File](#).

We used an automated tuning and evaluation process for MaxEnt function (*ENMevaluate*, package *ENMeval*) [50]. MaxEnt was automated to assess best model using eight feature classes

(L, Q, P, LQ, HQ, QPH, QPHT, and LQHP) and six regularization parameters (0.5, 1.0, 1.5, 2.0, 2.5, 3.0). The acronyms in the feature classes relate to relationship between the predictor variables and the predicted occurrence of the target species including linear (L), quadratic (Q), product (P), hinge (H), and threshold (T) [40, 50]. The regularization parameters control for overfitting by downweighing co-efficients, but must be balanced against preventing model tuning. Tuning was accomplished by using spatial block cross-validation, which splits the target area into a number of grids and then resamples data within each respective grid for training and testing to improve model metrics [50, 51]. Model statistics were then averaged across all spatial subsets. Each species was run with a different combination of feature classes and regularization parameters (48 different models per species) and the best model was selected using the highest average Boyce Continuous index (BCI) value [52, 53]. BCI is ideal for presence-only models because it measures model accuracy based on how the occurrence records differ from a random distribution, with values +1 being accurate, values of 0 suggesting the model is completely random, and values -1 indicating high predictions away from occurrence records. Models were conducted in parallel for efficiency in runtime using GNU parallel [54] on the Compute Canada super computer cluster (www.computecanada.ca/). From the best model determined for each species, we extracted the average training area under the curve (AUC), average BCI, percent contribution of each environmental variable, the optimal feature classes and regularization parameters, and the average difference between training and testing AUC values. We also determined the threshold to cut-off model predictions based on the lowest trade-off between sensitivity and specificity (function *threshold*, package *dismo*). For a visual workflow of the analyses conducted for species distribution modelling, see [S1 Fig](#).

We removed species from further analysis that failed to provide satisfactory model results. For example, a species was not included in the final analyses if there were insufficient records from GBIF to confidently model the distribution ($n < 10$), if the model failed to produce a best model, or the AUC value was less than 0.70 (240 species removed). All remaining analyses included 2,019 species that met these criteria. For a list of all meta-data associated with modelling for each species including AUC/CBI scores, parameters, and MaxEnt settings, see [55].

Predicted occurrence based on climate suitability

The output predictions from MaxEnt were fitted to a logistic distribution and represent the predicted occurrence based on climate suitability for the target species to inhabit, and range between 0 (completely unsuitable, low species prevalence) and 1 (ideal climate, high species prevalence). These values can function as a probability that a species may be observed in a city (i.e., 0 = never, 0.5 = occasionally, 1 = often) when considering climate alone. However, we note that this value does not translate to a true probability of occurrence because many non-climate factors could restrict or increase the potential of the species observed (e.g., dispersal, species interactions, resource availability). Additionally, there is some discussion that the logistic output from MaxEnt represents an estimate of the probability of presence, rather than true probability, as the output values are based on user inputs [see 56]. While these considerations of estimating occurrence are especially relevant for determining a species-specific distribution (especially between studies), our study is exclusively examining the relative difference between historic and future estimates of probability within the same species using the same model to predict for both time frames.

We estimated the predicted occurrence of each species for every city under each climate scenario. Within the 20 km quadrat in each city, we created a stratified grid of 100 points that we extracted the historic climate and future climate in each SSP and both timeframes. Using the best MaxEnt model, the predicted occurrence for each of the species was estimated using

the extracted climates of the 100 points in each city. If the average predicted occurrence was above the identified threshold from the MaxEnt modelling, we considered that species to occur within the city. Our research question was interested in the relative change in predicted occurrence between future and historical timeframes. Therefore, for all analyses we calculated 1) the number of new, extirpated, and unchanged cities for each species, and 2) the number of gained, lost, and unaffected species for each city (S3 Table).

Statistical analyses

We tested if there were differences among the three SSP scenarios by conducting two generalized linear models (GLM) with number of gained and lost species per city as the response variables. We fitted each GLM with a negative binomial distribution (package *MASS*, function *glm.nb*) because the response variables represented discrete counts that were over dispersed [57]. To test if the number of species historically present related to the future change in composition, we fitted GLMs with predicted gains and losses as the response variables. The SSP scenarios were treated as a predictor. We determined if there were any climatic indicators relating to cities that are either more resilient or vulnerable to projections of climate change by fitting GLMs using mean annual air temperature (MAT) and precipitation (MAP). We used the 1990–2020 average of MAT and MAP for comparisons to changes in species to see which of the current climates was most expected to be affected. Finally, we compared if human population of each city related to predicted changes in contemporary richness by conducted a Pearson correlation test (function *cor.test*) using the number of gains and losses associated with each city.

Results

The composition of terrestrial animals is expected to significantly shift in many cities by the end of the century (Fig 1). Under all SSP scenarios, every city had both substantial gains and losses of urban species by the end of the century (Fig 1). When exploring cities most sensitive or resilient to changes in composition, we compared mean annual temperatures (MAT) and precipitation (MAP) against the projected changes in species richness. Cities with historically colder temperatures (i.e., $\text{MAT} < 10^\circ \text{C}$) were predicted to have significantly higher gains in novel species (MAT: $\chi^2_{1,178} = 216.1$, $p < 0.0001$) and fewer losses in resident species (MAT: $\chi^2_{1,178} = 21.4$, $p < 0.0001$; S2 Fig). Interestingly, cities with historically high precipitation (MAP > 800 mm) were predicted to have the highest species turnover, with both the greatest gains (MAP: $\chi^2_{1,178} = 30.9$, $p < 0.0001$) and largest losses in species (MAP: $\chi^2_{1,174} = 45.2$, $p < 0.0001$; S2 Fig). Cities predicted to have the highest introduction of new species (gains > 200 species) included those in temperate Canada, such as Quebec City and Ottawa, and the American Midwest, for example, Omaha and Kansas City (Fig 1). Cities predicted to have the largest species declines (losses > 200) were those in the subtropical eastern parts of the United States and Coastal California (Fig 1). The cities expected to have the fewest changes in contemporary species richness were found in the arid parts of North America, including Las Vegas, Mesa, and Tucson (Fig 1).

We found differences among SSPs where under a scenario of more intense development and greenhouse gas emissions (i.e., SSP 5–85) there were significantly more species lost ($\chi^2_{2,165} = 17.6$, $p = 0.0001$; Fig 1) and gained ($\chi^2_{2,177} = 62.2$, $p < 0.0001$; Fig 1). For example, depending on SSP scenario, Toronto is predicted to have between 159 and 360 new species occurring within its boundaries by the end of the century while also experiencing a loss of between 40 and 195 species currently present. While this results in a 13.4–18.5% net gain in the number of species, compared to our estimate of 888 species currently predicted for Toronto, these gains

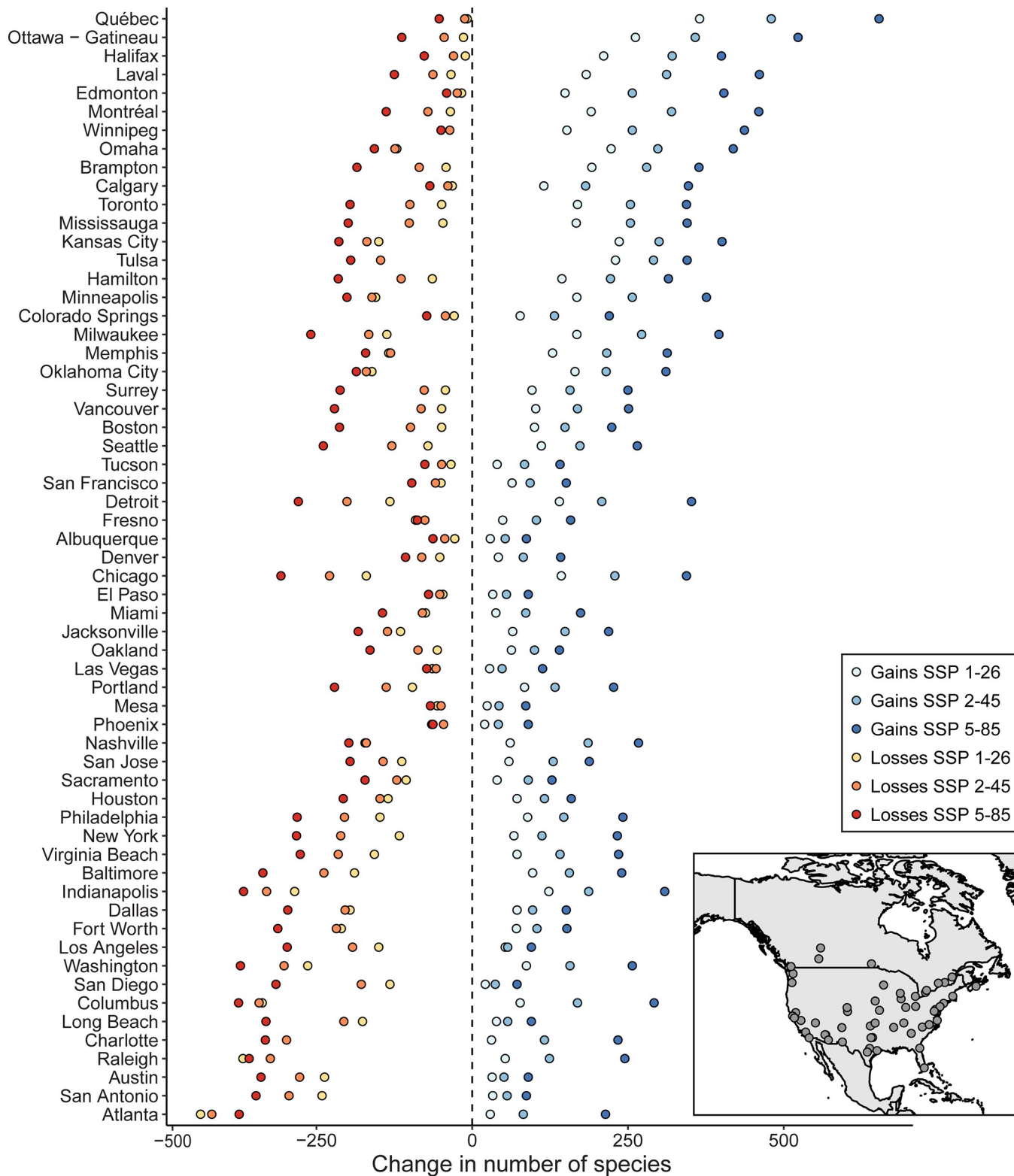


Fig 1. The total number of gains and losses for species in each city separated by SSP scenario. Cities at the top of the figure are predicted to have the greatest increase in species richness relative to species' historical distribution. Tested cities in Canada and the USA are displayed in the inset map.

<https://doi.org/10.1371/journal.pone.0299217.g001>

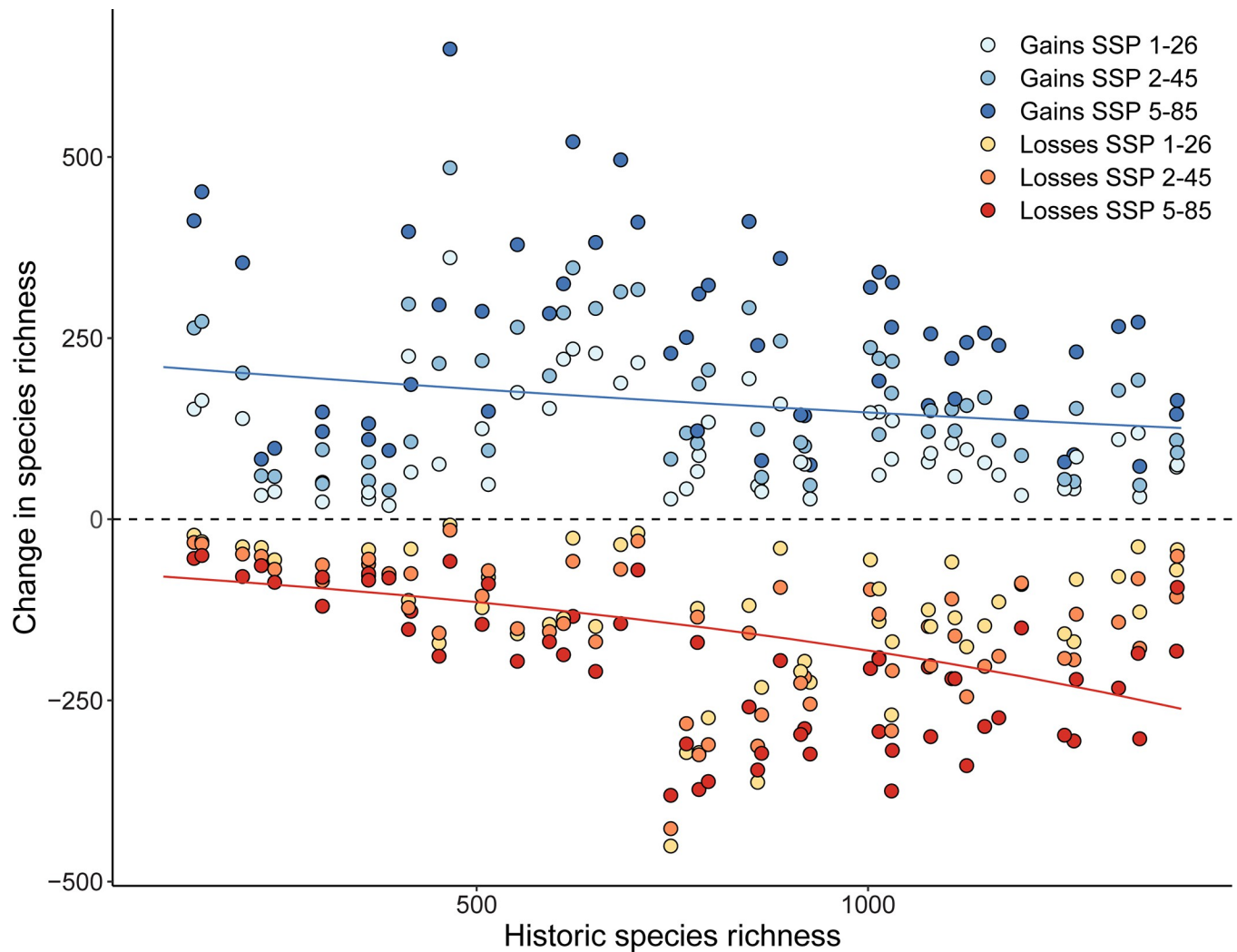


Fig 2. Cities with historically higher species richness were predicted to have significantly more species lost ($\chi^2_{2,165} = 43.0$, $p < 0.0001$) and relatively fewer species gained ($\chi^2_{2,177} = 8.71$, $p = 0.003$) in the future regardless of SSP scenario. Each city is represented six times for each of the three SSP scenarios separated by gains and losses.

<https://doi.org/10.1371/journal.pone.0299217.g002>

and losses represent a massive change in the overall species composition (22% species loss and 41% species gained). We note our estimates only include species with substantial records on GBIF and are not exhaustive accounts of species richness in each city.

Cities with high historic richness were predicted to have the largest declines and fewest gains in species ($\chi^2_2 = 43.0$, $p < 0.0001$; Fig 2). We found that cities with historically lower species richness were anticipated to have significantly higher species gained ($\chi^2_2 = 8.71$, $p = 0.0031$; Fig 2). While these effects were exacerbated under SSP scenarios with greater development and higher greenhouse gas emissions scenarios for both species gained ($\chi^2_2 = 65.3$, $p < 0.0001$) and lost ($\chi^2_2 = 18.4$, $p = 0.0001$), there were no interactions between SSP and historic species richness (loss $p = 0.53$, gain $p = 0.99$). We found that city population size was independent of gains ($r = -0.06$, $p = 0.68$) and losses ($r = 0.18$, $p = 0.17$) in species richness, but some of the most populated cities are predicted to have the greatest declines.

Not all species are predicted to be equally impacted by climate change (Fig 3). Among vertebrates, the taxa that on average (among species) were predicted to consistently experience

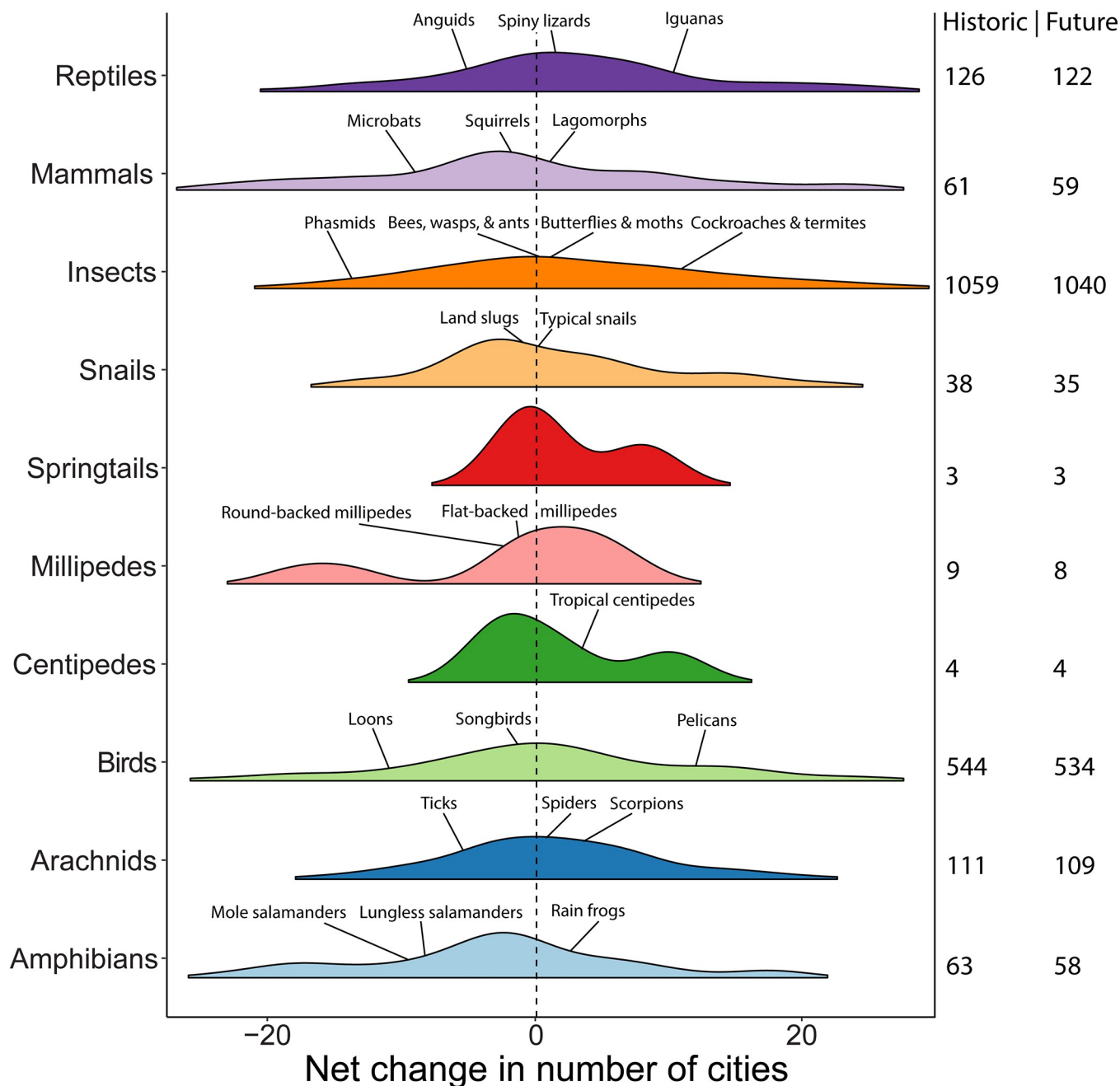


Fig 3. The net change in the number of cities a species will be found in between historic and future climate scenarios for 2,019 animal species separated by class, order, or family. On the right, we present the number of unique species within the respective taxon found within the cities 60 cities in our study for historic and future climate scenarios. Negative values represent a decline in number of cities a species would occupy in the future and positive values represent an increase in the number of cities (i.e., becoming more common). We highlight notable taxa (order or family) with at least two or more species that had extreme values of either large increases or decreases. These notable taxa are presented with their common name and the average net change across all species. The inset map was produced using the GADM administrative boundaries (<https://gadm.org/>).

<https://doi.org/10.1371/journal.pone.0299217.g003>

more losses than gains across cities include loons (-28%, Gaviiformes), canids (-17%, Canidae) and anguid lizards (-47%, Anguillidae) (Fig 3). Many arthropods were also predicted to decline, including phasmids (-52%, Phasmatodea) and round-backed millipedes (-36%, Spirobolida). Almost all species within the classes of amphibians (-21%, Amphibia) as well as springtails

(-11%, Collembola) were projected to decline (Fig 3). Earthworms (-23%, Clitellata) were also predicted to be found in fewer cities, although earthworms were only represented by one species (*Lumbricus terrestris*). Vertebrates predicted to increase in cities included turtles (+59%, Emydidae), mice and other murids (+20%, Muridae), true toads (+38%, Bufonidae) and pelicans (+39%, Pelecaniformes). Some arthropods were also expected to increase, such as net-winged insects (+67%, Neuroptera), scorpions (+26%, Scorpiones), and spiders (+7.5%, Araneae). Although we observed some idiosyncratic responses among species in response to climate change, almost all species (94.5%) experienced some change in the cities where they were found with 44.5% of the species becoming less common in the selected cities and 50% becoming more common. We found that 54 species (2.6%) were predicted to be completely extirpated from all tested cities by the end of the century (Fig 3).

Discussion

The great urban shift

Both the predicted species gains and losses are expected to drive widespread turnover of urban biodiversity across nearly all cities in Canada and the United States (Fig 1). Cities with historically cooler temperatures and higher precipitation, such as in temperate Canada and the American Midwest are expected to see the largest influx of novel species. By contrast, relatively hot cities in high precipitation patterns were expected to have the largest loss in resident species richness. These climates are consistent with cities in the subtropical regions of the United States and coastal California, both relatively species rich [58], but expected to have large declines in richness. Our findings coincide with historic species richness correlating to larger species loss and fewer species gains (Fig 2). Cities in the subtropical US, such as Atlanta, have been previously identified as climate sensitive areas and are expected to lose 13.5% of tree species this century [59]. The cities with the smallest predicted changes included those in the arid southwest, such as Mesa, Phoenix, and Albuquerque. While the south western portion of North America is expected to become warmer and drier [58], these ecosystems are believed to be relatively resilient to climate variability when compared to other climates [60], thus limiting the effect of climate change on these cities. Lastly, cities in temperate Canada were expected to see the largest gains in new species and fewest losses (Fig 1) with Quebec, Ottawa, and Winnipeg expecting to nearly double in species richness (Fig 2). The warmer and wetter climate projections for these cities [61, 62] are likely to prove favourable for many animal species currently limited by winter conditions. The response of urban species to climate change is expected idiosyncratic, with certain cities being more sensitive to gains and losses based on contemporary species richness and regional climate patterns.

Greater greenhouse gas emissions and habitat loss will contribute to larger turnover in urban species composition by the end of the century (Fig 1). While our models used climate projects for 2081–2100, the responses of species over the next decades may not be linear. Some species may shift earlier or later depending on tipping points in climate conditions [e.g., 63]. Regardless of actions to mitigate greenhouse gas emissions, substantial shifts are expected to occur in the composition of urban wildlife this century. Climate action to reduce greenhouse gas emissions [64] will determine the extent to which urban species will change in the future. The SSP scenarios were also created with consideration of urbanization rates, with the most rapid and intense urbanization anticipated under SSP1-26 and SSP5-85 [64, 65]. In these scenarios, over 90% of the global population will live in urban areas by the end of the century [64], further emphasizing that in the near future, urban tolerant species will represent the biodiversity people will be most familiar. However, the species affected may be different under the densification of urban development in SSP1-26 compared to the sprawling development of

SSP5-85. This raises the debate of land sharing vs. land sparing for urban development to maximize conservation efforts depending on urbanization pattern [11, 66]. Climate change will therefore shape the cultural identity and connection to nature for people in cities.

Taxonomic responses to climate change

Some of the largest changes in predicted occurrence were observed in birds and insects, which were also the taxa with the largest number of species represented ($n = 542$ and 1056 , respectively). Over 95% of species of birds (49% increase, 46% decrease) and insects (53% increase, 43% decrease) were found to have a change in the number of cities they are predicted to occupy. These results are broadly consistent with a previous study that showed a compositional shift in bird communities visiting urban backyards in North America in recent decades as a result of warming winter temperatures [22]. As a result, future generations of people living in cities may find familiarity with different bird songs than the ones we hear today. Insect biodiversity and abundance is already declining in many regions and urban centres around the world [67–70]. For example, in Raleigh, NC, bee abundance is anticipated to decline 40% per degree of warming [71], a pattern supported by our data predicting a 32% decline in predicted bee species (*Anthophila*) for Raleigh, as well as a 9% decline in bees across all cities in Canada and the USA. At-risk species as identified by the IUCN Red List were not necessarily more vulnerable to climate change (S2 File), but already have populations in decline from other stressors (e.g., habitat loss, invasive species) that may be exacerbated by climate change. Furthermore, our results show that exotic species had a higher frequency of being gained in cities relative to natives especially under greater greenhouse gas emissions (S2 File). These findings suggest there are interactions occurring between climate change and species invasion that could act synergistically to threaten urban diversity, although we must caveat these findings that exotic species only represented 1% of our species list. Recent empirical evidence supports Anthropogenically-driven climate change causing shifts in urban species that, in this study, we extend across all terrestrial wildlife, the largest effort of its kind to date.

Limitations and additional considerations

The taxa negatively affected by climate change in our study are likely to be affected by additional impacts, further reducing their persistence in urban environments. Cities are often stressful for animals, having higher rates of zoonotic diseases [72], habitat fragmentation [73], light and noise pollution [74, 75], pet caused mortality [76], and warmer temperatures [77]. The recent pandemic lockdown in North America produced an increase in bird abundances, suggesting human activity is negatively correlated with urban wildlife [78]. Conversely, some species have evolved adaptations to urban environments [73, 79], potentially overlapping with some degree of resiliency against climate change. Moreover, cities contain many different microclimates and can support a diversity of habitat types through practices such as supplemental irrigation. For instance, urban heat island effects have repeatedly been reported in cities [80, 81] and can have fine-scale variation in air temperatures (<100 m) of as much as 3° C throughout the city [82]. These large temperature differences can function as refugia or introduction points for some species in the larger context of the macroclimatic patterns in the region. However, while some animal species can exist in these islands of climate suitability within select portions of the city, these species will likely be isolated based on the regional climate patterns. Some features of cities may provide temporary refugia for some species, but the additional stressors caused by urbanization coupled with future climate shifts will shrink the available habitat of many species and isolate their remnant populations.

Our results used a climate-only examination for projecting the occurrence of species in cities, but there are many non-climate factors that impact distribution as well. Recent work has found that the predictability of species distribution models can be improved by including species interactions [83], connectivity [84], dispersal [85], and land cover [86]. Our estimates of shifts in urban animal species composition are thus relatively conservative compared to the realized future impact of climate change on the abundance and diversity of wildlife. Predictions of climate suitability are effective at estimating potential declines in occurrence (i.e., species cannot exist outside their climatic niche), but estimated increases in climate suitability may not necessarily translate to an increase in occurrence for the above reasons. These ecological dynamics may result in biodiversity patterns lagging behind expected changes in species composition from climate change [87]. There is accumulating evidence that taxa, such as birds, butterflies, and bees, are experiencing a climate debt and are unable to track a changing climate [17, 68, 87–89], suggesting our results may be downwardly biased in estimates of future biodiversity turnover. Including the effects of non-climate variables in the species distribution modelling could have improved model accuracy, but with over 2000 species are computational prohibited and can be largely speculative. For instance, including species interactions in our models would involve creating a n -dimensional matrix for every species with all the trophic and non-trophic interactions for all species we modelled, species we did not model (e.g., plants, fungi), and novel interactions created in the future. We explored the role species interactions may play in impacting the future distribution of urban species using changes in co-occurrence as a proxy and found potentially significant changes in the network of interactions among species (See [S3 File](#) for a discussion). Modelling macro-ecological patterns across many taxa and over a large spatial gradient can be informative of general trends expected in the future, but the inclusion of non-climate variables can help improve the accuracy when looking at species and location specific outcomes.

Conclusion

Our findings identify a *great urban shift* occurring in wildlife across North American cities because of climate change. We believe the relatively short timeframe (i.e., within a few decades) and volume of climate change impacts will produce a dramatic change in many urban species communities. The widespread changes in the representation of wildlife will directly affect the cultural identity, heritage, and symbolism for human residents. The loss of urban biodiversity may also negatively affect mental well-being of residents [90] and the economy (e.g., lost tourism, decreased property aesthetics, more invasive species). The impacts of animal species departing urban areas extend well beyond cultural influences and will likely also include a loss of the ecosystems services they provide [10], such as pest management [91], pollination [71, 92], disease control [91], and decomposition [93]. There is critical need to quantify the consequences of the changes to urban species composition expected to occur in the coming decades, and to develop mitigation strategies to preserve this important biodiversity.

Supporting information

S1 Fig. Analysis workflow of species distribution models.

(DOCX)

S2 Fig. Projections of species change relative to current climate.

(DOCX)

S1 Table. Sixty cities examined in Canada and the US.

(DOCX)

S2 Table. List of all species occurrence datasets.

(DOCX)

S3 Table. Patterns of contemporary species richness in cities.

(DOCX)

S1 File. Methods for parameterizing input data into MaxEnt.

(DOCX)

S2 File. Climate change effects on at-risk and exotic urban species.

(DOCX)

S3 File. The effect of species interactions in modelling distributions.

(DOCX)

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TO: Conservation Halton Board

MEMO: # CHB 03 24 02

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: April 18, 2024

SUBJECT: 2024 Flood Hazard Mapping Program Update

MEMO

In 2018, Conservation Halton (CH) renewed its Flood Hazard Mapping Program to update flood hazard mapping across jurisdiction. Updated mapping provides CH, municipal partners, the public, and other key stakeholders with a current understanding of the magnitude and extent of flood hazards. It is an important tool that supports CH's regulatory, planning, and flood forecasting and warning programs, as well as municipal emergency management, flood mitigation, and infrastructure design.

To date, mapping for over 30% of CH's jurisdiction has been completed and work is underway on an additional 60%. Figure 1 illustrates the status of flood hazard mapping across CH's watershed.

Flood Hazard Mapping studies will advance in the following areas in 2024:

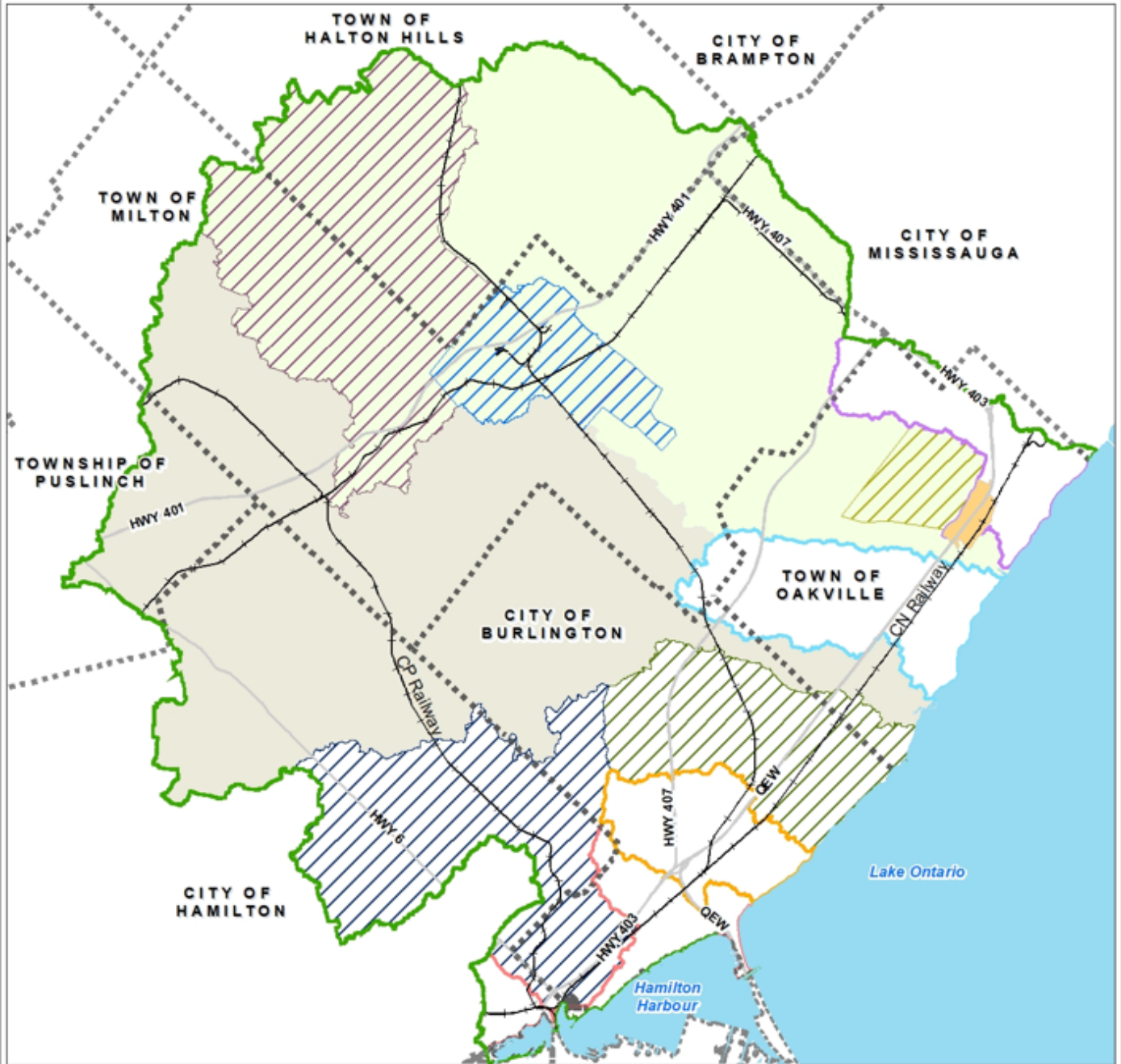
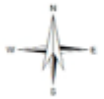
- Sixteen Mile Creek watershed;
- Bronte Creek watershed; and
- Midtown Oakville (including Morrison Wedgewood Diversion Channel Spill Update).

The Midtown Flood Hazard Mapping Study is a collaborative project with the Town of Oakville and will support the Town with the development of their Midtown Implementation Plan.

The 2024 work plan for CH's Flood Hazard Mapping Program may be revised, as necessary, if CH's municipal partners require support in select geographic areas based on their priorities (e.g., Town of Milton's Phase 4 Area, Burlington GO Major Transit Station and Downtown Areas).

Technical Advisory Committees are established for each study area and consist of engineering, planning, and emergency management representatives from municipalities, including Halton Region. Public engagement will be undertaken as these studies progress to ensure that the public; municipal, provincial and federal agencies; and stakeholders are informed of the study status and have opportunities to participate. Study-specific progress memos will be shared with the CH Board at key study milestones and will highlight stages when stakeholders, the public, agencies, and the Board will engage in the mapping review and update process.

Figure 1: Flood Hazard Mapping Studies



LEGEND

- | | | | |
|------------------------------|--|------------------------|---------------------------|
| Conservation Halton Boundary | Completed | Advance in 2024 | Future Studies |
| Highway | East Burlington Creeks | Bronte Creek | West Burlington Creeks |
| Railway | Grindstone Creek | Midtown Oakville | Central Burlington Creeks |
| Municipal Boundary | Urban Milton | Sixteen Mile Creek | West Oakville Creeks |
| Lake | Morrison-Wedgewood Diversion Channel Tributaries | | East Oakville Creeks |
| | Upper West Sixteen Mile (Hydrology Only) | | |



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REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 03

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

DATE: April 18, 2024

SUBJECT: Appointment of Acting Chief Administrative Officer/Secretary-Treasurer

Recommendation

THAT the Conservation Halton Board **appoints Barbara Veale as the Acting Chief Administrative Officer/Secretary-Treasurer for Conservation Halton to fulfill responsibilities under the *Conservation Authorities Act* and the Halton Region Conservation Authority General Membership By-law, No. 2018-01, as amended;**

And

THAT the Conservation Halton Board **approves Barbara Veale as a Signing Officer of Conservation Halton as per sections B.2 and B.10 of the Halton Region Conservation Authority General Membership By-law;**

And

THAT the Conservation Halton Board **appoints Barbara Veale as the interim Conservation Ontario Alternate Voting Delegate for Conservation Halton.**

Report

Conservation Halton (CH) Board approval is required for the appointment of Barbara Veale as Acting Chief Administrative Officer (CAO)/Secretary-Treasurer considering the resignation of CH's current President & Chief Executive Officer (CEO)/Secretary-Treasurer, Hassaan Basit. The effective date is April 19, 2024, until the appointment of a successor.

As per Section 18(1) of the *Conservation Authorities Act* (CA Act), an authority shall appoint a secretary-treasurer and may appoint such other employees as it considers necessary who shall hold office during the pleasure of the authority and shall receive such salary or other remuneration as the authority determines, payable out of the funds of the authority. As per Section A of the Halton Region Conservation Authority General Membership By-law, the leader of CH is appointed by the General Membership and may, by resolution of the General Membership, include the responsibilities of the Secretary-Treasurer, if so designated by resolution of the General Membership.

CH will require an Acting CAO/Secretary-Treasurer commencing April 19, 2024, to provide operational overview and report to the CH Board during the recruitment process of a permanent

President & CEO/CAO/Secretary-Treasurer (Section B.2 of the By-law). This interim appointment is necessary to comply with the signing authority provision in Section B.10 of the By-law.

Conservation Ontario Alternate Voting Delegate

Conservation Authorities must have a minimum of two (2) voting members on the Conservation Ontario (CO) Board; the Chair as the Voting Delegate and the President & CEO/Secretary-Treasurer as an Alternate Voting Delegate. Staff is requesting Barbara Veale be appointed as CH's Alternate Voting Delegate for CO in their capacity as Acting CAO/Secretary-Treasurer until a successor is appointed.

Impact on Strategic Priorities

The appointment of an Acting CAO/Secretary-Treasurer supports the Momentum priorities of "People and Talent" and "Organizational Sustainability".

The Acting CAO/Secretary-Treasurer is accountable to the Authority, working cooperatively to achieve the goals established by the Authority.

Financial Impact

As per the Board-approved Salary Administration Policy, an employee performing most of the essential core duties of a position in a higher job classification for a period of more than twenty-five (25) continuous working days may be considered for payment of Acting Pay.

Signed & respectfully submitted:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Hassaan Basit, President & CEO/Secretary-Treasurer
hbasit@hrca.on.ca, 905-336-1158 x 2270

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 04

FROM: Mark Vytvytskyy, Chief Operating Officer

DATE: April 18, 2024

SUBJECT: Momentum Strategic Plan Extension and Update

Recommendation

THAT the Conservation Halton Board **approves the extension of the Momentum Strategic Plan for up to two years beyond the current end of December 31, 2024;**

And

THAT the Conservation Halton Board **receives for information the 2023 Momentum Strategic Plan year end report.**

Executive Summary

Following a comprehensive planning process in late 2022, complemented by regular alignment sessions and continuous staff contributions, Conservation Halton's (CH) Momentum Strategy has proven successful in achieving major objectives. Based on the recommendation of the current President & CEO, coupled with the ongoing success and relevance of the current plan, it is advisable to extend the Momentum Strategic Plan by up to two (2) years, until the end of 2026. The Momentum Plan has served as an effective compass in guiding CH's strategic trajectory. An extension does not prevent a revision or renewal of the plan between now and 2026; it doesn't compel CH to launch a new process this year, given the ongoing recruitment of CH's next Chief Administrative Officer (CAO)/CEO.

The Momentum Progress Report Q1 & Q2 2023 presented to the Board in September (CHB 07 23 01) introduced thematic analysis to offer a comprehensive perspective on progress across Priority Areas. The 2023 report further underscores the value of these themes, delivering insightful perspectives that will continue to progress as staff accumulates more data.

This report highlights:

- Progress made since the September 2023 Board report;
- Progress on 2023 Key Performance Indicators (KPIs);
- Fulfillment of 2023 action items; and
- Utilization of themes to facilitate a deeper understanding of interdepartmental relationships and dependencies within Priority Areas.

Significant success was achieved in 2023 via the Momentum Strategic Plan. The majority of the annual targets were met, with plans underway to accomplish the remaining targets by the conclusion of 2024 and beyond.

Consistent enhancements in data accuracy and timeliness were demonstrated throughout the reporting year. Looking forward, the annual planning process will be strengthened by embedding the Enterprise Risk Register, refining budget estimation methodologies, and integrating tools to offer a user-friendly overview of strategic initiatives across all levels of the organization in real time.

Report

With the imminent departure of Conservation Halton’s (CH) President & Chief Executive Officer (CEO), there will be a period of transition during which a new leader will be identified and onboarded. The 2023 Momentum Strategic Plan year end report, as outlined in this report, demonstrates a productive, successful year in alignment with CH’s core and strategic values. By extending the life of the Momentum Strategic Plan to December 31, 2026, the CH Board will provide stability to CH whilst focusing on a successful leadership transition.

A strong planning process at the end of 2022, coupled with deep-dive sessions to ensure continued alignment mid-year and ongoing support of contributing staff, has resulted in the most successful year of Momentum. This success supports the staff recommendation to extend the life of the Momentum Strategic Plan, as it is an established process to effectively measure the progress of CH’s strategic direction.

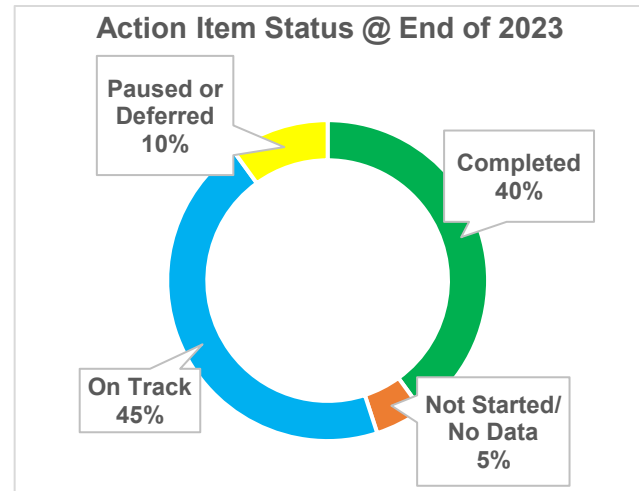
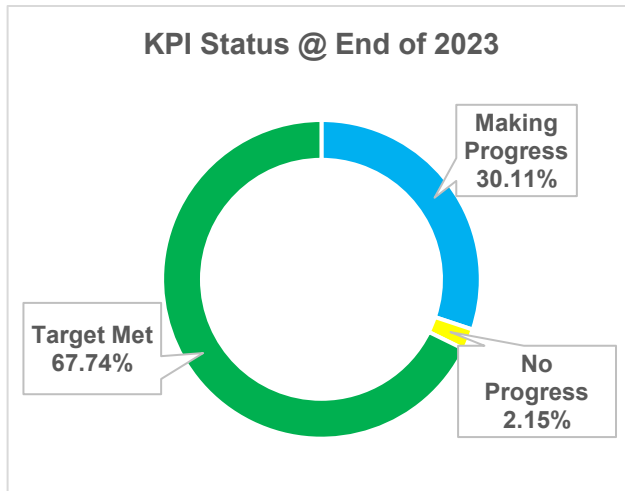
The CH Board report CHB 07 23 01 introduced the concept of themes to provide a horizontal view of the work across Priority Areas. The 2023 year end report illustrates insights using these themes, which will become more valuable as more data is collected year over year.

Overall Performance

The following table represents 2023 objectives, KPIs, and action items per Priority Area. The action items form the tangible work under the strategic plan for the year, which feeds into the KPIs and ultimately progresses the objectives.

Priority Area	Number of Objectives	Number of KPIs	Number of Action Items
Natural Hazards and Water	5	25	40
Science, Restoration and Conservation	4	19	14
Education, Empowerment and Engagement	4	13	18
Nature and Parks	4	10	10
Organizational Sustainability	3	7	14
Digital Transformation and Innovation	5	8	11
People and Talent	4	10	10
TOTAL	29	92	117

The following graphs represent the status of both the KPIs and the action items across the corporation at the end of 2023.



KPIs

More than two-thirds (63) of the KPIs were met in 2023. KPIs marked “Making Progress” represent KPIs due to be completed by the end of the Momentum plan (i.e., end of 2024). All are on target to be met by the end of 2024. KPIs marked “No Progress” represent two (2) of the ninety-two (92) total KPIs:

1. Marked “No Progress” due to a decrease in participation in some events that contribute to the KPI. for 2024, the approach to this KPI will be reimagined.
2. Marked “No Progress” due to the KPI being a 2024 target, with work not started. Work on this KPI is slated to begin early in 2024, with a completion date of the end of 2024.

Action Items

In 2023, 40% of the action items were completed. KPIs are marked “On Track” if:

1. The KPI is being finalized in the first half of Q1 2024;
2. Major factors arose in 2023 that caused schedule delays, but the action item is still progressing; or
3. It is a multi-year action item with a full completion date of the end of the Momentum Plan.

For the latter two (2) reasons, staff will carry specific actions over to the 2024 work plan to track to completion.

The action items with “Not Started/No Data” or “Paused or Deferred” status represent work that was unable be advanced in 2023 due to factors such as staff capacity, staff turnover, or competing priorities. These action items have been carried over to the 2024 work plan as they are important to advancing the Momentum Plan.

The tables below demonstrate the progress across both the KPIs and the action items from Q2 through to Q4, 2023.

KPI Status	End of Q2, 2023	Difference from Q2 to Q4, 2023	Action Item Status	End of Q2, 2023	Difference from Q2 to Q4, 2023
Target Met/Making Progress	28.57%	+58.51%	Completed/On Track	7.69%	+58.71%
No Progress	21.98%	-19.83%	Not Started/No Data/Paused or Deferred	17.95%	-19.83%

Objective Performance

The following table shows the overall status of each objective within the respective priority areas and provides a snapshot comparison of how the Momentum Strategic Plan is progressing towards targets from the first half of 2023 through to the end of the year.

To arrive at the status for each objective, the action items and KPIs within each objective were assigned a weighted score according to the progress indicated within the Strategic Plan tracking tool, the Momentum Hub. These scores were combined to provide the Objective Status in the table below.

The Strategic Plan made notable progress in 2023. KPIs and action items with a 2023 target were, for the most part, achieved. Items with an overall 2024 target are on track to be met. The areas tracking low at the end of Q2 2023 were monitored and supported where needed, and all finished the year with a strong performance.

Priority Area	Objective	Q1/Q2 2023 Status	End of Q4 2023 Status
Natural Hazards and Water	Foster partnerships and identify opportunities to build mutual understanding, trust, respect, and support with watershed stakeholders	High Progress	Complete
	Lead in delivering planning and permitting customer service and experience excellence	High Progress	High Progress
	Lead the Halton-Hamilton source water protection program for municipal drinking water source protection through a Comprehensive Review and Update of Drinking Water Science and Source Protection Plan Policies	High Progress	High Progress
	Modernize Planning and Regulations Policies and Mapping	Medium Progress	High Progress
	Optimize dam safety, operations, and flood forecasting within a sustainable funding model	High Progress	High Progress
Science, Restoration and Conservation	Expand monitoring and analytical capabilities to support Watershed Planning and Management	Medium Progress	Almost there

Priority Area	Objective	Q1/Q2 2023 Status	End of Q4 2023 Status
	Implement Climate Change Actions for Watershed Resiliency	Medium Progress	High Progress
	Implement restoration activities to manage natural hazards and Natural Resources	High Progress	High Progress
	Implement Watershed Plans to Manage Natural Hazards and Natural Resources	High Progress	High Progress
Education, Empowerment and Engagement	Deliver Community Programming and Events to Landowners and the Public to Inspire Local Environmental Action and Volunteerism	High Progress	Complete
	Develop community informed programming through greater allyship with Indigenous, Black, People of Colour, Racialized, 2SLGBTQIA+, and Disability communities	High Progress	Almost there
	Leverage Brand to Build Community Awareness of Climate Change and Support for Flood Preparedness	High Progress	Complete
	Provide Outdoor Experiential Opportunities that are Curriculum-Linked and Accessible for School Boards and Students	High Progress	Complete
Nature and Parks	Enhance Access to Greenspace Today and in the Future through Investments in Infrastructure Including Capital Assets and Land to Meet Growth Pressures	High Progress	High Progress
	Enhance Customer Experience and Inform Product Development through Market Research, Analysis and Branding	High Progress	Almost there
	Enhance Operational Excellence and Safety	High Progress	Almost there
	Ensure Parks Financial Performance	High Progress	High Progress
Organizational Sustainability	Apply an integrated approach to Operational Risk, Governance and Compliance	High Progress	High Progress
	Ensure Long Term Financial Sustainability	Medium Progress	Complete
	Reduce CH's Carbon Footprint	Low Progress	High Progress
Digital Transformation and Innovation	Enable a Digital Culture Across the Organization & Invest in Technologies to Improve Problem Solving	Medium Progress	Almost there
	Enhance Business Intelligence through Insights Visualizations and Analytics	Low Progress	Almost there
	Establish CH Innovation Hub to Enable Partnerships with Agencies, Companies and Academia to Develop Innovative Environmental Solutions	Medium Progress	Almost there
	Implement an Enterprise Information Management Framework for Document Digitization	Medium Progress	High Progress
	Improve Cyber security, IT and Data Standards	Medium Progress	Complete

Priority Area	Objective	Q1/Q2 2023 Status	End of Q4 2023 Status
People and Talent	Broaden wellness program initiatives to invest in employee wellbeing	Medium Progress	Complete
	Create an Equity, Diversity and Inclusion (EDI) framework to cultivate a culture that embraces, honours and embraces differences	Medium Progress	Complete
	Establish a growth mindset, learning organization to enable and empower employees to achieve our collective ambition	Medium Progress	Almost there
	Position CH as an employer of choice to attract, invest in and retain talent	Low Progress	Almost there

Highlights

The following table highlights some notable achievements under each Priority Area for 2023.

Priority Area	Highlights of 2023
Natural Hazards and Water	<ul style="list-style-type: none"> First version of the public consultation strategy for Planning & Watershed Management was completed. Memorandums of Understanding were secured with partnering municipalities for service provision as per provincial requirements. KPIs relating to permit application processing and technical reviews were met and/or exceeded. 84% of major capital repair projects for dams and channels were completed within scope, budget, and on time (compared to a target of 75%).
Science, Restoration and Conservation	<ul style="list-style-type: none"> KPIs relating to specific restoration activities were all met or exceeded, including the planting of 130,385 native shrubs and trees planted (against a target of 85,000); and the restoration of 8.5 kilometres of stream restoration (against a target of 4 kilometres). Phase 1 of the Watershed Strategy was completed. Best-practices to advance collaborative natural asset management were developed.
Education, Empowerment and Engagement	<ul style="list-style-type: none"> Significant increases in several KPIs were achieved, such as annual volunteer hours (59% increase against a target of 15%); corporate stewardship event attendees (a cautious 5% increase in anticipation of a slow post-pandemic recovery was targeted; 289% increase was realized). All social media-related KPIs were exceeded for at least three (3) quarters of 2022, resulting in successful impression and engagement results. 96% of guests would recommend CH's education and recreation programs (against a target of 80%), and 65% of eligible visitors returning at least once more (against a target of 35%). Pre-pandemic participation was achieved across various programs, such as the Halton Children's Water Festival and Mountsberg curriculum-based educational programming.

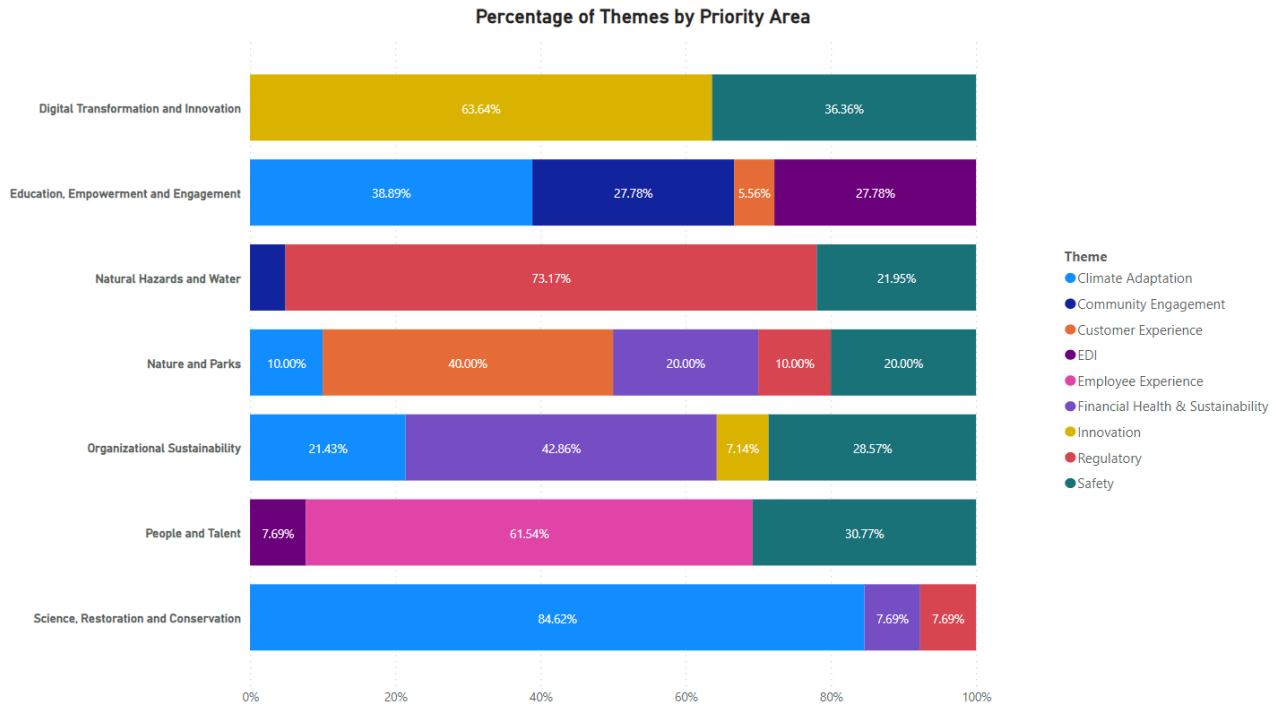
Priority Area	Highlights of 2023
Nature and Parks	<ul style="list-style-type: none"> Focus on projects compliant with the <i>Accessibility for Ontarians with Disabilities Act (AODA)</i>, approximately fifty (50), ensures visitors can continue to access CH's parks, facilities, and experiences both now and in the future. Creation of demographic snapshots of park users to inform and robust customer engagement strategies. Enhancement of the Park Health & Safety training program to increase safety and competency in staff.
Organizational Sustainability	<ul style="list-style-type: none"> Development and implementation of the Enterprise Risk Management Committee Risk Register dashboard, to allow for identification and tracking/measurement of the top risks facing CH. Phase 1 of the Facility Asset Management Plan update was completed. A 20.05% reduction in greenhouse gas (GHG) emissions was achieved (measured in arrears; data is for 2022). First hybrid electric vehicle (EV) purchased.
Digital Transformation and Innovation	<ul style="list-style-type: none"> Development of digital procurement request and tracking system. Development and deployment of a digitized Enterprise Risk Management Risk Register. Consultant partner engaged to begin work on establishing an Innovation Hub. Successful pilot for the Record Digitization project was completed, resulting in approximately 550,000 documents digitized and the end-to-end process, including search and retrieval of electronic documents, being developed.
People and Talent	<ul style="list-style-type: none"> 95% of employees reported a positive experience during wellness programming participation (target was 65-75%). 78% of employees participated in EDI initiatives or training opportunities. EDI advisory group launched, with inaugural membership of thirteen (13) staff members selected via an application process. Awarded Hamilton-Niagara Top 100 Employers of the Year.

Themes

As noted in Momentum Progress Report Q1 & Q2 2023 (CHB 07 23 01), the concept of themes was introduced for 2023. Each action item within the strategic work plan was attributed one (1) of nine (9) themes. A summary of each theme and the reason for inclusion is provided in Attachment 1.

The table below shows the breakdown of the percentage of each theme within each Priority Area, providing a snapshot of themes that are represented within a Priority Area and by how. The Safety theme is well represented across most of the Priority Areas, and particularly in areas that have responsibility for both internal and external stakeholder engagement; this indicates a firm grasp on the importance of this theme.

Financial Health and Sustainability is well-represented in both Nature & Parks and Organizational Sustainability. These two (2) areas are revenue-generating or responsible for the fiscal health of Conservation Halton overall.



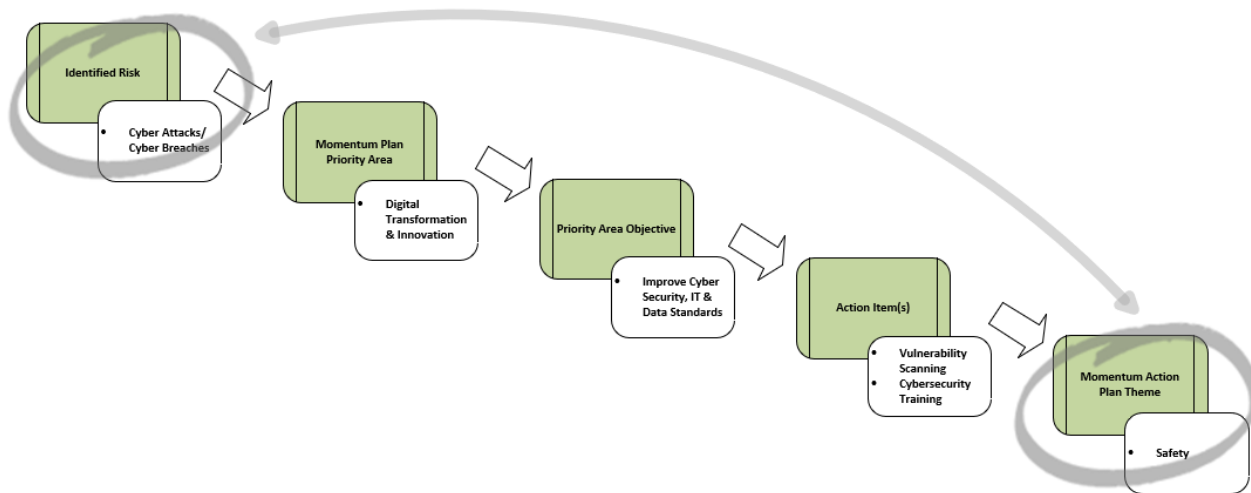
Themes will become even more relevant when there are multiple year data points to examine. Trend analysis will provide insight into gaps in specific Priority Areas and allow staff to focus on developing a work plan to ensure the work is evenly spread across the organization. For example, Innovation is mainly in the digital Transformation & Innovation Priority Area, with a lesser amount of work falling under the Organizational Sustainability Priority Area. In future, there may be opportunities to expand it across other Priority Areas, to take advantage of the innovative mindset that prevails at CH.

It will allow staff to make direct links and correlations to other areas of focus within CH. For example, the ERM Risk Register documents that tracks the top risks across the organization. As risks are identified and mitigation measures are developed, the work that arises will be incorporated into the Momentum work plan. By considering the “Safety” theme, staff can quickly and easily see the progress of all action items that are being undertaken to mitigate the risks identified in the Risk Register.

[Link to ERM Risk Register](#)

To understand the risks the organization is facing and how they are being addressed, staff will use the “Safety” theme in the annual Momentum work plan to identify action items that work toward mitigating the top risks as identified through the Risk Register.

For example, “Cyber Attacks/Cyber Breaches” has been identified in the top five (5) ERM risks. The visual below illustrates how this information is incorporated into Momentum work planning to track the work being done to mitigate the risk.



The link between the risk and the action item/assigned theme is twofold, allowing for transparency in risk mitigation work and providing the ability for multi-layer reporting to demonstrate the full picture of risk mitigation at all levels.

In addition, future improvements to the Momentum Planning process include a robust upfront costing model. This will allow staff to track the financial impact of the risk mitigation work, allowing increased accuracy when estimating the cost of making CH is as safe as possible for staff and visitors.

Conclusion

CH had a very successful 2023. The majority of work and KPIs targeted to be completed in 2023 was achieved, and the items due to be completed by the end of 2024 are on track.

2023 saw quarter-over-quarter improvements in the consistency, preciseness, and timeliness of data input, as the result of deep-dive sessions to ensure that all contributors were aligned and “bought into” the methodology and measurement of the work plan and KPIs. This resulted in the ability to reliably monitor the work plan to identify and intercept potential issues that might prevent CH from achieving strategic targets. The success of this approach is evident in the Q2 versus Q4 results.

Intended future improvements to the Strategic Plan annual planning process include a focus on identifying internal support staff requirements to ensure resource capacity, a more robust budget estimate methodology to measure the financial implications of specified work, and integration with other tools to move towards a connected, transparent view of the strategic work within CH at all levels.

Impact on Strategic Priorities

This report supports all Momentum priorities by presenting the results of the collective efforts of CH staff and leadership in advancing all priority areas in 2023.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Mark Vytvytskyy
Chief Operating Officer

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Mark Vytvytskyy, Chief Operating Officer
mvytvytskyyl@hrca.on.ca, 905-336-1158 x 1228

PREPARED BY:

Rebecca Munro, Senior Manager, Corporate Services

Attachments:

Attachment 1: Themes and Definitions

Themes and Definitions

Theme	Meaning
Climate Adaptation	Work under this theme is critical in Conservation Halton’s efforts to achieve and maintain a healthy watershed and resilient ecosystems.
Regulatory	A large volume of work within specific priority areas is primarily due to regulatory and legislative requirements. This theme captures those action items.
Safety	The action items for this theme have a main focus on keeping both staff and visitors safe whilst on Conservation Halton property.
Community Engagement	Conservation Halton is passionate about engagement with the broader community, whether it is school groups, volunteers, or actively participating in fostering partnerships with various groups. This theme reflects the actual work being undertaken in 2023 to continue and expand this important work.
Employee Experience	This theme spotlights the work Conservation Halton undertakes in actively creating and maintaining a positive culture within the organization, increasing employee morale and satisfaction with their role
Innovation	Conservation Halton prides itself on being innovative and creative within working practices and approaches to challenges, and this theme captures the action items dedicated primarily to this.
Financial Health & Sustainability	The work under this theme strives to ensure CH is financially strong and sustainable both now and into the future.
Customer Experience	Customers – visitors, permit applicants, clients, landowners – are critical to the ongoing success of Conservation Halton. This theme showcases the specific work undertaken to enhance their experience when they visit or interact with CH.
Equity, Diversity and Inclusion (EDI)	EDI is an incredibly important topic for organizations, and this theme helps capture the tangible work being done to ensure that Conservation Halton embeds and lives a culture that honours, embraces, and enables everyone, regardless of their differences.

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 05

FROM: Garner Beckett, Executive Director, Foundation

DATE: April 18, 2024

SUBJECT: **Appointment of Denise Santini to the Conservation Halton Foundation Board of Directors**

Recommendation

THAT the Conservation Halton Board **approves the appointment of Denise Santini to the Conservation Halton Foundation Board of Directors.**

Report

The Conservation Halton (CH) Foundation Nominations and Governance Committee (Committee) has undertaken a process of candidate review to fill a vacancy on the CH Foundation Board of Directors and bring the membership to a full complement of fifteen (15). The Committee was reinstated in 2019 to enhance the effectiveness of the CH Foundation Board by addressing vacancies, evaluating candidates, and ensuring members continue to operate within the by-laws and policies confirmed by the CH Foundation Board, as-per the Committee Terms of Reference (Attachment 1).

After conducting an evaluation and interview process, the Committee, with support from CH Foundation staff, recommends the appointment of Denise Santini to the Foundation Board of Directors.

As a business owner, Denise brings a unique skill set, background, and expertise that will be an asset to the CH Foundation. As an active supporter and partner for many years, Denise has demonstrated passion for the work and a commitment to the values and strategic objectives of both CH and the CH Foundation.

In accordance with the Halton Region Conservation Foundation By-law, appointments to the CH Foundation Board of Directors must also be approved by the CH Board.

Impact on Strategic Priorities

This report supports the Momentum priority of Organizational Sustainability by enhancing and supporting major gift fundraising efforts to encourage greater philanthropic support from the community.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted: Approved for circulation:



Garner Beckett
Executive Director, Foundation



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Garner Beckett, Executive Director, Foundation
gbeckett@hrca.on.ca

Attachments:

Attachment 1: Conservation Halton Foundation Nominations
and Governance Committee Terms of Reference



Conservation Halton Foundation

Nominations and Governance Committee: Terms of Reference

Purpose & Accountability

The purpose of the Nominations and Governance Committee is to continually enhance the effectiveness of the Conservation Halton Foundation Board of Directors by ensuring the Board maintains an appropriate complement of directors with relevant skill sets and operates within the bylaws and policies as confirmed by the Board of Directors.

Membership

1. Chair, Conservation Halton Foundation
2. Vice-Chair, Conservation Halton Foundation
3. Chair, Conservation Halton
4. Vice-Chair, Conservation Halton
5. CAO, Conservation Halton
6. Director of Development, Conservation Halton Foundation (non-voting)

Objectives

1. Operate the Board with an appropriate complement of directors (up to a maximum of 15)
2. Review director terms and maintain an ongoing roster of potential new directors
3. Ensure the Board includes individuals with an appropriate skill set to meet Board objectives
4. Ensure new Directors are properly oriented and are provided with training (as appropriate) for Committee and general board tasks
5. Ensure that the Foundation is in compliance with all relevant policies and procedures (Foundation By-Laws, Gift Policies, etc.)
6. Benchmark annual Board performance to drive continual improvement

Roles of Committee Members

Nominations and Governance Committee members will:

1. Review the terms of current directors to assess any vacancies on the board
2. Play a lead role in identifying skills sets needed for the board of directors
3. Play a lead role in identifying prospective new board members to fill vacant positions, with the support of the balance of the Board
4. Review relevant policies of the Board and other policies outside the organization (that may be adopted by the Board) to ensure that the Foundation continues to have strong operating policies
5. Volunteer their time to contact and/or meet with current and prospective board members

Roles of Staff

The Committee will be supported by the Foundation Director. The Foundation Director will:

1. Provide information on current director terms and projected renewal dates
2. Provide information on all current Foundation policies and gather external information, as needed
3. Act as a resource to the Committee in identifying needed skill sets and prospective board members
4. Develop correspondence and materials to recruit new members to the Board of Directors of Conservation Halton Foundation

Meeting Schedule

The Committee will meet as needed to accomplish the Committee objectives.

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 06

FROM: Garner Beckett, Executive Director, Foundation

DATE: April 18, 2024

SUBJECT: Reappointment of Conservation Halton Foundation Board Members

Recommendation

THAT the Conservation Halton Board **approves the reappointment of the following Members for a two (2) year term ending at the Conservation Halton Foundation Board of Directors Annual General Meeting in 2026:**

- **Bill Mann**
- **Madhav Murti**
- **Mavis Shang**

Report

The above-named individuals have demonstrated a commitment to the values and long-term strategic objectives of both Conservation Halton (CH) and the Conservation Halton Foundation (Foundation). All listed individuals have confirmed they will let their names stand for reappointment to the Foundation Board of Directors for an additional two (2) year term, ending at Foundation Annual General Meeting in 2026.

In accordance with the Halton Region Conservation Foundation By-Law, Foundation Board of Director Member renewals must also be approved by the CH Board.

Impact on Strategic Priorities

This report supports the Momentum priority of “Organizational Sustainability” by enhancing and supporting major gift fundraising efforts to encourage greater philanthropic support from the community.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Garner Beckett
Executive Director, Foundation

Approved for circulation:



Hasaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Garner Beckett, Executive Director, Foundation
gbeckett@hrca.on.ca

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 07

FROM: Barbara J. Veale, Senior Director, Watershed Management & Climate Change

DATE: April 18, 2024

SUBJECT: Guiding Principles and Objectives for the Watershed Strategy

Recommendation

THAT the Conservation Halton Board **approves the revised Goal and Guiding Principles and Objectives for the Watershed Strategy;**

And

THAT the Conservation Halton Board **receives for information the staff report entitled “Guiding Principles and Objectives for the Watershed Strategy”.**

Report

Recent changes to the *Conservation Authorities Act* (CA Act) require that all conservation authorities (CAs) complete a Watershed-Based Resource Management Strategy (Watershed Strategy) by December 31, 2024. The workplan and timeline for completing the Watershed Strategy was approved by the Board on February 15, 2024 (CHB 01 24 09). The legislation prescribes several components, including guiding principles and objectives. These guiding statements will inform the design and delivery of the programs and services required through the legislation or Memorandums of Understanding (MOUs) with participating municipalities.

Draft principles and objectives for Conservation Halton’s (CH’s) Watershed Strategy were posted on the CH website for public review and comment between January 15 and February 13, 2024. Thirty-three (33) completed surveys were submitted. Responses generally supported the draft statements, although several wording changes to clarify these statements were suggested. Based on the feedback received, several revisions are proposed.

The wording changes proposed are based on the input received and provided in the table below.

Proposed – January 2024	Revisions – April 18, 2024 (in red text)
Goal	
Based on CH’s strategic plan and MOUs for programs and services, we propose the following broad goal for the Watershed Strategy:	

Proposed – January 2024	Revisions – April 18, 2024 (in red text)
<p>To design and deliver cost-effective programs and services that protect people and property from natural hazards and climate change impacts, conserve nature, deliver education, and provide opportunities for outdoor recreation and education across Conservation Halton’s watersheds.</p>	<p>To design and deliver cost-effective programs and services that:</p> <ul style="list-style-type: none"> • help protect people and property from natural hazards and <i>related</i> climate change impacts, • <i>help address watershed-scale key resource issues,</i> • <i>help protect,</i> conserve, and <i>enhance</i> nature, • <i>deliver environmental education,</i> and • provide opportunities for outdoor recreation <i>on Conservation Halton lands.</i>
Objectives	
<p>The following high-level objectives for the Watershed Strategy build on and complement our proposed goal:</p>	
<p>To avoid, reduce or mitigate risk to public health and safety and property damage from flooding and other natural hazards and the impacts of climate change.</p>	<p>To avoid, reduce or mitigate risk to public health and safety and property damage from flooding and other natural hazards and the impacts of climate change.</p>
<p>To identify key natural resource issues and primary stressors that influence them, both locally and cumulatively.</p>	<p>To identify key natural resource issues and primary stressors that influence them, both locally and cumulatively, <i>including climate change.</i></p>
<p>To monitor key indicators of natural resource issues to describe conditions, trends, and risks.</p>	<p>To monitor key indicators of natural resource issues to describe conditions, trends, and risks.</p>
<p>To characterize surface/groundwater systems and natural resources, which support hydrological and ecological integrity and influence natural hazard processes.</p>	<p>To characterize surface/groundwater systems and natural resources, which support hydrological and ecological integrity and influence natural hazard processes.</p>
<p>To identify the causes and risks of key natural resource issues and develop potential solutions for addressing them that foster climate change resiliency, biodiversity, community sustainability, and well-being.</p>	<p>To identify the causes and risks of key natural resource issues and develop potential solutions for addressing them that foster climate change resiliency, biodiversity, community sustainability, and well-being.</p>
<p>To protect, improve and restore surface and ground water quality and quantity to maintain natural watershed functions/services and reduce impacts on the Hamilton Harbour and western Lake Ontario.</p>	<p>To protect, improve and restore surface and ground water quality and quantity to maintain natural watershed functions/services and reduce impacts on the Hamilton Harbour and western Lake Ontario.</p>
<p>To mitigate risks to municipal drinking water sources and ensure a sustainable and clean water for communities and ecosystems.</p>	<p>To mitigate risks to municipal drinking water sources <i>as specified by the Clean Water Act</i> and <i>promote</i> sustainable and clean water for communities and ecosystems.</p>

Proposed – January 2024	Revisions – April 18, 2024 (in red text)
To recognize the value of CH-owned lands in supporting all the objectives and providing accessible, high-quality outdoor recreation and education opportunities.	To recognize the value of CH-owned lands in supporting all the objectives and providing accessible, high-quality <i>and sustainable</i> outdoor recreation and education opportunities.
Principles	
Principle I: Natural Resources Provide Essential Services That Are Best Managed on a Watershed Basis	
Watershed Scale: The management of natural resources will be implemented on a watershed basis through our Watershed Strategy and the Conservation Lands Strategy as required by legislation.	Watershed Scale: The management of natural resources will be implemented on a watershed basis through our Watershed Strategy and the Conservation <i>Area</i> Strategy as <i>defined</i> by legislation.
Watershed-based Resource Management Strategy: The Watershed Strategy will provide a comprehensive and collaborative framework to identify and analyze natural resource issues, conditions, trends, and risks for delivering cost-effective programs and services to manage them.	Watershed-based Resource Management Strategy: The Watershed Strategy will provide a comprehensive and collaborative framework to identify and analyze natural resource issues, conditions, trends, and risks for delivering cost-effective programs and services to manage them.
Essential Services: Natural resources provide essential services (e.g., they buffer impacts of climate change, mitigate natural hazards, filter contaminants, sustain biodiversity, provide green spaces for recreation), and will be valued and managed as natural assets to sustain community prosperity, growth, and well-being.	Essential Services: Natural resources provide essential services (e.g., they buffer impacts of climate change, mitigate natural hazards, filter contaminants, sustain biodiversity, provide green spaces for recreation), and will be valued, managed, and <i>protected</i> as natural assets to <i>support</i> community prosperity, growth, and well-being.
Principle II: Managing Water and Other Natural Resources is a Shared Responsibility	
Partners: Key partners in natural resource management will include Conservation Halton, municipalities, government agencies, and other stakeholders.	Partners: Key partners in natural resource management will include Conservation Halton, municipalities, <i>First Nations</i> , government agencies, <i>landowners</i> , and other stakeholders.
Scope: The Watershed Strategy will address key resource management issues associated with natural hazards, climate change impacts, and drinking water sources as defined in the legislation and other resource management issues as agreed to by funding partners.	Scope: The Watershed Strategy will address key resource management issues associated with natural hazards, climate change impacts <i>on natural resources</i> , and drinking water sources as defined in the legislation and other resource management issues as agreed to by funding partners.
Approach: A collaborative, transparent and precautionary approach will be used to develop and implement the Watershed Strategy.	Approach: A collaborative, transparent and precautionary approach will be used to develop and implement the Watershed Strategy.

Proposed – January 2024	Revisions – April 18, 2024 (in red text)
Principle III: Management of Water and Other Natural Resources is Effective and Efficient	
<p>Funding: Government resources will be efficiently allocated; costs for programs and services will be shared through our budget, cost apportioning and other agreements, and offset through other partnerships, grants, fees-for-service, or sources of funding; resources will be pooled to achieve cost savings wherever possible.</p>	<p>Funding: Government <i>funding</i> will be efficiently allocated; costs for programs and services will be shared through <i>the budget process</i> and agreements and <i>be</i> offset through other partnerships, grants, fees-for-service, or sources of funding; <i>available</i> resources will be <i>coordinated and</i> pooled to achieve cost savings wherever possible.</p>
<p>Management Approaches: Best value, optimal and integrated solutions will be sought using a dynamic, responsive, and adaptive approach which is supported by monitoring, progress reporting, and periodic review.</p>	<p>Management Approaches: Best value, optimal and integrated solutions will be sought using a dynamic, responsive, and adaptive approach which is supported by monitoring, progress reporting, and periodic review.</p>
<p>Implementation: Best practices will be applied; provincial and municipal standards will be achieved or exceeded; existing staff and organizational expertise will be optimized; unnecessary duplication will be avoided.</p>	<p>Implementation: Best practices will be applied; <i>provincial standards</i> will be achieved or exceeded; existing staff and organizational expertise will be optimized; actions will be <i>streamlined, complementary, value-added, and coordinated, where possible</i>; unnecessary duplication will be <i>eliminated</i>.</p>
<p>Data and Knowledge Sharing: Relevant data will be collected, integrated, and analyzed using sound science and robust analytical tools and technologies; information will be shared in usable formats among partners to support decision making and evaluation; outcomes and progress are reported.</p>	<p>Data and Knowledge Sharing: Relevant data will be collected, integrated, and analyzed using sound science, <i>established protocols and standards</i>, and robust analytical tools and technologies; information will be shared in usable formats among partners to support decision making and evaluation; outcomes and progress are reported.</p>
Principle IV: Engagement is Integrated and Iterative	
<p>Active Participation: Opportunities for active participation by municipalities, government agencies, Indigenous communities, and subject matter experts will be provided.</p>	<p>Active Participation: Opportunities for active participation by municipalities, government agencies, <i>First Nations</i>, and subject matter experts will be provided.</p>
<p>Public Engagement: Community groups and residents will be invited to actively engage to provide local knowledge and perspectives; input will be documented, summarized and publicly accessible.</p>	<p>Public Engagement: Community groups, <i>landowners, residents, and other stakeholders</i> will be invited to actively engage to provide local knowledge and perspectives; input will be documented, summarized and publicly accessible.</p>
<p>Regular Reporting and Revision: Implementation outcomes will be reported regularly; our</p>	<p>Regular Reporting and Revision: Implementation outcomes will be reported regularly; our programs and services will be adjusted based on results.</p>

Proposed – January 2024	Revisions – April 18, 2024 (in red text)
programs and services will be adjusted based on results.	

Staff recommends that the revised goal and guiding principles and objectives be approved by the Board.

Impact on Strategic Priorities

This report supports the Momentum priorities of “Natural Hazards” and “Water, Science, Conservation and Restoration, and Education, Empowerment and Engagement”.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:

Approved for circulation:




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Senior Director, Watershed Management & Climate Change

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 08

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: April 18, 2024

SUBJECT: **Legislative and Regulatory Changes Affecting Conservation Halton’s Development Permitting and Interim Policies and Procedures**
CH File No.: AADM 436

Recommendation

THAT the Conservation Halton Board **approves the “Interim Policies and Guidelines for the Administration and Implementation of the *Conservation Authorities Act* and *Ontario Regulation 41/24*”;**

And

THAT the Conservation Halton Board **approves the “Interim Transitional Procedures and Guidelines (Transitioning from *Ontario Regulation 162/06* to *Ontario Regulation 41/24*)”;**

And

THAT the Conservation Halton Board **receives for information the staff report entitled “Legislative and Regulatory Changes Affecting Conservation Halton’s Development Permitting and Interim Policies and Procedures”.**

Executive Summary

On February 16, 2024, the Province released *Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits* (O. Reg. 41/24), under the *Conservation Authorities Act* (CA Act). O. Reg. 41/24 replaces Conservation Halton’s (CH) existing individual “Development, Interference with Wetlands and Alterations to Shorelines and Watercourses” regulation *Ontario Regulation 162/06* (O. Reg. 162/06) and will be used by all Conservation Authorities (CAs). This regulation came into effect on April 1, 2024, and coincides with the proclamation of associated sections within the CA Act.

The transition period from the release of O. Reg. 41/24 to when the changes came into effect was limited. As such, staff prioritized items that need to be addressed immediately (e.g., updates to mapping, application forms, notifications, interim policies) and those that will need to be completed over the coming months (e.g., procedures document). Select items require CH Board approval, including the following priorities:

1. The re-appointment of officers (CHB 03 24 09);

2. The delegation of permit approvals/cancellations and administrative reviews (CHB 03 24 10);
3. Interim Policies and Guidelines for the Administration and Implementation of O. Reg. 41/24 (Attachment 1); and
4. Interim Transitional Procedures and Guidelines for transitioning from O. Reg. 162/06 to O. Reg. 41/42 (Attachment 2).

Report

Over the past few years, the Province has introduced a series of legislative amendments through Bill 229 and Bill 23, as well as proposed regulatory and policy changes through consultations on various Environmental Registry postings. These changes are to support the Province's commitment to increase the supply of housing in Ontario and to have 1.5 million homes built over the next ten (10) years. Many of the introduced legislative changes affecting CAs have not been in force and effect and the associated implementing regulations had not been released.

On February 16, 2024, the Province released two new regulations (O. Reg. 41/24: Prohibited Activities, Exemptions and Permits and O. Reg. 42/24: Mandatory Programs and Services), under the CA Act. O. Reg. 41/24 replaces CH's existing individual "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" regulation (O. Reg. 162/06) and will be used by all CAs. O. Reg. 42/24 amends O. Reg. 686/21 (Mandatory Program & Service Regulation) to require CAs to undertake annual permitting and regulatory compliance reporting. The enactment of these regulations coincides with the proclamation of associated sections within the CA Act.

Outlined below is a summary of the key legislative and regulatory changes that came into effect on April 1, 2024, as well as an overview of the implications and implementation next steps for CH.

Summary of Key Legislative Changes

1) *Regulatory Tests (CA Act s.28.1)*

Changes the tests used by CAs in permit decisions whereby:

- the "conservation of land" and "pollution" tests have been removed;
- an "unstable soils and bedrock" test has been added; and
- a test related to ensuring a development or alteration activity does not "create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property" has been added.

The tests for the "control of flooding, erosion, and dynamic beaches" remain.

2) *Exemptions (CA Act s.28 (4.1), 28.1(6), 28(2)(3)(4))*

Enables CA permit exemptions for the following:

- prescribed activities which are part of a development authorized under the *Planning Act* (note: this requires an additional regulation to be in effect); and
- low-risk development activities set out in O. Reg. 41/24.

3) *Minister Orders (CA Act s.28.1.1)*

Requires CAs to issue permits for:

- projects subject to Community Infrastructure and Housing Accelerator orders (under s.34.1 of the *Planning Act*) and allowing the Minister to review and amend any conditions attached to those permits.

Enhances the Minister's powers to:

- direct a CA not to issue a permit for a specified activity;
- direct a CA or CAs not to issue a permit for a type or class of activity for a specified period of time;
- enable the Minister to issue a permit for any activity if s.28.1 "tests" are satisfied;
- make an order before or after a CA application has been submitted (even if CA decision is pending); and
- enable the Minister to issue permit with conditions as they determine appropriate.

4) *Permit Appeal Process (CA Act s.28.1(8), 28.1(20), 28.1(22), 28.3(6))**

Establishes additional processes for applicants to:

- request a Minister's review of the CA's decision where a permit was refused or of the permit conditions imposed (within fifteen (15) days);
- appeal to the Ontario Land Tribunal (OLT) a CA's decision to refuse a permit or issue a permit subject to conditions (appeal provisions limited where a request for a Minister's review has been made) within ninety (90) days;
- appeal to the OLT for failure of a CA to make a decision on complete permit submission within ninety (90) days; and
- appeal to the OLT permits that have been cancelled following a CA hearing (within ninety (90) days)

*For section 28.1 permit applications (non-zoning order).

5) *Permit Cancellations (CA Act s.28.3)*

Moved the permit cancellation provisions to the CA Act rather than CA regulations.

6) *Board Delegation (CA Act s.28.4)*

Enables an Authority to delegate not only permit issuance to a person or body but also the:

- cancellation of permits; and
- issuance of sixty (60) month permits and permit extensions.

7) *Permit Application Fees (CA Act s. 21.2 (13 to 21))*

Establishes new provisions to allow for the reconsideration of permit application fees, including that:

- CAs have thirty (30) days to make a decision and applicants can appeal to the OLT for non-decision; and

- the OLT may dismiss an applicant's appeal, vary the amount, or order that no fee be charged, or a CA may be ordered by OLT to provide a refund.

8) *Enforcement & Offences (CA Act 30.1*, 30.2, 30.4, 30.5)*

Enhances CAs' abilities to enforce the CA Act and regulations, including:

- Provisions for how Officers may enter private property without warrants and bring experts onsite;
- New ability for Officers to make Stop Orders; and
- Updated offence provisions and penalties (maximum fines).

*Appointment of Officers moved from individual regulations to Section 30.1 of the CA Act

Summary of Key Regulatory Changes (O. Reg. 41/24 & O. Reg. 42/24)

1) *Single Regulation for all CAs*

O. Reg. 41/24: Prohibited Activities, Exemptions and Permits replaces CH's existing individual "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" regulation (*Ontario Regulation 162/06*). This new Section 28 regulation applies to all CAs.

2) *Definitions*

Changes to definitions include:

- Moved definitions from CA Act to O. Reg. 41/24;
- Revised definitions for watercourse, wetland "other areas", and shoreline; and
- Removed the definition for pollution.

3) *Prohibited Activities*

Changes to the activities and areas where a CA permit is required:

- Increased regulatory allowance in CH's minor urban valley systems and select areas in Oakville and Milton to fifteen (15) metres;
- Decreased regulated areas around wetlands (CAs now regulate thirty (30) metres from all wetlands rather than 120 metres from Provincially Significant Wetlands (PSW) or wetlands greater than two (2) hectares).

4) *Regulatory Mapping (O. Reg. 41/24 s.4)*

Enhances mapping provisions requiring a CA to:

- Make regulation mapping publicly available;
- Annually review and update maps; and
- Notify stakeholders of significant updates and promptly update maps.

5) *Exceptions (O. Reg. 41/24 s.5)*

Outlines CA permit exemptions for specified low-risk development activities, including small non-habitable structures not located in a watercourse or wetland.

6) *Pre-submission Consultation & Complete Applications (O. Reg. 41/24 s.6 & 7)*

Enhances permit process to require:

- CAs to engage in pre-submission consultations to confirm permit requirements; and
- Complete application requirements.

7) *Review Timelines and Service Standards (O. Reg. 41/24 (s.7) & Act (ss. 28.1(22))*

Prescribes service standards including:

- Twenty-one (21) days to deeming an application complete (or incomplete with confirmation of requirements) after receiving an application and associated fee;
- Ninety (90) days to make a decision on a permit, once deemed complete; and
- Limiting CAs from requiring new studies, technical information, or plans after the application is deemed complete (unless agreed to by applicant).

8) *Permit Conditions (O. Reg. 41/24 s.9)*

Requires that conditions can only be attached to a Permit if the conditions:

- Mitigate effects that control flooding, erosion, dynamic beaches, or unstable soil or bedrock;
- Prevent or mitigate effects on human health or safety or any damage or destruction of property in the event of a natural hazard; and
- Support administration or implementation of the permit, including reporting and notification, monitoring and compliance with the permit.

9) *Administrative Reviews (O. Reg. 41/24 s.8)*

New provisions to allow applicants to request a CA administrative review if:

- Notice for deeming application complete (or incomplete) has not been received;
- Applicant disagrees with the decision that an application is incomplete; or
- Applicant disagrees that the request for information, studies, or plans is reasonable.

CAs must undertake administrative reviews within thirty (30) days of receiving request. There is no appeal mechanism if applicant disagrees with the outcome.

10) *Policy and Procedures (O. Reg. 41/24 s.12)*

New requirement for CAs to develop policy and procedure documents that include:

- Details of pre-consultation processes and complete application requirements;
- Procedures of the permit review process;
- Standard timelines for a CA to make a decision for permit once deemed complete; and
- A process for the periodic review of policies and procedures.

11) *Reporting Requirements (O. Reg. 42/24)*

O. Reg. 42/24 amends O. Reg. 686/21 (Mandatory Program & Service Regulation) to require CAs to undertake annual permitting and regulatory compliance reporting.

General Implications and Implementation Actions

Most of the legislative and regulatory changes described above were expected, as they were introduced by the Province over the past few years through a series of legislative amendments (i.e., Bill 23, Bill 229) and through consultations on various Environmental Registry postings. Many of the changes are positive and can easily be, or have already been, implemented by CH (e.g., prescribed review timelines and service standards, permit pre-consultation and complete permit application requirements, public engagement for large mapping updates, reporting requirements, enhanced enforcement abilities, some of the exemptions for low-risk development activities). However, some of the changes will have or have already resulted in unintended consequences, such as additional costs, time delays, confusion for stakeholders and the public, and/or environmental impacts (e.g., increased regulated area in some urban areas of CH's jurisdiction).

Outlined below is an overview of some of the critical actions required for CH to successfully implement the changes:

- a) Mapping
 - Update CH's regulatory mapping with revised regulation limits.
- b) Administrative
 - Update regulatory and legislative references on all applications, forms, website, templates, technical guidelines, maps, etc.
- c) Notifications
 - Notify municipal staff, stakeholders, and the public of key legislative and regulatory changes, as well as new mapping requirements (e.g., revised regulation limits).
- d) Training
 - Attend Conservation Ontario and Ministry of Natural Resources and Forestry (MNRF) training.
 - Undertake internal training sessions for CH staff.
- e) Officer Designations and Staff Delegations
 - Re-appoint Officers under a new class designation.
 - Consider (re)delegating Authority powers to senior staff to ensure efficient timelines for permit review/issuance, administration reviews, and permit cancellations.
- f) Policies and Procedures
 - Adopt Interim Policies and Guidelines for the Administration and Implementation of O. Reg. 41/24 until CH's existing regulatory policy document is updated.
 - Adopt Transitional Procedures and Guidelines for transitioning from O. Reg. 162/06 to O. Reg. 41/42 to ensure permits and new applications are subjected to the appropriate procedures and guidelines, depending on date of submission, until a new Procedures document is developed.

The transition period from the release of O. Reg. 41/24 to when the changes come into effect was limited to six (6) weeks. As such, staff prioritized the items that needed to be addressed immediately and those that will need to be completed over the coming months. Additional actions may also be necessary as staff continues to review and assess the changes.

Items e) and f) above require CH Board approval. Two (2) staff reports related to the re-appointment of officers and delegation of permit approvals/cancellations and administrative reviews (Item e) can be found in staff reports CHB 03 24 09 and CHB 03 24 10.

As of April 1, 2024, CH must review and make decisions on applications for permits in accordance with Part VI of the CA Act and O. Reg. 41/24. This requires amendments to CH's Policy Document entitled "Conservation Halton Policies and Guidelines for the Administration of *Ontario Regulation 162/06* and Land Use Planning Policy Document April 27, 2006 (last amended, November 26, 2020)" to reflect this new framework. Staff is currently reviewing CH's existing Policy Document and anticipates bringing updated policies (conformity updates only) to the Board for approval at the end of Q2 2024.

Staff recommends that the CH Board approves the "Interim Policies and Guidelines for the Administration and Implementation of the *Conservation Authorities Act* and O. Reg. 41/24" (Attachment 1) until CH's existing Policy Document is updated. To mitigate the negative impacts associated with the increased regulatory allowance in CH's minor urban valley systems in Burlington and Oakville from 7.5 metres from the hazard limit to fifteen (15) metres, as well as in select areas in CH's major valley systems where the regulatory allowance increased to fifteen (15) metres (i.e., North Oakville East/West, Boyne, and Derry Green Secondary Plan Areas), staff has included a policy to allow all development activities within these areas that did not previously require a CH permit with only a Letter of Permission.

Transitional Procedures and Guidelines for transitioning from O. Reg. 162/06 to O. Reg. 41/42 are also needed to ensure permits and new applications are subjects to the appropriate procedures and guidelines. Staff recommends that the CH Board approve the "Interim Transitional Procedures and Guidelines (Transitioning from *Ontario Regulation 162/06* to *Ontario Regulation 41/24*)" (Attachment 2) until a new Procedures document is developed.

Where discrepancies exist between the text of the legislation or regulation and the information provided within CH's existing Policy Document and these Interim Policies and Procedures, the text of the legislation and regulation will prevail.


Impact on Strategic Priorities

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

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:


Kellie McCormack
Director, Planning & Regulations

Approved for circulation:


Hassaan Basit
President & CEO/Secretary-Treasurer



FOR QUESTIONS ON CONTENT:

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Attachments:

Attachment 1: Interim Policy Guidelines for the Administration and Implementation of the *Conservation Authorities Act* and *Ontario Regulation 41/24* (Prohibited Activities, Exemptions and Permits)

Attachment 2: Interim Transitional Procedures and Guidelines (Transitioning from the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation to the NEW *Ontario Regulation 41/24*)



ATTACHMENT 1

Interim Policy and Guidelines for the Administration and Implementation of the *Conservation Authorities Act* and *Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits)*

Effective Date: April 1, 2024

Summary

On April 1, 2024, *Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits)* and Part VI of the *Conservation Authorities Act* came into effect. This regulation replaces Conservation Halton's previous "Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" regulation (*Ontario Regulation 162/06*).

The proclamation of the new legislative and regulatory framework necessitates updates to existing Conservation Authority policies and procedures, including Conservation Halton's "Policies and Guidelines for the Administration of *Ontario Regulation 162/06* and Land Use Planning Policy Document April 27, 2006 (last amended, November 26, 2020)".

Interim Policy Guidance

As of April 1, 2024, Conservation Halton will review and make decisions on applications for permits in accordance with Part VI of the *Conservation Authorities Act* and *Ontario Regulation 41/24*. Amendments to "Policies and Guidelines for the Administration of *Ontario Regulation 162/06* and Land Use Planning Policy Document April 27, 2006 (last amended, November 26, 2020)" will be forthcoming to reflect this new framework. Per section 12 of O. Reg. 41/24, Conservation Halton will consult with stakeholders and the public during the review and update process as the authority considers advisable. Where discrepancies exist between the text of the legislation or regulation and the information provided within Conservation Halton's existing Policy Document and these Interim Policy Guidelines, the text of the legislation and regulation will prevail.

Key variances from CH's policies/processes include, but are not limited to:

1. Assessing permit applications made under Section 28.1 of the *Conservation Authorities Act* to determine if the proposed works will affect the control of flooding, erosion, dynamic beaches, and unstable soil or bedrock.
2. Assessing applications to determine whether the proposed activity would create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.
3. Attaching conditions to a permit only if the conditions (1) assist in preventing or mitigating any effects on the control of flooding, erosion, dynamic beaches, or unstable soil or bedrock; or (2) assist in preventing or mitigating any effects on human health or safety or any damage or destruction of property in the event of a natural hazard.
4. Reducing the regulated area surrounding provincially significant wetlands or wetlands greater than 2 hectares in size from 120 metres to 30 metres. The other areas in which development activities are prohibited are within 30 metres of all wetlands in Conservation Halton's area of jurisdiction.
5. Increasing the regulatory allowance in minor urban valley systems in Burlington and Oakville from 7.5 metres from the hazard limit to 15 metres, as well as in select areas in major valley



- systems to 15 metres (i.e., North Oakville East/West, Boyne, and Derry Green Secondary Plan Areas).
6. Permitting development activities between 7.5 metres and 15 metres of any hazard associated with a minor valley system and select locations within major valley systems identified in the approved Secondary Plans for the Boyne, Derry Green and North Oakville East and West Secondary Plan Areas, and will only require a Letter of Permission.
 7. Exceptions from CA permits for specific activities outlined in section 5 of O. Reg. 41/24, when carried out in accordance with the regulation.
 8. Updated definition of watercourse to a “defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs”.
 9. Updated complete application requirements (as outlined in section 7 of O. Reg. 41/24), including requirements for landowner authorization and payment of applicable fee.
 10. A new process for applicants to request an administrative review of an application (circumstances outlined in section 8 of O. Reg. 41/24).
 11. New requirement (as outlined in subsection 7(2) O. Reg. 41/24) to notify the applicant of whether an application is complete within 21 days and provide the applicant notice of a decision within 90 days following confirmation of a complete application (as outlined in 28.1(22) of the *Conservation Authorities Act*).
 12. A new process for pre-submission consultation (circumstances outlined in section 6 of O. Reg. 41/24).
 13. Enforcement procedures, appeals and hearing processes described in Parts VI and VII of the *Conservation Authorities Act*.



ATTACHMENT 2

Interim Transitional Procedures and Guidelines (Transitioning from *Ontario Regulation 162/06* to *Ontario Regulation 41/24*)

Effective Date: April 1, 2024

Background

The existing Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation provided each CA with the power to regulate development and activities in or adjacent to river or stream valleys, shorelines of the Great Lakes-St. Lawrence River system and inland lakes, watercourses, hazardous lands (e.g., unstable soil, bedrock, and slopes), wetlands and other areas around wetlands. Development taking place on these lands may require permission from the CA to confirm that the control of flooding, erosion, dynamic beaches, pollution, or the conservation of land are not affected.

On February 16, 2024, the Prohibited Activities, Exemptions and Permits under Conservation Authorities Act Regulation (*Ontario Regulation 41/24*) was approved by the Province under subsection 28(1) of the *Conservation Authorities Act* (CA Act). The administration of O. Reg. 41/24 is a Mandatory Program and Service of the Conservation Authorities as per Section 21.1.1 of the *Conservation Authorities Act* and as stipulated in O. Reg. 686/21: Mandatory Programs and Services. Under section 8 of O. Reg. 686/21, Conservation Authorities shall provide programs and services to ensure that the Authority carries out its duties, functions, and responsibilities to administer and enforce the provisions of Parts VI and VII of the Act and any regulations made under those Parts.

Purpose

The purpose of this document is to guide CH staff through the transition from O. Reg. 162/06: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations to the implementation of the new O. Reg. 41/24: Prohibited Activities, Exemptions and Permits Regulation.

1. Permit Applications

Applications Submitted Before April 1, 2024

Applications for permission to develop in a regulated area or to interfere with a wetland or alter a watercourse received prior to April 1, 2024, but not approved will be subject to the provisions of the CA Act and O. Reg. 41/24.

If the subject application for the proposed works is not within an area or an activity regulated under the new regulation (O. Reg. 41/24), then the applicant will be advised in writing that a permit is not required for the proposed works.

Applications Submitted After April 1, 2024

All applications received on or after April 1, 2024, will be subject to the provisions of the CA Act and O. Reg. 41/24.



Extension of Permissions Issued under the Current Regulation

Permits issued prior to April 1, 2024, and have expiry dates beyond April 1, 2024, will remain valid for the duration identified on the permission. Inspections and conditions enforced under the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation will continue until the permission expires unless the condition no longer applies based on new legislative and regulatory tests.

A request for extension of a permit issued before April 1, 2024, that is received after April 1, 2024, will be considered in accordance with the CA Act and O. Reg. 41/24. An applicant requesting an extension will be notified in writing that an extension is not required if the permit is for a development activity or interference/alteration not within a regulated area established under O. Reg. 41/24 or is otherwise subject to an exception under the same.

Requests for an extension of the existing permit must be received by the Authority prior to the date of expiry shown on the permission.

2. Planning Applications

Planning Applications Submitted Before April 1, 2024

All planning applications received before April 1, 2024, but still under review after this date, will be conducted in accordance with the O. Reg. 686/21: Mandatory Programs and Services, O. Reg. 596/22: Prescribed Acts – Subsections 21.1.1 (1.1) and 21.1.2 (1.1) of the Act, as well as based on the provisions of the CA Act and O. Reg. 41/24.

Planning Applications Submitted After April 1, 2024

All plan input and review will be conducted in accordance with the O. Reg. 686/21: Mandatory Programs and Services, O. Reg. 596/22: Prescribed Acts – Subsections 21.1.1 (1.1) and 21.1.2 (1.1) of the Act, as well as based on the provisions of the CA Act and O. Reg. 41/24.

3. Violation Notices and Legal Actions

Violation Notices issued prior to April 1, 2024, for works in an area or activity no longer regulated under the new O. Reg. 41/24, upon satisfactory resolution of the matter, the proponent will be issued a letter advising that the works occurring in violation of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation have remedied/rectified and the file is closed.

Violation notices issued and prosecutions commenced on or after April 1, 2024, will confirm with Parts VI and VII of the Act and O. Reg. 41/24.

Legal actions that commenced prior to April 1, 2024, will proceed where appropriate under consultation with legal counsel.

4. Other Agency Approvals

Issuance of a permit does not relieve the applicant from the responsibility of acquiring approval from other agencies or relieve the applicant from compliance with any conditions that other agencies may impose on the work.

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 09

FROM: Kellie McCormack, Director, Planning & Regulations
Craig Machan, Director, Parks & Operations

DATE: April 18, 2024

SUBJECT: Designation of Officers under Part VII (Enforcement and Offences),
Section 30.1 of the *Conservation Authorities Act*
CH File No.: AADM-436 & AADM-189

Recommendation

THAT the Conservation Halton Board **approves the re-appointment of all existing Officers under Part VII (Enforcement and Offences) Section 30.1 of the *Conservation Authorities Act*;**

And

THAT the Conservation Halton Board **receives for information the staff report entitled “Designation of Officers under Part VII (Enforcement and Offences), Section 30.1 of the *Conservation Authorities Act*”.**

Report

On April 1, 2024, Part VII Enforcement and Offences of the *Conservation Authorities Act* (CA Act) was proclaimed, resulting in the need to re-appoint all existing Conservation Authority (CA) Provincial Offences Officers with the updated legislation. *Ontario Regulation 686/21: Mandatory Programs and Services under the Conservation Authorities Act* requires that CAs provide programs and services to ensure that the Authority satisfies its duties, functions, and responsibilities to administer and enforce the provisions of Parts VI and VII of the CA Act and any regulations made under those Parts.

Appropriate training and qualifications are required to perform the duties of a Provincial Offences Officer in a professional and competent manner. Legislation and qualifying criteria have been established since 1999 to set a professional standard in this regard.

The *Provincial Offences Act* (POA), the CA Act, and the Class Designation sets out how a Provincial Offences Officer is appointed. Specifically:

- Subsection 1(3) of the POA states, “A minister of the Crown may designate in writing any person or class of persons as a provincial offences officer for the purposes of all or any class of offences”.
- Subsection 30.1 of the CA Act states, “An authority may appoint officers for the purposes of ensuring compliance with this Act and the regulations”.

- The Ministry of Natural Resources and Forestry Class Designation (Attachment 1) was signed by the Minister on March 20, 2024, regarding the appointment of a class of persons as officers under the CA Act and the *Trespass to Property Act*.

Re-Appointment of Existing Conservation Officers

All of CH's Officers have completed Level 1 Provincial Offences Officer training (or equivalent) and are trained on the legislation they are to enforce (i.e., *CA Act*, *Provincial Offences Act*, *Trespass to Property Act*). CH and each Provincial Offences Officer maintains a file of appointments, including proof that the aforementioned training has been satisfied. CH currently has six (6) officers designated under s. 28 of the CA Act and five (5) officers under s.29 that are empowered to enforce the legislation based on their respective appointments.

Staff recommends that the CH Board re-appoint all existing Officers pursuant to s.30.1 of the CA Act for the purpose of administering and enforcing Parts VI and VII of the CA Act (as amended) and *Ontario Regulations 688/21* and *41/24*, and for the jurisdiction in which the Officer received their original appointment.

Any new employee that requires appointment as an Officer will be required to demonstrate that they have adequate training and a clean criminal record check and will need to be appointed by the CH Board through a separate staff report.

Impact on Strategic Priorities

This report supports the Momentum priorities of "Natural Hazards and Water".

Financial Impact

Early detection of violations under *Ontario Regulation 162/06* allows staff to work with clients to have violations restored or brought into compliance, avoiding costly legal files.

Signed & respectfully submitted:


Kellie McCormack
Director, Planning & Regulations

Approved for circulation:


Hassaan Basit
President & CEO/Secretary-Treasurer
Craig Machan
Director, Parks & Operations

FOR QUESTIONS ON CONTENT:

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

Craig Machan, Director, Parks & Operations
cmachan@hrca.on.ca, 905-336-5011 x 1244

Attachments:

Attachment 1: Class Designation from Ministry of Natural Resources and Forestry



DESIGNATION

ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY

Under the authority of subsection 1(3) of the *Provincial Offences Act*, R.S.O. 1990, c. P. 33, I, GRAYDON SMITH, do hereby designate the class of persons in Column 1 of the attached Schedule as a provincial offences officer for the Acts and accompanying regulations, subject to any listed restrictions, described in Column 2 of the item.

This designation revokes Item 9 of the previous designation by the Minister of Natural Resources and Forestry, dated August 29, 2007, and comes into force on the later of April 1, 2024 and the day this designation is signed.

Dated at TORONTO this 20 day of March, 2024.

Honourable Graydon Smith
Minister of Natural Resources and Forestry

SCHEDULE – DESIGNATION OF PROVINCIAL OFFENCES OFFICERS

Item	Column 1 Class of Persons	Column 2 Class of Offences
1.	Any officer appointed under section 30.1 of the <i>Conservation Authorities Act</i>	All offences under the following Acts and accompanying regulations when carrying out duties within their conservation authority: <i>Conservation Authorities Act</i> <i>Trespass to Property Act</i>

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 10

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: April 18, 2024

SUBJECT: Delegation of Powers related to Permit Issuance, Cancellation and Hearings (Part VI - *Conservation Authorities Act*)
CH File No.: AADM-436 & AADM-437

Recommendation

THAT the Conservation Halton Board **approves the following staff positions be delegated the authority to issue permissions and permission extensions that meet Conservation Halton Board-approved regulatory policies:**

- Chief Administrative Officer/Chief Executive Officer
- Director, Planning & Regulations
- Senior Director, Watershed Management & Climate Change
- Senior Manager, Water Resources Engineering

And

THAT the Conservation Halton Board **approves the following staff positions be delegated the authority to cancel permissions and complete administrative reviews:**

- Chief Administrative Officer/Chief Executive Officer
- Director, Planning & Regulations

And

THAT the Conservation Halton Board **receives for information the staff report entitled “Delegation of Powers related to Permit Issuance, Cancellation and Hearings (Part VI - *Conservation Authorities Act*)”.**

Report

On April 1, 2024, the *Conservation Authorities Act* (CA Act) was amended, including the proclamation of Part VI (*Regulation of Areas Over Which Authorities Have Jurisdiction*). Included in this proclamation is the enactment of section 28.4 (*Delegation of Power*). Through this subsection, an Authority may delegate any of its powers related to the issuance or cancellation of permits under the CA Act or the regulations, or to the holding of hearings in relation to the permits, to the Authority’s executive committee or to any other person or body, subject to any limitations or requirements that may be prescribed by regulation. Prior to April 1, 2024, subsection 28(2) of the CA Act (now repealed) provided that a Conservation Authority (CA) regulation could delegate any of the Authority’s powers or

duties under the regulation to the CA’s executive committee or any other person or body, subject to regulatory limitations and requirements.

Conservation Halton (CH) had implemented a streamlined permit approval process since 2013, when the CH Board delegated permit approval to staff for works that meet Board-approved regulatory policies. While four (4) senior CH staff members had delegated powers to issue permissions under *Ontario Regulation 162/06* (CH’s previous regulation), continuation of these delegated powers must be granted by the CH Board under Part VI of the CA Act.

The new section 28.4 of the CA Act also provides additional provisions that enable the CH Board to delegate powers related to the cancellation of permits where the conditions of a permit have not been met, as well as to complete administrative reviews where an applicant disagrees with a decision that an application is incomplete, or that requests for information, studies, or plans is reasonable. This presents an opportunity to further streamline the administrative components of the permit review and decision-making process. However, delegation of powers to CH staff must be granted by the CH Board under Part VI of the CA Act.

Staff recommends that the staff positions outlined in Table 1 be delegated the authority to: 1) issue permissions and permission extensions that meet CH’s Board-approved regulatory policies; 2) cancel permits; and 3) complete administrative reviews.

Table 1: Recommendations and Rationale for Delegation of Powers		
Activity	Recommended Delegation	Rationale
Issuance & Extension of Permits (Up to the maximum period of validity)	<ul style="list-style-type: none"> • Chief Administrative Officer/Chief Executive Officer • Director, Planning & Regulations • Senior Director, Watershed Management & Climate Change • Senior Manager, Water Resources Engineering 	<ul style="list-style-type: none"> • Delegation of powers to staff for affirmative permitting decisions is currently in place for most CAs. • Expediency to review and issue permits within legislated and regulated timeframes (new requirement).
Cancellation of Permits	<i>Notice of Intent to Cancel and Permit Cancellation where there is no request for a Hearing</i> (i.e., select senior staff can issue a notice but can only cancel a permit if an applicant does not request a hearing within fifteen (15) days of notice; the Board will be notified of any permit cancellations on a quarterly basis)	<ul style="list-style-type: none"> • Cancellation of permits involves the opportunity for a hearing before the Board. • Hearings would be subject to the <i>Statutory Powers Procedure Act</i>. • Decisions from the hearing process are subject to appeal to the Ontario Land Tribunal.

	<ul style="list-style-type: none"> • Chief Administrative Officer/Chief Executive Officer • Director, Planning & Regulations <p><i>Permit Cancellation Hearings</i> (i.e., Permit Cancellation Hearing by Board if requested by applicant within fifteen (15) days of notice)</p> <ul style="list-style-type: none"> • CH Board 	
Administrative Reviews (Requests for Review)	<ul style="list-style-type: none"> • Chief Administrative Officer/Chief Executive Officer • Director, Planning & Regulations 	<ul style="list-style-type: none"> • Limited timeframe of thirty (30) days to complete a review. • Reviewer should have knowledge of CA application process and familiarity with CA development policies/guidelines. • Decision is related to confirmation of complete application/administrative processes <u>only</u> and not a decision about whether the permit should be issued. • The review process is not subject to the <i>Statutory Powers Procedure Act</i>. • No mechanism within the CA Act for appeal.

Staff’s recommendations and rationale for the delegation of powers related to permit issuance and cancellation and administrative reviews is provided above. The CH Board is responsible for the above activities, unless these powers are otherwise delegated.

Impact on Strategic Priorities

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

Financial Impact

No costs are associated with this report.

Signed & respectfully submitted:


Kellie McCormack
Director, Planning & Regulations

Approved for circulation:


Hasaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 11

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: April 18, 2024

SUBJECT: Premier Gateway Phase 2B Employment Area Secondary Plan and
Scoped Subwatershed Study, Town of Halton Hills
CH File No: MPR 745/AMPR-105

Recommendation

THAT the Conservation Halton Board **endorses the Premier Gateway Phase 2B Employment Area Scoped Subwatershed Study, specifically the management recommendations that relate to areas regulated by Conservation Halton;**

And

THAT the Conservation Halton Board **receives for information the staff report entitled “Premier Gateway Phase 2B Employment Area Secondary Plan and Scoped Subwatershed, Town of Halton Hills”.**

Executive Summary

The Town of Halton Hills prepared a Secondary Plan to establish land use designations and policies for employment use and Natural Heritage System (NHS) lands within its Premier Gateway Phase 2B Employment Area. The Secondary Plan is informed by a Scoped Subwatershed Study (SWS) that characterized environmental features and functions and established management recommendations for the NHS.

A systems approach was used to develop a high-level, long-term management strategy for natural hazard and natural heritage features in the study area. The future NHS will contain Sixteen Mile Creek, including associated natural hazard lands and natural heritage features and areas. This approach ensures that future development will not create new natural hazards or aggravate existing ones. It also ensures that natural heritage features, including wetlands, will be protected as part of a larger, overall NHS.

Staff is satisfied that the Scoped SWS provides comprehensive justification for the proposed management recommendations for natural hazards and wetlands within the study area. Staff recommends that the Conservation Halton (CH) Board endorses the Scoped SWS, specifically the management recommendations related to CH regulated areas, so that staff can issue future permits when CH's permitting requirements are met, the requirements of the Scoped SWS, and requirements identified in future technical studies.

Report

The Premier Gateway Phase 2B Employment Area is located at the southern limit of the Town of Halton Hills and is bounded by Steeles Avenue to the south, agricultural lands to the north, Winston Churchill Boulevard to the east, and Eighth Line to the west (Attachment 1: Figure 1 – Study Area).

The study area straddles the boundary between the Sixteen Mile Creek Watershed in CH's jurisdiction and the Mullet Creek Subwatershed in Credit Valley Conservation's (CVC) jurisdiction. Within CH's jurisdiction, the study area contains the eastern branch of Sixteen Mile Creek and its associated valley, as well as the associated flooding and erosion hazards, and wetlands.

Secondary Plan and Subwatershed Study Process

The Premier Gateway Phase 2B Secondary Plan establishes land use designations and policies for employment uses and a NHS for the above-described study area (Attachment 2: Figure 2 – Premier Gateway Phase 2B Land Use Plan). The Secondary Plan was adopted by the Town of Halton Hills in October 2023, by way of Official Plan Amendment (OPA) 50. On March 5, 2024, a decision was made by Halton Region to approve OPA 50 with modifications. The decision was followed by a twenty (20) day appeal period, during which time appeals were filed with Halton Region. OPA 50 will not be in effect until such time that the appeals are resolved.

Local municipalities are required to prepare Area-Specific Plans (Secondary Plans) for major growth areas, including new development or redevelopment areas. Secondary Plans are often supported by, among other things, a SWS. The purpose of a SWS is to:

- inventory, characterize and assess natural hazard, natural heritage, and water resource features and functions within the study area (i.e., constraints to development);
- provide recommendations for the protection, conservation, and management of natural hazard, natural heritage, and water resource features within the study area;
- provide sufficient detail to support the designation of a NHS;
- evaluate a land use concept, as well as a supporting stormwater management strategy, where the functions of natural features are maintained or enhanced, while ensuring no aggravation of natural hazards; and
- provide recommendations for a management strategy, implementation, and monitoring plan to be implemented through future site/area specific studies.

A Scoped SWS was prepared to support the Premier Gateway Phase 2B Employment Area Secondary Plan. The Scoped SWS characterized existing conditions, assessed potential impacts, and provided recommendations for management strategies, implementation, and monitoring plans. Development on these lands is to proceed in accordance with the final approved Scoped SWS.

The Scoped SWS also outlines requirements for future studies (e.g., Subwatershed Impact Studies) that will need to be completed as part of subsequent stages in the planning process. These future studies will verify and refine the recommended environmental and stormwater management plan presented in the Scoped SWS.

Basis of CH Review and Involvement with the Scoped SWS

CH staff reviewed the Scoped SWS to ensure CH's regulatory interests and responsibilities delegated by the Province, with respect to Section 3.1 (Natural Hazards) of the Provincial Policy Statement (PPS), were addressed. Staff also provided technical advice on stormwater management and natural heritage matters, based on the Memorandum of Understanding with Halton Region that was in effect at the time of review.

A systems approach was used to develop a high-level, long-term management strategy for natural hazard and natural heritage features in the study area. The future NHS will contain Sixteen Mile Creek, including the related natural hazards and natural heritage features. This approach ensures that future development will not create new natural hazards or aggravate existing ones. It also ensures that natural heritage features, including wetlands, will be protected as part of a larger, overall NHS.

The study area also contains two (2) isolated vegetation communities, located east of Ninth Line, that require further study at the Subwatershed Impact Study (SIS) stage. More detailed vegetation and soil assessments are required to determine whether these vegetation communities, approximately 0.11 hectares and 0.54 hectares in size, meet the definition of a wetland as defined in *Ontario Regulation 41/24*. If these areas are confirmed to be regulated wetlands, they are to remain in place or could potentially be replicated as an enhancement to the NHS. Subsequent design details to further support any design of the wetland replication, along with landscaping plans, would be provided through the future SIS in support of *Planning Act* and CH Permit Applications.

The proposed SWM strategy also ensures that there will be no flooding and erosion impacts to Sixteen Mile Creek. However, as part of the recommended stormwater management strategy, the Scoped SWS considers the use of surface storage (i.e., rooftop/parking lot storage) as a form of quantity control. CH has advised the Town that the inclusion of these controls in regulatory storm flood hazard mapping is not supported and will not be reflected in future regulatory storm flood hazard mapping until such time that the use of these types of controls for regulatory storm events is supported through clear Provincial direction and/or a comprehensive watershed approach is established between CH and its watershed municipalities.

Conclusion

CH staff has worked with the Town of Halton Hills, Halton Region, and their respective consultants in the development of a Scoped SWS as part of the Premier Gateway Phase 2B Employment Area Secondary Plan process. All natural hazards and significant natural features, along with the associated regulatory allowances and development setbacks, will form part of the NHS. CH staff recommends the Board endorse the Scoped SWS, specifically the management recommendations related to regulated features, so that staff can ultimately issue permits for works that meet CH's permitting requirements, the requirements of the Scoped SWS, and other technical studies.

Impact on Strategic Priorities


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

The theme is supported by the objective to remain dedicated to ecosystem-based watershed planning that contributes to the development of sustainable rural, urban, and suburban communities.

Financial Impact

There is no financial impact resulting from this proposal.

Signed & respectfully submitted:


Kellie McCormack
Director, Planning & Regulations

Approved for circulation:


Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

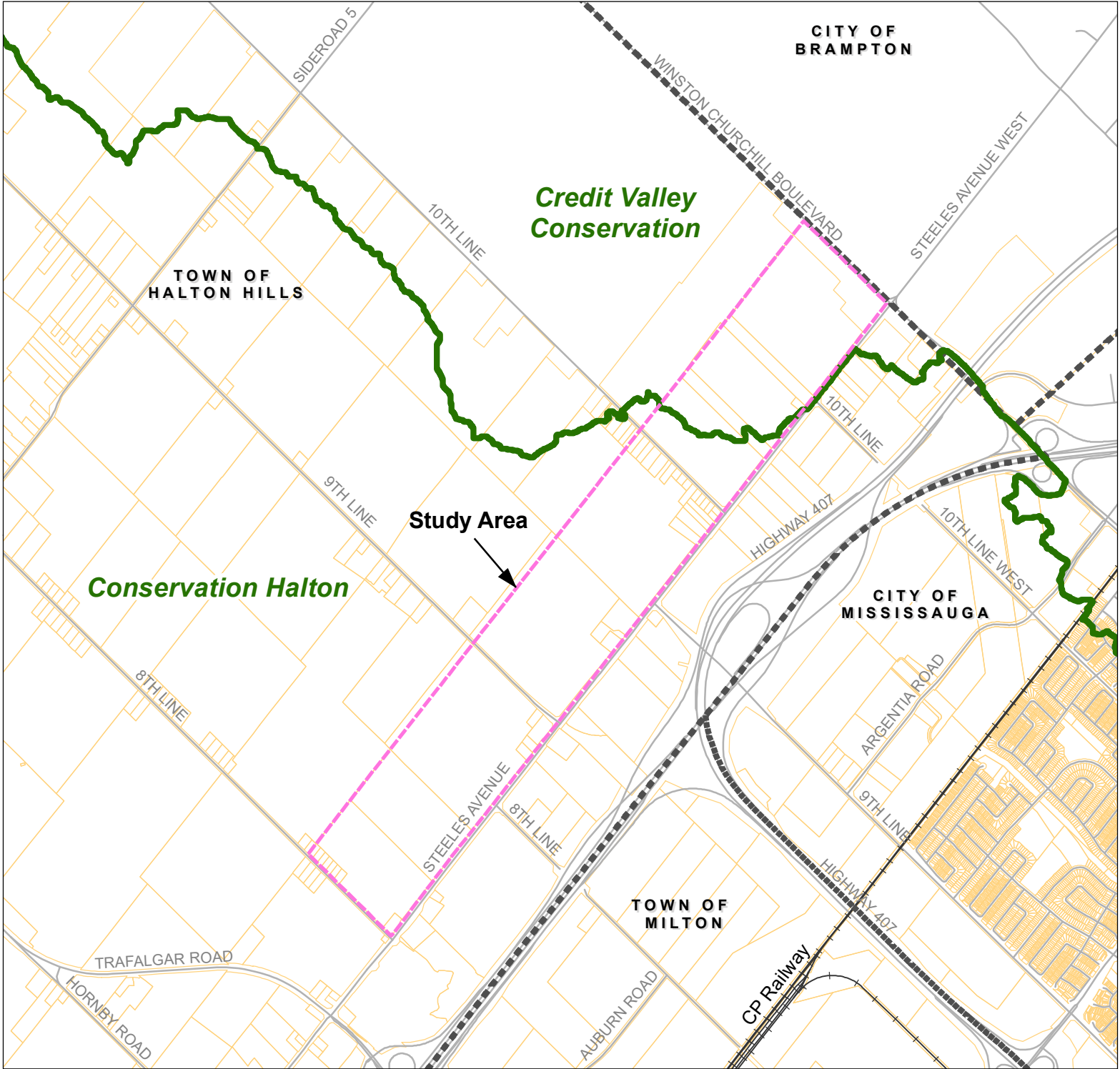
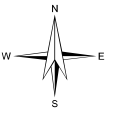
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PREPARED BY:

Ola Panczyk, Senior Environmental Planner

Attachments:

Attachment 1: Figure 1 – Study Area
Attachment 2: Figure 2 – Premier Gateway Phase 2B Land
Use Plan



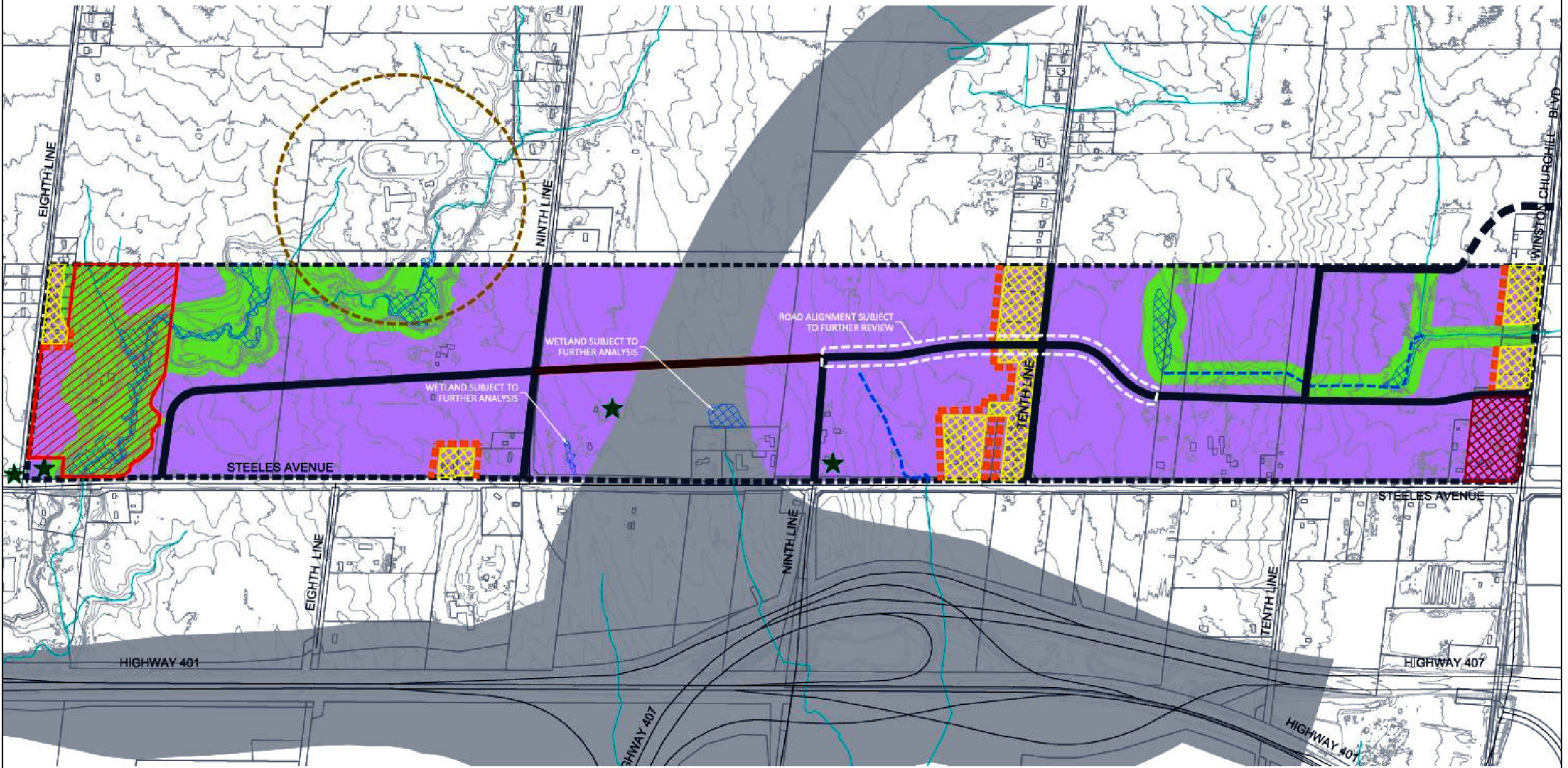
Legend

- Road
- Study Area
- Municipal Boundary
- Conservation Authority Boundary
- Parcel
- Railway



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Figure 2: Premier Gateway Phase 2B Land Use Plan



Legend

- | | | | | | |
|--|--------------------|--|---|--|---|
| | STUDY AREA | | NATURAL HERITAGE SYSTEMS | | BUFFER TO EXISTING RESIDENTIAL USES |
| | WATERSHED BOUNDARY | | PRESTIGE INDUSTRIAL AREA | | MINIMUM DISTANCE SEPARATION (MDS) |
| | PARCEL FACIL | | PROPOSED GTA WEST TRANSPORTATION CORRIDOR PREFERRED ROUTE | | COLLECTOR ROAD |
| | ROAD CENTRELINE | | RESIDENTIAL SPECIAL POLICY AREA | | POTENTIAL FUTURE COLLECTOR ROAD |
| | WATERCOURSE | | SUPPORTIVE COMMERCIAL | | COLLECTOR ROAD SUBJECT TO GTA WEST CONFIRMATION |
| | WATER BODY | | SUBJECT TO D090PA22.001 AS PER PL180499 | | HEADWATER DRAINAGE FEATURE (HDF) |
| | CONTOUR (1m) | | | | WETLAND AREA |
| | | | | | CULTURAL HERITAGE RESOURCE |

Map not to scale

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REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 12

FROM: Mark Vytvytskyy, Chief Operating Officer

DATE: April 18, 2024

SUBJECT: Developer Contribution Reserve Projects – Kelso/Glen Eden

Recommendation

THAT the Conservation Halton Board **approves the Kelso Glen Eden Revitalization Developer Contribution Reserve project as a priority project;**

And

THAT the Conservation Halton Board **approves funding for the Kelso Glen Eden Revitalization from the Developer Contribution Reserve funds held by Halton Region.**

Executive Summary

In 2012, Halton Region collected approximately \$18 million to fund projects in Conservation Halton (CH) Parks. The projects had to meet the following criteria:

- Projects must be of existing services/programs;
- Projects must be needed due to population growth within Halton Region; and
- Projects must align with approved Master Plans.

A list of priority projects was completed with three (3) projects identified as top priority:

1. Kelso/Glen Eden Water/Wastewater
2. Kelso/Glen Eden Recreation Centre
3. Crawford Lake Interpretive and Education Centre

Business cases for these projects were presented and approved by the CH Board in 2017 and included in the 2018 budget; since then, staff have conducted further reviews to explore additional options and opportunities.

In 2023, an updated report (CHB 05 23 04) was approved by the CH Board to update the priority list:

1. Crawford Lake Boardwalk
2. Crawford Lake Interpretive and Education Centre
3. Kelso/Glen Eden Recreation Centre

Crawford Lake Boardwalk

In 2019, CH successfully applied for a grant for the replacement of the current boardwalk at Crawford Lake. The business case was approved by the Board and included in the 2022 budget at a total cost of \$2,280,000. The updated costing for the project of \$3,400,000 was approved in June 2023.

Crawford Lake Interpretive and Education Centre

In June 2023, staff presented a report (CHB 05 23 04) to the Board to initiate the development and construction of the Crawford Lake Interpretive and Education Centre. This project is underway with 90% of the design expected to be confirmed by early May, with construction to begin in Fall 2024.

Kelso/Glen Eden Recreation Centre

Feasibility studies for a new recreation center at Kelso/Glen Eden were completed in 2023. Based on the study, as well as further refinement and evaluation of existing infrastructure by staff, the project has been updated.

Report

Kelso/Glen Eden visitation has grown from 274,000 visits to over 550,000 visits in the past twenty (20) years. This trend is expected to continue with the growth in Halton Region's population and the increasingly near-urban convenience and popularity of Kelso. The feasibility study noted that Kelso/Glen Eden has several limitations that affect visitor experience and impede capacity growth, revenue growth, and program expansion and development. Many of the existing buildings have deficiencies like outdated mechanical and electrical systems, poor energy efficiency, lack of barrier-free accessibility, etc. The study included Class D pricing estimates as well as proposed floor plans for a single building to help alleviate the above-mentioned issues. The building construction costs are estimated to be over \$20 million.

After taking a holistic review of the twelve (12) month operation of Kelso/Glen Eden and existing infrastructure, a new phased approach is recommended. The phased approach would reduce the impact on the operation, allow for financing to be spread out, and allow new programs and revenue to be actualized sooner.

- Phase 1 – West Beginner Lodge
- Phase 2 – Central Lodge
- Phase 3 – Alexander Village

The Kelso/Glen Eden Revitalization Project Business Case (Attachment 1) sets the foundation for the future of the site with modern facilities that meet the deficiencies listed in the feasibility report and improve the visitor experience. By the end of the project, revenue is expected to increase by \$2 million annually, which will positively impact various levels of funding to support the programs at the park.

The improved facilities related to the Project present the opportunity for the following revenue streams:

1. Increased snow school and summer camp revenue through expanded indoor space that allows for new programs, and improved viewing areas for spectators with a seamless transition to the outdoor space for activities.
2. Increased food and beverage opportunities through upgraded cafeterias and cafés, as well as an elevated dining experience.
3. Increased gate and membership revenue.
4. Third Party Site Rentals and Events (i.e., conferences, weddings, provincial-level sporting events).

Impact on Strategic Priorities

This report supports the Momentum priorities of “Nature and Parks” and “Education, Empowerment and Engagement”.

Nature and Parks

- Grow our network of parks and greenspaces to promote equitable access and provide unique experiences that connect people with nature and heritage.
 - Develop and implement a new vision for CH Park spaces and infrastructure to ensure the optimization of resources.

Education, Empowerment and Engagement

- Inspire action by fostering an appreciation of environment and heritage through leading-edge educational programming and outdoor experiences with the environment.
 - Build community awareness and support by demonstrating the value and impact of our programs and services.
 - Provide learning opportunities and recreation programming of the highest quality by leveraging current research, cross-sector collaboration, and smart technologies.

Financial Impact

The Kelso/Glen Eden Revitalization Project is expected to cost approximately \$20 million, with funding sourced from the Developer Contribution Reserve (DCR), other reserves, future grants, and low-interest financing options to be discussed with Halton Region. In the 2024 budget, \$362,500 is allocated for further facility scoping. Construction costs for this project are expected to be included in the 2025 and future capital budgets.

A business case is included as an appendix to this report. Conservative projections estimate that an annual increase of \$1,992,471 in revenues could be expected, attributed to additional visitation and expanded programming capacity.

Signed & respectfully submitted:



Mark Vytvytskyy
Chief Operating Officer

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Mark Vytvytskyy, Chief Operating Officer
mvytytskyy@hrca.on.ca, 905-336-1158 x 1228

PREPARED BY:

Craig Machan, Director, Parks & Operations

Attachments:

Attachment 1: Kelso/Glen Eden Revitalization Business Case

Kelso/Glen Eden Revitalization Business Case March 2024

Executive Summary

This report is submitted in support of the construction and renovation of three areas at Kelso Conservation Area and Glen Eden (Kelso/Glen Eden or K/GE) as supported by the current park master plan. Glen Eden is the ski and snowboard area operated by Conservation Halton (CH) at Kelso Conservation Area in the winter months.

Within this document is an evaluation of relevant financial, environmental, planning, and business considerations associated with the implementation of this project. The project is proposed to be done in three phases to minimize the impact on park operations. The total estimated cost of all phases is up to \$20 million, with projected incremental increases in revenues of \$34 million utilizing a conservative approach, over the next 20 years.

Background Information

Kelso/Glen Eden visitation has grown from 274,000 visits to over 550,000 visits in the past 20 years.

Glen Eden, with an annual average (based on five years) visitation of 300,000 has grown into the third most visited ski/snowboard location in Ontario. For context, approximately five million annual ski/snowboarder visits are experienced in the province across roughly fifty ski/snowboard areas with little to no growth over the past ten years (source: Canadian Ski Council and Ontario Snow Resorts Association). Glen Eden accounts for roughly 10% of provincial ski/snowboard visits and is well known for high-quality lesson programming as well as the provision of favorable conditions despite being a southerly located operation.

Kelso Conservation Area experiences an annual average (based on five years) visitation of 260,000. The main attractions to Kelso are for lake activities of swimming and boating, mountain biking, day and overnight camping, summer day camp programming, and hiking.

Significant investment has been previously focused on providing robust 'on hill' infrastructure in the form of reliable chair and surface lifts, modern snowmaking technology, surface grooming equipment, and CPR overpass, the visitor centers alongside rental and arrival areas have remained largely unchanged. The areas include the East Lodge constructed in 1972, the temporary West Lodge placed in 2001, the temporary winter rental building placed in 2001, Visitor Centre originally constructed in 1975 and repurposed in 2012. These structures demonstrate the passing of a reasonable life expectancy threshold for K/GE needs in the following ways:

- Original design for permanent structures was proposed using much lower visitation and service level expectations that do not meet current standards.
- Placement of temporary structures was done so as a 'bandage' solution. Although appropriate at the time, these structures do not meet design standards for a variety of needs such as *Accessibility for Ontarians with Disabilities Act* (AODA) compliance,

service interconnectedness, summer/winter rentals, indoor programming, food services, etc.

- 'Pinch points' and service level deficiencies created by peak visitation periods with inefficient rental shop, food service, and staging areas, have been documented to be the greatest frustrations from winter user groups (as per the K/GE Master Plan).
- The temporary structures have also reached the limits of their physical life and are subject to Niagara Escarpment Commission development permit renewals.
- With increased visitation and improved service delivery has come the need for increased staffing. Improvements are required to 'back of the house' services and staffing areas needed for proper job function with either the permanent or temporary structures.
- Low ability to engage strategies focused on increasing revenue per skier/snowboarder visit while maintaining customer value is greatly hindered by the current state of facilities.
- Low ability to practically engage four-season recreation, programming, and other business diversification opportunities.

With an increasing population, sustained rise in interest for ski/snow activities, combined with aging infrastructure, there is a clear opportunity to invest in new infrastructure to support and continue growth of Kelso/Glen Eden visitation while sustaining exemplary visitor experience.

Project Description

To provide the opportunity to address the above-noted challenges the Kelso Conservation Area Master Plan, along with staff input, calls for:

- A new prominent facility, multi-purpose, year-round, four-season, facility which will accommodate for growth in visitation. The facility will also provide more welcoming spaces for people to gather and focus on renewed service offerings. The facility will also provide new staff spaces which have a direct impact on customer-facing business units. The facility will utilize green building techniques to house visitor services, rentals, lockers, retail services, food services, washrooms, and multi-use spaces for gathering and seating, as well as applicable ancillary staffing areas.
- Renew and enhance roadways, parking lots, and wayfinding to provide a better user experience by harmonizing the flow of the site to create a more thoughtful, intuitive, and inclusive way to navigate the landscape which will link visitors to existing and proposed infrastructure.

Previously, staff worked with consultants to design options that meet the needs of each of the above items. Through further review, staff have recommended that the project be split into three phases:

1. New West Beginner Lodge with improved walkway and guest flow across the park (estimated cost \$11.5 million)
2. New Central Lodge (estimated cost \$7.5 million)
3. Renovation of the Alexander buildings (estimated cost \$1 million)

The above-mentioned projects will be built in multiple phases to minimize the impact on the operation of the park. The total cost of all phases of the project is estimated to be up to \$20 million.

West Beginner Lodge – Phase 1

This new lodge will become the main location of all recreational programming at K/GE. This lodge will be the new location of the Rentals/Tech shop, Patrol, and Snow School/WOW Camp. The building will include space for washrooms, a café, and a retail shop. It will provide an indoor observation area for parents and guardians. In summer, equipment rentals will be expanded to include mountain bikes and other options for guests.

Along with the new building, a new T-Bar lift will be installed, and additional learning terrain will be created to expand on snow school lessons. A carpet will be relocated from the east learning center as well.

A new crossing is being assessed by staff, Transport Canada, and CP Rail. This will allow for guests to walk directly to the West Learning Lodge from the parking lot.

Total construction cost of revitalization is summarized in the below table.

Phase 1	Cost
West Beginner Lodge Building	\$ 11,000,000
Lift and Carpet	500,000
Total Phase 1 Cost	\$ 11,500,000

By starting with this phase, the operation of the existing West Lodge and ski operation can continue with minimal disruption. Construction is expected to take over twelve months.

Central Lodge & Outdoor Spectator Patio – Phase 2

This lodge will become the main location for the winter operation of Glen Eden. This building will include a kitchen and cafeteria space with adjoining seating and a viewing area. It will also include a small visitor service space along with washrooms.

During the summer season, the space will be used for major events such as corporate groups, mountain bike races, and private bookings.

Total construction cost of revitalization is summarized in the below table.

Phase 2	Cost
Central Lodge & Outdoor Spectator Patio	\$ 7,500,000
Total Phase 2 Cost	\$ 7,500,000

After completion of the building, the current West Lodge will be removed which is included as part of construction costs above. An outdoor seating area will be built in its place. This space will include seating and fire pits.

Alexander Village – Phase 3

Central to the entire park, the Alexander Village presents a unique opportunity to create a space in the heart of the park for four seasons. It will help alleviate winter capacity issues on the hill and provide a desirable attraction year-round. The village has four different opportunities:

**CHB 03 24 12 - Attachment 1
Kelso/Glen Eden Revitalization Business Case**

- *Alexander Barn*

The barn space is currently leased by Halton Region for use by Heritage Services staff. The lease expires in 2063, however in 2020 Region staff received approval to begin the search for a new location. Staff anticipates the building being transferred back to CH in phases with the first opportunity being the bottom level.

The bottom space currently has outdated washrooms and a kitchen. It has a large open floor space. Once under CH control, the space will receive a renovation to update the washrooms to meet regulatory requirements and update the commercial kitchen space. Once complete, the area will provide a sit-in restaurant experience that will be available year-round.

Eventually, as more of the building is transferred to CH, event space and further program areas will be added.

- *Alexander House*

The house is also currently leased by the Region, however this will be transferred to CH in 2024.

A major renovation is proposed. There are no heritage restrictions on the house. This space will be the future site of a café, brewery, or retail space. It will provide outdoor seating with views of the escarpment.

- *Alexander Courtyard*

This space is occasionally used in summer months for picnics, however it is largely unused for most of the year. This space would be a focal point for the Village. It would include outdoor seating and gathering space to be used year-round.

Improvements to this area are anticipated to cost approximately \$1 million, regardless of option selected.

Phase 3	Cost
Alexander Village	\$ 1,000,000
Total Phase 3 Cost	\$ 1,000,000

Business Objective and Financial Analysis

The following financial information demonstrates the importance of Kelso/Glen Eden relative to the CH Parks portfolio:

Kelso/GE and CH Parks	K/GE	Total CH Parks	K/GE%
2023 Operating Revenue	\$ 12,306,787	\$ 18,929,066	65%
2023 Operating Expenses (excl. chargebacks)	8,526,890	14,229,264	60%
2023 Net Revenue	\$ 3,779,897	\$ 4,699,802	80%

5 Year Average Surplus (excl. chargebacks)	\$ 1,850,959	\$ 3,112,572	59%
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As a successful K/GE season translates directly to success in Park operational and capital budgeting, an investment in K/GE operations will play an important role to ensuring the sustainability and success of CH Park portfolios.

The key business objective for the implementation of the K/GE Revitalization is to increase the revenue generated by each visitor, meet increased visitation demands, and most importantly to continue delivering on a unique, high quality visitor experience. The 2023 benchmark for revenues per unique visits is summarized as follows:

Revenue per Visit	
2023 K/GE Operating Revenue	\$ 12,306,787
2023 Total Visits	352,718
Revenue/Visit	\$ 34.89

A focus on the revenue generation through K/GE is analyzed further below.

Revenue Generation

Revenue generated per visitor plays an important metric to evaluate performance and business opportunities across Conservation Halton Parks. In a more recent shift, we have begun to recognize the opportunity created by seeking out revenue opportunities that increase revenue generation per guest and enhancing their overall experience, rather than simply increasing the number of guests. This is evident in year-over-year GE operations:

Revenue per Visit	2022	2023	Increase (Decrease)	%
Ski Operating Revenue	\$ 7,325,990	\$ 8,422,230	\$ 1,096,240	15%
Total Ski-Hill Visits	275,000	260,000	(15,000)	(5%)
Revenue/Visit	\$ 26.64	\$ 32.39	\$ 5.75	22%

This improvement of \$5.75/visit generated nearly \$1.1 million in new gross revenues despite less visits in year, which can be attributed to inclement weather. By focusing on revenue/visit, this allows CH to focus on visitor experience while mitigating weather related risks of the ski-hill.

There is significant opportunity available to Kelso/Glen Eden, and ultimately CH, through the introduction of a well-planned, well-serviced central lodge. With proper investment, this feature can easily increase ticket and membership rates and will have a significant impact on add-on revenues such as for winter and summer programming, food and beverage, retail, and many more avenues. In review of annual programming relative to 2023 financials, opportunities can be summarized in the following scenarios using three varying levels in risk, primarily based on projected visitor increase combined with value enhanced experienced from the revitalization project:

Revenue Growth	Conservative	Moderate	Optimistic
Projected Incremental Revenue	\$1,520,750	\$3,712,299	\$6,056,180
Visitor Growth	1.5%	5.0%	7.5%
Visitor Increase	3,900	13,000	19,500
2023 Visits	260,000	260,000	260,000
Additional Revenue/Visit	\$5.76	\$13.60	\$21.67

An estimated gross revenue increase of approximately \$1.5 million to \$6.1 million is projected depending on the scenarios, all of which require minimal changes to operations and operating

costs. This translates to additional revenue/visit of \$5.76/visit and up to \$21.67/visit based on 2023 financials. A twenty-year financial forecast is provided in the Appendix of this report utilizing the conservative assumptions above (Year 3 shows a full year of revenue increases totalling \$1,520,750 in the chart above). Furthermore, in the most optimistic approach, total visits increase to 279,500 or a 7.5% increase compared to 2023 visitation and only a 1.6% increase compared to 2022 visits of 275,000, demonstrating feasibility and reasonableness of assumptions even in the most optimistic approaches.

In addition to the new revenue opportunities mentioned above, there are further opportunities related to summer programming, as well as expansion of school programming, corporate meetings and events, and many more revenue streams. Please refer to the provided Financial Appendix for further details.

Visitor Retention

As identified in the current Kelso Conservation Area Master Plan, the market and visitor needs assessment identifies opportunities to increase revenue per visitor driven through new facility infrastructure:

- Increased value for current service offerings through improved delivery to visitors. i.e., improved experience and wait times.
- Increased ability to provide higher valued service options. i.e., elevated food service, reservable spaces and auxiliary services.
- Increasing new skier/snowboarder retention percentages through improved service delivery. i.e., making rental process part of the experience rather than part of the transaction/process.
- Improved and self-service oriented concession/food service delivery. i.e., properly designed food preparation areas linked to open concept customer pick up and payment.
- Improved hard and soft good retail offerings. i.e., brick and mortar retail spaced linked to e-commerce opportunities.
- Improved ability to meet demands of specific demographics and user groups. i.e., on-site storage and care for personal equipment of growing senior clientele base.
- Increased ability to convert winter visits into spring/fall visits. i.e., four-season programming packages that grow return business of existing customers.

A more immediate financial benefit with the implementation of K/GE Revitalization will be the increased ability to improve visitor retention rates of Key Financial Performance Indicators (annual pass sales, program registration, day ticket sales) through the demonstration of Conservation Halton's desire and long-term commitment to invest in area visitors feel are a priority. A previously completed customer survey for the economic feasibility study of the Kelso/Glen Eden Master Plan renewal by over 1,230 current Kelso/Glen Eden users indicate that the highest levels of dissatisfaction rates (when being asked about all park features, assets, and attributes) are rated as:

- Base buildings: 15.1% of responses view as unfavourable.
- Food services: 20.4% of responses view as unfavourable.
- Washrooms: 11.0% of responses view as unfavourable.

For comparison the same survey results show:

- Programs: 2.3% of responses view as unfavourable.
- Visitor services: 5% of responses view as unfavourable.
- Overall satisfaction with Kelso/Glen Eden: 5% unfavourable with 75% favourable (20% neutral).

The addition of these facilities will greatly increase the ability to meet Key Service Targets identified in Metamorphosis 2020 and reconfirmed in Momentum 2024:

- Plan for ten-year capital needs with a sustainable financing strategy.
- Increase self-generated revenue by 5-10% annually.
- Reach an average customer satisfaction rate of 90% across all service areas.

Estimated Cost Savings from Decommissioning of Existing Facilities

With the construction/renovation of the buildings above, it is anticipated that the existing West Lodge, Rental Shop will be decommissioned. Based on the Kelso/Glen Eden Financial Viability Study, May 15, 2020, by Watson & Associates Economists Ltd., the annual operating costs of the West Lodge and Rental Shop are estimated at \$99,000 based on the 2020 operating budget and would no longer be incurred once the facilities are replaced. According to CH's Building Condition Assessment, the ten-year capital needs are estimated to be \$660,000 for these two facilities. It is also anticipated that the existing "A" Frame Building, the Milton Heights Racing Club Building, will be demolished as well. Annual operating and capital costs for these building will also lead to savings upon demolition. The East Lodge will be refreshed, reused, and will remain in place.

Estimated Facility Operating Costs

Based on the Kelso/Glen Eden Financial Viability Study, May 15, 2020, by Watson & Associates Economists Ltd., the per square feet operating costs (i.e., \$14.54) of the existing facilities have been applied to the proposed building gross floor area (approximately 20,000 square feet) to estimate the annual facility operating costs of approximately \$320,000.

Facility Maintenance & Renewal Costs

Based on the Kelso/Glen Eden Financial Viability Study, May 15, 2020, by Watson & Associates Economists Ltd., the annual facility maintenance and renewal costs have been estimated at 3% of facility construction costs and these costs would be incurred after year fifteen of the facility life span.

Strategic Alignment

The implementation of the K/GE Revitalization links directly with a key Priority identified in Momentum 2024:

Nature and Parks

- Grow our network of parks and greenspaces to promote equitable access and provide unique experiences that connect people with nature and heritage.

- Develop and implement a new vision for CH Park spaces and infrastructure to ensure optimization of resources.

Education, Empowerment and Engagement

- Inspire action by fostering an appreciation of our environment and heritage through leading edge educational programming and outdoor experiences with the environment.
- Build community awareness and support by demonstrating the value and impact of our programs and services.
- Provide learning opportunities and recreation programming of the highest quality by leveraging current research, cross-sector collaboration, and smart technologies.

As outlined in the current Kelso/Glen Eden Master Plan, Metamorphosis 2020, and reconfirmed in Momentum 2024, this infrastructure will provide direct opportunity to engage business strategies to:

- Increase self-generated revenue by 5-10% annually.
- Plan for long-term capital needs with a sustainable financing strategy.
- Promote ecotourism opportunities and economic potential of CH Parks.
- Attract new customers and retain current customers to increase annual membership sales and member retention.
- Review program delivery costs, revenue generation and public value for all programs, process, and functions.
- Investigate new business models for CH lands to generate new sources of revenue and increase operational efficiency.
- Meet current and future visitor growth demands.

Benefits

Failure to invest in, design, and implement these facilities without special consideration of the needs and opportunities of the varied user groups at Kelso/Glen Eden will have negative impacts on Conservation Halton's ability to achieve the organizational priorities listed above.

As identified in the Kelso Conservation Area Master Plan, the needs and opportunities of investing in built infrastructure needed at Kelso/Glen Eden are unique. CH had engaged the services of the RED Studio Architects Inc. to conduct an investigative report which yielded the following principles:

- Current site planning has yielded to move the new Central Lodge further East to be more on centre to the hill and off skiable terrain. This will allow for better flow and will allow for phasing in of the new lodge while allowing West Lodge to remain operational until new lodge complete.
- Ensure the buildings can be used year-round, and during all four seasons. The facilities will utilize green building techniques to house visitor services, rentals, retail services, food services, washrooms, and multi-use spaces for gathering and seating, as well as applicable ancillary staffing areas.
- Renew and enhance roadways, parking lots, and wayfinding to provide a better user experience by harmonizing the flow of the site to create a more thoughtful, intuitive, and

inclusive way to navigate the landscape which will link visitors to existing and proposed infrastructure.

- Ensure the facility is large enough to accommodate future anticipated growth in visitation.
- Ensure the facility is flexible enough to accommodate a variety of programs, group sizes, and changes in venue type quickly.
- Ensure that the indoor and outdoor programs are closely linked and mutually supportive.
- Ensure that there is sufficient revenue generating space in the building including rental spaces, gift shops, and support facilities such as retail and food services.
- Provide appropriate public support services and amenities for all group types and sizes.
- Engage LEED principles and utilize building strategies (such as green roof, solar panels, rainwater harvesting, low flow toilets, etc.) that can be used as part of the core environmental interpretive messaging.
- Ensure the facilities are unique to this site and speaks to the special site characteristics at the Kelso Conservation Area.

Key Risk Drivers

As a key driver of the Conservation Halton budget and operations, failure to meet the financial expectations noted above will have immediate and long-term impacts in a variety of ways, including:

- Decrease of Conservation Halton's ability to invest in new and existing capital infrastructure in CH parks, as supported within current Master Plans.
- Limiting of the ability for Glen Eden to engage opportunities associated with increased revenue generation per skier/snowboarder visit.
- Increase strain on the ability to fund internal Chargebacks without underfunding other key budget lines.
- Failure to meet applicable code and regulatory requirements.

Limitations

Archaeological: Currently, no significant archaeological issues had been identified. Ongoing monitoring and re-evaluation of any archaeological issues will be conducted throughout the life of the project to ensure any risks are mitigated and all regulations are complied with.

Financial: Increasing gross revenue or even meeting budgeted gross revenue expectations at Kelso Conservation Area and Glen Eden is difficult for a variety of reasons. When difficulty occurs in meeting budgeted expectations, it can negatively impact other revenue measurements including revenue per visitor, key performance indicators, labour cost percentages, fixed cost percentages, etc. Implementation of the Kelso/Glen Eden Revitalization will provide opportunities to mitigate, but not completely resolve, revenue generation challenges including:

Weather: While Kelso/Glen Eden staff have taken an informed and proactive strategy to grow revenue lines less impacted by fluctuating weather (annual pass sales and program registrations), over 40% of Kelso/Glen Eden revenue is still highly impacted when poor weather is experienced.

Seasonality of Business: Growth in the recreation industry during the 'shoulder seasons' is very difficult with no quick or simple solution. Business growth is done with the purpose of maintaining year-round core staffing levels, maintaining awareness of parks programs and services, etc. 'Shoulder season' business should be invested in without straying far from the core business and have different financial performance expectations.

Competition: While ski/snowboard visitor loyalty is significantly impacted by location and can have negative outcomes mitigated through high quality service, programming and operations, competition from all forms of recreation and entertainment is a reality of the business of Kelso/Glen Eden. Broad opportunities for families and individuals to invest their time and income for leisure is more so the competition faced by Kelso/Glen Eden than other Conservation Areas and Ski/Snowboard areas.

Financial Accessibility: Kelso/Glen Eden, like any business, must ensure that the cost for services meets the expectations of customers. Increasing fees without investing in and/or improving services, programs, and operations can decrease customer confidence. This decrease in customer confidence can occur quickly and take significant periods of time to overcome. Reinvesting in business offerings can create the need for increased fees that the customer may have preferred to avoid and tolerate existing service levels.

Project Justification

Until recently, construction and renovation of improved facilities has been a financially unrealistic endeavour. Significant competing priorities for infrastructure spending from user fee-generated reserves has been a historical challenge. While investing in new chairlifts, snowmaking infrastructure, snow grooming equipment, winter rental fleet, etc., has positively impacted the financial performance of Kelso/Glen Eden, it has left little opportunity to invest in the facilities proposed in this report.

Along with solid park year-end surpluses, formal securement of Developer Contribution Reserve funds to be spent specifically on park infrastructure will provide opportunity for these facilities to be constructed while meeting the investment needs outlined in the Parks 10 Year Capital Plan and Parks Master Plans.

Implementation

Planning, permitting, design, funding, and logistical works associated with the revitalization at Kelso/Glen Eden will require significant use of internal and external resources.

Ongoing works include:

Planning, Permitting and Timeline

- Approval, in principle, by the Conservation Halton Board identifying the project as a priority project.
- The current Kelso Conservation Area/Glen Eden Master Plan has been endorsed by the Ministry of Natural Resources and Forestry and the Niagara Escarpment Commission (NEC). Additional consultation will be required with the NEC to evaluate needs of additional permitting.

- This project is anticipated to occur over a multi-year span. At the beginning, staff will be primarily focused on planning, permitting, regulatory, and cost certainty requirements. The start/completion of physical works are anticipated in subsequent years.
- Current scheduling projections anticipate detailed design, permit, tender, and construction documents for each phase could take about twelve to twenty-four months with construction taking at least two years to complete. Earliest completion date is forecasted for spring/summer 2027 with operational readiness by the 2027/2028 ski season.

Funding & Budgeting

- Project funding will consist of a combination of Halton Region Developer Contribution Reserve funding, debt financing, grants, fundraising, and capital reserves.
- Kelso/Glen Eden 10-year Capital Forecast will be updated to include this priority project.

Logistical

- During the construction phases, it is anticipated there may be some impact to operations. However, the intention is to keep the sites open to the public, which may involve using temporary structures and/or the relocation of existing services to accommodate visitors' needs. The goal is to reduce the impact on revenue and customer experience.

Summary and Next Steps

The biggest barrier towards proceeding with the revitalization of Kelso/Glen Eden is financing. CH will work closely to ensure availability of funding to proceed with each phase of the project in a responsible, sustainable manner. The attached financial appendix shows the positive cash flow impact of the K/GE revitalization project over a twenty-year span. Utilizing a conservative approach, the incremental net proceeds are projected to be \$26.6 million over a twenty-year period, with construction and maintenance costs of \$20 million and \$3.8 million, respectively.

Majority of funding to support this project will be through Developer Contribution Reserve funds, which are currently held by Halton Region. Upon confirming approval of these funds, the following next steps should occur:

1. Through approval of this Business Case and the Budget 2025 budget process, staff will work with Halton Region for approval of funding from the DCR funding for this project.
2. Engagement of a specific project management team that will consist of internal staff members with external resources as required. An immediate first action of this team will be to build cost certainty around the full scope of design and construction of these structures.
3. Engagement of internal and external resources to provide a detailed risk analysis, return on investment projections, revenue projections analysis, projected operating budget, and Asset Management plan compliance.
4. Continue to seek additional required funds through Debt Financing, grant opportunities, and reserves.

CHB 03 24 12 - Attachment 1
Kelso/Glen Eden Revitalization Business Case

Kelso/Glen Eden Revitalization Project
Cash Flow Analysis - 20 Year Forecast
Financial Appendix

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-20	TOTAL (\$)
	(Phase 1)	(Phase 2)	(Phase 3)									
Revenues												
<i>Winter Programming</i>												
GE - Increase in Lift Ticket Revenues (Price & Visitation) ¹	60,000	150,000	150,000	153,000	156,060	159,181	162,365	165,612	168,924	172,303	1,924,401	3,421,847
GE - Membership Revenue Increase (Price & Quantity) ¹	80,000	80,000	200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	2,565,869	4,442,462
GE - F&B Revenue Increase ²	25,000	300,000	300,000	306,000	312,120	318,362	324,730	331,224	337,849	344,606	3,848,803	6,748,694
GE - Equipment Rental Revenues Increases ³	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	128,293	234,123
GE - School Programming ⁴	7,500	7,500	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	128,293	229,123
<i>Summer Programming</i>												
Kelso - Summer Camp Registration Increase ⁵	130,000	130,000	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	2,245,135	4,007,155
Kelso - Summer Camp Meal Plan ⁵	-	135,000	135,000	137,700	140,454	143,263	146,128	149,051	152,032	155,073	1,731,961	3,025,662
Kelso - Summer Team, School & Corporate Programming ⁵	25,000	35,000	55,000	56,100	57,222	58,366	59,534	60,724	61,939	63,178	705,614	1,237,677
Kelso - Summer Lift Service ⁵	-	180,000	180,000	183,600	187,272	191,017	194,838	198,735	202,709	206,763	2,309,282	4,034,216
Kelso - Venue Rentals ⁶	-	60,750	60,750	61,965	63,204	64,468	65,758	67,073	68,414	69,783	779,383	1,361,548
Kelso - Event Hosting ⁶	-	20,000	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	256,587	448,246
Kelso - MTB Programming & School ⁷	7,500	15,000	35,000	35,700	36,414	37,142	37,885	38,643	39,416	40,204	449,027	771,931
Kelso - MTB Rentals ⁷	-	9,000	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	128,293	223,123
Kelso - Summer Food Service ¹	-	180,000	180,000	183,600	187,272	191,017	194,838	198,735	202,709	206,763	2,309,282	4,034,216
Total Revenues	345,000	1,312,250	1,520,750	1,551,165	1,582,188	1,613,832	1,646,109	1,679,031	1,712,611	1,746,864	19,510,224	34,220,024
Total Operating Expenses (incl. incremental staffing) ⁸	(189,020)	(326,278)	(332,803)	(339,459)	(346,248)	(353,173)	(360,237)	(367,442)	(374,790)	(382,286)	(4,269,646)	(7,641,383)
Proceeds	155,980	985,972	1,187,947	1,211,706	1,235,940	1,260,659	1,285,872	1,311,589	1,337,821	1,364,578	15,240,578	26,578,641
Facility Construction & Maintenance Costs												
Phase 1 (13000 sq ft)	(11,500,000)	-	-	-	-	-	-	-	-	-	-	(11,500,000)
Phase 2 (9000 sq ft)	-	(7,500,000)	-	-	-	-	-	-	-	-	-	(7,500,000)
Phase 3 (sq ft TBD)	-	-	(1,000,000)	-	-	-	-	-	-	-	-	(1,000,000)
Maintenance and Renewal ⁸	-	-	-	-	-	-	-	-	-	-	(3,784,873)	(3,784,873)
Total Facility Construction & Maintenance Costs	(11,500,000)	(7,500,000)	(1,000,000)	-	-	-	-	-	-	-	(3,784,873)	(23,784,873)
Net Proceeds (Deficit)	(11,344,020)	(6,514,028)	187,947	1,211,706	1,235,940	1,260,659	1,285,872	1,311,589	1,337,821	1,364,578	11,455,705	2,793,769

Notes

All forecasts above utilize a 2% inflationary factor from Year 4 onwards

1 - Utilizing the conservative scenario, assumes general 1.5% increase in price and visitation for lift tickets, 2%-5% for memberships

2 - Assumes increase in guests with 30% of visitors spending \$10 on Food and Retail

3 - 10% increase on current equipment sales of \$100K/year

4 - Assumes 15% revenue increase based on 2023 revenues

5 - Assumes 10% increase of summer camp capacities with increased space

6 - Assumes additional 1.5 rentals/week for in season demand, along with 2 additional summer events for hosting

7 - Increased MTB attendance with increased capacity

8 - Based on the Kelso/Glen Eden Financial Viability Study, May 15, 2020, by Watson & Associates Economists Ltd

REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 13

FROM: Marnie Piggot, Director, Finance

DATE: April 18, 2024

SUBJECT: **Financial Review for Capital Investments of Developer Contribution Reserve Funds**

Recommendation

THAT the Conservation Halton Board **approves the investment of the Developer Contribution Reserve Funding in the capital projects as outlined in the report;**

And

THAT the Conservation Halton Board **authorizes staff to enter into discussions with Halton Region during the budget process on potential debt financing for remaining funding required for the Kelso/Glen Eden Revitalization project.**

Report

Halton Region Council Report [FN-40-23](#) on the Conservation Halton (CH) 2024 budget provided an update on the \$18.8 million in developer contributions collected through the 2012 Allocation Program. The report noted that projected interest accumulated to the end of 2022 was \$3.3 million, resulting in a total of \$22.3 million available to fund growth-related CH initiatives. CH is required to submit a capital plan to Halton Region for approval to access the Developer Contribution Reserve (DCR) funds. Halton Region staff have advised CH staff that the DCR funds will remain designated for approved CH projects if legislated changes were enacted by the Province related to Halton Region structure.

CH has submitted requests to Halton Region for approval of DCR funding through the annual budget process. The funding requests to date have been supported through updated business cases approved by the CH Board in June 2023 for the Crawford Lake Boardwalk Replacement and the Crawford Lake Visitors Centre. DCR funding for project feasibility study costs were approved in previous budgets to obtain further cost certainty for development of the project business cases.

Budget amounts approved up to the 2024 budget along with actual expenses incurred for approved projects to December 31, 2023, are as follows:

Project	Approved DCR Funding up to 2024 Budget	Less: Actual Project Expenses Dec. 31, 2023	DCR Funding Approved and Unspent
Project Feasibility Studies	\$ 750,000	(\$320,620)	\$ 429,380
Crawford Lake Boardwalk	1,808,076	(29,548)	1,778,528
Kelso/Glen Eden Facilities	185,000	-	185,000
Crawford Lake Interpretive and Education Centre	362,500	-	362,500
Total	\$ 3,105,576	(\$350,168)	\$ 2,755,408

The Crawford Lake Boardwalk replacement construction is anticipated to start later this year. The detailed design and costing for the Crawford Lake Interpretive and Education Centre was awarded through a competitive process to an architect in early 2024 with construction anticipated to start in 2025. These projects have also been successful in receiving grants to support the estimated funding for these projects.

The 2025 budget process will consider the request for DCR funding in 2025 to fund estimated construction costs for the Crawford Lake facility and other project estimated costs.

Based on the previously approved business cases and along with the addition of the Kelso/Glen Eden Revitalization business case, the total \$22.3 million DCR funding will be committed to identified approved capital projects. Since the Crawford Lake Boardwalk replacement and Interpretive and Education Centre projects are in further stages of progression which include grant funding approvals, DCR funding is recommended to be applied to the completion of these projects first. The remaining available DCR funding can be allocated to the Kelso/Glen Eden Revitalization project. Based on estimated costs included in the project business cases and approved grant funding, the recommended investment of the DCR funding is as follows:

Project - Costs and Funding	Project Feasibility Studies	Crawford Lake Interpretive and Education Centre	Crawford Lake Boardwalk Replacement	Kelso/Glen Eden Revitalization	Total
Project Estimated Costs					
Total Costs to Dec. 31, 2023	\$ 320,620	\$ -	\$ 29,548	\$ -	\$ 350,168
Business case estimated remaining costs	429,380	7,362,500	3,450,452	20,000,000	31,242,332
Total Estimated Project Costs	750,000	7,362,500	3,480,000	20,000,000	31,592,500
Project Funding					
Grant funding					
Investing in Canada Infrastructure Program (ICIP)	\$ -	\$ -	\$ 1,671,924	\$ -	\$ 1,671,924
Green and Inclusive Community Buildings (GICB)	-	2,390,960	-	-	2,390,960
Total estimated DCR Funding and Interest ¹	750,000	4,971,540	1,808,076	14,570,384	22,100,000
Other funding required	-	-	-	5,429,616	5,429,616
Total Estimated Project Funding	\$ 750,000	\$ 7,362,500	\$ 3,480,000	\$ 20,000,000	\$ 31,592,500

¹ - Per Halton Region November 2023 Report

The Kelso/Glen Eden Revitalization project will require an estimated further \$5.4 million in funding to complete all three (3) phases of the project. With the proposed phasing of the Kelso/Glen Eden project, there may be opportunities to grow park capital reserves sufficiently and seek grants to fund the remaining funding needed. In the event there is not sufficient funding available through these sources, staff recommend that debt financing through Halton Region be considered a potential funding option during budget process discussions at the appropriate time.

Impact on Strategic Priorities

This report supports the Momentum priority of “Organizational Sustainability”.

Financial Impact

The report outlines the proposed investment of the DCR funds in approved park capital projects. There is no direct financial impact for this report.

Signed & respectfully submitted:



Marnie Piggot
Director, Finance

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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REPORT TO: Conservation Halton Board

REPORT NO: # CHB 03 24 14

FROM: Garner Beckett, Executive Director, Foundation

DATE: April 18, 2024

SUBJECT: Conservation Halton Donor Recognition and Naming Policy

Recommendation

THAT the Conservation Halton Board **approves the Conservation Halton Donor Recognition and Naming Policy.**

Report

The Conservation Halton Foundation has significant fundraising initiatives underway to help advance the mission and vision of Conservation Halton (CH) by supporting projects that are aligned with the organization's strategic direction. These efforts are leading to frequent conversations with major gift donors who feel inspired to invest in the unique CH projects, park developments, and programming that provide benefits to the environment and the community.

The updated naming policy (Attachment 1: Proposed Conservation Halton Donor Recognition and Naming Policy) is recommended to define the process that governs the recognition of donors for the naming of CH assets such as facilities, spaces, infrastructure projects, or parcels of land. The policy includes protocols for determining and formalizing donor recognition to guide staff and volunteers in facilitating significant donor conversations and encouraging greater philanthropic support.

The proposed naming policy builds upon and modernizes CH's existing naming policy (Attachment 2: Naming of CH Owned Properties and Assets), adopted November 13, 2014.

Under the updated naming policy all naming opportunities will be assigned a monetary value prior to engagement with donors, taking into consideration the function, usage, size, marketability, and financial requirements (replacement and/or operational costs) of the asset. CH will re-evaluate asset valuations frequently to ensure the listed value reflects the market value of the assets. The updated naming policy does not apply to or guide non-philanthropic partnership agreements such as business-to-business arrangements or sponsorships that may include branding or co-branding components.

The updated policy sets a framework to approve all donations with associated naming elements, based on asset and donation value. All assets valued at \$250,000 or greater shall be approved by CH's Board. All naming opportunities valued below \$250,000 require staff approval as illustrated in the table below (Table 1):

Table 1: Naming Donation Approvals According to Asset Value	
Staff Approval	Asset Value
President & CEO	\$50,000 - \$249,999
Executive Director, Foundation	Up to \$49,999

It will be the responsibility of the Executive Director of the CH Foundation in consultation with the Senior Leadership Team and President and CEO to recommend naming opportunities to the Board for their approval.

For gifts equal to or greater than \$1,000,000, a signed gift agreement with the donor is also required. The donor agreement will outline the gift specifics, including terms, payment schedule, and the obligations of associated parties.

The updated Naming Policy outlines limitations and restrictions to protect CH's image and reputation and ensure all naming recognition aligns with current CH branding guidelines. The policy includes a process to rename assets as agreement terms expire and to revoke naming recognition if donor obligations are unfulfilled or if naming conflicts with CH's vision.

The policy also aims to guide naming recognition intended to honour the distinguished service of individuals. Individuals or groups contemplating a naming opportunity to recognize outstanding service to CH must consult directly with the President & CEO who will, in accordance with this policy, seek Board approval.

The six (6) core CH parks (Kelso Conservation Area, Crawford Lake Conservation Area, Mountsberg Conservation Area, Rattlesnake Point Conservation Area, Mount Nemo Conservation Area, and Hilton Falls Conservation Area) will not be considered for renaming due to their historic significance.

Impact on Strategic Priorities

This report supports the Momentum priority of "Organizational Sustainability" by enhancing and supporting major gift fundraising efforts to encourage greater philanthropic support from the community.

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:



Garner Beckett
Executive Director, Foundation

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Garner Beckett, Executive Director, Foundation
gbeckett@hrca.on.ca

Attachments:

Attachment 1: Proposed Conservation Halton Donor
Recognition and Naming Policy

Attachment 2: Naming of CH Owned Properties and Assets
(November 13, 2014)

Conservation Halton Donor Recognition and Naming Policy

DRAFT

1.0 PURPOSE

The purpose of this policy is to define the process that governs the recognition of donors for the naming of Conservation Halton (CH) assets, such as facilities, spaces, infrastructure projects, or parcels of land. The policy includes protocols for determining and formalizing donor recognition to provide:

- appropriate public acknowledgment and consistent institutional appreciation of major donors;
- public evidence of philanthropic activity that demonstrates that CH and the Conservation Halton Foundation (CHF) enjoy considerable external support and encourage others to invest in the future health of our watershed;
- appropriate utilization of the limited number of naming opportunities;
- clear guidelines for those involved in discussions with donors; and
- facilitation of increased and ongoing support from CH/CHF supporters.

The naming policy reflects the importance of philanthropic giving to the realization of CH/CHF's mission and vision.

The naming policy does not seek to guide non-philanthropic partnership agreements such as business-to-business arrangements or sponsorships that may include branding or co-branding components.

2.0 PRINCIPLES

2.1 Naming Opportunities

Decisions to name an asset shall be compatible, to the extent reasonably ascertainable, with CH's mission and vision and aligned with the organization's strategic direction.

In cases where philanthropic contributions include specific name recognition and/or signage, the recognition will follow the generally accepted CH brand and park standards regarding size, placement, visual appearance, etc.

The approval of a naming opportunity will not result in additional costs for CH.

2.2 Limitations to Naming Opportunities

No naming opportunity shall be approved if it:

- is likely to have a negative impact on the image or reputation of CH/CHF;
- could call into serious question the public respect for CH/CHF by implying endorsement of a partisan political or ideological position. This does not preclude the use of the name of an individual who has previously held public office and/or could imply endorsement of a specific commercial product. This does not preclude using the name of an individual or company that manufactures or distributes commercial products; and/or

CHB 03 24 14 - Attachment 1

Proposed Conservation Halton Donor Recognition and Naming Policy

- honorary naming or distinguished naming may be considered and approved on a case-by-case basis by the CH Board. Facilities or programs will not be named to honour the outstanding service of a member of the Board or staff while the honouree remains in the employment of the CH and/or the CHF.

3.0 SCOPE DEFINITIONS

CH and the CHF welcome gifts from generous individuals, corporations, foundations, and associations. The Donor Recognition and Naming Policy shall guide the extent of donor recognition and naming procedures for:

- buildings or substantial parts of buildings;
- existing or new conservation areas and parks;
- substantial elements involving existing maintenance or proposed construction of new infrastructure within conservation areas (viewing platforms, docks, pavilions, trails, gazebos, etc.); and
- the acquisition of land.

For the purposes of this policy:

Gift refers to an outright donation to CH/CHF in cash or in-kind from an individual, corporation, foundation, or other source, for either restricted or unrestricted use. Gifts are made without expectation of tangible return or benefit to the donor.

Endowed Gifts are donations made to CH/CHF on the understanding that the principal amount of the donation will be invested for a minimum ten-year period, with the interest earnings to be used to advance specific goals of CH, such as the acquisition of lands or construction of CH infrastructure.

Expendable Gifts are gifts or grants given to CH/CHF that the donor has directed to be used immediately in support of various goals of CH.

Pledge refers to a gift committed by a donor to be achieved with set payments over a predetermined term.

4.0 DEVELOPMENT OF NAMING OPPORTUNITIES

4.1 General

Naming opportunities for facilities, spaces, infrastructure projects, or parcels of land shall be assigned a monetary value established in consultation with CH. The naming opportunity values shall take into consideration the function, usage, size, marketability, and financial requirements (replacement and/or operational costs) of the opportunity. CH shall re-evaluate the naming opportunities list frequently to ensure the listed value reflects the market value of the assets represented.

All naming opportunities valued \$250,000 or greater shall be approved by CH's Board.

CHB 03 24 14 - Attachment 1

Proposed Conservation Halton Donor Recognition and Naming Policy

All naming opportunities valued below \$250,000 shall use the following approval framework:

Staff Approval	Asset Value
President and CEO	\$50,000 - \$249,999
Executive Director, Foundation	Up to \$49,999

4.2 Roles and Responsibilities

It will be the responsibility of the Executive Director of the CHF, in consultation with the Senior Leadership Team and President and CEO, to recommend naming opportunities to the Board for their approval. All naming opportunities meeting the requirements as outlined must be approved by the Board.

4.3 Procedure

Documentation with respect to the naming decision, stipulating rationale and conditions underlying the naming decision, and all other supporting documentation shall be maintained by CH. The following process should be undertaken by CH/CHF staff when determining new naming opportunities:

- determine the value of the naming opportunity;
- determine the proposed terms of the gift agreement, including time period or naming duration if applicable;
- determine the proposed rights and benefits;
- draft and sign the gift agreement or pledge form;
- confirm naming opportunity and/or recognition benefits subject to the Board approval;
- prepare and sign a donor recognition signage form which includes the acknowledgement/recognition plan.

When establishing the value of the naming opportunity, staff will undertake to:

- evaluate the space, considering the square footage, purpose, and use of the space, cost to build and equip, location of the space, public profile and prestige of the asset or opportunity;
- where applicable, obtain an estimate from a professional third-party firm for new construction; and
- obtain an independent evaluation/estimate from a professional for the land value associated with any acquisitions.

5.0 ASSIGNMENT OF NAMING OPPORTUNITIES

5.1 General

Naming opportunities may be assigned for a living person, in memory of a person, or after a family, foundation, association, service club, business, or corporation. The naming for a benefactor may also apply to a third party at the wish of the benefactor and must be agreed upon by the honouree if living. Naming associated with a particular facility or endowment shall not preclude further naming within the same facilities, spaces, or infrastructure project. All naming decisions shall be supported by appropriate and complete documents including written documentation stipulating rationale and conditions underlying the naming and provided in a report to the Board.

5.2 Donor Recognition

Existing names and/or commitments shall be honoured as of the approval date of this policy unless revoked or removed at the discretion of the CH Board.

Future donor recognition will be commensurate with the size and terms of the gift at the discretion of the Board. The duration of the donor recognition shall be at minimum (10) years with the specific term outlined in the gift agreement and as approved by the Board. In the case of an endowment, the naming will continue for the life of the endowment. At the end of the agreed-upon term, the original donor will be given the first right of refusal to re-subscribe. Should the donor decline, CH/CHF may consider providing other prospective donors with a naming opportunity. CH/CHF will honour a donor's request to remain anonymous in tributes, printed materials, permanent signage, and all other forms of public recognition should they wish.

In instances where donor recognition is to occur, CH/CHF will make recommendations concerning the installation of all recognition signage in consultation with the donors, appropriate approval agencies, and CH/CHF departments and leadership and with alignment to CH branding guidelines. Signage standards apply to all physical and non-physical assets. Donor recognition will only occur after CH/CHF has received a signed gift agreement or pledge form and 25% of the total pledge commitment. Donor logos shall not be used on assets. Donor taglines or marketing terms shall not be included in donor recognition names.

All agreements with donors for named recognition shall be recorded in writing, through a signed pledge form or gift agreement. For gifts equal to or greater than \$1,000,000, a signed gift agreement is required. A signed donor recognition signage form shall be completed for all naming opportunities, which is completed after receipt of the 25% of the total pledge commitment, cash gift, or as agreed upon by CH/CHF and Donor. CH/CHF shall honour naming in accordance with the gift agreement and donor recognition signage form which is made with the donor and as approved by the Board. Periodically CH/CHF may provide the honorary naming of an asset in recognition of a person/group/organization's contribution to the Authority.

5.3 Renaming or Revoking Names

Renaming of an asset can occur at any time at the request of the donor or once the term of the naming agreement has been concluded and the original recipient or donor does not wish to re-subscribe. CH/CHF reserves the right to revoke a naming agreement as the result of the following circumstances:

CHB 03 24 14 - Attachment 1 Proposed Conservation Halton Donor Recognition and Naming Policy

- if it is determined that the actions or deeds of the individual or corporation that the asset is named for are not in keeping with the mission or standards of CH/CHF; and/or
- there is a failure of the named or honoured donor/person to fulfill agreed-upon obligations.


In either of these instances, the President and CEO can bring a formal request to the Board to revoke the naming rights to the asset for Board approval. If approved, the donor will be informed in writing by the President and CEO on behalf of CH/CHF.

5.4 Naming for Distinguished Service

The Board may consider, on a case-by-case basis, naming in recognition of distinguished service. Individuals or groups contemplating a naming opportunity to recognize such service must consult directly with the President and CEO who would, in accordance with this policy, seek Board approval. Assets will not be named to honour the outstanding service of a Board Member or staff while the honouree remains on the CH Board or in full-time employment of CH.

5.5 Naming Subject to Raising Full Cost

When the gift contribution does not meet the full cost of the project, the naming is subject to the completion of satisfactory funding arrangements and the naming will take place only after this is achieved. If CH/CHF is unable to proceed with the project, the potential benefactor(s) will be invited to redirect their contribution(s) and/or be refunded their pledge payments.

 Conservation Halton		Policy Number	
		Pages	1 of 2
Section	Conservation Lands/Foundation	Effective Date	
Subject	Naming of CH Owned Properties and Assets	Revision Number	

Policy Statement

Conservation Halton will ensure consistent naming procedures are followed that adhere to the mission and goals of the Authority.

Procedure

All requests for naming of properties and major assets (pavilions, Visitor Centres, trails etc) must be approved by the Board of Directors. All core/non-core properties and major asset naming requests will be reviewed by the Conservation Halton Management Team.


All minor assets (picnic tables, plaques, trees etc) must be approved by Director of CH Foundation in partnership with the appropriate Manager.

Naming Request must be submitted in writing and include the following information:

Core/Non-Core Properties, Major Assets	Minor Assets
1. Proposed Name	1. Proposed Name
2. Existing Name	2. Any money associated with the request (if applicable)
3. Background Information	3. Contact Information of Applicant
4. Letters of Support	
5. Any money associated with the request (if applicable)	
6. Contact Information of Applicant	

Naming Requests must meet the following criteria:

1. Identifies
 - a. the location or physical characteristic (eg. Mount Nemo Conservation Area) **or**
 - b. historical significance to community or individual/family (eg. Crawford Lake Conservation Area or Cameron Barn) **or**
 - c. a Not for Profit or individual that has made a significant contribution that supports the work of Conservation Halton. (Robert Edmondson Conservation Area) **or**
 - d. an individual, organization or company who provides significant financial donation.
2. Must not have similar pronunciation or spelling of existing property or asset within the watershed and must not reflect or reference:
 - a. Elected Officials currently in office
 - b. Political affiliation
 - c. Derogatory or discriminate
 - d. Current CH staff, Board of Directors
 - e. Trade names, trademarks or anything that would represent a copyright infringement
3. Conservation Halton may refuse any request they deem not suitable for any reason.
4. Must meet the costs listed below and submit fees upon approval (at discretion of the Board of Directors).

 Conservation Halton		Policy Number	
		Pages	2 of 2
Section	Conservation Lands/Foundation	Effective Date	
Subject	Naming of CH Owned Properties and Assets	Revision Number	

Asset	Term	Value
1. Core Conservation Area	50 years	50% Appraised Value and 50% Operating Costs*
2. Non-Core Property	25 years	50% Appraised Value and 50% Operating Costs*
3. Major Asset (Visitor Centre, trails)	25 years	50% Appraised Value and 50% Operating Costs*
4. Minor Assets (benches, trees)	5 years	100% of Purchase Cost and 100% Maintenance Costs

*Operating Costs per year

Proposed names which are not covered under the above guidelines will be considered on a case by case basis

Successful applicant must enter into negotiated agreement with Conservation Halton

Agreements may be terminated at any time with no refund (unless negotiated in agreement), if the name of the property or asset violates the mission or goals of Conservation Halton or if the name no longer reflects a positive relationship, at the sole discretion of Conservation Halton and be approved by the Board of Directors.

Approvals

Approved By:	Date:	Signature:
Management Chair		
CAO		
Chair, Conservation Halton Foundation		
Chair, Board of Directors		

Revision History

Revision	Date	Description of Changes	Revised By	Approved By
R00				
R01				
R02				