



Conservation Halton Board of Directors Meeting Agenda

Conservation Halton

Zoom Webinar

Jun 23, 2022 1:00 PM - 4:00 PM EDT

Table of Contents

1. Roll Call

2. Disclosure of Pecuniary interest for Conservation Halton Board of Directors

3. Acceptance of Agenda

4. Presentations

4.1. Preliminary 2023 Priorities & Preliminary Budget Presentation - Hassaan Basit, President & CEO (Report 7.6 DRAFT Preliminary 2023 Budget)

4.2. Capital Campaign Launch & Re:Generations 2022 Gala - Jim Sweetlove & Garner Beckett, Executive Director, Foundation (8.1 CHF Update)

5. CEO Verbal Update

6. Consent Items

6.1. Approval of Conservation Halton Board of Directors Meeting/AGM Minutes - April 21, 2022.....5

Conservation Halton Board of Directors DRAFT Meeting/AGM Minutes - April 21 2022.pdf.....5

6.2. Approval of Finance & Audit Committee DRAFT Meeting Minutes - June 9.....10

Finance & Audit Committee DRAFT Meeting Minutes - June 9 2022.pdf.....10

6.3. Status of Conservation Halton's Spill Flood Hazard Policy Review & Update - revised timeline (CHBD 05 22 01).....12

Status of Conservation Halton's Spill Flood Hazard Policy Review and Update (CHBD 05 22 01).pdf.....12

6.4. Status of Conservation Halton's Land Use Planning Policy Review and Update (CHBD 05 22 02).....13

Status of Conservation Halton's Land Use Planning Policy Review and Update (CHBD 05 22 02).pdf.....13

6.5. Recent Environmental Registry of Ontario (ERO) Postings (CHBD 05 22.....14

Recent Environmental Registry of Ontario (ERO) Postings (CHBD 05 22 03).pdf....14

Appendix A & B.pdf.....16

6.6. East Burlington Creeks Flood Hazard Mapping Study (CH File No. ADM 356) and Urban Milton Flood Hazard Mapping Study (CH File No. ADM 347) Update (CHBD 05 22 04).	22
East Burlington Creeks Flood Hazard Mapping Study (CH File No. ADM 356) and Urban Milton Flood Hazard Mapping Study (CH File No. ADM 347) Update (CHBD 05 22 04).pdf	22
6.7. Permits & Letters of Permission issued under Ontario Regulation 162/06 from January 1 to March 31, 2022 (CHBD 05 22 05).	24
Permits & Letters of Permission issued under Ontario Regulation 162/06 from January 1 to March 31, 2022 (CHBD 05 22 05).pdf	24
Appendix C - Permits LoP.pdf	25
6.8. Conservation Halton comments on Recovery Strategy for the Chimney Swift (Chaetura pelagica) in Canada (CHBD 05 22 06).	31
Conservation Halton comments on Recovery Strategy for the Chimney Swift (Chaetura pelagica) in Canada (CHBD 05 22 06).pdf	31
Appendix D.pdf	33
6.9. Limehouse Pond Bypass Restoration Project (CHBD 05 22 07).	36
Limehouse Pond Bypass Restoration Project (CHBD 05 22 07).pdf	36
Appendix E - Limehouse Pond.pdf	37
6.10. Expansion of water quality monitoring program (CHBD 05 22 08).	39
Expansion of water quality monitoring program (CHBD 05 22 08).pdf	39
7. Action Items	
7.1. Work Plan for Consultation on Conservation Halton's Guidelines for Wetland Water Balance Assessments (CHBD 05 22 09).	43
Work Plan for Consultation on Conservation Halton's Guidelines for Wetland Water Balance Assessments (CHBD 05 22 09).pdf	43
7.2. Conservation Halton's Wetland Mapping Review & Update (CHBD 05 22 10).	47
Conservation Halton's Wetland Mapping Review & Update (CHBD 05 22 10).pdf	47
7.3. Water Quality and Habitat Improvement Program (WQHIP) Guidelines for Countryside and Commercial landowners (CHBD 05 22 11).	51
Water Quality and Habitat Improvement Program (WQHIP) Guidelines for Countryside and Commercial landowners (CHBD 05 22 11).pdf	51
Appendix F - WQHIP Countryside.pdf	53
Appendix G - WQHIP Commercial.pdf	77

7.4. Tansley Bridge over Bronte Creek – Offsite Restoration Funding Agreement (CHBD 05 22 12).	102
Tansley Bridge over Bronte Creek – Offsite Restoration Funding Agreement (CHBD 05 22 12).pdf	102
7.5. Authorization Request for Award Approval Contract: CH Headquarters Low Impact Development Construction Services RFT # CA003-22-3 (CHBD 05 22.....	105
Authorization Request for Award Approval Contract: CH Headquarters Low Impact Development Construction Services RFT # CA003-22-3 (CHBD 05 22 13).pdf	105
7.6. Authorization Request for Award Approval Contract: Kelso Dam - Lift Gate and Hoist Refurbishment, East Gate (C22016) (CHBD 05 22 14).	107
Authorization Request for Award Approval Contract: Kelso Dam - Lift Gate and Hoist Refurbishment, East Gate (C22016) (CHBD 05 22 14).pdf	107
7.7. Budget Variance Report for the Period Ended April 30, 2022 and December 31, 2022 Projected Year End Amounts (CHBD 05 22 15).	109
Budget Variance Report for the Period Ended April 30, 2022 and December 31, 2022 Projected Year End Amounts (CHBD 05 22 15).pdf	109
Appendix H - Budget Variance Report Financial Appendix April 30 2022.pdf	114
Appendix I - Capital Summary Financial Appendix April 30 2022.pdf	119
Appendix J - Reserve Continuity April 30 2022.pdf	120
7.8. Asset Management Plan (2022) – Dams and Channels (CHBD 05 22 16).	121
Asset Management Plan (2022) – Dams and Channels (CHBD 05 22 16).pdf	121
Appendix K - Asset Management Plan Dams and Channels 2022 .pdf	124
7.9. Appointment of Auditors (CHBD 05 22 17).	171
Appointment of Auditor for 2022 year end - Board June 23 2022 (CHBD 05 22.....	171
7.10. DRAFT Preliminary 2023 Budget (CHBD 05 22 18).	173
2023 Preliminary Budget Report - Board June 23 2022 (002).pdf	173
Appendix L - 2023 Preliminary Budget June 2022.pdf	185
8. CHF Chair Update (Jim Sweetlove)	
8.1. Capital Campaign Launch & Re:Generations 2022 Gala - Jim Sweetlove & Garner Beckett, Executive Director, Foundation	
9. In Camera	
9.1. Legal Matter (CHBD 05 22 19)	
9.2. Legal Matter (CHBD 05 22 20)	
10. Other Business	

10.1. Correspondence from North Aldershot Environmental Protection.....	217
Correspondence from North Aldershot Environmental Protection.....	217
11. Adjournment	

Conservation Halton Board of Directors Meeting/Annual General Meeting Minutes
Apr 21, 2022, at 1:00 p.m.
Zoom Webinar

1. Roll Call

Members Present:

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

Members absent with no regrets: Hamza Ansari

Staff Present:

Kim Barrett, Associate Director, Science & Partnerships,
Hassaan Basit, President & CEO,
Garner Beckett, Executive Director Foundation,
Adriana Birza, Manager, Office of the President & CEO,
Niamh Buckley, Admin Assistant, Office of the President & CEO,
Shelly Datseris, Manager, Marketing & Communications,
Chitra Gowda, Snr. Manager, Watershed Planning and Source Protection,
Craig Machan, Director, Park Operations,
Kellie McCormack, Director, Planning & Regulations
Marnie Piggot, Director Finance
Plezzie Ramirez, Director, HR
Jill Ramseyer, Director, Corporate Compliance
Pavan Seth, Procurement Manager Corporate Compliance
Mark Vytvytskyy, COO
Barb Veale, Senior Director, Watershed Strategies & Climate Change
Justin Wei, Senior Manager, Finance

The Chair called the meeting to order at 1:12 p.m.

2. Disclosure of Pecuniary interest for Conservation Halton Board of Directors

There were NO Disclosures of Pecuniary Interest

3. Acceptance of Agenda

CHBD 04 01 Moved by: Jean Williams
Seconded by: Allan Elgar

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

Carried

4. CEO Verbal Update

The CEO shared the following:

- Park events update: Soft launch of the WOW Camp for Summer 2022 has seen the biggest single day registration from all of CH sales drives to date.
- The CEO encouraged Board member to come out for *Blooms and Bubbles (June 26)* and *Pride in Nature (June 11)* events at Area 8.

In response to a board query if parks are at capacity, the CEO advised that there are times when they are however with the introduction of the reservation system at the start of COVID-19, CH has been able to avoid overcrowding. There are events at CH that are at capacity and CH continues to develop efficiencies and introduce improvements to facilitate equitable access for all community members.

- Key financial updates: Grant and Funding Approvals (to April 19, 2022) – \$2.16M approved YTD
- Grant and Funding Submissions, Pending Decision (to April 19, 2022) – \$1.68M in outstanding YTD requests.
- CH has received a draft report from consultants for Dams & Channels Assessment Management Plan and this will be presented for approval at the Board meeting on June 23.
- CH recently signed an 18-month agreement with the Ministry of Environment, Conservation and Parks for the installation of a new water quality monitoring station near the mouth of Sixteen Mile Creek. Installation costs are funded by the Ministry.
- CEO Office: The CEO advised that the date held for the May 19 Board meeting will be repurposed to a Board Strategy Planning Session and take place at Kelso Conservation Area. Formal invitation and agenda to follow.

5. Consent Items

5.1 Approval of Governance & Risk Committee DRAFT Meeting Minutes - March 24, 2022

5.2 Approval of Conservation Halton Board of Directors DRAFT Meeting Minutes - March 24, 2022

5.3 Approval of Finance & Audit Committee DRAFT Meeting Minutes - April 7, 2022

5.4 Health & Safety Update (Q4 2021 – Q1 2022)
(CHBD 04 22 01)

5.5 Purchasing Activity Memo - April 2022
(CHBD 04 22 02)

5.6 Recent Environmental Registry of Ontario (ERO) Postings CH
(CHBD 04 22 03)

5.7 Update on applications to expand Milton Quarry East, Dufferin Aggregates,
Town of Halton Hills CH File No. PQ21
(CHBD 04 22 04)

The consent items were adopted.

6. Action Items

6.1 Delegation of Approval Authority for Permissions, Ontario Regulation 162/06
(CHBD 04 22 05)

CHBD 04 02 Moved by: Marianne Meed Ward
Seconded by: Gordon Krantz

THAT the Conservation Halton Board of Directors **approves the following staff positions be delegated the authority to approve permissions under Ontario Regulation 162/06:**

- **President & Chief Executive Officer / Secretary- Treasurer**
- **Senior Director, Watershed Strategies and Climate Change**
- **Director, Planning and Regulations**
- **Senior Manager, Water Resources Engineering**

Carried

6.2 2021 Audited Financial Statements
(CHBD 04 22 06)

CHBD 04 03 Moved by: Jim Sweetlove
Seconded by: Rory Nisan

THAT the Conservation Halton Board of Directors **approves the audited financial statements for the year ended December 31, 2021, as recommended by the Finance & Audit Committee.**

Carried

6.3 Reappointment of Foundation Board of Directors (CHBD 04 22 07)

CHBD 04 04

Moved by: Bryan Lewis
Seconded by: Dave Gittings

THAT the Conservation Halton Board of Directors **approves the reappointment of the following Members to the Conservation Halton Foundation Board of Directors for a two-year term:**

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

Carried

6.4 Authorization Request for Award Approval Contract: Central Workshop Architectural Planning & Design Services RFP # CH-221221 (CHBD 04 22 08)

CHBD 04 05

Moved by: Steve Gilmour
Seconded by: Zeeshan Hamid

THAT the Conservation Halton Board of Directors **approves the award recommendation of the Central Workshop Architectural Planning & Design Services contract to Green Propeller Design Inc. on the basis of “Highest Overall Scoring Proponent” in alignment with the Conservation Halton Purchasing Policy Section 2.3.2 b). Requests for Proposals of \$100,000 and over must be approved by the Conservation Halton Board of Directors.**

Carried

7. Annual General Meeting 2022

7.1 2021 Year in Review (Hassaan Basit, President & CEO)

The CEO presented the Annual Report for 2021 highlighting CH's key successes.

The Chair commended the CEO for clear and concise reporting with great content and look.

Presentation can be revisited in OnBoard, and the 2021 Annual Report is available for the public on <https://www.conservationhalton.ca/annualreport>.

8. CHF Chair Update (Jim Sweetlove)

The Chair provided an update on the Foundation AGM held on April 6, 2022. The Foundation Members have adopted fundraising targets for 2022.

2021 Audited Financial statements were approved for 2021 with the Foundation donations to Conservation Halton totalling \$938,950 compared to \$518,094 in prior fiscal 2020.

9. Other Business

There was NO other business.

10. Adjournment

CHBD 04 06 Moved by: Rick Di Lorenzo

THAT the Conservation Halton Board of Directors Meeting/Annual General Meeting be adjourned at 1:59 p.m.

Carried

Signed by: Hassaan Basit

Date: June 23, 2022

DRAFT



Conservation Halton Finance & Audit Committee Minutes
Jun 9, 2022 at 9:30 AM EDT
Zoom Meeting

1. Roll Call

Members Present: Rob Burton
Mike Cluett
Joanne Di Maio
Moya Johnson

Members absent with regrets: Gerry Smallegange
Jim Sweetlove

Staff Present: Hassaan Basit, President & CEO,
Adriana Birza, Senior Advisor, Office of the President & CEO,
Niamh Buckley, Admin Assistant, Office of the President & CEO,
Marnie Piggot, Director Finance
Justin Wei, Senior Manager, Finance

The Chair called the meeting to order at 9:30 a.m.

2. Disclosure of Pecuniary Interest for Finance & Audit Committee Members

There were **No** disclosures of pecuniary interest for the Finance & Audit Committee Members.

3. Approval of Agenda

FA 02 01 Moved by: Joanne Di Maio
Seconded by: Moya Johnson

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

Carried

4. Action Items

4.1 Assessment Management Plan Dams & Channels (FA 02 22 01)

FA 02 02 Moved by: Mike Cluett
Seconded by: Moya Johnson

THAT the Finance & Audit Committee **recommends to the Conservation Halton Board of Directors the approval of the Asset Management Plan (2022) – Dams and Channels.**

Carried

4.2 2023 Preliminary Budget and Forecasts

FA 02 03 Moved by: Moya Johnson
Seconded by: Joanne Di Maio

That the Finance & Audit Committee **recommends to the Conservation Halton Board of Directors that the 2023 preliminary budget (attached) be approved for budget discussion purposes with funding watershed municipalities.**

Carried

4.3 Appointment of Auditor for 2022 Year-End Audit

FA 02 04 Moved by: Moya Johnson
Seconded by: Mike Cluett

THAT the Finance & Audit Committee **recommends to the Conservation Halton Board of Directors the reappointment of KPMG LLP as auditor for Conservation Halton for the 2022 fiscal year-end audit;**

And

THAT KPMG LLP audit fees noted in the report **be approved for up to a further five years subject to annual reappointment as auditors for Conservation Halton (CH).**

5 Other Business

There was **NO** other business.

6 Adjournment

FA 02 05 Moved by: Mike Cluett

THAT the Finance & Audit Committee meeting **be adjourned at 9:50 a.m.**

Carried

Signed by: Hassaan Basit, President & CEO

Date: June 23, 2022

TO: Conservation Halton Board of Directors

MEMO #: CHBD 05 22 01

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: June 23, 2022

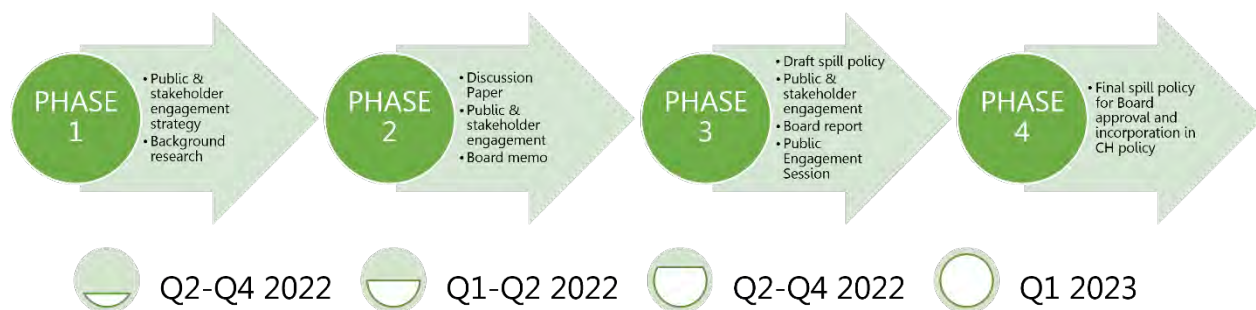
SUBJECT: Status of Conservation Halton's Spill Flood Hazard Policy Review and Update

MEMO

The purpose of this memo is to provide a status update on Conservation Halton's (CH) spill flood hazard policy review and update, upcoming milestones, and a revised timeline following the February 2022 update to the Board (CHBD 01 22 02).

Staff released a discussion paper on March 25, 2022, to provide the public and stakeholders with background information on spill flood hazards and to engage on the policy approaches that CH could take to deal with development in spill flood hazards. Throughout Spring 2022, staff presented to the Greater Golden Horseshoe Conservation Authority Planning Group, the Halton Area Planning Partnership, BILD (Halton Chapter), and CH's Floodplain Mapping Advisory Committee, as well as engaged in numerous discussions with municipal staff and members of the public. A high-level of interest has been expressed in this policy initiative and while feedback on the discussion paper was requested by May 6, 2022, comments are still being received.

To ensure that the perspectives of CH's municipal partners and stakeholders can be considered adequately in the development draft policy, the work plan schedule has been adjusted to provide additional time for public engagement and policy development (see figure below).



Staff will continue the engagement process and present draft spill flood hazard policies to the Board, public, and stakeholders in Q3. All input received will be documented and staff anticipates making recommendations to the Board on the approval of new spill flood hazard policies in Q1 2023. New policies will provide the public with greater certainty and transparency on CH's requirements for developing in spill flood hazards.

TO: Conservation Halton Board of Directors

MEMO #: CHBD 05 22 02

FROM: Kellie McCormack, Director, Planning and Regulations

DATE: June 23, 2022

SUBJECT: Status of Conservation Halton's Land Use Planning Policy Review and Update

MEMO

On February 17, 2022, Conservation Halton's (CH) Board of Directors approved the recommendations in Report # CHBD 01 22 06, that outlined a work plan to review and update CH's land use planning policies. The work plan set out the process to develop and consult on land use planning policies to guide CH's plan input and review program. It also included the key phases when the public, stakeholders, and CH's Board will engage in the policy review and update process.

Over the past several months, staff has been undertaking background research and developing draft policies for internal review. The original work plan schedule targeted public and stakeholder engagement over Q2-Q3 of 2022, and Board approval of policies in Q4 of 2022. This time frame has been adjusted to allow staff to prioritize planning process updates in response to Bill 109 and public and stakeholder engagement on CH's spill flood hazard policies. The work plan schedule has been adjusted to provide additional time for policy development and public engagement (figure below).



Staff will continue working on the policy directions report and will report back to the Board in Fall 2022. New land use planning policies will provide the public and CH's municipal partners with greater certainty and transparency on CH's advisory feedback on *Planning Act* and *Aggregate Resource Act* Applications, Environmental Assessments and Niagara Escarpment Development Permits.

TO: Conservation Halton Board of Directors

MEMO #: CHBD 05 22 03

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: June 23, 2022

SUBJECT: Recent Environmental Registry of Ontario (ERO) Postings

MEMO

This memo provides a summary of the feedback Conservation Halton (CH) provided to the Ministry of Municipal Affairs and Housing (MMAH) on three proposals that were recently posted to the Environmental Registry of Ontario (ERO): 1) *Planning Act* changes under Bill 109, *More Homes for Everyone Act, 2022*; 2) Community Infrastructure and Housing Accelerator (CIHA) – Proposed Guideline; and 3) Growing the size of the Greenbelt. The commenting deadline for these postings did not align with CH's Board reporting timeframes and, as such, are being provided as an update after the fact.

***Planning Act* changes under Bill 109, *More Homes for Everyone Act, 2022* (ERO number 019-5284) and the Community Infrastructure and Housing Accelerator – Proposed Guideline (ERO number 019-5285); CH File PPO 066**

Background

Bill 109, the *More Homes for Everyone Act, 2022* was introduced by the province on March 30, 2022 and received Royal Assent on April 14, 2022. Bill 109 introduced changes to numerous pieces of provincial legislation and was to serve as a first step towards implementing the recommendations of the Ontario Housing Affordability Task Force. CH provided specific comments on Schedule 5 of Bill 109, which introduced changes to the municipal planning approvals process under the *Planning Act*, including:

- Enabling municipalities to request a Community Infrastructure and Housing Accelerator (CIHA) order designed to accelerate planning processes;
- Requiring municipalities to provide a pro-rated fee refund for site plan, zoning by-law and official plan amendment application fees if a decision is not made within the legislated timelines of receiving the complete application;
- Allowing the minister to prescribe matters that are not permitted to be imposed as conditions to subdivision approval;
- Requiring decisions on site plan applications to be delegated to municipal staff;
- Establishing regulation-making authority to prescribe complete application requirements for site plan applications; and
- Establishing regulation-making authority to require public reporting on development applications and approvals.

Key Comments (Detailed feedback in Appendix A)

As Bill 109 received Royal Assent before the commenting period for the ERO posting closed, CH's comments focused on implementation-related recommendations and on the proposed guideline for the CIHA. CH's key recommendation was that initiatives to accelerate housing and community infrastructure and the planning approval process must not be at the expense of provincial and local policies, specifically those related to protecting public health and safety from natural hazards and protecting natural heritage and water resources and systems.

CH recommended further consultation with CAs on any regulations related to limiting plan of subdivision conditions of approval to ensure that any prescribed requirements do not conflict with CA regulatory requirements. CH supported the change to delegate decisions on site plan applications to municipal staff to expedite review and decision-making, prescribing complete application requirements for site plan applications to provide more certainty in the site plan process, and public reporting on development applications, reviews, and approvals to improve transparency in service delivery.

Provincial consultation on growing the size of the Greenbelt (ERO numbers 019-4485, 019-4483, & 019-4803); CH File PPL 046

Background

On March 24, 2022, MMAH posted proposed changes to the *Greenbelt Plan* to add 13 new Urban River Valley (URV) areas to the Greenbelt, a proposed amendment to the Greenbelt Area boundary regulation and a request for ideas for adding more URVs to the Greenbelt.

Key Comments (Detailed feedback in Appendix B)

CH supported the proposed extension of the URV designation to the portions of Fourteen Mile Creek Valley in our watershed not previously designated. The areas within CH's jurisdiction that are currently included within URVs are: Grindstone, Bronte, Sixteen Mile and Fourteen Mile Creeks, as well as Glenorchy Conservation Area. CH also noted its support of adding, expanding, or further protecting any other URVs or Greenbelt Plan (GBP) additions, where proposed and supported by our municipal partners, specifically the proposed additions within CH's jurisdiction.

While most of the land that CH owns is located within the Greenbelt, including the GBP Area and Niagara Escarpment Plan (NEP) Area, staff suggested the inclusion of two small CH owned parcels that appear to have been inadvertently excluded from the GBP or NEP Areas (refer to blue shaded parcels on the enclosed map of Appendix B).

Appendix A - CH Detailed Feedback ERO# 019-5284 & 019-5285

April 29, 2022

Ministry of Municipal Affairs and Housing
777 Bay Street, 23rd Floor, Suite 2304
Toronto, ON M7A 2J3



BY EMAIL (planningconsultation@ontario.ca)

**Re: Planning Act Changes (More Homes for Everyone Act, 2022) & Community Infrastructure and Housing Accelerator – Proposed Guideline
ERO# 019-5284 & ERO# 019-5285
CH File: PPO 066**

Conservation Halton (CH) has reviewed the *Planning Act* changes under Bill 109, More Homes for Everyone Act, 2022 (ERO number 019-5284) and the Community Infrastructure and Housing Accelerator (CIHA) – Proposed Guideline (ERO number 019-5285) and offers key comments below. Additional comments are included in Appendix A. As Bill 109 received Royal Assent on April 14, 2022, CH's comments focus on implementation-related recommendations and on the proposed guideline for the CIHA.

Conservation Authorities (CAs) play a part in the municipal planning approvals process and are committed to working with the province, municipal partners and developers to increase certainty, remove barriers and enable more timely decisions in the delivery of housing. Bill 109 introduces several changes that will have direct implications for the municipal planning approval process and the involvement of CAs. Under Ontario Regulation 686/21, CAs act on behalf of the province under the *Planning Act* to ensure decisions under the Act are consistent with natural hazards policies of the Provincial Policy Statement (PPS) and also provide technical advice on natural heritage and water resource system matters through service agreements with our municipal partners.

The proposed guideline for the CHIA identifies that it will apply to any lands within a municipality's geographic boundaries (except lands within the Greenbelt Area) and allows the Minister to provide an exemption from the PPS, municipal official plans, and other provincial plans that may be applicable. CH recommends that the Province ensure that, at minimum, the CHIA be consistent with the PPS and, more specifically, the CHIA should only be used where it has been demonstrated that there is no risk to public health and safety from natural hazards and natural heritage and water resources and systems are not negatively impacted.

Thank you for the opportunity to provide input on the *Planning Act* changes under Bill 109, More Homes for Everyone Act, 2022, and the CHIA – Proposed Guideline.

Sincerely,



Kellie McCormack
Director, Planning & Regulations
kmccormack@hrca.on.ca

Appendix A: Conservation Halton Detailed Comments

Planning Act Changes (the More Homes for Everyone Act, 2022) ([ERO# 019-5284](#))

Key Changes	Conservation Halton (CH) Comments
Require municipalities to partially refund application fees to applicants who do not receive a decision on their zoning by-law amendment applications within 90 days (or 120 days if submitted concurrently with an official plan amendment application) and on a graduated basis thereafter for applications made on or after January 1, 2023	<ul style="list-style-type: none"> The proposed application fee refunds may have unintended consequences and is unlikely to result in faster delivery of housing. Application fees are critical for covering staff resources and are based on the user pay principle and cost recovery model. If fees are refunded it may force municipalities and conservation authorities (CAs) to issue rushed approvals with holding provisions or long lists of conditions. It may also lead to more denials of applications, creating a larger OLT backlog and leading to slower processing of applications. It is unclear if application refund provisions for site plans and zoning by-law amendments are applicable to external agencies charging plan review fees such as CAs. Under Ontario Regulation 686/21, CH acts on behalf of the Province to ensure decisions under the <i>Planning Act</i> are consistent with natural hazards policies of the PPS and provides technical advice on natural heritage and water resource system matters through service agreements with our municipal partners. Conservation Halton (CH) charges fees based on a cost recovery and user pay model. If costs are not recovered it may impact our ability to deliver this service and provide timely reviews.
Establish a new Community Infrastructure and Housing Accelerator (CIHA) tool for municipal requests to expedite zoning outside of the Greenbelt area (<i>to include Minister-issued guidelines around the scope of use for this tool</i>)	<ul style="list-style-type: none"> The guideline identifies that the applicant would be exempted from provincial policies and plans and municipal official plans – this is particularly concerning from a natural hazard and feature perspective. The CHIA should only be used where it has been demonstrated that there is no risk to public health and safety from natural hazards and that the natural hazard policies of the PPS are met.
Requiring decisions on site plan applications to be delegated to staff for applications made on or after July 1, 2022	<ul style="list-style-type: none"> CH supports the delegation of decisions on site plan applications to staff as a way to expedite review and decision-making.
Establishing regulation-making authority to prescribe complete application requirements for site plan applications	<ul style="list-style-type: none"> CH supports prescribing complete application requirements for site plan applications as a way to provide more certainty in the site plan process for

	the applicant, municipality and commenting agencies.
Requiring municipalities to partially refund site plan application fees to applicants who do not receive a decision within the 60-day timeframe and on a graduated basis thereafter for applications made on or after January 1, 2023	<ul style="list-style-type: none"> Please see comments regarding zoning by-law amendment applications above.
Establishing regulation-making authority to prescribe what cannot be required as a condition of subdivision approval	<ul style="list-style-type: none"> Further consultation with CAs is requested prior to the minister making regulations to limit what cannot be required as a condition of approval for subdivisions. CAs want to ensure that the conditions we typically use to support planning approvals (i.e. requiring CA permits prior to development) are not restricted.
Establishing regulation-making authority to require public reporting on development applications / approvals	<ul style="list-style-type: none"> CH supports transparent service delivery including public reporting on development applications, reviews and approvals. As part of annual and quarterly reporting to the CH Board of Directors, staff tracks and provide statistics on the volume and duration of planning and permit reviews and approvals. These key performance indicators for plan and permit review are used to inform strategic goals and priorities and decision making on resourcing.
General Comments (ERO#019-5284)	
<ul style="list-style-type: none"> As CAs play a part in the overall development review process and delivery of housing, we are committed to working with the province, municipal partners and developers to increase certainty, remove barriers and enable more timely decisions. However, some of the province's proposed <i>Planning Act</i> changes under Schedule 5 of Bill 109 are concerning. Initiatives to accelerate housing and community infrastructure and prescribe conditions of subdivision approval should not be done in isolation from provincial and local policies around protecting public health and safety from natural hazards and supporting natural heritage and water resources and systems. 	

Community Infrastructure and Housing Accelerator Tool ([ERO# 019-5285](#))

Proposed Guideline	Conservation Halton (CH) Comments
Where the tool may be used	If this tool is implemented, it should only be used where it has been demonstrated that there is no risk to public health and safety from natural hazards and that the natural hazard policies of the PPS are met.
Community infrastructure and housing accelerator orders	<ul style="list-style-type: none"> The guideline identifies that the applicant would be exempted from provincial policies and plans and municipal official plans – this is particularly concerning from a natural hazard and feature perspective. Any initiative to accelerate new community infrastructure and housing should adhere to and complement other provincial and local priorities such as protecting natural heritage and water resources and systems and public health and safety from natural and human made hazards.
Types of development	<ul style="list-style-type: none"> The minister may make a CHIA order to expedite approvals for buildings that provide health, long-term care, education, security and safety as well as any type of housing including community housing and affordable housing. It is critical that these types of development containing institutional uses and essential emergency services continue to locate outside hazardous lands, as per PPS policy 3.1.5, to protect vulnerable populations and maintain emergency services during an emergency as a result of flooding and/or erosion.
Subsequent approvals	<ul style="list-style-type: none"> The guideline states that when making a CHIA order, subsection 34.1 (15) of the <i>Planning Act</i> would allow the Minister, upon request of a local municipality, to provide that specific subsequent approvals are not subject to provincial plans, the PPS and municipal official plans. CH recommends that the guideline clarify that CA approvals under the <i>Conservation Authorities Act</i> may still be required.



Appendix B - CH Detailed Feedback ERO# 019-4485, 019-4483, 019-4803

905.336.1158
Fax: 905.336.7014
2596 Britannia Road West
Burlington, Ontario L7P 0G3
conservationhalton.ca

Protecting the Natural
Environment from
Lake to Escarpment

April 22, 2022

Ministry of Municipal Affairs and Housing
777 Bay Street
23rd Floor, Suite 2304 Toronto,
ON M7A 2J3

BY EMAIL: greenbeltconsultation@ontario.ca

**Re: Provincial consultation on growing the size of the Greenbelt
ERO No. 019-4485, 019-4483, & 019-4803
CH File No.: PPL 046**

Conservation Halton (CH) has reviewed the recent Environmental Registry of Ontario postings related to growing the size of the Greenbelt (ERO # 019-4485, 019-4483 & 019-4803). Many of the comments we provided during the last consultation (ERO # 019-3136) remain valid and our key comments are noted below.

The areas within CH's jurisdiction that are currently included within Urban River Valleys (URVs) include: Grindstone, Bronte, Sixteen Mile and Fourteen Mile Creeks, as well as Glenorchy Conservation Area. CH supports the proposed extension of the URV designation to the portions of Fourteen Mile Creek Valley not previously designated.

CH also supports adding, expanding, or further protecting any other URVs or Greenbelt Plan (GBP) additions, where proposed and supported by our municipal partners, specifically the proposed additions within CH's jurisdiction.

Most of the land that CH owns is located within the Greenbelt, including the GBP Area and Niagara Escarpment Plan (NEP) Area. However, as shown on the attached map, there is one particular area in CH's jurisdiction where most of the CH-owned lands are within the GBP or NEP Areas but two small CH owned parcels appear to have been inadvertently excluded (refer to blue shaded parcels on the enclosed map). CH staff recommends that the Province include these lands within the Greenbelt.

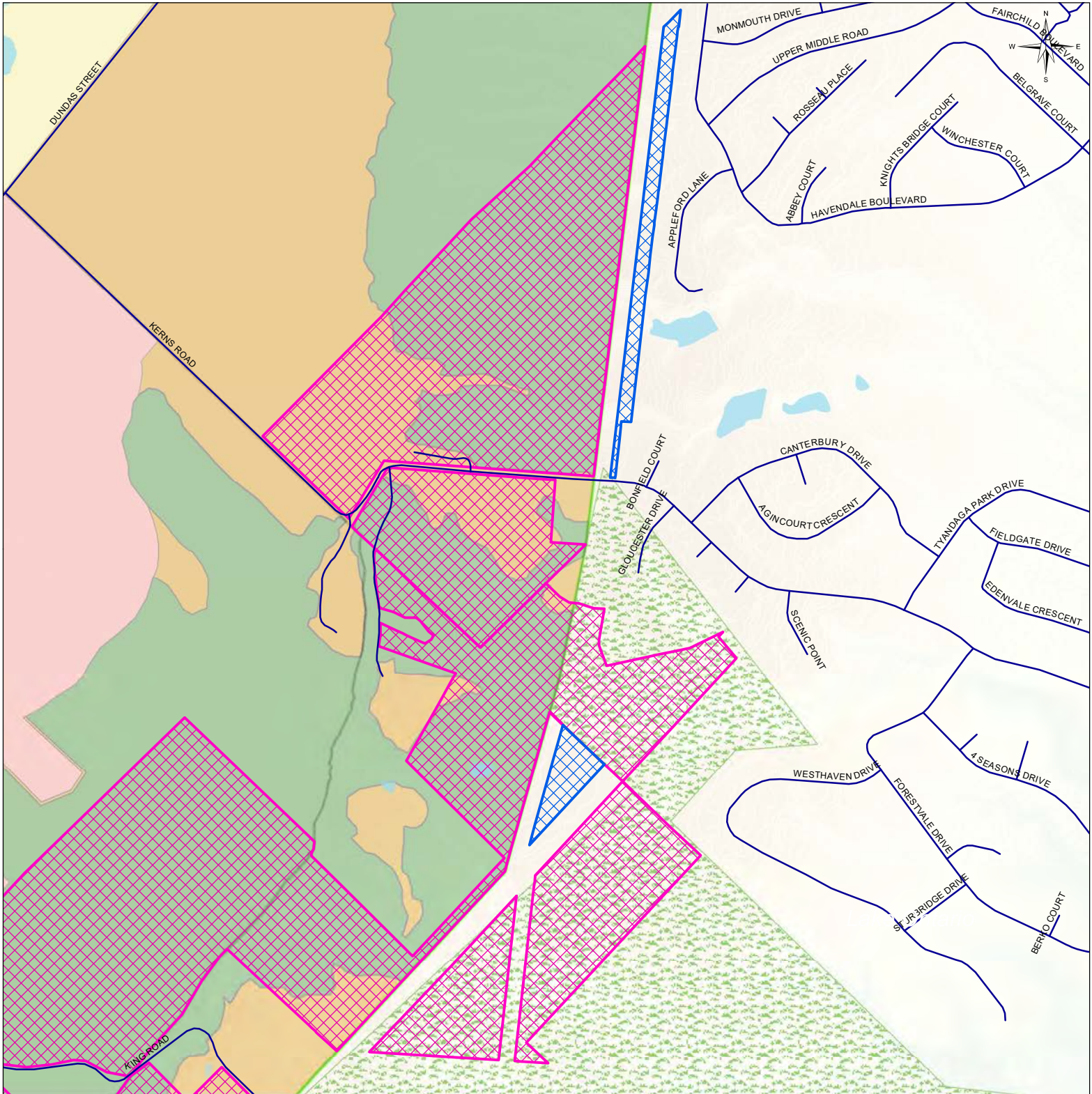
Thank you for providing an opportunity for input on the proposal to grow the Greenbelt.

Yours truly,

Kellie McCormack, MA, MCIP, RPP
Director, Planning & Regulations 905.336.1158 ext. 2228
kmccormack@hrca.on.ca

Encl. 1 – Map showing CH owned lands proposed for inclusion in the Greenbelt Plan Area

Growing the Size of the Greenbelt (Burlington)



Legend

- Roads
- CH Owned Parcels Proposed for Greenbelt Plan Area
- CH Owned Parcels

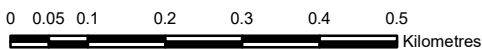
NEC Planning Areas

Designation

- Escarpment Natural Area
- Escarpment Protection Area
- Escarpment Rural Area
- Mineral Resource Extraction Area
- Urban Area

Greenbelt Designation

- Niagara Escarpment Plan
- Protected Countryside
- Urban River Valley



This mapping was produced by Conservation Halton and should be used for information purposes only. Data sources used in its production are not guaranteed for accuracy and all boundaries should be considered approximate. Conservation Halton disclaims all responsibility for any and all mistakes or omissions in the information and further disclaims all liability for loss or damage, which may result from the use of this information. This map is protected by copyright and may not be reproduced without written consent from Conservation Halton. Any copying, redistribution or republication of the content thereof, in whole or in part, is strictly prohibited. Produced by Conservation Halton GIS

TO: Conservation Halton Board of Directors

MEMO #: CHBD 05 22 04

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: June 23, 2022

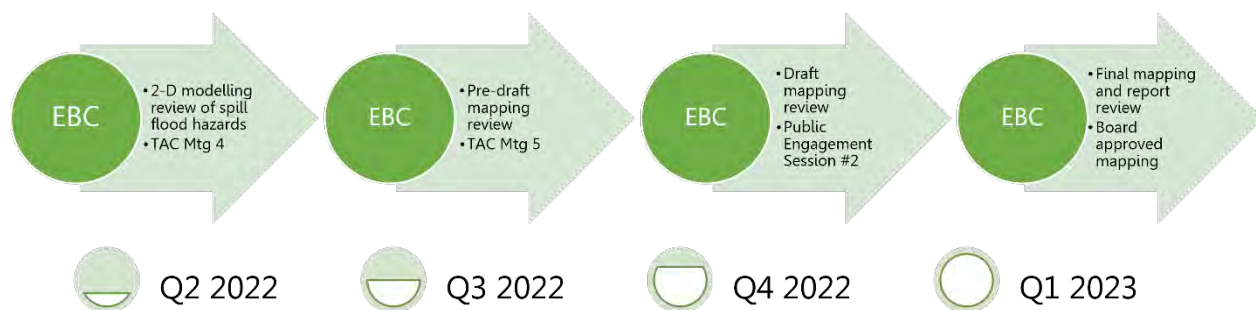
SUBJECT: East Burlington Creeks Flood Hazard Mapping Study (CH File No. ADM 356) and Urban Milton Flood Hazard Mapping Study (CH File No. ADM 347) Update

MEMO

This memo provides a status update on the flood hazard mapping studies for East Burlington Creeks and Urban Milton and anticipated timelines for completion. Updated flood hazard mapping will provide CH, municipal partners, the public and other key stakeholders with greater certainty and transparency in identifying areas that may be susceptible to riverine flooding hazards and the approximate limits of CH's regulated areas.

East Burlington Creeks Flood Hazard Mapping Study

In September 2021, CH's Board of Directors received an update memo (CHBD 06 21 02) on the study status. Since that time, CH staff hosted an online public engagement session in October 2021, convened multiple technical advisory committee (TAC) meetings, and worked with the consultant, John Wood Group PLC ("Wood"), to finalize draft flood hazard modelling and mapping for the study area. The use of two-dimensional (2-D) modelling to characterize flood hazards, including spill flood hazards, increases mapping accuracy but requires additional analysis. The updated timeline for this project is outlined in the figure below.

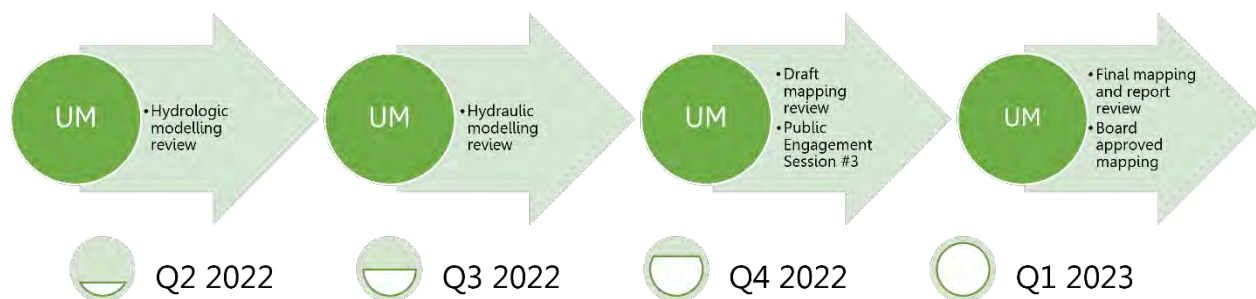


Throughout Q2 and Q3 of 2022, staff will work with Wood and the TAC to advance the flood hazard modelling and mapping to the draft stage when it can be shared for public and stakeholder review. Staff anticipates that Public Engagement Session #2 for East Burlington Creeks will occur in Q4 2022, where draft flood hazard mapping will be presented to the public for feedback.

Staff will review all feedback received and anticipates returning to the Board in Q1 2023 to present the final draft mapping for approval and inclusion in CH's approximate regulation limit (ARL) mapping. The study must be completed by March 31, 2023, as per National Disaster Mitigation Program (NDMP) funding requirements.

Urban Milton Flood Hazard Mapping Study

The Urban Milton Flood Hazard Mapping Study originally commenced in 2019; however, the scope of the study has increased based on discussions with the Town of Milton to evaluate alternate model methodologies and the impact of stormwater management controls. In March 2022, CH's Board of Directors approved an increase of \$40,000 to the study budget to reflect the change in study scope and based on an extension by the NDMP to March 2023 (CHBD 03 22 08). The updated timeline for this project is outlined in the figure below.



Throughout Q2 and Q3 of 2022, staff will continue working with the study consultant, Greck and Associates, Town of Milton, and their peer reviewer (Wood), and the TAC to advance the flood hazard modelling and mapping to the draft stage when it can be shared for public and stakeholder review. Staff anticipate that Public Engagement Session #2 for Urban Milton will occur in Q4 2022, where draft flood hazard mapping will be presented to the public for feedback.

Staff will review all feedback received and anticipates returning to the Board in Q1 2023 to present the final draft mapping for approval and inclusion in CH's approximate regulation limit (ARL) mapping. The study must be completed by March 31, 2023, as per National Disaster Mitigation Program (NDMP) funding requirements.

REPORT TO: Conservation Halton Board of Directors

REPORT NO: CHBD 05 22 05

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: June 23, 2022

SUBJECT: **Permits & Letters of Permission issued under Ontario Regulation 162/06 from January 1 to March 31, 2022**

Recommendation

THAT the Conservation Halton Board of Directors **receives for information the staff report entitled “Permits and Letters of Permission issued under Ontario Regulation 162/06 from January 1 to March 31, 2022”.**

Report

Between January 1 to March 31, 2022, Conservation Halton (CH) staff issued 74 Permits and 20 Letters of Permission (see attached - Appendix C). All approvals were reviewed and approved in accordance with Board approved policies contained in CH's *Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document April 27, 2006, last amended, November 26, 2020.*

Impact on Strategic Priorities

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

Financial Impact

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

Signed & respectfully submitted:



Kellie McCormack
Director, Planning & Regulations

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-
Treasurer

FOR QUESTIONS ON CONTENT:

Kellie McCormack, Director, Planning & Regulations; 905-336-1158 x2228; kmccormack@hrca.on.ca

Charles Priddle, Manager, Regulations Program;
905-336-1158 x2276; cpriddle@hrca.on.ca

Appendix C

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
Burlington						
S/19/B/12	7561 **REVISED**	1086 Lakeshore Road	**REVISED** upgrades to the Burlington Beachway Pavilion including the construction/replacement of an existing wood deck, washroom/changeroom upgrades, barrier free beach access, new beach landing, and dune restoration works along the shoreline of Lake Ontario.	2021-12-15	2022-01-06	Cassandra Connolly
A/21/B/126	8060	290 North Shore Boulevard West	Dwelling re-construction and expansion, and construction of a patio, pool, and accessory building on a property containing the erosion hazards associated with the shoreline of Lake Ontario.	2021-12-16	2022-01-11	Cassandra Connolly
A/22/B/01	8065	2066 Waterbridge Drive	Re-construction and expansion of a deck partially within the 7.5m regulatory allowance from the floodplain of Shoreacres Creek.	2022-01-10	2022-01-19	Cassandra Connolly
A/21/B/101	7944 **REVISED**	1110-1200 Heritage Road (to service 4145 North Service Rd)	**REVISED** Installation of a conduit requiring directional bore, and the installation of vaults requiring excavation, grading, and restoration works within the flooding and erosion hazards associated with Shoreacres Creek.	2022-01-12	2022-01-19	Cassandra Connolly
A/21/B/136	8068	0 Cardinal Avenue (Cardinal WWPS - adj to 300 Cardinal)	Installation of a new concrete pad, power & control panel and wiring/cablings, junction box and replacement of the existing stairs associated with the Cardinal Avenue Wastewater Pumping Station within the stable top of bank associated with West Aldershot Creek. (\$2700B)	2022-01-18	2022-01-24	Ben Davis
A/21/B/99	8073	3503 New Street	Re-construction of a dwelling, site grading, and construction of a patio within the floodplain and 7.5m regulatory allowance of Tuck Creek.	2022-01-16	2022-01-31	Cassandra Connolly
A/20/B/114	8078	3175 No. 1 Sideroad	Replacement of a 910x660mm pipe arch culvert conveying Appleby Creek with a new 900mm concrete pipe with riverstone revetment at the outfall.	2021-10-06	2022-02-03	Cassandra Connolly
A/22/B/08	8080	4611 Erwin Road	Construction of a rear deck and stairs within the 7.5m regulatory allowance from the floodplain of Sheldon Creek.	2022-01-31	2022-02-09	Cassandra Connolly
A/22/B/10	8082	629 Old York Road	Replacement of a culvert and drop structure conveying a tributary of Grindstone Creek.	2022-02-08	2022-02-09	Cassandra Connolly
A/21/B/125	8086	0 Palmer Drive (N/W corner Palmer Dr and Rusholme Cres)	Replacement of 50m of 250mm cast iron watermain with 200mm PVC watermain associated with the Burlington Watermain/Waste-watermain replacement program. The works will occur within the floodplain associated with Roseland Creek.	2022-02-09	2022-02-10	Ben Davis
A/21/B/133	8087	3455 - 3485 Harvester Road	Installation of ± 253.4m of 1-4" duct via directional bore/trench within the flooding and erosion hazards associated with Tuck Creek and across a bridge conveying that watercourse.	2022-02-09	2022-02-11	Cassandra Connolly
A/22/B/19	8088	2082-2090 James Street	Removal of ± 375m ² of contaminated soil, in order to replace and grade to original elevations on lands within 7.5m of the floodplain associated with Rambo Creek.	2022-02-15	2022-02-16	Sean Stewart
A/22/B/18	8092	818 Belhaven Crescent	Partial demolition and re-construction and expansion of a dwelling and deck within the valley of West Aldershot Creek but no further into the valley than existing development	2022-02-14	2022-02-23	Cassandra Connolly
A/22/B/17	8099	0 South Service Road (between Harvester Rd. and Century Dr.)	Reconstruction of the South Service Road and the construction of new concrete sidewalks crossing of two (2) tributaries of Appleby Creek and within the flooding and erosion hazards associated with those watercourses.	2022-02-10	2022-02-24	Cassandra Connolly
A/21/B/131	8097	6554 Glenfern Avenue	Installation of 31 m of a new NPS 1 ¼ " natural gas pipeline within the valley associated with Bronte Creek, for residential servicing.	2022-02-18	2022-02-24	Sean Stewart

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/B/135	8102	Derry Road bridge over Kilbride Creek (adj to 2130 Derry)	Bridge repair/rehabilitation including erosion control installation (rip-rap) at wingwall abutment within the within the floodplain of a tributary of Bronte Creek (Kilbride Creek).	2022-01-24	2022-03-02	Ben Davis
A/21/B/16	7742 **REVISED**	3050 Lakeshore Road	REVISED permit is for the reconstruction of a residence, construction of a back covered porch, stairs, on-grade patio, and pool maintaining applicable setbacks associated with shoreline erosion hazard of Lake Ontario.	2022-02-25	2022-03-03	Cassandra Connolly
A/22/B/22	8112	2324 Fleet Path	Excavation works and construction of a walk-out basement within 7.5 metres of the valley of Upper Rambo Creek, beyond the 3m minimum setback for accessory structures.	2022-03-07	2022-03-16	Cassandra Connolly
A/22/B/23	8113	3236 Steeplechase Drive	Construction of a rear deck and patio partially within the 7.5m regulatory allowance from the meander belt erosion hazard of Appleby Creek.	2022-03-09	2022-03-16	Cassandra Connolly
A/20/B/145	7705 **REVISED**	60 Park Avenue East	**REVISED** - Installation of a new 250mm diameter PVC outlet outfall and erosion protection measures in the valley of West Aldershot Creek	2022-03-11	2022-03-21	Cassandra Connolly
A/21/B/88	8114	844 Glenwood Drive	Re-construction and expansion of a dwelling and construction of accessory structures within the 7.5m regulatory allowance of West Aldershot Creek.	2022-03-04	2022-03-21	Cassandra Connolly
A/22/B/25	8116	820 Lee Court	Re-construction of a rear deck and construction of a pavilion partially within the 7.5m regulatory allowance from the erosion hazard of West Aldershot Creek, maintaining a minimum 3m setback from the valley.	2022-03-11	2022-03-23	Cassandra Connolly

Halton Hills						
A/21/HH/35	8052	10740 Fifteenth Sideroad	Excavation of a new offline pond for agricultural practices in an existing agricultural field within the valley of Sixteen Mile Creek..	2021-12-17	2022-01-13	Justin McArthur
A/21/HH/36	8069	10609 Fourth Line	Construction of additions to an existing dwelling and septic replacement	2021-12-06	2022-01-24	Colleen Bain
A/21/HH/27	7992 **REVISED**	10757 Fifth Line	Revised - Installation of approximately 21.0 metres of NPS 1 inch pipeline and 140.0 metres of NPS 1 ¼ inch pipeline within the floodplain associated with a tributary of Sixteen Mile Creek to service a residence.	2022-02-25	2022-02-25	Justin McArthur
A/22/HH/01	Letter of Permission	8583 Eighth Line	Construction of a two-storey dwelling located between 30 and 120 metres of a wetland greater than 2 hectares in size.	2022-01-21	2022-01-24	Justin McArthur
A/22/HH/03	Letter of Permission	6153 Twenty Second Sideroad	Construction of an inground swimming pool between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2022-02-04	2022-02-04	Justin McArthur
A/22/HH/02	Letter of Permission	0 Regional 25 Road (b/w 12516 & 12540)	Construction of a two-storey dwelling and attached garage located between 15 and 30 metres of a wetland less than 2 hectares in size and between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2022-02-04	2022-02-14	Justin McArthur
A/22/HH/04	Letter of Permission	0 Third Line (adjacent to 10735)	Emergency replacement of a collapsed culvert which conveys a tributary of Sixteen Mile Creek.	2022-03-14	2022-03-14	Justin McArthur

Hamilton						
A/22/H/05	8061	1009 Tenth Concession Road East	Replacement of a septic system located within a Provincially Significant Wetland (PSW).	2022-01-05	2022-01-12	Cassandra Connolly
A/21/H/45	8064	Valley Inn Bridge	Replacement/reconstruction of a pedestrian bridge which crosses/spans Grindstone Creek and is located within Provincially Significant Wetlands.	2022-01-10	2022-01-18	Cassandra Connolly

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/22/H/06	8074	466 Eleventh Concession Road East	Realignment/extension of a driveway within 15m of the valley of Bronte Creek and 120m of a Provincially Significant Wetland, associated with the construction of a new dwelling and ancillary structures outside of the regulated area.	2022-01-18	2022-02-02	Cassandra Connolly
A/22/H/01	8094	51 Mountsberg Road	Replacement and relocation of a septic system located within a Provincially Significant Wetland (PSW).	2022-01-05	2022-02-23	Cassandra Connolly
A/22/H/01	8094	51 Mountsberg Road	Replacement and relocation of a septic system located within a Provincially Significant Wetland (PSW).	2022-02-18	2022-02-23	Cassandra Connolly
A/21/H/34	8096	0 Parkside Drive (b/w Churchill & Boulding)	Utility pole relocation and installation, and extension of underground infrastructure to connect to an existing grid system, burying overhead crossings within the regulated area associated with Grindstone Creek.	2022-02-01	2022-02-23	Cassandra Connolly
A/21/H/60	8095	532-596 Parkside Drive	Municipal ditch maintenance requiring grading and excavation and the replacement of six municipal road culverts within 120m of a wetland larger than 2 hectares and a Provincially Significant Wetland (PSW).	2022-02-23	2022-02-24	Sean Stewart
A/22/H/09	8111	0 Parkside Drive	Replacement/relocation of ±147m of NPS 6" main pipeline via directional drill within the flooding and erosion hazards associated with Grindstone Creek.	2022-02-11	2022-03-16	Cassandra Connolly
A/22/H/08	8115	17 William Street	Construction of additions and roof reconstruction to a dwelling within 30m of a wetland greater than 2 hectares in size.	2022-03-09	2022-03-22	Cassandra Connolly
A/21/H/59	Letter of Permission	940 Beeforth	Reconstruction and expansion of a residence dwelling, requiring the installation of a new septic system and relocation of a well, within 30-120 meters of the Flamborough Centre Wetland Complex, a Provincially Significant Wetland (PSW).	2022-01-04	2022-01-10	Charles Priddle
A/21/H/50	Letter of Permission **REVSIED**	234 Fourteenth Concession Road East	Revised: Demolition and re-construction with expansion of a dwelling and the replacement/relocation of a septic system between 30 metres and 120 meters of a Provincially Significant Wetland (PSW).	2022-01-06	2022-01-19	Cassandra Connolly
A/22/H/07	Letter of Permission	20 Wildberry Way	Construction of a covered and patio with kitchen within 30 and 120 meters of a Provincially Significant Wetland (PSW).	2022-02-04	2022-02-15	Cassandra Connolly
A/22/H/10	Letter of Permission	182 Campbellville Road	Re-construction of a dwelling, driveway reconfiguration, septic system replacement, pool, and associated grading within 30 and 120 meters of a Provincially Significant Wetland (PSW).	2022-02-18	2022-02-28	Cassandra Connolly
A/22/H/12	Letter of Permission	5 Glenron Road	Demolition of existing development on site, and the construction of a new dwelling, detached accessory structure, septic replacement, inground pool and patios, and landscaping/hardscaping within 30 and 120 meters of a Provincially Significant Wetland (PSW).	2022-03-04	2022-03-16	Cassandra Connolly
A/22/H/14	Letter of Permission	6 Creekview Court	Construction of a swimming pool, patio, cabana, pergola, and armourstone hardscape wall within 30 and 120 meters of a wetland greater than 2ha in size.	2022-03-09	2022-03-16	Cassandra Connolly
A/22/H/11	Letter of Permission	1153 Regional 987 Road	Construction of a covered deck and a detached garage within 30 and 120 meters of a Provincially Significant Wetland (PSW).	2022-03-10	2022-03-18	Cassandra Connolly

Milton						
A/21/M/93	8057	140 Livingston Road (Pond 8)	Maintenance to an existing SWM pond outlet including grading and replacement of rip rap within the floodplain associated with a tributary of Sixteen Mile Creek.	2021-12-22	2022-01-10	Justin McArthur

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/21/M/94	8058	1475 Main Street East (Pond 11)	Maintenance to an existing SWM pond outlet including grading and replacement of rip rap within the floodplain associated with a tributary of Sixteen Mile Creek	2021-12-22	2022-01-10	Justin McArthur
A/21/M/95	8059	1060 Tock Close (Pond 34)	Maintenance to an existing SWM pond outlet including grading and replacement of rip rap within the floodplain associated with a tributary of Sixteen Mile Creek.	2021-12-22	2022-01-10	Justin McArthur
A/21/M/72	8063	5 Bayview Lexus (S5b)	Construction of a 750-millimeter diameter storm sewer and concrete headwall within the floodplain associated with a tributary of Sixteen Mile Creek.	2021-12-10	2022-01-20	Justin McArthur
A/21/M/63	8067	6458 Fifth Line (Oxford - Pond 2)	Construction of a SWM pond outfall within the floodplain associated with a tributary of Sixteen Mile Creek required as part of the approved Oxford Derry Green plan of subdivision. 6458 Fifth Line - Oxford (Derry Green) Property.	2021-09-14	2022-01-26	Justin McArthur
A/22/M/05	8076	2140 Country Lane Court	Addition to a dwelling that is located between 15 and 30 metres of a Provincially Significant Wetland (PSW).	2022-01-28	2022-02-03	Justin McArthur
A/20/M/70	8089	0 Fifth Line - Oxford Property (Derry Green)	Construction of the ultimate channel realignment of a tributary of Sixteen Mile Creek (South Tributary BP-3-B/BP-4-C).	2021-12-13	2022-02-17	Justin McArthur
A/22/M/10	8098	46 Court Street South	Construction of a main floor porch within 15 metres of the regulated floodplain associated with Sixteen Mile Creek.	2022-02-17	2022-02-24	Matthew Lauzon
A/22/M/08	8090	2585 Lower Base Line	Installation of a NPS 4-inch pipeline within the floodplain associated with a tributary of Sixteen Mile Creek to service a future business.	2022-02-18	2022-02-24	Justin McArthur
A/21/M/83	8100	Tremaine Road @ Sixteen Mile Creek	Bridge repair/rehabilitation including abutment and retaining wall repair within the within the floodplain of Sixteen Mile Creek.	2022-01-24	2022-02-25	Ben Davis
A/21/M/82	8103	Derry Road bridge over Limestone Creek (adj to 3333 Derry)	Bridge repair/rehabilitation including abutment and wildlife passage fencing installation within the within the floodplain of a tributary of Bronte Creek (Limestone Creek).	2022-02-23	2022-03-02	Ben Davis
A/22/M/06	8104	7095 Fifth Line (formerly 11319 Derry Road)	Realignment of a tributary of Sixteen Mile Creek and drainage ditch grading within the floodplain, as part of an approved Plan of Subdivision.	2022-01-31	2022-03-07	Justin McArthur
A/21/M/64	8105	6458 Fifth Line	Construction of a SWM pond outfall within the floodplain associated with a tributary of Sixteen Mile Creek required as part of an approved plan of subdivision.	2021-09-14	2022-03-07	Justin McArthur
A/21/M/62	8106	0 Second Line (adj. 10418 Second Line)	Replacement of a concrete box culvert which conveys a tributary of Bronte Creek.	2022-03-11	2022-03-11	Justin McArthur
A/22/M/02	8110	11319 Derry Road	Construction of a stormwater management pond outfall within the floodplain associated with a tributary of Sixteen Mile Creek.	2022-03-14	2022-03-17	Justin McArthur
A/22/M/15	8118	11100 First Nassagaweya Line	Installation of an NPS 1 ¼-inch natural gas pipeline within the floodplain associated with a tributary of Bronte Creek.	2022-03-21	2022-03-24	Justin McArthur
A/18/M/23	8120	McGeachie & Harrop	Replacement of Watermain and Wastewater main along McGeachie Drive and Harrop Drive within the within the floodplain of Sixteen Mile Creek. (PR 2907)	2022-03-24	2022-03-29	Ben Davis
A/22/M/04	Letter of Permission	10661 First Nassagaweya Line	Construction of a 540 square foot covered cabana located between 15 and 30 metres of a wetland less than 2 hectares in size.	2022-01-24	2022-01-24	Justin McArthur
A/22/M/03	Letter of Permission	172 Jessie Avenue	Installation of new septic tank located between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2022-01-17	2022-02-01	Matthew Lauzon
A/22/M/07	Letter of Permission	11500 Fifth Nassagaweya Line	Construction of a detached garage and studio between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2022-02-02	2022-02-03	Justin McArthur
A/22/M/09	Letter of Permission	6625 Sixth Line	Installation of a septic system between 30 and 120 metres of a wetland greater than 2 hectares in size.	2022-02-25	2022-02-25	Justin McArthur

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/22/M/12	Letter of Permission	12297 Second Line	Construction of a 1 storey addition to the existing dwelling, and a septic tank between 15 and 30 metres of a wetland less than 2 hectares in size.	2022-02-25	2022-02-25	Justin McArthur
A/22/M/11	Letter of Permission	10305 First Nassagaweya Line	Construction of a 20ft x 40ft pavilion between 30 and 120 metres of Provincially Significant Wetland (PSW).	2022-03-10	2022-03-10	Justin McArthur
A/21/M/67	Letter of Permission	4319 Henderson Road	Reconstruction of a dwelling damaged by fire, and installation of a new septic system between 30 and 120 metres of a Provincially Significant Wetland (PSW).	2022-03-24	2022-03-28	Justin McArthur

Mississauga

No Permits or Letters of Permission issued during this time

Oakville

A/21/O/111	8053	97 Forsythe Street	Re-construction of a deck and retaining wall within the flooding and erosion hazards associated with Sixteen Mile Creek.	2021-12-10	2022-01-04	Charles Priddle
A/21/O/109	8054	444 Drummond Road	Construction of an inground swimming pool within the 7.5m regulated allowance associated with the floodplain of Lower Wedgewood Creek.	2022-01-04	2022-01-05	Megan Winiecki
A/22/O/02	8056	531 Esplanade	Construction of a swimming pool within the erosion hazard associated with the shoreline of Lake Ontario.	2022-01-05	2022-01-05	Megan Winiecki
A/21/O/68	8062	26 Holyrood Avenue	New shoreline protection works consisting of an armour stone revetment and a stub groyne adjacent to and within the Lake Ontario Shoreline.	2021-11-05	2022-01-13	Colleen Bain
A/21/O/88	8066	1276 Hillview Crescent	Removal of a pool and regrading within 7.5 metres of a valley associated with the Upper Morrison Creek.	2022-01-17	2022-01-24	Charles Priddle
A/22/O/07	8070	2552 Rivers Bend Lane	Installation of a private sanitary forcemain required to connect a residence to municipal services within 15 metres of the valley associated with Bronte Creek	2022-01-25	2022-01-25	Megan Winiecki
A/21/O/112	8042	1134 Truman Avenue	Reconstruction of a 2-storey residence within 7.5 metres of the valley associated with the Morrison Wedgwood Diversion Channel.	2022-01-13	2022-01-27	Megan Winiecki
A/21/O/34	8072	178 Morrison Road	Watercourse alteration with grading and some creek bank hardening to address significant erosion at a municipal property that is traversed by Lower Morrison Creek.	2022-01-25	2022-01-28	Charles Priddle
A/22/O/06	8071	1503 Pembroke Drive	Construction of a wooden deck and associated interlocking patio between 3 metres and 7.5 metres of the valley associated with Munn's Creek.	2022-01-31	2022-01-31	Megan Winiecki
A/21/O/07	8007	18 West Street	Reconstruction of a single-family dwelling and landscaping within the erosion hazard limit associated with Lake Ontario, with all habitable space confirmed to be located beyond the Engineered Development Setback.	2022-02-01	2022-02-03	Colleen Bain
A/22/O/09	8079	1509 Pembroke Drive	Construction of an accessory covered patio located between 3m and 7.5m of the valley associated with Munns Creek.	2022-02-04	2022-02-08	Megan Winiecki
A/21/O/94	8085	1 Ennisclare Drive East	Alteration and enhancement of existing shoreline protection works including the placement of a berm revetment in front of the existing wall, raising the wall and walkway, and rehabilitating the pier, within the shoreline of Lake Ontario.	2021-10-29	2022-02-09	Colleen Bain
A/21/O/110	8083	16 Arkendo Drive	Construction of a second storey addition and a pool within the erosion hazard associated with the shoreline of Lake Ontario but maintaining minimum setback requirements.	2021-12-17	2022-02-09	Megan Winiecki

CH File No.	Permit No.	Address	Proposed Works	Complete	Issued	CH Staff Member
A/22/O/11	8084	12 Raymar Place	Construction of a covered patio within the erosion hazard associated with the shoreline of Lake Ontario but maintaining minimum setback requirements.	2022-02-07	2022-02-09	Megan Winiecki
A/22/O/13	8081	0 South Service Road (@ Equestrian Crt)	Directional bore and installation of Cogeco conduits over existing culverts which convey Taplow Creek and Fourteen Mile Creek.	2022-02-09	2022-02-09	Megan Winiecki
A/21/O/94	8085	1 Ennisclare Drive East	Alteration and enhancement of existing shoreline protection works including the placement of a berm revetment in front of the existing wall, raising the wall and walkway, and rehabilitating the pier, within the shoreline of Lake Ontario.	2021-12-21	2022-02-09	Colleen Bain
A/22/O/01	8055 **REVISED**	74 Onslow Court	**REVISED**The construction of an accessory deck within 7.5m of the valley associated with Munns Creek.	2022-02-23	2022-03-01	Megan Winiecki
A/22/O/15	8101	1382 Forest Glade Road	Reconstruction of dwelling including second-storey addition and main floor expansion with attached garage within 7.5m of the valley associated with Morrison Creek.	2022-03-03	2022-03-03	Megan Winiecki
A/21/O/114	8091	261 Glen Oak Drive	Re-construction, expansion, and relocation of a dwelling within 7.5 metres of the floodplain associated with McCraney Creek.	2022-03-04	2022-03-07	Megan Winiecki
A/22/O/18	8108	1183 Rushbrooke Drive	Construction of a deck within 7.5m of the erosion hazard associated with a valley associated with McCraney Creek.	2022-03-10	2022-03-10	Megan Winiecki
A/21/O/113	8107	3304 Lakeshore Road West	Improvements to shoreline protection involving construction of a stacked armour stone wall in front of the existing protection on the shoreline of Lake Ontario.	2022-03-14	2022-03-14	Megan Winiecki
A/22/O/20	8119	2055-2065 Cornwall Road	Re-development involving construction of two commercial buildings within the flood hazard (spill) associated with Joshua's Creek.	2022-03-16	2022-03-24	Colleen Bain
A/22/O/24	8121	1177 Summerlea Street	Construction of a replacement dwelling within 7.5 metres of the floodplain associated with Fourteen Mile Creek.	2022-03-29	2022-03-30	Colleen Bain
Puslinch						
A/22/P/01	Letter of Permission	7743 Leslie Road West	Construction of an accessory building between 30 metres and 120 metres of a Provincially Significant Wetland (PSW).	2022-01-11	2022-01-13	Charles Priddle
A/22/P/02	Letter of Permission	4052 Milbourough Line	Demolition an accessory structure and construction of a 70' by 32' accessory building between 30 metres and 120 metres of a Provincially Significant Wetland (PSW).	2022-03-02	2022-03-02	Charles Priddle

TO: Conservation Halton Board of Directors

MEMO #: CHBD 05 22 06

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

DATE: June 23, 2022

SUBJECT: Conservation Halton comments on *Recovery Strategy for the Chimney Swift (Chaetura pelagica) in Canada*

MEMO

On March 17, 2022, Environment and Climate Change Canada posted the *Recovery Strategy for the Chimney Swift (Chaetura pelagica) in Canada* to the Species at Risk (SAR) public registry for a 90-day public comment period. Conservation Halton (CH) also received a letter with proposed critical habitat for the species located on our land. The Administration Office Britannia Road is a known Chimney Swift site.

The Chimney Swift is protected under the federal *Species at Risk Act*, the provincial *Endangered Species Act*, and the federal *Migratory Birds Convention Act*. Often described as “flying cigars”, these small grey birds superficially resemble swallows and share the same foraging habit of catching flying insects in mid-air. Though Chimney Swifts once used natural tree cavities, all currently known nesting and roosting sites in Canada are now located in human-made structures. Staff participated in surveys from 2011-2013 to help identify Chimney Swift critical habitat throughout the watershed.

As a landowner, CH is responsible for managing their habitat in a manner that does not negatively affect the species. Failing to do so could result in charges under the *Species at Risk Act* and other legislation. Activities likely to result in the destruction of critical habitat include:

- Elimination or obstruction of access to the chimney,
- Work done on the chimney during the breeding season (late May-mid August),
- Significantly increasing the chimney’s temperature during the breeding season (e.g. by using a heating appliance), or
- Modification of the chimney to the extent that it becomes unsuitable for the species, such as installing a metal liner.

If for public health or safety reasons it becomes necessary to alter or remove the chimney, a permit would be required before work could proceed.

The Recovery Strategy includes the following sections:

- Species Information
- Threats
- Population and Distribution Objectives
- Broad Strategies and Approaches for Meeting Recovery Objectives
- Critical Habitat
- Measuring Progress

CH's comments are supportive of the Recovery Strategy and of the identification of critical habitat at the Administration Office. Through the commenting process, staff offered several technical comments based on their knowledge of the species and the watershed (Appendix D attached).



905.336.1158
Fax: 905.336.7014
2596 Britannia Road West
Burlington, Ontario L7P 0G3
conservationhalton.ca

Protecting the Natural
Environment from
Lake to Escarpment

June 1, 2022

Recovery Planning
Environment and Climate Change Canada
15th Floor, Place Vincent Massey
351 St. Joseph Boulevard
Gatineau, QC
K1A 0H3

BY EMAIL (ec.planificationduretablissement-recoveryplanning.ec@canada.ca)

To Whom it May Concern:

Re: Recovery Strategy for the Chimney Swift (*Chaetura pelagica*) in Canada

Conservation Halton has reviewed the above-referenced recovery strategy and offers the comments below:

Section 3.2, Species Population and Distribution, Lines 387-390

“Based on data from the monitoring program, it is estimated that Ontario and Quebec likely have the highest number of Chimney Swifts, followed by New Brunswick, Nova Scotia, and Manitoba (Canadian Wildlife Service, Bird Studies Canada and Manitoba Chimney Swift Initiative, unpublished data 2018)”

- Are the higher numbers in Ontario and Quebec likely due to human population in those provinces and therefore higher numbers of volunteers participating in monitoring and covering more chimneys?

Section 3.3, Needs of the Chimney Swift, Lines 431-432

“It spends most of the day in flight feeding on flying insects wherever it can find them. This includes urban areas, rural and agricultural areas, aquatic environments and forests.”

- Suggest including wetlands (marshes) in list

Section 4.1, Threat Assessment, Table 2, Threat 5.3

Suggest Logging and Wood Harvesting impact be “Not Calculated” as per the explanation of impact ratings given below chart rather than Low, given that natural nesting cavities were in hollow trees which are now rare on the landscape due to forestry practices as described. At some point in the past this impact was very high. And the effects of logging on the wintering grounds is not available but it is acknowledged in the text that they use hollow trees on their wintering grounds.

“Not Calculated - impact was not calculated when the threat does not occur within the assessment period (e.g., timing is insignificant/negligible or low because the threat existed only in the past)”

“Before the European colonization of North America, the sites used by Chimney Swifts for nesting and roosting consisted mainly of hollow trees greater than 50 cm in diameter at breast height (Gauthier et al. 2007; Steeves et al. 2014; Zanchetta et al. 2014). Historical and present-day forest clearing in a large part of eastern North America has considerably reduced the number of trees of suitable size for this species (Gauthier et al. 2007). In addition, current logging practices, which favour a relatively short harvesting cycle to meet market demand, translate to a smaller percentage of trees that are old enough or large enough to serve as Chimney Swift nesting or roosting sites.”

“Since the Chimney Swift uses hollow trees in its South American wintering range, the species is likely threatened by the intensive logging taking place in the Amazon forest (COSEWIC 2018). No information is available on the effects of logging on the wintering grounds.”

Section 4.2.2, Threats with a negligible or unknown impact, Line 709 IUCN Threat 11. Climate change and severe weather

Could an increase in extreme heat days also affect chimney suitability and nesting success? As referenced earlier in strategy Section 3.3 Lines 461-462 (le Roux et al. 2019).

“This latter study found that Chimney Swifts preferred chimneys that buffered the nesting site from excess ambient heat.”

Section 6.3, Narrative to Support the Recovery Planning Table, Lines 1040-1042

Suggest including home and business owners, religious communities (many chimneys are in old churches), as stakeholders.

Section 7.1.1, Habitat occupancy, Lines 1162-1164

“The habitat occupancy criteria in natural areas will be developed once data have been obtained on the natural environment from the activities set out in the schedule of studies.”

- Suggest at a minimum this should be the same as for human-made structures

Appendix D, Critical Habitat for the Chimney Swift, Line 1632 Table D2

17TNH99 Residential 43.33146 -79.80511 Blairholm Ave. Burlington On church Non-federal

- Building type should be Religious not Residential

General Comments:

Conservation Halton is supportive of the proposed recovery measures and critical habitat identified for Chimney Swift within our watershed. We look forward to working further with Environment and Climate Change Canada on the implementation of the strategy. Should you have any questions or wish to discuss our comments, please contact Andrea Dunn, Coordinator, Monitoring Ecology at adunn@hrca.on.ca.

Sincerely,



Barbara J. Veale, PhD, RPP, MCIP
Senior Director, Watershed Strategies & Climate Change

TO: Conservation Halton Board of Directors
MEMO #: CHBD 05 22 07
FROM: Barbara J. Veale, Senior Director, Watershed Strategies & Climate Change
DATE: June 23, 2022
SUBJECT: Limehouse Pond Bypass Restoration Project

MEMO

The Limehouse Pond Bypass is a restoration project being undertaken in the Sixteen Mile Creek watershed. There is a large online pond that results in significant warming of the creek as it flows through the pond. This has negative consequences for aquatic ecosystem health because warm water does not hold as much oxygen as colder water. Consequently, warm water limits the presence of sensitive coldwater species like Brook Trout and is more likely to promote growth of undesirable algae. The goal of this project is to improve water and habitat quality by reducing the warming influence of the pond on the downstream. Staff will use bioengineering to isolate the pond from the creek, applying nature-based solutions (in this case, upcycled Christmas trees) as a solution to an engineering problem (see attachment – Appendix E).

There are several notable takeaways from this project:

1. The Limehouse Pond Bypass is one example of how CH uses monitoring data to inform science-based decision making. It was identified as a high priority for restoration because data showed a clear, consistent, and significant influence of the pond on downstream water temperature. The strength of the monitoring data collected by CH was also a key factor in convincing the landowners to proceed with the project.
2. This project provides an excellent illustration of the importance of ongoing relationship-building, mutual respect and finding common ground when working with private landowners on a voluntary basis. Nine years passed from the time the initial contact was made to the present time where the landowners are now ready to take the project on.
3. The Limehouse Pond Bypass is an example of the types of projects funded by Conservation Halton's Water Quality and Habitat Improvement Program (WQHIP), which includes cost-sharing with the landowner. Additional information on the WQHIP is available in CHBD 05 22 11.

LOCATION

Headwater tributary of Sixteen Mile Creek, Limehouse, Ontario

ISSUE

Creek flows through a large online pond, resulting in 6°C temperature increase at the outflow.

GOAL

Reduce thermal impacts of online pond to improve water and habitat quality in the headwaters of Sixteen Mile Creek.

MONITORING

Two temperature loggers installed in 2021:

- SXM-95 Upstream of pond: Cold-Cool
- SXM-93 Downstream of Pond: Cool-Warm



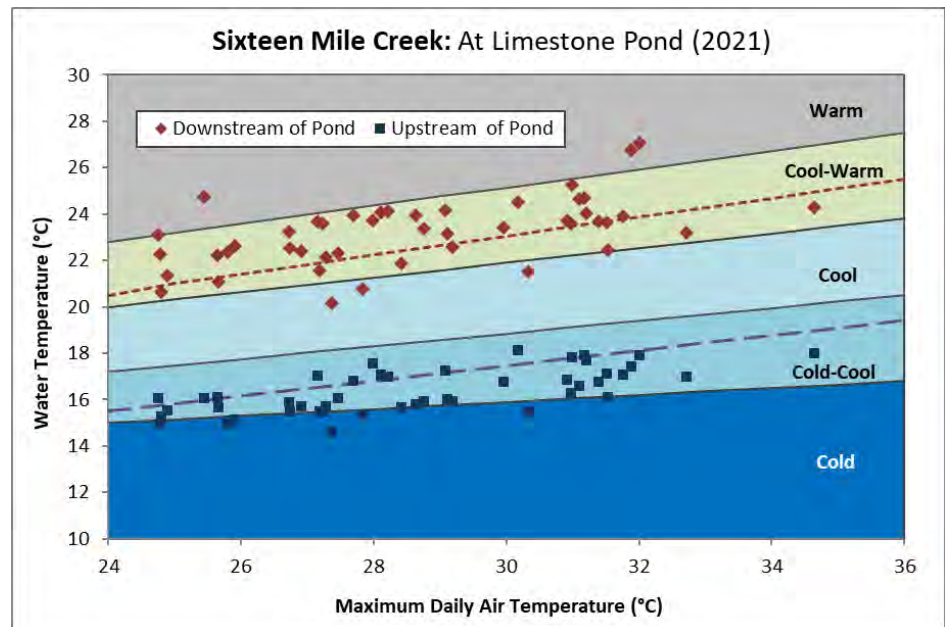
Limehouse Pond Bypass

Using monitoring data to inform restoration projects



On a private property in Limehouse, Ontario, a headwater tributary of Sixteen Mile Creek flows under a farm laneway, into a large pond, and continues through a pond outflow. In 2012, the landowners connected with Conservation Halton (CH) to learn about stewardship initiatives they could undertake on their property. Staff noted the sizable online pond on the property and alerted the landowners to the potential impacts downstream.

That summer, CH staff installed two data loggers to track the water temperature just upstream and downstream of the pond. The results showed a staggering 6 degree difference: on the hottest summer days, the creek entering pond is Cold-Cool classification at around 16°C, and downstream of the pond the creek is measuring Cool-Warm, about 22°C. This is the greatest temperature impact from an online pond that CH has yet observed.



Staff suggested the landowners disconnect the pond from the creek to reduce its thermal impacts and improve water and habitat quality. At the time, the landowners were not ready to undertake this project, but when they reached out again in 2021, staff were keen to see if the temperature data would be repeated: the 2021 data showed the same remarkable 6 degree increase due to the pond...

Limehouse Pond Bypass

PLANS FOR RESTORATION

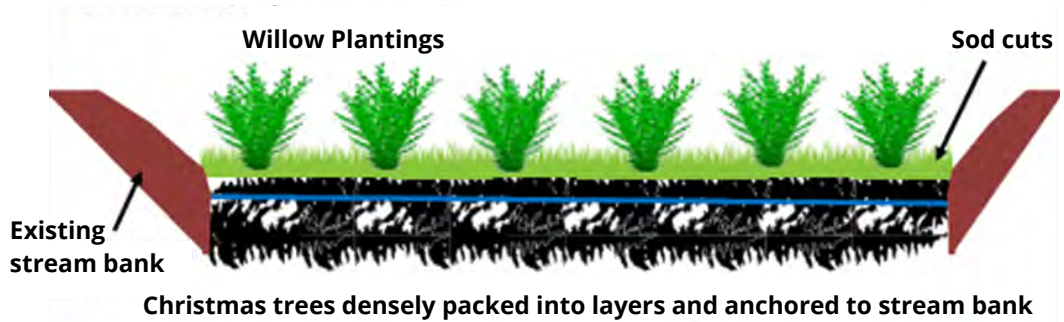
Thanks to the strong and clear data collected through ecological monitoring, the landowners were convinced to move forward with a plan to disconnect the pond from the creek. The data logger results also helped justify this location as a priority restoration site for Conservation Halton within the watershed.

ONLINE POND

Pond that is fed directly by a creek, notable for their negative impact on fish habitat and water quality. The warming sun increases the water temperatures over a greater surface area and there is less water movement than through the creek.

BIOENGINEERING

Applying nature-based solutions to engineering problems, such as controlling erosion with plant roots.



To isolate the pond from the creek, a bioengineered berm will be created using upcycled Christmas trees. These will be anchored in place and the top of the berm will be covered with native sod cuts sourced from the property and planted with willows. The existing culvert is degraded and undersized, so it will be replaced and will direct the creek away from the pond. More Christmas trees will be installed to help prevent bank erosion at the outlet of the culvert. The landowner secured funding through Conservation Halton's Water Quality and Habitat Improvement Program and construction will begin in the summer of 2022.



By conducting ecological monitoring, Conservation Halton can better understand how to best move forward with restoration projects. It helps to justify the significant environmental impacts of projects such as this. With quantifiable data, it is easier to communicate the importance of these efforts with landowners and demonstrate the tangible impacts they can have. Monitoring data is a critical tool to help prioritize where investments should be made as we work to protect and restore our creeks.

TO: Conservation Halton Board of Directors

MEMO #: CHBD 05 22 08

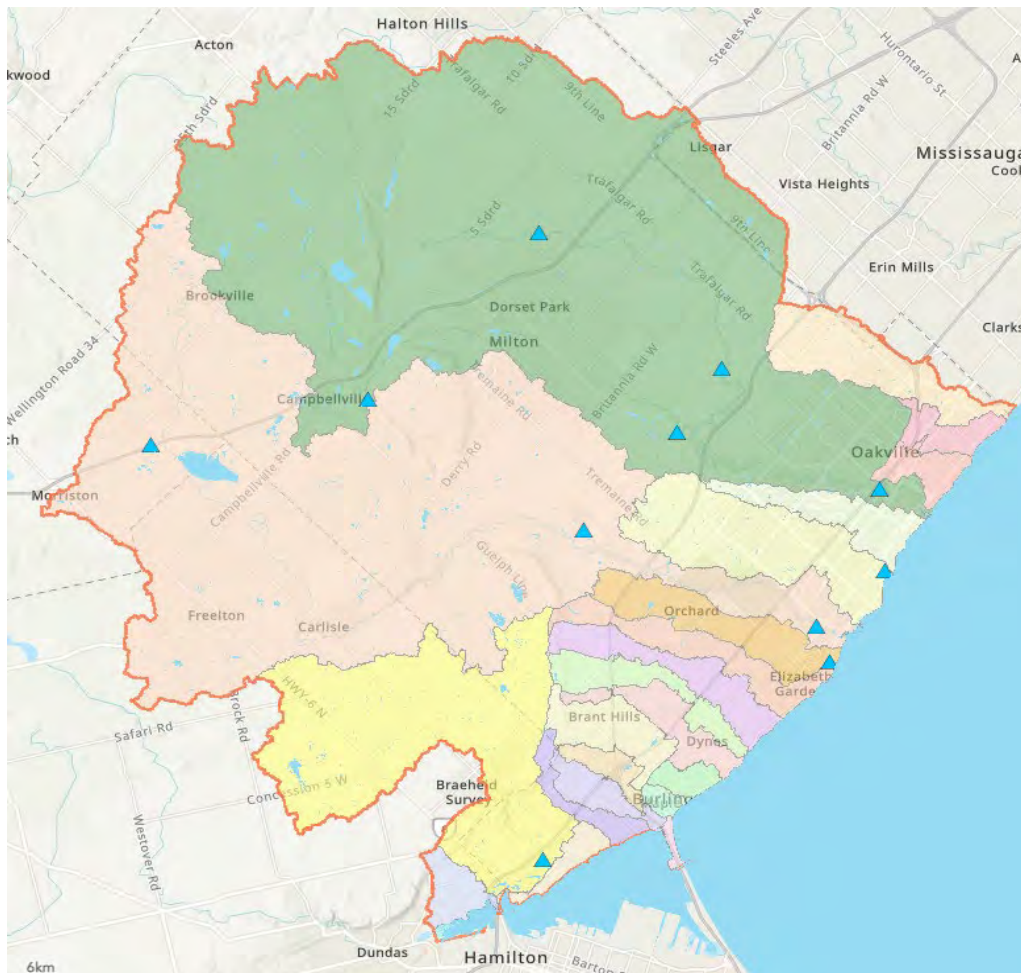
FROM: Barbara J. Veale, Senior Director, Watershed Strategies & Climate Change

DATE: June 23, 2022

SUBJECT: Expansion of water quality monitoring program

MEMO

Robust water quality information is critical to effective watershed management, including development of the Watershed-based Resource Management Strategy that is now required under the Conservation Authorities Act. Conservation Halton (CH) receives provincial funding to support laboratory analysis of eleven (11) surface water quality sampling stations under the mandated Provincial Water Quality Monitoring Network (PWQMN), as shown in the figure below.



In addition to the chemical surface water quality monitoring undertaken through the PWQMN, CH also collects a significant amount of data on water temperature, benthic invertebrates (as water quality indicators) and limited physical parameters (dissolved oxygen, pH, conductivity and turbidity, using portable probes). Water quantity data is also gathered to complement water quality data, for example, by combining flow and contaminant concentrations to calculate loadings (i.e. the physical amount in kg/year) deposited to Lake Ontario as the receiving waterbody.

In 2021, CH joined the Great Lakes DataStream (<https://greatlakesdatastream.ca/>), an open-access portal for sharing water quality information. This portal provides access to water quality data in our watershed uploaded by others, including Fisheries and Oceans Canada, Ministry of Environment, Conservation and Parks, and Ministry of Northern Development, Mines, Natural Resources and Forestry.

Water quality and quantity data is also collected by others within the watershed, including the municipalities, the development community, other government agencies, and academic institutions, however, this data is generally collected for specific projects or studies and is not routinely shared in a useable format with CH. Staff is exploring opportunities to access and use these data sets as a cost-effective means to supplement our monitoring data and enhance our ability to analyze and assess watershed water quality conditions and trends.

Our current level of water quality monitoring is useful for identifying conditions and trends in certain reaches. With more information, our ability to draw inferences from the data to enhance science-based decision-making can be enhanced. For example, with only one PWQMN station in the Grindstone Creek watershed (yellow in the figure above), it is unknown where existing water quality issues originate, and it is also possible that issues higher up in the watershed are being missed completely.

To address the information deficiency and establish a baseline of water quality conditions, staff have worked with several partners over the past year to form three strategic partnerships to begin expanding the reach of our water quality sampling network in the short term. Together with efforts to access and incorporate data from external sources, the three new projects will help to advance several Momentum Objectives, including:

- **Expand** monitoring and analytical capabilities to support watershed planning and management
- **Foster** partnerships and identify opportunities to build mutual understanding, trust, respect, and support with watershed stakeholders
- **Implement** watershed plans to manage natural hazards and natural resources
- **Implement** climate change actions for watershed resiliency
- **Lead** the Halton-Hamilton Source Water Protection program for municipal drinking water through a comprehensive review and update of drinking water science and source protection plan policies

CH-Halton Region-Queens University

CH, Halton Region and Queens University have entered into a two-year agreement to increase the geographic scope of our water quality sampling program from 11 stations (10 of which are in Halton

Region) to approximately 50 stations in Halton Region. This will increase understanding of water quality issues which will inform future solutions and ongoing monitoring needs.

All three agencies are providing cash and specialized in-kind contributions to support the project, resulting in efficiencies for each of the partners. Leveraging personal and institutional knowledge of the watershed, CH staff are leading the field program with support from the Masters' student from Queens, who is being funded by Halton Region. Queens is providing laboratory analysis of the samples and all partners will have access to the data. Field collection of the data started May 30.

Hamilton Harbour Remedial Action Plan (HHRAP)

Grindstone Creek and Indian Creek are two of the watersheds draining into Hamilton Harbour. High levels of phosphorus in the Harbour contribute to eutrophication and algae issues and it is important to understand how much, and where, nutrients such as phosphorus originate within the watersheds for the purposes of the HHRAP and also CH's watershed planning program. There has been a PWQMN water quality sampling station near the mouth of Grindstone Creek for many years, using grab samples to provide a snapshot of contaminant concentrations (e.g., mg/L) at a particular point in time and space. However, the information needed to support Remedial Action Plan decision-making requires loadings (e.g., kg/day) to determine the relative contribution of watersheds to the Harbour. Collecting such information requires a different technique where samples are taken once per hour over a 24-hour period and combined with data on the volume of water flowing through the creek during that time. With funding from the HHRAP, automated ISCO samplers were installed near the mouths of both Grindstone and Indian Creeks in 2021. In addition, grab samples were taken at 20 monitoring locations throughout Grindstone Creek watershed and 5 locations throughout Indian Creek watershed to look for source locations of contaminants. This work is ongoing through 2022 and discussions for an alternate funding source in 2023 are underway. It is anticipated that an additional year of funding will be provided to complete work on loadings with the ISCO samplers, but additional funding for widespread grab samples is uncertain at this time.

Ministry of Environment, Conservation and Parks (MECP)

On a larger scale, a need for water quality data to improve nutrient load estimates to Lake Ontario has been identified by several agencies. Starting in 2018, a multi-agency initiative consisting of federal, provincial, municipal and conservation authority staff was established to monitor river discharges to Lake Ontario. Toronto Region and Ganaraska River Conservation Authorities have already entered into agreements with MECP to undertake this work, and CH was invited to do so in 2021. The location of the sampling station in the Sixteen Mile Creek watershed coincides with CH's longest running PWQMN station at Speers Road in Oakville, with data going back to 1964. The development of a rating curve and estimation of loadings at this station will complement decades of grab sample information. The station is located downstream of Milton, one of the fastest growing municipalities in North America. The establishment of this station will provide a baseline from which to track any changes in loadings as upstream development continues. If Sixteen Mile Creek is found to be contributing a significant amount of nutrients to Lake Ontario, it may open the door to future discussions of funding opportunities to address the issue.

The sampling setup and methodology at this station is the same as the HHRAP stations established at Grindstone and Indian Creeks. Though the three watersheds are very different in terms of size and land uses, it will be instructive to compare responses to the same events.

Data Gaps and Next Steps

Water quality reflects the influences of adjacent and upstream land uses and is a key indicator of overall watershed health, including in-stream conditions and physical processes. For example, levels of total suspended solids may indicate upstream erosion problems and negatively affect aquatic ecosystems. CH's current water quality monitoring network is insufficient to broadly assess water quality conditions and trends within our watersheds. Opportunities to expand data sets through accessing data which is already being collected by others and strategically expanding our water quality monitoring network are currently being explored. Key issues already identified include:

1. There is a significant data gap in water quality monitoring in the upper reaches of Bronte Creek watershed and is not included in any of the above partnership projects. Similarly, the sub-catchments of Grindstone Creek within the City of Hamilton also have limited recent data.
2. The partnership projects will facilitate an understanding of baseline conditions in the reaches monitored and identify areas of potential concern (for example, high chloride levels that can affect the quality of drinking water and are toxic to aquatic life). Strategic sampling over a longer term may be warranted to track trends and pinpoint causes of degradation and opportunities for restoration. Alternative opportunities for resourcing additional water quality sampling needs will be explored.

Water quality monitoring is vital for tracking water quality conditions and trends and identifying possible causes and solutions to address specific resource problems. These problems may relate to stream processes such as erosion, sedimentation, contaminants and algal growth and related effects on Lake Ontario and Hamilton Harbour. This information is needed to assess the overall water quality monitoring network and future monitoring requirements and support the development of the Watershed-based Resource Management Strategy.

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 09

FROM: Kellie McCormack, Director, Planning & Regulations

DATE: June 23, 2022

SUBJECT: **Work Plan for Consultation on Conservation Halton's Guidelines for Wetland Water Balance Assessments**

Recommendation

THAT the Conservation Halton Board of Directors **approves the staff report entitled “Work Plan for Consultation on Conservation Halton's Guidelines for Wetland Water Balance Assessments.”**

Executive Summary

A Wetland Water Balance Assessment is undertaken when development is proposed in areas that may interfere or alter a wetland catchment area to determine potential impacts on the hydrologic function of a wetland, as well as mitigation measures. Over the past several months, Conservation Halton (CH) staff has undertaken background research on wetland water balance approaches in other jurisdictions and has also prepared an initial draft of technical submission guidelines to outline CH's key requirements for a Wetland Water Balance Assessment. CH's Guidelines for Wetland Water Balance Assessments are intended to provide development proponents with standardized steps for the preparation of an Assessment, so that CH's requirements are clear and transparent. This will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. In early Fall 2022, CH staff will engage with municipal partners, neighboring conservation authorities, and select BILD-identified consultants and broader public consultation will follow in late 2022. All feedback will be assessed and incorporated into the final version, as appropriate.

Report

Background

Conservation Halton's (CH) previous strategic plan “Metamorphosis”, as well as the current plan “Momentum”, establish targets and measures for a range of CH's programs and services, including targets for planning and permit response times. Over the past few years, numerous initiatives have been carried out by the Planning and Regulation team to streamline plan review and permitting processes and to improve service delivery, including updating and developing new technical submission guidelines. Last year, CH's Board of Directors approved technical submissions guidelines for Landscaping and Rehabilitation Plans and Stormwater Management Engineering Submissions.

Technical submissions guidelines provide applicants with a clear and transparent understanding of CH's requirements and expectations for technical submissions. They provide direction and outline approaches that can be used to satisfy CH's permitting requirements and Board-approved policies.

The guidelines are specific to CH and do not replace or supersede federal, provincial, or municipal requirements.

The purpose of this report is to provide the Board with an overview of the work that has been undertaken to-date on CH's Guidelines for Wetland Water Balance Assessments, as well as to present a work plan for consultation.

Purpose and Objectives of the Guidelines

A Wetland Water Balance Assessment is undertaken when development is proposed in areas that may interfere or alter a wetland catchment area to determine potential impacts on the hydrologic function of a wetland, as well as mitigation measures. The purpose of CH's Guidelines for Wetland Water Balance Assessments is to identify requirements and key expectations for Wetland Water Balance Assessments. The Guidelines are intended to provide guidance to qualified professionals on the standardized steps on how to characterize the existing hydrological, hydrogeological, and ecological functions of a wetland through the collection and analysis of baseline data. They also provide direction on how to determine impacts and identify mitigation measures.

The goal of CH's Guidelines for Wetland Water Balance Assessment is to encourage better quality submissions, which will result in quicker and more consistent reviews, fewer resubmissions, and faster approval times. It is also to ensure that wetlands across CH's watershed are protected and conserved for the long term. These Guidelines will apply to all CH permit and/or planning applications when development is proposed in areas that may interfere or alter a wetland catchment area.

Overview of the Guidelines

The document is divided into two key sections:

1. Introduction – This section outlines the purpose of the document and CH's role in reviewing wetland water balance assessments, as well as how it relates to CH's permitting process and the planning process
2. Steps to Prepare a Wetland Water Balance Assessment – This section outlines the steps to be undertaken as part of the assessment including:
 - Step 1 - Baseline Data Collection and Analysis
 - Step 2 - Build the Existing Conditions Wetland Water Balance
 - Step 3 – Establish Water Balance Goals and Targets
 - Step 4 - Develop Proposed Conditions Water Balance and Comparing Pre- and Post-Development
 - Step 5 - Develop Monitoring Plan
 - Step 6 - Complete/Submit Report

Work Plan for Consultation for CH's Guidelines for Wetland Water Balance Assessments

The process for developing the Guidelines consultation work plan includes three phases, as outlined below.



Phase 1

A first step in the development of CH's Guidelines for Wetland Water Balance Assessments involved undertaking background research on wetland water balance approaches and procedures in other Conservation Authority jurisdictions. The next step involved framing CH's goals and objectives and drafting key assessment requirements. Finally, staff has worked to develop an initial draft document. By the end of this Phase, a final draft of CH's Guidelines will be available for the consultation process.

Phase 2

Phase 2 is anticipated to start in Summer 2022. Staff will take the summer months to prepare consultation materials and set up meetings for consultations to occur in Fall 2022. Staff will engage in focused consultations with municipal partners, conservation authorities within the Greater Golden Horseshoe, and select BILD-identified consultants on a draft of the Guidelines. Broader public consultation will be carried out by the end of 2022, including broadcasts via social media, email, and posting a draft of the document on CH's website publicly for a 30-day comment period. Feedback obtained through meetings, discussions, and written correspondence will be assessed and incorporated into the final version, as appropriate. Phase 2 is anticipated to occur Q3-4 2022.

Phase 3

The final phase of this process will be to bring the final draft guideline to the CH Board for approval. The planned timeline to complete Phase 3 is Q2 2023.

Conclusion

CH's Guidelines for Wetland Water Balance Assessments will provide CH's partners and stakeholders with standardized steps for the preparation of an Assessment, so that CH's requirements are clear and transparent. This will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. It will also ensure that wetlands across CH's watershed are protected and conserved for the long term. Staff recommends that the Board of Directors endorse the consultation work plan for CH's Guidelines for Wetland Water Balance Assessments presented in this report.

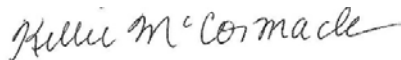
Impact on Strategic Priorities

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:

Lesley Matich, Manager, Planning Ecology,
905-336-1158 x2323; lmatic@hrca.on.ca

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 10

FROM: Kellie McCormack, Director, Planning and Regulations

DATE: June 23, 2022

SUBJECT: Conservation Halton's Wetland Mapping Review & Update

Recommendation

THAT the Conservation Halton Board of Directors **approves the public engagement plan for the Conservation Halton's Wetland Mapping Review & Update.**

Executive Summary

Conservation Halton (CH) has embarked on a major review and update to its regulatory wetland mapping, which will result in changes to CH's Approximate Regulation Limit (ARL) mapping. Since CH's last comprehensive wetland mapping update, technological advances in mapping, updated and higher quality of air photos, and the completion of large-scale technical studies, has enabled CH to better identify, characterize, and map wetlands. Up-to-date mapping supports the delivery of CH's regulatory and planning program by ensuring that staff can undertake timely reviews, deliver good customer service, provide technical advice, and implement CH's regulatory policies to ensure wetlands are protected from the impacts of development. Draft wetland mapping has been prepared for CH's entire jurisdiction and is ready to be released to the public. The public engagement period will provide landowners time to review the draft mapping, as well as give time for CH staff to undertake site visits and make mapping changes, if necessary. The final draft mapping and a report will be brought to the CH Board of Directors for approval. Staff recommends that the Board of Directors approve the public engagement approach outlined in this report.

Report

Background

In 2018, Conservation Halton (CH) embarked on a major review and update to its regulatory mapping (e.g., flood hazard, erosion hazard, wetland, and watercourse mapping). Updates to technical studies and modelling, site visits or field verification, and/or updated Provincial mapping (e.g., Provincial wetland mapping) has increased our understanding of the nature and extent of existing hazards and/or wetlands across CH's watershed. As mapping reviews and updates progress, refinements to CH's Approximate Regulation Limit (ARL) mapping will be necessary.

CH's ARL mapping is a screening tool to determine if a site is regulated by CH and contains or is adjacent to natural hazards and/or wetlands. This tool is available on CH's website and is used by conservation authorities, municipalities, property owners, consultants, realtors, and solicitors, amongst other stakeholders.

Once draft regulatory mapping is considered reliable or credible, CH must apply its regulation and make the public aware that permissions may be required from CH for works on their properties. It is also to ensure that risk to life or property damage from development is avoided once a hazard is identified and to ensure that interference with the functions of a wetland is avoided. Under *Ontario Regulation 162/06*, CH regulates wetlands from interference, as well as development in wetlands and “other areas” adjacent to wetlands where development could interfere with the hydrologic functions of the feature. Based on the text of CH’s regulation, regardless of whether a wetland or hazard is mapped or not, the text of the regulation prevails.

Wetland mapping is a dynamic, iterative process and evolves over time. Updated or new information obtained via a technical study, or a site visit can result in refinements to CH’s wetland mapping. CH staff consistently applies “best available information” for: 1) understanding the size, significance, and extent of the wetland, 2) assessing interference with a wetland, and 3) decision making and administering *Ontario Regulation 162/06*, when works or activities are contemplated within CH regulated areas. In addition to supporting CH’s regulatory program, updated wetland mapping is also used by CH’s municipal partners in the development of Natural Heritage System mapping.

CH’s current wetland mapping layer was developed in 2006, the same time that *Ontario Regulation 162/06* came into effect. This layer was developed using air photo interpretation and site visits, as well as the Province’s wetland mapping available from the Land Information Office. This layer has been modified over the years to reflect site specific updates as part of the permitting or planning process, but the last comprehensive update was in 2012.

Since CH’s last comprehensive wetland mapping update, there has been a considerable change in land use across CH’s watershed. In addition, technological advances using LiDAR (Light Detection and Ranging), updated and higher quality of air photos, and the completion of large-scale technical studies, enable staff to better identify, characterize, and map wetlands across CH’s jurisdiction. Up-to-date mapping supports the delivery of CH’s regulatory and planning program by ensuring that staff can undertake timely reviews, deliver good customer service, provide technical advice, and implement CH’s regulatory policies to ensure wetlands are protected from the impacts of development.

Major mapping updates made at the watershed, subwatershed, watercourse or shoreline reach, or multi-property scale, not associated with a planning or permit application, require CH Board of Directors approval prior to being incorporated in the ARL mapping. For these types of changes, CH builds on Conservation Ontario’s (CO) *Guidelines for Updating Section 28 Mapping: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations*.

Wetland Mapping Update Process & Public Engagement Plan

The general process and timeline for updating CH’s wetland mapping and public engagement plan is outlined below, which is in keeping with CH’s Board approved Mapping Transition and Implementation Protocol (CHBD 08 21 09).



Phase 1

Phase 1 of the wetland mapping update began in 2018 and, as part of this exercise, staff did an extensive review of CH's existing wetland mapping and merged it with the following:

- CH's Ecological Land Classification (ELC) mapping (includes field verified and air photo interpreted wetlands);
- Updated Provincial wetland mapping (includes Provincially Significant Wetlands (PSWs) and other wetlands identified by the Province via wetland evaluations, field verification, and air photo interpretation); and
- Wetland data obtained from subwatershed studies or other studies via the planning process.

Staff also used LiDAR topographic and contour data, as well as updated air photos, to validate the preliminary draft mapping. The preliminary draft mapping underwent further internal QA/QC and draft mapping is now ready to be released for public consultation and engagement.

The draft mapping currently shows an increase of approximately 19% in the amount (area) of wetlands mapped across CH's watershed compared to CH's existing wetland mapping layer.

Preliminary findings and/or reasons for the mapping changes include:

- Many wetlands are larger than previously identified. Most mapping changes were a result of boundary adjustments through reconciling wetland limits among data sources.
- New tools and technology allow for greater, more precise identification of wetlands and wetland limits than in the past.
- New wetlands were identified and confirmed through field verifications by CH staff.
- New wetlands were identified and confirmed through information from external partners (e.g., Province; municipalities via subwatershed studies).
- Mapping changes were relatively uniform across the CH's watershed (i.e., changes did not affect one municipality, or urban or rural area more than another).

Note: Final statistics and findings will be presented to the Board following public engagement on the draft mapping and at the end of Phase 3 of this mapping update process.

Phase 2

Phase 2 of the wetland mapping update involves the public engagement on the draft mapping. The engagement period will be open for 60 days to provide property owners time to review and engage with staff and allows time for staff to undertake site visits to validate wetland mapping, if necessary.

Notice of CH's wetland mapping update will be posted on CH's website and through other media (e.g., social media, media releases, etc.) and will include background information about this initiative, links to CH's draft mapping, and a feedback form to connect with staff. During this engagement period, staff will review the comments received and will make any necessary mapping revisions.

The timing of the public engagement is intentional, as wetlands must be looked at while vegetation is present and alive (generally June to September). In field wetland assessments confirm presence/absence as well as wetland limits, using the "50% rule" as outlined in the *Ontario Wetland Evaluation System for Southern Ontario Manual* (MNR 2013). This is where 50% of the vegetation are wetland species and 50% of the vegetation are upland species, based on the relative cover, are found.

Results from any in field wetland assessments will be incorporated into CH's wetland mapping. After the public engagement period ends, any additional site-specific edits will be made in keeping with CH's Approximate Regulation Mapping Maintenance Protocol (CHBD 11 19 11).

Phase 3

In Phase 3 of this process, the final draft mapping and a report will be brought to the CH Board of Directors for approval. Once the mapping is approved, CH's stakeholders, municipalities, development proponents, and the public will be notified that CH has completed its mapping update and the new data will officially be incorporated into CH's ARL mapping and shared with our municipal partners.

Conclusion

Staff recommends that the Board of Directors approve the Work Plan for Public Engagement on CH's Wetland Mapping Update.

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:

Lesley Matich, Manager, Planning Ecology,
lmatic@hrca.on.ca

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 11

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

DATE: June 23, 2022

SUBJECT: **Water Quality and Habitat Improvement Program (WQHIP) Guidelines for Countryside and Commercial landowners**

Recommendation

THAT the Conservation Halton Board of Directors **approves the “Countryside Properties Financial Incentive Program Guidelines and the Commercial Properties Financial Incentive Program Guidelines.”**

And

THAT the Conservation Halton Board of Directors **approves housekeeping changes to the “Urban Properties Financial Incentive Program Guidelines.”**

Report

Since 1994, Conservation Halton (CH) has provided technical and financial assistance to private landowners through the Water Quality and Habitat Improvement Program (WQHIP) to incentivize and assist them in implementing voluntary best management practices and conservation projects that directly or indirectly result in:

- creek and/or wetland water quality improvements
- wildlife habitat improvements
- groundwater protection
- climate change mitigation or adaptation
- improved land management practices

To ensure funding is directed to meaningful projects that are correctly executed, and to enable landowners to access the funding, CH has established processes, guidelines, and an advisory committee (CHBD 01 20 08). Generic guidelines have since been tailored to specific property types to streamline the customer experience and in November 2021 the first two (Agricultural and Urban) in a series of four guidelines were approved (CHBD 08 21 11). This report seeks 1) approval for the last two guidelines (Countryside and Commercial) and 2) one minor housekeeping amendment to the Urban guidelines. The updated CH web site has also been structured using the four property types to assist visitors in quickly accessing relevant information.

1) New Countryside and Commercial Guidelines

The Countryside Guidelines are geared toward rural non-farm properties and feature the following eligible project types (see attachment – Appendix F):

- Machinery crossings
- In-stream barrier mitigation
- Natural area creation and enhancement
- Wellhead abandonment and wellhead protection
- Invasive species management
- Education and training
- Innovative project

The Commercial Guidelines feature the following eligible project types (see attachment – Appendix G):

- Natural area creation and enhancement
- Education and training
- In-stream barrier mitigation
- Invasive species management
- Rainwater conservation
- Innovative projects
- Wellhead abandonment and wellhead protection

2) Housekeeping amendment to Urban Guidelines

Pollinator gardens were removed from eligibility for the Aquatic and Terrestrial Habitat Enhancement and instead included in the eligible projects under Rainwater Conservation. This is to encourage cost share for pollinator gardens that conserve water at a grant cap of \$2,500 and not to fund pollinator gardens at \$5,000.

Impact on Strategic Priorities

This report supports the Momentum priorities of Education, Empowerment and Engagement as well as Science, Conservation and Restoration.

Financial Impact

Unlike neighbouring Conservation Authority Water Quality and Habitat Improvement Programs that receive funding directly from the regional municipalities, CH's Program is funded through corporate sponsorship and past project revenues. The 2022 funding allocated to this program is projected to be \$35,000, with growth planned year over year.

Signed & respectfully submitted:



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

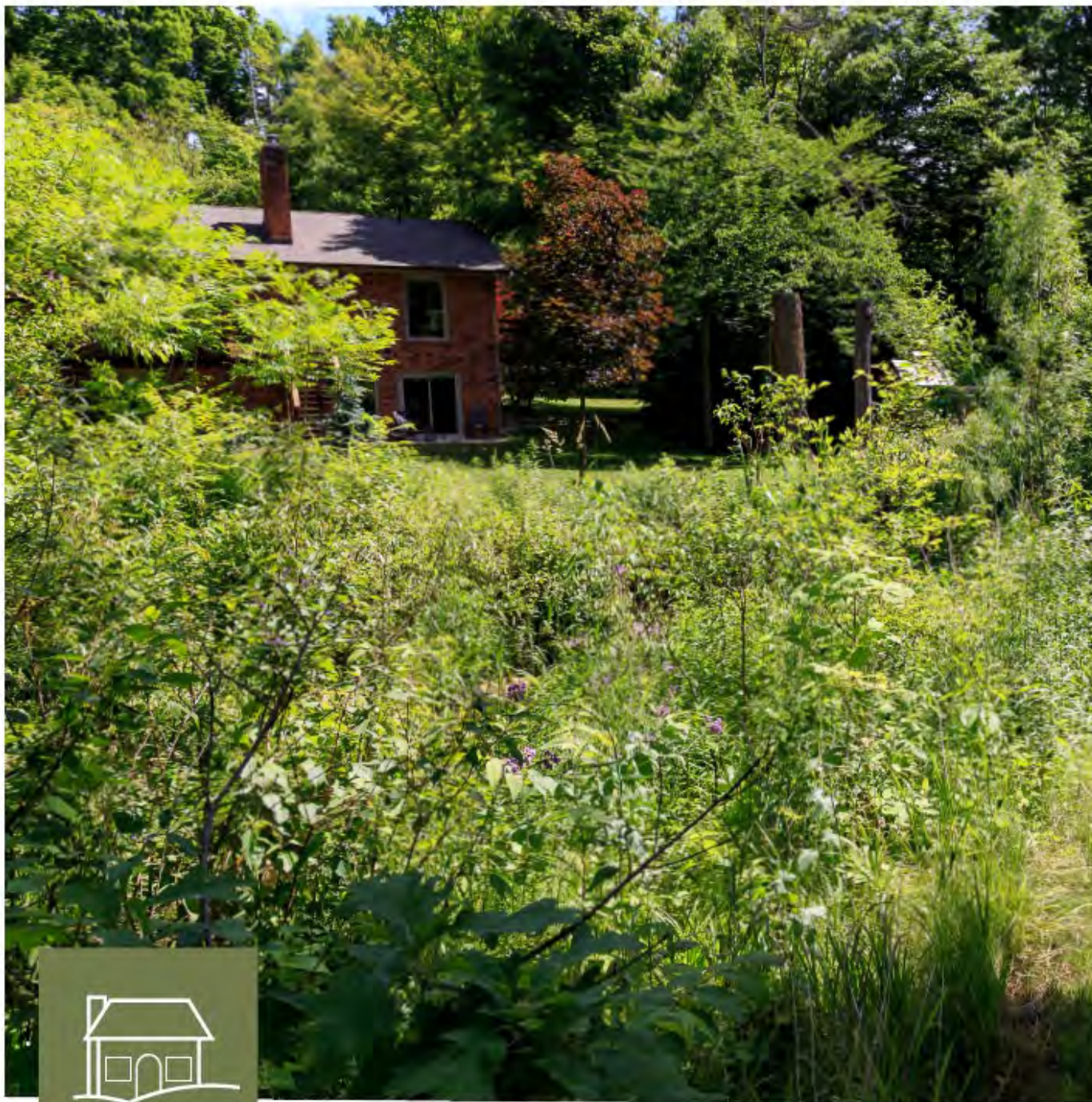
Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Kim Barrett, Associate Director, Science & Partnerships
905.336.1158 x2229 | kbarrett@hrca.on.ca



Countryside Properties | Financial Incentive Program Guidelines

WATER QUALITY & HABITAT IMPROVEMENT PROGRAM

Current as of April 4, 2022



Conservation Halton has a lot of information and documents available to support landowners in both hard copy and online. To assist you in finding the information most relevant to you, documents have been organized into the following categories: Urban Properties, Countryside Properties and Agricultural Properties. Use the colour coding tag and symbology as a guide along your information gathering journey.

Agricultural Properties



Countryside Properties



Urban Properties



Commercial Properties





Conservation Halton

Water Quality and Habitat Improvement Program

COUNTRYSIDE PROPERTIES

Contents

Program Background	4
.....	4
Program Purpose	4
Program Goals.....	4
Program Process	4
Landowner Financial Assistance and Project Eligibility	6
Grant Overview.....	6
Table 1: Projects Eligible for Funding.....	6
Eligibility.....	7
Limitations to Grant Availability	8
The Grant Process	8
How to Apply.....	8
Grant Application Review Process	9
Project Closeout.....	10
Timeline.....	10
Roles and Responsibilities.....	11
Conservation Halton (CH)	11
The Project Technical Advisory Committee (PTAC)	11
The Grant Applicant	11
Project Guidelines	13
Education and Training	13
Innovative Projects	15
In-Stream Barrier Mitigation.....	16
Invasive Plant Species Control	17
Machinery Crossings	19
Natural Area Creation and Enhancement.....	20
Wellhead Abandonment - Halton Region.....	22
Wellhead Abandonment – City of Hamilton.....	23
Wellhead Protection (Upgrades)	24



Program Background

Since 1994, Conservation Halton has provided technical and financial assistance to private landowners to assist them in implementing best management practices and conservation projects that improve and protect water quality and wildlife habitat. Citizens in urban, rural, and agricultural areas of Conservation Halton's watershed are encouraged and supported in taking responsibility for restoring and maintaining the quality of the environment in which they live.

This is the foundation upon which this program, formerly known as the Hamilton-Halton Watershed Stewardship Program, was developed in 1994 with the following partners:

Conservation Halton
Hamilton Conservation Authority
Bay Area Restoration Council

Program Purpose

The purpose of the Water Quality and Habitat Improvement Program (WQHIP) is to support landowners with a grant towards the cost of eligible projects they undertake on their land to improve local surface and ground water quality as well as fish and wildlife habitat through improved land management practices. All projects implemented under this program are voluntary.



Program Goals

- To provide technical and financial assistance to landowners and residents in Conservation Halton's watershed to achieve their environmental and stewardship goals;
- To promote and facilitate the adoption of environmentally sound land management practices to protect, restore, and enhance surface and ground water, air and soil quality, and/or fish and wildlife habitat in Conservation Halton's watershed;
- To help protect agricultural lands as a natural resource of major importance in the area, while recognizing and supporting farmers and agricultural organizations as valuable contributors to the environment, community, and economy; and
- To promote healthy communities that respect the natural environment and water resources.

Program Process

Grant assistance is available to landowners who:



- Build new structures, upgrade existing structures, and/or adopt practices which will improve existing impairment problems as part of their water quality improvement plan;
- Create or rehabilitate fish and wildlife habitat;
- Demonstrate good land stewardship practices; and
- Create educational opportunities or demonstration sites.

Projects will be pre-screened by Conservation Halton staff for eligibility to ensure they meet guidelines. Projects will then be reviewed by the Project Technical Advisory Committee (PTAC) who will consider the merit of each project and score them accordingly.

There may be instances where Conservation Halton is the recipient of external grant funding that can be allocated to landowner projects. Under these circumstances, a PTAC review of the project may not be required.

There may be instances where landowners' proposed projects require review by one or more of the following: Ontario Ministry of Natural Resources and Forestry (OMNRF), Ontario Ministry of the Environment, Conservation and Parks (MECP), Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), local Medical Officer of Health, Ontario Soil and Crop Improvement Association (OSCIA), Conservation Halton (CH), Fisheries and Oceans Canada (DFO), or municipality, etc.

Approvals Committee: The Project Technical Advisory Committee (PTAC) acts as the Approvals Committee for all WQHIP project proposal applications as outlined in the PTAC Terms of Reference and ensures that the WQHIP is administered in accordance with these guidelines.

PTAC consists of representatives from local agricultural organizations, environmental interest groups, citizens at large, as well as representation from local Conservation Authorities.

Conservation Halton staff provide support to landowners by offering free:

- Property site visits;
- Landowner consultations;
- Technical assistance for project design, when appropriate;
- Education and outreach opportunities.



Landowner Financial Assistance and Project Eligibility

Grant Overview

The following grants are available to agricultural landowners in Conservation Halton's watershed who implement projects to improve water quality or habitat on their properties as outlined below. A single property may be eligible to receive grants under each category up to the category cap each calendar year (some exceptions apply). For large projects that are planned to be implemented in phases, applicants are encouraged to present the complete project as well as the immediate phase that is requesting funds. Each phase of the project must provide a demonstrable environmental improvement as determined by the PTAC.

Refer to Table 1 for a list of project categories and their associated grant rates and caps.

Note: WQHIP grants may be combined (stacked) with other cost share sources, and applicants are encouraged to seek additional funding. Combined grants are not to exceed 100% of total expenses. Applicants must inform Conservation Halton staff of additional cost share funding. Conservation Halton's Water Quality and Habitat Improvement Program is applied as the final funding. If a landowner receives funding from another source(s), their project will be eligible to receive the WQHIP grant rate for the remaining costs. For example:

Total Project Cost = \$1000

\$250 confirmed funding from other cost share source

\$750 remaining cost is eligible for WQHIP grant rate and cap.

Table 1: Projects Eligible for Funding

Project Type	Cost Share	Maximum Cost Share	Performance Incentive	Notes
Machinery Crossings	75%	\$5,000	-	Per project
In-Stream Barrier Mitigation	75%	\$10,000		Per project
Natural Area Creation and Enhancement	75%	\$5,000/\$10,000		Per project
Wellhead Abandonment – City of Hamilton	100%	\$1000		Maximum 2 wells per property. A City of Hamilton program delivered through CH's WQHIP
Wellhead Abandonment – Halton Region	Offered Through Halton Region			
Invasive Species Management	50% - 75%	\$10,000		Per project
Wellhead Protection (upgrades)	100%	\$1000		One project per property
Education and Training	50%	\$500		Once per year per applicant
Innovative Projects	75%	\$5,000		Per project



Eligibility

1. A grant to implement a project through the WQHIP may be paid to an individual applicant who:
 - is a resident of Ontario; and
 - is a registered owner of the property

Note: Under this program, a person is deemed to be the owner of land if the person leases the land for farming from the registered owner.

2. The project must be located within Conservation Halton's jurisdiction and improve habitat and/or water quality.
3. The following costs are generally eligible for grant assistance:
 - Required permits
 - Purchased materials and supplies
 - Professional fees
 - Fees for design, construction, and supervision

Note: The labour and machinery use of the applicant, family dependents, and the applicant's business are not eligible.

4. All approvals and permits are the responsibility of the applicant. It is the applicant's responsibility to ensure that the project meets all legal requirements including (but not limited to):
 - Local municipal bylaws
 - Provincial and regional highway setbacks
 - Drainage Act
 - Federal and Provincial Acts
 - Canada Farm Building Code
 - Ontario Building Code
 - Conservation Authorities Act
5. Innovative technologies and projects that do not conform to the guidelines will be considered by the PTAC on a project-by-project basis. Applicants should contact Conservation Halton WQHIP staff to determine the application requirements.
6. From time to time, Conservation Halton staff will review the eligible project types and guidelines and may alter these at their discretion.



Limitations to Grant Availability

1. Grants are limited to properties in Conservation Halton's watershed, with completed water quality and/or habitat improvement project plan designs.
2. Any applicant who proceeds with a project before it has been approved by the PTAC has no assurance that financial assistance will be provided.
3. An applicant must specify the year in which the project will be completed. If the project cannot be completed within the specified year, the grant may not be available, however, the applicant may appeal to Conservation Halton staff for an extension.
4. Funds will be allocated on a priority basis. Those projects with the higher potential for improving habitat and/or water quality will be considered first.
5. The grant will not be paid on HST if the applicant is entitled to an HST rebate.
6. Conservation Halton will set funding allocations annually. At that time, they may decide to set allocations for priority areas, and/or project categories. Funds may be limited based on this decision.
7. The number of grants available may be restricted to meet local priorities and budgets. Once the annual WQHIP budget has been committed, no further approvals will be given.
8. It is possible that a project is evaluated as having merit but is not funded due to available funding being fully allocated to higher ranking projects. If the approved projects in a single year exceed the annual budget, the remaining approved un-funded projects may be resubmitted for re-scoring and approval the following year.

The Grant Process

How to Apply

1. Contact the Water Quality and Habitat Improvement Program at Conservation Halton (CH) (905-336-1158 x 2263) or by email at stewardship@hrca.on.ca to verify that your proposed project meets the guidelines and to arrange a site visit. CH staff are available to assist you with the planning of your project and applying to the program.
2. Complete and submit the WQHIP Application to Conservation Halton by the December 1st* deadline of the year prior to the year of project implementation. An Application Support Guide will be provided for clarification and to assist with the process.

* Application deadline may be extended in a given year. Please check online at: <https://conservationhalton.ca/financial-incentives> or contact your Landowner Outreach Technician to confirm the current year's deadline.



Grant Application Review Process

1. The Project Technical Advisory Committee reviews project applications once per year over a two-week period in January/February. Grant applications are anonymously presented to PTAC to review, evaluate, and score the projects based on their potential to protect and/or improve local habitat and/or water quality. All applicants are notified of their project scoring results in the week following the PTAC review.
2. The committee may pose questions to the applicant, a contractor listed on the application, or to CH staff and may have discussions about the project to determine a project's merit.
3. Project merit is assessed based on the following attributes:
 - The project directly addresses a water quality impairment;
 - The project directly addresses a habitat impairment;
 - The project contributes to improving water quality;
 - The project contributes to improving habitat quality;
 - The project is located adjacent to, or in close proximity to a natural area; and
 - The project raises public awareness of water quality and habitat issues or opportunities.
4. PTAC members score each of the projects independently, based on the project's attributes.
5. After reviewing the responses from the PTAC members, Conservation Halton staff will rank the different projects and inform PTAC members of their decision to fund or not fund the grant applications.
6. Once the project proposal has been reviewed and approved by the PTAC, successful applicants will be notified to proceed with the project. If your project has not been approved, the reasons for this will be communicated. There may be an opportunity to resubmit the project application the following year after suggested changes have been made.
7. Once your project has been approved, you will be asked to review, sign, and return a WQHIP Agreement prior to commencing work. The agreement, alongside your application, will serve as the Project Agreement between you and CH.



Project Closeout

1. Notify staff when the project is completed, paid for, and you have copies of all necessary permits and receipts. A site inspection is required to confirm that the project is complete. At that time, you can submit the Financial Tracking Form, original invoices marked “paid”, and a copy of cancelled cheques (front and back) or bank statement for all eligible project expenses to CH staff.
2. Once a site inspection has determined that the work is complete and satisfactory, your pre-approved cost-share payment will be sent to you within 4 weeks.

Timeline

ACTION	DATE
WQHIP applications to be submitted to Conservation Halton	January 15 th
PTAC Review meeting	January/February
Landowner notification letters distributed	Late February
Project Agreement established	Early March
Project installations	March-November
Financial Tracking submitted to Conservation Halton	ASAP, but no later than December 1 st
Grant payment issued (upon completion of inspection)	ASAP, but no later than December 15 th



Roles and Responsibilities

Conservation Halton (CH)

- Establishes and updates program guidelines as needed to ensure that the program is properly administered;
- Reviews the funding allocation regularly;
- Ensures that information on the administration of the program is available to all potential applicants;
- Establishes the WQHIP Project Guidelines with assistance from PTAC and partners and regularly reviews and evaluates the financial assistance framework to ensure the program is properly administered and the financial assistance available aligns with the goals of the WQHIP;
- Conducts site visits to identify project opportunities for the creation or enhancement of habitat and evaluates the potential sources, pathways, and magnitude of water quality impairment;
- Provides information to landowners regarding conservation practices, structures, and stewardship practices that may qualify for grants;
- Provides management choices and remedial options to reduce pollution potential from identified sources;
- Assists landowners with the completion of the WQHIP Funding Application and Agreement;
- Reviews water quality and/or habitat improvement plans for acceptability for grant assistance;
- Ensures the anonymity of project applicants when grant applications/project proposals are presented to PTAC;
- Allocates funds based on the review, scoring, and ranking of PTAC;
- Communicates to all applicants the results of the PTAC review in writing;
- Verifies that projects have been completed;
- Ensures that payment is issued to the landowner upon project administrative completion; and,
- Undertakes monitoring of the completed project as written in the funding agreement.

The Project Technical Advisory Committee (PTAC)

- Made up of industry professionals and community volunteers;
- Ensures that the WQHIP is administered in accordance with these guidelines; and,
- Evaluates and scores each project based on the attributes listed under the Grant Application Review Process above.

The Grant Applicant

- Contacts CH WQHIP staff to verify that the proposed project meets the grant eligibility requirements;
- Contacts CH WQHIP staff to arrange an on-site consultation;
- Completes the grant application to the best of their ability. CH WQHIP staff are available to



assist;

- Ensures that the information on the grant application is complete and correct;
- When signing the grant application, agrees to maintain and use the new structures in accordance with their water quality improvement or habitat enhancement plan for a period of not less than 10 years or the life of the structure;
- Ensures that the project meets all relevant local, provincial, and federal laws and regulations;
- Ensures that appropriate permits are obtained prior to construction;
- Contacts CH promptly following completion so that verification of the completed projects can be made;
- Provides receipts for materials or items purchased and copies of supporting cancelled cheques or proof of financing in order to receive the grant, including completion of the Financial Tracking Form;
- Agrees to display a conservation project sign on their property in a location visible to the public;
- Agrees to inform CH if the property is sold to a new landowner in the future;
- Agrees to transfer a copy of the approved WQHIP Funding Application and Agreement and associated documents to the new landowner (for information purposes only) if the property is sold in the future; and
- Gives permission to CH to photograph and promote the success of a particular project to demonstrate the positive actions that are being taken by the landowners in CH's watersheds.

Note: Although Conservation Halton may provide information regarding the applicant's water quality improvement plan, habitat enhancement plan, and the practices and structures contained in the plan, it is the responsibility of the applicant to ensure that the practices and structures undertaken are suitable to the applicant's operation and technically and structurally adequate.

Conservation Halton, Bay Area Restoration Council, PTAC Members, funding agencies or other review agencies (e.g., DFO, OMAFRA, MECP, MNRF, OSCIA, Local Medical Officer of Health) are not liable for any loss arising from the use of any advice or information provided as part of or under the Water Quality and Habitat Improvement Program.



Project Guidelines

Education and Training

Cost-Share: 50% up to \$500

Purpose:

- To support a watershed resident in accessing an opportunity that relates to the protection, restoration, and enhancement of surface and/or groundwater quality, air or soil quality, and/or fish and wildlife habitat as promoted by CH.
- To provide support to an organization or collaborations that wish to educate or train CH watershed residents on water quality, habitat, or agri-environmental related subjects.



Eligible Projects:

- Educational and/or Training Course costs
- Production of new materials (e.g., brochures, pamphlets, etc.)
- Reprints and distribution of existing materials
- Development and implementation of new events (e.g., workshops, farm tours, etc.)
- Support of recurring events

Project Details:

- Applicants* will provide a plan identifying the need for the initiative, the target audience, goals and objectives, draft content, distribution plan, itemized cost estimates, timeline, as well as potential and secured funding.
- The plan must demonstrate that the project is a priority in the context of CH's WQHIP
- Applicants are encouraged to seek multiple funding partners. Applicants must identify all funding (potential and received) from other partners or cost recovery aspects at the time of application.
- Applicants are encouraged to develop materials and events that address the needs of various stakeholders including agricultural, residential, commercial, and industrial.
- Educational programs must not duplicate the work being done or previously completed by other agencies or organizations. The Program will make use of existing educational materials and events whenever possible, providing that they adequately meet its objectives.
- Applicants are eligible for one grant per year for educational initiatives. PTAC may consider additional project proposal applications from one group if funds remain at the end of the Program year.
- CH's WQHIP will not fund projects initiated by for-profit companies and organizations, government or government agencies and Conservation Authorities.
- The Program will not fund projects targeted at audiences exclusively outside of CH's watershed.



- Successful applicants will consult with CH WQHIP staff on the final content and layout of publications and events to ensure that Program objectives are met.

Eligible Costs:

- Material costs
- Professional/speaker fees
- Translation
- Printing costs
- Rental of halls or equipment for events
- Permits and approvals
- Meals and non-alcoholic beverages

Ineligible Costs:

- Purchase of equipment
- On-going operating and capital costs (e.g., costs associated with an annual general meeting)
- Individual courses that solely benefit a single business or individual
- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Mileage

* An 'applicant' represents the interests of their organization at its highest representative level. Therefore, individual applications, without the consent of their organization, will not be considered. Funding allocated to the applicant will be considered as funding to the entire organization and will be subject to the yearly grant maximum.



Innovative Projects

Cost Share Details: 75% up to \$5,000

Purpose:

To encourage the adoption of innovative technology that improves and protects surface water or groundwater quality and/or wildlife habitat.

Project Details:

- Projects will be reviewed on their own merits. The applicant must submit a plan outlining the proposed project.
- Projects must be able to demonstrate the potential for improving and protecting surface water or groundwater quality and/or wildlife habitat.
- Applicants are encouraged to seek additional funding from other sources.
- All permits required by the appropriate agencies must be obtained (municipal, provincial or federal, Conservation Authority, etc.).

Eligible Costs:

- Materials and supplies
- Labour (other than the applicant's) associated with an approved project
- Permit fees
- Professional design fees
- Engineering or consulting fees

Ineligible Costs:

- Primary research
- Purchase equipment or equipment modifications
- GPS systems and components, yield monitors
- Funding will not be provided to incomplete projects
- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Primary hydro



In-Stream Barrier Mitigation

Grant Rate and Cap: 75% up to \$10,000

Purpose:

- To restore or enhance aquatic habitat through the remediation of an existing impairment to fisheries habitat. Impairments may include, but are not limited to, online ponds, dams, culverts, etc.

Eligible Project Types:

- Bypass channel
- Dam removal
- Debris removal
- In-stream Barrier Mitigation
- Culvert replacement or upgrade
- Online pond mitigation

Project Details:

- Projects must obtain approval from appropriate agencies (e.g., Conservation Authority, OMAFRA, DFO, MNRF, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- Project must remediate an existing water quality impairment.
- During construction all erosion control measures shall be implemented.
- For larger or more complex projects, engineered designs may be advised.
- Structures should be properly engineered to withstand expected water volume and velocities. The applicant and their contractor/engineer will be responsible for the structural integrity of the project.

Eligible Costs:

- Materials and labour (other than the applicant's or the applicant's family)
- Equipment rentals
- Professional services
- Permits
- Engineering and consulting fees

Ineligible Costs:

- Projects without adequate sediment control
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Maintenance of installed structures



Invasive Plant Species Control

Grant Rate and Cap: 50% - 75% up to \$5,000 (see Grant Rates and Caps in chart below)

Purpose:

- To support the implementation of best management practices to remove, control, and prevent the spread of invasive plant species and help enhance biodiversity.

Eligible Projects:

- Removal of invasive plant species such as *Phragmites*, Dog-Strangling Vine, Japanese Knotweed, Common Buckthorn, etc. For a full list of eligible species, visit www.invadingspecies.com



Note: Best Management Practices often recommend planting native tree and shrub species once the targeted invasive species population is eradicated or under control. If dealing with a large infestation, it is sometimes best to remove the invasive plant(s) and re-plant in phases to avoid other invasive species moving in. Re-planting with native species will help jump-start natural succession and increase biodiversity in the area. Higher consideration may be given to invasive plant species control projects that are paired with a native tree, shrub, herbaceous plant and/or grass planting project application. Projects proposing non-native species alternatives and lawn alternatives post removal, will not be considered. Best Management Practices for Invasive Plant Species in Ontario can be found at www.ontarioinvasiveplants.ca



Invasive Species Type	Description of Eligible Project	Grant Rate	Grant Cap
Herbaceous Plants and Grasses	Property within 100 meters of an Environmentally Significant Area (ESA), Area of Natural and Scientific Interest (ANSI), Significant Woodland, Provincially Significant Wetland (PSW) and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using Integrated Pest Management (IPM).	75%	\$5,000
Woody Shrubs			\$5,000
Trees			\$5,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$2,500
Woody Shrubs			\$5,000
Herbaceous Plants and Grasses	Property within 100 meters of an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$500
Woody Shrubs			\$1,000
Trees			\$1,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$250
Woody Shrubs			\$500
Herbaceous Plants and Grasses	Projects occurring within the floodplain of a creek. Funding to pay for contractors to remove invasive species using IPM.	75%	\$2,500
Woody Shrubs			\$5,000
Trees			\$5,000

Eligible Costs:

- Professional contracting services for removal/control of invasive plant species. Full list of eligible species found at www.invadingspecies.com.
- Project costs could include the following:
 - Development of invasive plant species management plan
 - Materials, labour, equipment rentals, permits, and engineering fees
 - Use of specialized equipment for removal
 - Appropriate disposal of vegetation

Ineligible Costs:

- Major clearing of fencerows, field, or forest landscapes
- Purchase of cultivation equipment, including equipment used primarily for general vegetation control around farmsteads (e.g., tillers, bushhogs, mowers etc.)
- Chemicals (herbicides), unless proven to be the most effective means of control with a support letter from technical specialist or other supporting information deemed appropriate
- Purchase of chemical spraying equipment
- Control and management of plants not identified as invasive (full list of eligible species at www.invadingspecies.com)
- Fuel costs



Machinery Crossings

Cost Share Details: 75% up to \$5,000

Purpose: To control or reduce the impact of farm machinery crossings on surface water quality.

Eligible Projects:

- Replacement or removal of machinery crossings with an existing water quality impact.
- Streambank stabilization including ditchbank seeding, culvert protection, and bioengineering techniques.

Project Details:

- Bed-level, mid-level, and bridge crossings may be considered. All bridge crossing designs must be engineered. The private sector is expected to fill these requirements.
- Applicant must obtain permit approval from appropriate agencies prior to construction. In-stream works will require a Conservation Authority permit. Any work done on a municipal drain requires prior approval from the municipality. Additional approvals may be required.

Eligible Costs:

- Professional design fees for completed projects
- Labour and supervision
- Materials and supplies
- Permits Fees

Ineligible costs:

- Labour and machinery use of applicant, family dependents, and the applicant's business.



Natural Area Creation and Enhancement

Grant Rate and Cap: 75% up to \$10,000: Aquatic
75% up to \$5,000: Terrestrial

Purpose: To create, restore, or enhance aquatic and terrestrial habitats and/or enhance water quality.

Eligible Project Types:

- Watercourse or instream channel reconstruction/enhancements
- Riparian plantings
- Streambank stabilization
- Wetland creation and enhancements
- Wetland buffer plantings
- Seeding, planting, or live staking of native species of flora (e.g., reforestation, meadow or grassland establishment, pollinator habitat)
- Habitat features (e.g., bird and bat boxes, spawning substrate, turtle nesting bed, osprey platform, snake hibernaculum)



Project Details:

- Projects must obtain approval(s) from appropriate agencies (e.g., Conservation Authority, OMAFRA, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- A plan is required specifying species, planting density, location, site preparation, and maintenance. To promote approval, the plan should be developed in conjunction with Conservation Authority/CH staff or a private consultant.
- A plan is required for construction of habitat features, including but not limited to, what materials will be used, size, location of installation, etc.
- A plan is required for all wetland and watercourse projects. Level of detail required will vary by project and site and will be stipulated by approval agencies.
- Appropriate native species are mandatory.
- Wetland creation projects must provide water storage, improve water quality by acting as a natural filter, reduce flooding, reduce erosion, replenish groundwater, and create or enhance wildlife habitat.
- Priority may be given to projects that are adjacent to identified natural heritage areas (please consult with CH staff).
- Priority may be given to projects partnering with other wetland restoration programs (e.g., Ducks Unlimited Canada)



- The participant is responsible for the care and maintenance of plantings. The project site must be properly maintained according to the approved plan to receive a performance incentive

Eligible Costs:

- Materials and supplies
- Labour
- Equipment rentals
- Professional services
- Permits Fees
- Trees, shrubs, and planting costs (maximum \$30 per tree where site conditions warrant larger stock)
- Tree protection systems

Ineligible Costs:

- Commercial stock, fruit trees, or Christmas tree species which are commercially marketable in less than 15 years
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Irrigation ponds
- Non-native species of flora



Wellhead Abandonment - Halton Region

Cost Share Details: 50% up to \$1,000 per well

****This project is offered directly through Halton Region's Residential Private Well Decommissioning Grant Program. Details can be found at:***

<https://www.halton.ca/For-Residents/Water-and-Environment/Water-Quality-Protection/Well-Water/Residential-Well-Decommissioning-Grant>



Wellhead Abandonment – City of Hamilton

Cost Share Details: 100% up to \$1,000 per well

Purpose:

- To prevent groundwater contamination via improperly abandoned or unused wells by encouraging the proper plugging of wells that are dry or no longer used.

Eligible Projects:

- Proper plugging of unused wells (dug, bored, or drilled) by a licensed well contractor.

Project Details:

- Must comply with Ontario Ministry of the Environment, Conservation and Parks (MECP) procedures for plugging or abandoning unused water wells according to Ontario Regulation 903 under the Ontario Water Resources Act.
- A drilled well inside a dug well is considered one project and therefore qualifies for one grant only.
- The contractor is required to complete an MECP Well Record to document the steps taken to plug the well. A copy of the well record must be submitted upon completion to the program representative.
- If you have an existing well record for the well that you are proposing to upgrade, please include a copy with the application form. If you do not have a well record, please see below for guidance on determining if a well record exists.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Park's website: Directory of Licensed Well Contractors in Ontario <https://www.ontario.ca/page/find-licenced-well-contractors> or by contacting the Water Well Help Desk at 1-888-396-WELL (9355) or wellshelpdesk@ontario.ca

Eligible Costs:

- Licensed contractor fees
- Any labour or materials associated with proper well plugging procedures

Ineligible Costs:

- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Grant will not be paid on HST if the applicant is entitled to a HST rebate



Wellhead Protection (Upgrades)

Cost Share Details: 100% up to \$1000 per well

Purpose:

- To reduce the risk of contamination of well water by implementing proper construction and maintenance practices and safeguards for existing wells.

Eligible Projects:

- Upgrading water wells to meet Ontario Regulation 903 of the Ontario Water Resources Act including:
 - Installing pitless adapter and filling drilled well pits;
 - Grading and permanently seeding soil surface to divert water away from well head;
 - Sealing annular space around well casing;
 - Upgrading or replacement of casing;
 - Extending well casing to 16" (40 cm) above finished ground level; and
 - Installing proper well head caps (vermin proof).

Project Details:

- In accordance with Ontario Regulation 903 of the Ontario Water Resources Act, any alteration to the well must be completed by a licensed well contractor. The contractor is required to complete a MECP Well Record to document works undertaken on the well. A copy of the Well Record must be submitted upon completion to program staff.
- Where a contractor determines an existing well cannot be upgraded, funding may be provided for the drilling of a replacement well on the condition the old well is properly decommissioned. If a replacement well must be drilled, all reasonable attempts must be made to achieve adequate separation distances from potential sources of contamination. CH WQHIP staff can assist with this.
- Information on licensed well contractors and well records can be found on the MECPs Directory of Licensed Well Contractors in Ontario: <http://www.waterwellontario.ca/>

Eligible Costs:

- Licensed contractor fees
- Materials and labour (other than that of the applicant or the applicant's family)
- Wiring and plumbing costs associated with well upgrades
- Drilling of new wells, if the existing well cannot be upgraded. To be eligible, existing wells must be properly decommissioned. Applications for well upgrades on properties which have the ability to connect to municipal water service will require additional justification and consultation with Conservation Halton staff

Ineligible Costs:

- Well pumps
- Water purification or treatment systems
- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Well upgrades in buildings. They will be considered for the well decommissioning grant



COMMERCIAL PROPERTIES | FINANCIAL INCENTIVE PROGRAM GUIDELINES

WATER QUALITY & HABITAT IMPROVEMENT PROGRAM

Current as of May 4, 2022



Conservation Halton has a lot of information and documents available to support landowners in both hard copy and online. To assist you in finding the information most relevant to you, documents have been organized into the following categories: Urban Properties, Countryside Properties and Agricultural Properties. Use the colour coding tag and symbology as a guide along your information gathering journey.

Agricultural Properties



Countryside Properties



Urban Properties



Commercial Properties





Conservation Halton Water Quality and Habitat Improvement Program CORPORATE PROPERTIES

Contents

Program Background	2
.....	2
Program Purpose	2
Program Goals.....	2
Program Process	2
Landowner Financial Assistance and Project Eligibility	4
Grant Overview.....	4
Table 1: Projects Eligible for Funding.....	4
Eligibility.....	5
Limitations to Grant Availability	5
The Grant Process	6
How to Apply.....	6
Grant Application Review Process	6
Project Closeout.....	7
Timeline.....	7
Roles and Responsibilities.....	9
Conservation Halton (CH)	9
The Project Technical Advisory Committee (PTAC)	9
The Grant Applicant	9
Project Guidelines	11
Education and Training	11
In-Stream Barrier Mitigation.....	13
Invasive Plant Species Control	14
Rainwater Conservation.....	16
Natural Area Creation and Enhancement.....	18
Innovative Projects.....	20
Wellhead Abandonment – City of Hamilton.....	21
Wellhead Protection (Upgrades)	22



Program Background

Since 1994, Conservation Halton has provided technical and financial assistance to private landowners to assist them in implementing best management practices and conservation projects that improve and protect water quality and wildlife habitat. Citizens in urban, rural, agricultural, and commercial areas of Conservation Halton's watershed are encouraged and supported in taking responsibility for restoring and maintaining the quality of the environment in which they live.

This is the foundation upon which this Program, formerly known as the Hamilton-Halton Watershed Stewardship Program was developed in 1994 with the following partners:

Conservation Halton
Hamilton Conservation Authority
Bay Area Restoration Council

Program Purpose

The purpose of the Water Quality and Habitat Improvement Program (WQHIP) is to support landowners and property managers with a grant towards the cost of eligible projects they undertake on their land to improve local surface and ground water quality as well as fish and wildlife habitat through improved land management practices. All projects implemented under this program are voluntary.



Program Goals

- To provide technical and financial assistance to landowners and residents in Conservation Halton's watershed to achieve their environmental and stewardship goals;
- To promote and facilitate the adoption of environmentally sound land management practices to protect, restore, and enhance surface and groundwater, air, and soil quality and/or fish and wildlife habitat in Conservation Halton's watershed;
- To help protect agricultural lands as a natural resource of major importance in the area, while recognizing and supporting farmers and agricultural organizations as valuable contributors to the environment, community, and economy; and
- To promote healthy communities that respect the natural environment and water resources.

Program Process

Grant assistance is available to landowners or property managers who:



- build new structures, upgrade existing structures, and adopt practices which will improve existing problems as part of their water quality improvement plan;
- create or rehabilitate fish and wildlife habitat;
- demonstrate good land stewardship practices; and
- create educational opportunities or demonstration sites.

Projects will be pre-screened by staff for eligibility to ensure they meet guidelines. Projects will then be reviewed by the Project Technical Advisory Committee (PTAC) who will consider the merit of each project and score them accordingly.

There may be instances where Conservation Halton is the recipient of external grant funding that can be allocated to projects. Under these circumstances, a PTAC review of the project may not be required.

There may be instances where proposed projects require review by one or more of the following: Ontario Ministry of Natural Resources and Forestry (MNRF), Ontario Ministry of the Environment, Conservation and Parks (MECP), Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), local Medical Officer of Health, Ontario Soil and Crop Improvement Association (OSCIA), Conservation Halton (CH), Fisheries and Oceans Canada (DFO), or municipality, etc.

Approvals Committee: The Project Technical Advisory Committee (PTAC) acts as the Approvals Committee for all WQHIP project proposal applications as outlined in the PTAC Terms of Reference and ensures that the Water Quality and Habitat Improvement Program is administered in accordance with these guidelines.

PTAC consists of representatives from local agricultural organizations, environmental interest groups, citizens at large, as well as representation from local Conservation Authorities.

Conservation Halton staff provide support to landowners by offering free:

- Property site visits;
- Landowner/property manager consultations;
- Technical assistance for project design when appropriate;
- Education and outreach opportunities.



Landowner Financial Assistance and Project Eligibility

Grant Overview

The following grants are available to urban properties in Conservation Halton's watershed who implement projects to improve water quality or habitat on their properties as outlined below. A single property may be eligible to receive grants under each category up to the category cap each calendar year (some exceptions apply). For large projects that are planned to be implemented in phases, applicants are encouraged to present the complete project as well as the immediate phase that is requesting funds. Each phase of the project must provide a demonstrable environmental improvement as determined by the PTAC.

Refer to Table 1 for a list of project categories and their associated grant rates and caps.

Note: WQHIP grants may be combined (stacked) with other cost share sources, and applicants are encouraged to seek additional funding. Combined grants are not to exceed 100% of total expenses. Applicants must inform Conservation Halton staff of additional cost share funding. Conservation Halton's Water Quality and Habitat Improvement Program is applied as the final funding. If an applicant receives funding from another source(s), their project will be eligible to receive the WQHIP grant rate for the remaining costs. For example:

Total Project Cost = \$1000

\$250 confirmed funding from other cost share source

\$750 remaining cost is eligible for WQHIP grant rate and cap.

Table 1: Projects Eligible for Funding

Project Type	Cost Share	Maximum Cost Share	Notes
Natural Area Creation and Enhancement	75%	\$5,000 (Terrestrial) \$10,000 (Aquatic)	Per project
Education and Training	50%	\$500	Once per year per applicant
In-Stream Barrier Mitigation	75%	\$5,000	Per project
Invasive Species Management	50% -75%	\$5,000	Per project (specific rates and caps in chart below apply)
Rainwater Conservation	50%	\$5,000	Per project
Innovative Projects	75%	\$5,000	Per project
Wellhead Abandonment – City of Hamilton	100%	\$1,000	Maximum 2 wells per property
Wellhead Protection	100%	\$1,000	Per property



Eligibility

1. A grant to implement a project through the Water Quality and Habitat Improvement Program may be paid to an individual applicant who:
 - is a registered business in Ontario
 - is a registered owner of the property
 - is a property manager with permissions to make permanent changes to the property
2. The project must be located within Conservation Halton's jurisdiction and improve habitat and/or water quality.
3. The following costs are generally eligible for grant assistance:
 - Required permits
 - Purchased materials and supplies
 - Professional fees
 - Fees for design, construction, and supervision

NOTE: The labour and machinery use of the applicant, family dependents, and the applicant's business are not eligible. All contributions from the applicant will be in-kind.

4. All approvals and permits are the responsibility of the applicant. It is the applicant's responsibility to ensure that the project meets all legal requirements including (but not limited to):
 - Local municipal bylaws
 - Provincial and regional highway setbacks
 - Drainage Act
 - Federal and Provincial Acts
 - Canada Farm Building Code
 - Ontario Building Code
 - Conservation Authorities Act
5. Innovative technologies and projects that do not necessarily conform to the guidelines will be considered by the Project Technical Advisory Committee on a project-by-project basis. Applicants should contact program staff to determine the application requirements.
6. From time to time, Conservation Halton staff will review the eligible project types and guidelines and may alter these at their discretion.

Limitations to Grant Availability

1. Grants are limited to properties in Conservation Halton's watershed, with completed water quality and/or habitat improvement project plan designs.
2. Any applicant who proceeds with a project before it has been approved by the Project Technical Advisory Committee has no assurance that financial assistance will be provided.



3. An applicant must specify the year in which the project will be completed. If the project cannot be completed within the specified year, the grant may not be available. However, the applicant may appeal to Conservation Halton staff for an extension.
4. Funds will be allocated on a priority basis. Those projects with the higher potential for improving habitat and/or water quality will be considered first.
5. The grant will not be paid on HST if the applicant is entitled to an HST rebate.
6. Conservation Halton will set funding allocations annually. At that time, they may decide to set allocations for priority areas, and/or project categories. Funds may be limited based on this decision.
7. The number of grants available may be restricted to meet local priorities and budgets. Once the annual Water Quality and Habitat Improvement Program budget has been committed, no further approvals will be given.
8. It is possible that a project is evaluated as having merit but is not funded due to available funding being fully allocated to higher ranking projects. If the approved projects in a single year exceed the annual budget, the remaining approved un-funded projects may be resubmitted for re-scoring and approval the following year.

The Grant Process

How to Apply

1. Contact the Water Quality and Habitat Improvement Program at Conservation Halton (CH) (905-336-1158 x 2263) or by email at stewardship@hrca.on.ca to verify that your proposed project meets the guidelines and to arrange a site visit. CH staff are available to assist you with the planning of your project and applying to the program.
2. Complete and submit the WQHIP Application to Conservation Halton by the December 1st * deadline of the year prior to the year of project implementation. An Application Support Guide will be provided for clarification and to assist with the process.

* Application deadline may be extended in a given year. Please check online at: <https://conservationhalton.ca/financial-incentives> or contact your Landowner Outreach Technician to confirm the current year's deadline.

Grant Application Review Process

1. The Project Technical Advisory Committee reviews project applications once per year over a two-week period in January/February. Grant applications are anonymously presented to PTAC to review, evaluate, and score the projects based on their potential to protect and/or improve local habitat and/or water quality. All applicants are notified of their project scoring results in the week following the PTAC review.



2. The committee may pose questions to the applicant, a contractor listed on the application, or to CH staff and may have discussions about the project to determine a project's merit.
3. Project merit is assessed based on the following attributes:
 - The project directly addresses a water quality impairment;
 - The project directly addresses a habitat impairment;
 - The project contributes to improving water quality;
 - The project contributes to improving habitat quality;
 - The project is located adjacent to or in close proximity to a natural area; and
 - The project raises public awareness of water quality and habitat issues or opportunities.
4. PTAC members score each of the projects independently, based on the project's attributes.
5. After reviewing the responses of the PTAC members, Conservation Halton staff will rank the different projects and inform PTAC members of their decision to fund or not fund the grant applications.
6. Once the project proposal has been reviewed and approved by the Project Technical Advisory Committee, successful applicants will be notified to proceed with the project. If your project has not been approved, the reasons for this will be communicated. There may be an opportunity to resubmit the project application the following year after suggested changes have been made.
7. Once your project has been approved, you will be asked to review, sign, and return a WQHIP Agreement prior to commencing work. The agreement, alongside your application, will serve as the Project Agreement between you and Conservation Halton.

Project Closeout

1. Notify staff when the project is completed, paid for, and you have copies of all necessary permits and receipts. A site inspection is required to confirm that the project is complete. At that time, you can submit the financial tracking form, original invoices marked "paid", and a copy of cancelled cheques (front and back) or bank statement for all eligible project expenses to CH staff.
2. Within 4 weeks of a site inspection that determines that the work is complete and satisfactory, your pre-approved cost-share payment will be sent to you.

Timeline

ACTION	DATE
WQHIP Applications to be Submitted to Conservation Halton	December 1 st



PTAC Review meeting	January-February
Applicant Notification Letters Distributed	Late February
Project Agreement Established	Early March
Project Installations	March-November
Financial Tracking Submitted to Conservation Halton	ASAP, but no later than December 1 st
Grant Payment Issued (upon completion of inspection)	ASAP, but no later than December 15 th



Roles and Responsibilities

Conservation Halton (CH)

- Establishes and updates program guidelines as needed to ensure that the program is properly administered;
- Reviews the funding allocation regularly;
- Ensures that information on the administration of the program is available to all potential applicants;
- Establishes the WQHIP Project Guidelines with assistance from PTAC and partners and regularly reviews and evaluates the financial assistance framework to ensure the program is properly administered and the financial assistance available aligns with the goals of the WQHIP;
- Conducts site visits to identify project opportunities for the creation or enhancement of habitat and evaluates the potential sources, pathways, and magnitude of water quality impairment;
- Provides information to landowners regarding conservation practices, structures, and stewardship practices that may qualify for grants;
- Provides management choices and remedial options to reduce pollution potential from identified sources;
- Assists applicant with the completion of the Water Quality and Habitat Improvement Funding Application and Agreement;
- Reviews water quality and/or habitat improvement plans for acceptability for grant assistance;
- Ensures the anonymity of project applicants when grant applications/project proposals are presented to PTAC;
- Allocates funds based on the review, scoring, and ranking of PTAC;
- Communicates to all applicants the results of the PTAC review in writing;
- Verifies that projects have been completed;
- Ensures that payment is issued to the landowner upon project administrative completion; and,
- Undertakes monitoring of the completed project as written in the funding agreement.

The Project Technical Advisory Committee (PTAC)

- Is made up of industry professionals and community volunteers;
- Ensures that the WQHIP is administered in accordance with these guidelines; and,
- Evaluates and scores each project based on the attributes listed under the Grant Application Review Process above.

The Grant Applicant

- Contacts CH WQHIP staff to verify that the proposed project meets the grant eligibility requirements;
- Contacts CH WQHIP staff to arrange an on-site consultation;



- Completes the grant application to the best of their ability. CH WQHIP staff are available to assist;
- Ensures that the information on the grant application is complete and correct;
- When signing the grant application, agrees to maintain and use the new structures in accordance with their water quality improvement or habitat enhancement plan for a period of not less than 10 years or the life of the structure;
- Ensures that the project meets all relevant local, provincial, and federal laws and regulations;
- Ensures that appropriate permits are obtained prior to construction;
- Contacts CH promptly following completion so that verification of the completed projects can be made;
- Provides receipts for materials or items purchased and copies of supporting cancelled cheques or proof of financing in order to receive the grant, including completion of the Financial Tracking Form;
- Agrees to display a conservation project sign on their property in a location visible to the public;
- Agrees to inform CH if the property is sold to a new owner or will be managed by a different company in the future;
- Agrees to transfer a copy of the approved Water Quality and Habitat Improvement Funding Application and Agreement and associated documents to the new landowner (for information purposes only) if the property is sold in the future; and
- Gives permission to CH to photograph and promote the success of a particular project to demonstrate the positive actions that are being taken by the landowners or property managers in CH's watersheds.

Note: Although Conservation Halton may provide information regarding the applicant's water quality improvement plan, habitat enhancement plan, and the practices and structures contained in the plan, it is the responsibility of the applicant to ensure that the practices and structures undertaken are suitable to the applicant's operation and technically and structurally adequate.

Conservation Halton, Bay Area Restoration Council, PTAC Members, funding agencies or other review agencies (e.g., DFO, OMAFRA, MECP, MNRF, OSCIA, Local Medical Officer of Health) are not liable for any loss arising from the use of any advice or information provided as part of or under the Water Quality and Habitat Improvement Program.



Project Guidelines

Education and Training

Cost-Share: 50% up to \$500

Purpose:

- To support a watershed business in accessing an opportunity that relates to the protection, restoration, and enhancement of water, air, or soil quality, and/or fish and wildlife habitat as promoted by Conservation Halton.
- To provide support to organizations that wish to educate or train employees from a Conservation Halton watershed business on water quality, habitat, or agri-environmental related subjects.

Eligible Projects:

- Educational and/or training course costs
- Production of new materials (e.g., brochures, pamphlets, etc.)
- Reprints and distribution of existing materials
- Development and implementation of new events (e.g., workshops, farm tours, etc.)
- Support of recurring events



Project Details:

- Applicants* will provide a plan identifying the need for the initiative, the target audience, goals and objectives, draft content, distribution plan, itemized cost estimates, timeline, and potential and secured funding.
- The plan must demonstrate that the project is a priority in the context of Conservation Halton's Water Quality and Habitat Improvement Program.
- Applicants are encouraged to seek multiple funding partners. Applicants must identify all funding (potential and received) from other partners or cost recovery aspects at the time of application.
- Applicants are encouraged to develop materials and events that address the needs of various stakeholders including agricultural, residential, commercial, and industrial.
- Projects must not duplicate the work being done or previously completed by other agencies or organizations. The Program will make use of existing educational materials and events whenever possible, providing that they adequately meet its objectives.
- Applicants are eligible for one grant per year for educational initiatives. The PTAC may consider additional project proposal applications from one group if funds remain at the end of the Program year.
- Projects initiated by for-profit companies and organizations, government or government agencies, and conservation authorities are not eligible.



- The Program will not fund projects targeted at audiences exclusively outside of Conservation Halton's watershed.
- Successful applicants will consult with Conservation Halton WQHIP staff on the final content and layout of publications and events to ensure that Program objectives are met.

Eligible Costs:

- Material costs
- Professional/speaker fees
- Translation
- Printing costs
- Rental of halls or equipment for events
- Permits and approvals
- Meals and non-alcoholic beverages

Ineligible Costs:

- Purchase of equipment
- On-going operating and capital costs (e.g., costs associated with an annual general meeting)
- Courses that solely benefit an individual
- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Mileage

* An 'applicant' represents the interests of their organization at its highest representative level. Therefore, individual applications, without the consent of their organization, will not be considered. Funding allocated to the applicant will be considered as funding to the entire organization and will be subject to the yearly grant maximum.



In-Stream Barrier Mitigation

Grant Rate and Cap: 75% up to \$5,000

Purpose:

- To restore or enhance aquatic habitat through the remediation of an existing impairment to fisheries habitat. Impairments may include, but are not limited to, online ponds, dams, culverts, etc.

Eligible Project Types:

- Bypass Channel
- Dam Removal
- Debris Removal
- In-stream Barrier Mitigation
- Culvert Replacement or Upgrade
- Online Pond Mitigation



Project Details:

- Projects must obtain approval from appropriate agencies (e.g. Conservation Authority, OMAFRA, DFO, MNRF, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- Project must remediate an existing water quality impairment.
- During construction all erosion control measures shall be implemented.
- For larger or more complex projects, engineered designs may be advised.
- Structures should be properly engineered to withstand expected water volume and velocities. The applicant and their contractor/engineer will be responsible for the structural integrity of the project.

Eligible Costs:

- Materials
- Labour
- Equipment rentals
- Professional services
- Permits
- Engineering and consulting fees

Ineligible Costs:

- Projects without adequate sediment control
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Installation or repair of the tile drainage system
- Maintenance of installed structures



Invasive Plant Species Control

Grant Rate and Cap: 50% - 75% up to \$5,000 (see Grant Rates and Caps in chart below)

Purpose:

- To support the implementation of best management practices to remove, control, and prevent the spread of invasive plant species and help enhance biodiversity.

Eligible Projects:

- Removal of invasive plant species such as *Phragmites*, Dog-Strangling Vine, Japanese Knotweed, Common Buckthorn, etc. For a full list of eligible species, visit www.invadingspecies.com



Note: Best Management Practices often recommend planting native tree and shrub species once the targeted invasive species population is eradicated or under control. If dealing with a large infestation, it is sometimes best to remove the invasive plant and re-plant in phases to avoid other invasive species moving in. Re-planting with native species will help jump-start natural succession and increase biodiversity in the area. Higher consideration may be given to invasive plant species control projects that are paired with a native tree, shrub, herbaceous plant and/or grass planting project application. Projects proposing non-native species alternatives and lawn alternatives post removal will not be considered. Best Management Practices for Invasive Plant Species in Ontario can be found at www.ontarioinvasiveplants.ca



Eligible Costs:

- Professional contracting services for removal/control of invasive plant species. Full list of eligible species found at www.invadingspecies.com
- Project costs could include the following:
 - Development of invasive plant species management plan
 - Materials, labour, equipment rentals, permits, and engineering fees
 - Use of specialized equipment for removal
 - Appropriate disposal of vegetation

Ineligible Costs:

- Major clearing of field or forest landscapes
- Purchase of cultivation equipment, including equipment used primarily for general vegetation control (e.g., tillers, mowers, etc.)
- Chemicals (herbicides), unless proven to be the most effective means of control with a support letter from technical specialist or other supporting information deemed appropriate
- Purchase of chemical spraying equipment
- Control and management of plants not identified as invasive
- Fuel costs

Invasive Species Type	Description of Eligible Project	Grant Rate	Grant Cap
Herbaceous Plants and Grasses	Property within 100 meters of an Environmentally Significant Area (ESA), Area of Natural and Scientific Interest (ANSI), Significant Woodland, Provincially Significant Wetland (PSW) and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using Integrated Pest Management (IPM).	75%	\$5,000
Woody Shrubs			\$5,000
Trees			\$5,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, 10 acres or greater in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$2,500
Woody Shrubs			\$5,000
Herbaceous Plants and Grasses	Property within 100 meters of an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$500
Woody Shrubs			\$1,000
Trees			\$1,000
Herbaceous Plants and Grasses	Property greater than 100 meters away from an ESA, ANSI, Significant Woodland, PSW and/or wetland complex, less than 10 acres in size. Funding to pay for contractors to remove invasive species using IPM.	50%	\$250
Woody Shrubs			\$500
Herbaceous Plants and Grasses	Projects occurring within the floodplain of a creek. Funding to pay for contractors to remove invasive species using IPM.	75%	\$2,500
Woody Shrubs			\$5,000
Trees			\$5,000



Rainwater Conservation

Grant Rate and Cap: 50% up to \$5,000

Purpose:

Reduce imperviousness and increase infiltration or storage of rainwater to reduce the volume and improve the quality of stormwater runoff flowing directly into local watercourses or designated natural areas and/or into the municipal sewer system.

Eligible Projects:

- Bioswales
- Infiltration trenches
- Soakaway pits/Rain gardens
- Water retention/Storage systems
- Detention basins
- Permeable pavement/pavers
- Projects that demonstrate the retention, infiltration, or conservation of rainwater



Project Details:

- Evidence of the interception of stormwater drainage from the proposed project location to the municipal system or directly to a watercourse must be present.
- Any excess flow must drain onto the applicant's property.
- Priority will be given to properties serviced by combined sewers and projects incorporating more than one project type to reduce stormwater runoff.
- Downspout disconnections and excavated projects must occur a minimum of 3 m from building foundations.
- Bioretention projects, soakaway pits, and infiltration trenches must be:
 - Located in a relatively flat area and out of areas where the water table is high;
 - Sized appropriately and with amended soils where the infiltration test has indicated the soils are poorly drained; and
 - Installed with a drain or overflow to accommodate large storm events.
- Detention basins and stormwater quality control basins must be professionally designed.

Eligible Costs:

- Materials and supplies
- Contractor labour
- Equipment rentals
- Professional services
- Permits
- Engineering and consulting fees
- Native plant species

**Ineligible Costs:**

- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Non-native plant species
- Disposal fees
- Equipment purchases



Natural Area Creation and Enhancement

Grant Rate and Cap: 75% up to \$10,000: Aquatic
75% up to \$5,000: Terrestrial

Purpose: To create, restore, or enhance aquatic and terrestrial habitats and/or enhance water quality.

Eligible Project Types:

- Watercourse or instream channel reconstruction/enhancements
- Riparian plantings
- Streambank stabilization
- Wetland creation and enhancements
- Wetland buffer plantings
- Seeding, planting, or live staking of native species of flora (e.g., reforestation, meadow or grassland establishment)
- Habitat features (e.g., bird and bat boxes, spawning substrate, turtle nesting bed, osprey platform, snake hibernaculum)



Project Details:

- Projects must obtain approval(s) from appropriate agencies (e.g., Conservation Authority, OMAFRA, Municipality, etc.). Projects on Municipal Drains must be approved by the applicable Drainage Superintendent.
- A plan is required specifying species, planting density, location, site preparation, and maintenance. To promote approval, the plan should be developed in conjunction with Conservation Authority/CH staff or a private consultant. A plan is required for construction of habitat features, including but not limited to, what materials will be used, size, location of installation, etc. A plan is required for all wetland and watercourse projects. Level of detail required will vary by project and site and will be stipulated by approval agencies.
- Appropriate native species are mandatory.
- Wetland creation projects must provide water storage, improve water quality by acting as a natural filter, reduce flooding, reduce erosion, replenish groundwater, and create or enhance wildlife habitat.
- Priority may be given to projects that are adjacent to identified natural heritage areas (please consult with Conservation Halton WQHIP staff).
- Priority may be given to projects partnering with other wetland restoration programs (e.g., Ducks Unlimited Canada)



- The participant is responsible for the care and maintenance of plantings. The project site must be properly maintained according to the approved plan to receive a performance incentive
- Livestock must be excluded from the site.

Eligible Costs:

- Materials and supplies
- Labour
- Equipment rentals
- Professional services
- Permits Fees
- Trees, shrubs, and planting costs (maximum \$30 per tree, \$20 per shrub, and \$7 per herbaceous)
- Tree protection systems

Ineligible Costs:

- Commercial stock, fruit trees, or Christmas tree species which are commercially marketable in less than 15 years
- Farmstead landscaping
- Labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents, and the applicant's business
- Irrigation ponds
- Non-native species of flora



Innovative Projects

Cost Share Details: 75% up to \$5,000

Purpose:

To encourage the adoption of innovative technology that improves and protects surface water or groundwater quality and/or wildlife habitat.

Project Details:

- Projects will be reviewed on their own merits. The applicant must submit a plan outlining the proposed project.
- Projects must be able to demonstrate the potential for improving and protecting surface water or groundwater quality and/or wildlife habitat.
- Applicants are encouraged to seek additional funding from other sources.
- All permits required by the appropriate agencies must be obtained (municipal, provincial or federal, Conservation Authority, etc.).

Eligible Costs:

- Materials and supplies
- Labour (other than the applicant's) associated with an approved project
- Permit fees
- Professional design fees
- Engineering or consulting fees

Ineligible Costs:

- Primary research
- Purchase of farm equipment or equipment modifications
- GPS systems and components, yield monitors
- Funding will not be provided to incomplete projects
- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Primary hydro



Wellhead Abandonment – City of Hamilton

Cost Share Details: 100% up to \$1,000 per well

Purpose:

- To prevent groundwater contamination via improperly abandoned or unused wells by encouraging the proper plugging of wells that are dry or no longer used.

Eligible Projects:

- Proper plugging of unused wells (dug, bored, or drilled) by a licensed well contractor.

Project Details:

- Must comply with Ontario Ministry of the Environment, Conservation and Parks (MECP) procedures for plugging or abandoning unused water wells according to Ontario Regulation 903 under the Ontario Water Resources Act.
- A drilled well inside a dug well is considered one project and therefore qualifies for one grant only.
- The contractor is required to complete a Ministry of the Environment, Conservation and Parks Well Record to document the steps taken to plug the well. A copy of the well record must be submitted upon completion to the program representative.
- If you have an existing well record for the well that you are proposing to upgrade, please include a copy with the application form. If you do not have a well record, please see below for guidance on determining if a well record exists.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Parks website: Directory of Licensed Well Contractors in Ontario <https://www.ontario.ca/page/find-licensed-well-contractors> or by contacting the Water Well Help Desk at 1-888-396-WELL (9355) or wellshelpdesk@ontario.ca

Eligible Costs:

- Licensed contractor fees
- Any labour or materials associated with proper well plugging procedures

Ineligible Costs:

- Labour and machinery use of the applicant, family dependents, and the applicant's business
- Grant will not be paid on HST if the applicant is entitled to a HST rebate



Wellhead Protection (Upgrades)

Cost Share Details: 100% up to \$1000 per well

Purpose:

- To reduce the risk of contamination of well water by implementing proper construction and maintenance practices and safeguards for existing wells.

Eligible Projects:

- Upgrading water wells to meet Ontario Regulation 903 of the Ontario Water Resources Act including:
 - Installing pitless adapter and filling drilled well pits;
 - Grading and permanently seeding soil surface to divert water away from well head;
 - Sealing annular space around well casing;
 - Upgrading or replacement of casing;
 - Extending well casing to 16" (40 cm) above finished ground level; and
 - Installing proper well head caps (vermin proof).

Project Details:

- In accordance with Regulation 903 of the Ontario Water Resources Act, any alteration to the well must be completed by a licensed well contractor. The contractor is required to complete a Ministry of the Environment, Conservation and Parks Well Record to document works undertaken on the well. A copy of the Well Record must be submitted upon completion to program staff.
- Where a contractor determines an existing well cannot be upgraded, funding may be provided for the drilling of a replacement well on the condition the old well is properly decommissioned. If a replacement well must be drilled, all reasonable attempts must be made to achieve adequate separation distances from potential sources of contamination. Conservation Halton WQHIP staff can assist with this.
- Information on licensed well contractors and well records can be found on the Ministry of the Environment, Conservation and Park's website: Directory of Licensed Well Contractors in Ontario: www.ontario.ca/page/find-licenced-well-contractors

Eligible Costs:

- Licensed contractor fees
- Materials and labour (other than that of the applicant or the applicant's family)
- Wiring and plumbing costs associated with well upgrades
- Drilling of new wells, if the existing well cannot be upgraded. To be eligible, existing wells must be properly decommissioned. Applications for well upgrades on properties which have the ability to connect to municipal water service will require additional justification and consultation with Conservation Halton staff

Ineligible Costs:

- Well pumps
- Water purification or treatment systems



- Labour and machinery use of the applicant, the applicant's family, and/or the applicant's business
- Well upgrades in buildings. They will be considered for the well decommissioning grant

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 12

FROM: Nigel Finney, Project Manager, Restoration & Conservation

DATE: June 23, 2022

SUBJECT: Tansley Bridge over Bronte Creek – Offsite Restoration Funding Agreement

Recommendation

THAT the Conservation Halton Board of Directors **approves the Memorandum of Agreement with the Region of Halton for the offsite ecological restoration project for the Tansley Bridge over Bronte Creek project.**

And

THAT the Conservation Halton Board of Directors **authorizes the Chief Executive Officer to sign the agreement on behalf of Conservation Halton.**

Report

The Region of Halton is in the process of widening and rehabilitating Dundas Street (Regional Road 5) from Appleby Line (Regional Road 20) to Tremaine Road (Regional Road 22), including the Tansley Bridge over Bronte Creek. These works occur within recognized [Silver Shiner](#) habitat which is protected under the provincial *Endangered Species Act, 2007*.

The Region has secured a Permit ([AU-C-003-18](#)) from the Ministry of the Environment, Conservation and Parks (MECP) under subsection 17(1) of the *Endangered Species Act, 2007*. In addition to site specific overall benefit activities, the Region is required to fulfill offsite ecological restoration to benefit Silver Shiner.

As a local leader in remediating natural hazards and ecological restoration, Conservation Halton (CH) has partnered with the Region to provide the full suite of project management services to complete the rehabilitation/stabilization of 1,500 m² of actively eroded Bronte Creek valley slope located at 4284 Side Road 2, Burlington, Ontario (Mount Nemo Scout Camp) to provide long-term protection against slope instability and erosion to reduce the risk to Silver Shiner habitat.

A combination of slope and river processes has resulted in considerable erosion of the valley wall. Erosive processes have inhibited vegetation growth and sediment has been eroding into Bronte Creek for several years. A detailed study will be completed to determine the best remedial measures to improve habitat conditions and reduce erosion.

This project would be in collaboration with Scouts Canada – National Service Centre. Scouts Canada is supportive of the initiative and looking forward to partnering on beneficial outcomes.

This project will also enhance the Region of Halton's Natural Heritage System, mitigate an unstable slope and reduce sedimentation and habitat degradation in the main Bronte Creek valley.

The project, preliminarily valued at \$1.5 million, would be undertaken at full cost recovery from the Region and is projected to be planned and implemented from 2022 to 2027.

The opportunity would provide CH with significant investments in internal skills, project management experience, and would further position the authority as an accomplished and effective leader in ecological restoration project management.

Scouts Canada - Camp Nemo



1. Project Location:
 - Location: City of Burlington - Scout Camp Nemo
 - Watercourse: Bronte Creek, Main Branch
2. Project Goals:
 - Stabilize 1,500 m² of actively eroding bank

Legend

- Erosion Area
- Scouts Camp Property
- Watercourse

70 35 0 70 Meters



NFinney 190916

Impact on Strategic Goals

This report supports the strategic objective of implementing restoration activities to manage natural hazards and natural resources. This report also supports the objective to enhance collaboration between the conservation authority, municipality, and local landowners through mutually beneficial partnership initiatives.

Financial Impact

Costs associated with implementing this initiative will be fully recovered through funding and financing conditions in the Funding Agreement with the Region of Halton.

Signed & respectfully submitted:



Nigel Finney
Project Manager, Restoration & Conservation

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Nigel Finney, 905.208.1006; nfinney@hrca.on.ca

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 13

FROM: Mark Vytvytskyy, Chief Operating Officer

DATE: June 23, 2022

SUBJECT: **Authorization Request for Award Approval Contract:
CH Headquarters Low Impact Development Construction Services
RFT # CA003-22-3**

Recommendation

THAT the Conservation Halton Board of Directors **approves the award recommendation of the Conservation Halton Administrative Office Low Impact Development Construction Services contract to Forest Ridge Landscaping Inc.**

And

THAT the Conservation Halton Board of Directors **approves a budget increase for the Low Impact Development project of \$798,000 (including \$67,000 contingency) from the \$500,000 included in the 2021 budget.**

Report

As part of a phased upgrade to the administrative offices of Conservation Halton (CH) (located at 2596 Britannia Road West, Burlington), a Request for Tender (RFT) was publicly issued on Bids & Tenders.ca (bidding portal) to secure tenders for construction services related to the Low Impact Development (LID). This is a necessary project to transition the property from grey to green solutions. It will showcase green infrastructure techniques to manage and infiltrate stormwater and modernize visitor use of the space.

Based on the pricing submission of the RFT evaluation, it is estimated that the funding requirement for the construction services will be approximately \$682,636.61 (base bid amount - \$565,770.00 + provisional costs amount - \$105,060.00 + HST-R \$11,806.61). Completion date is estimated to be November 21, 2022.

For achieving the lowest compliant tender during the RFT process, CH is recommending that Forest Ridge Landscaping Inc. be awarded the contract for CH Administrative Office Low Impact Development Construction Services. The proposal aligns with the CH Purchasing Policy Section 2.3.2 (b) *Requests for Tenders of \$350,000 and over must be approved by the Conservation Halton Board of Directors.*

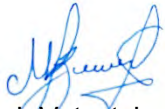
Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability (strategic objective of transitioning infrastructure from grey to green solutions).

Financial Impact

The total cost of the construction services contract will be approximately \$682,636.61 and will be funded from the federal Canada Community Revitalization Fund (\$302,940). Remaining funding will come from the approved Halton Region debt financing in the 2021 budget of up to \$500,000.

Signed & respectfully submitted:



Mark Vytvytskyy
Chief Operating Officer

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 14

FROM: Mark Vytvytskyy, Chief Operating Officer

DATE: June 23, 2022

SUBJECT: **Authorization Request for Award Approval Contract:
Kelso Dam - Lift Gate and Hoist Refurbishment, East Gate (C22016)**

Recommendation

THAT the Conservation Halton Board of Directors **approves the award recommendation of the Kelso Dam - Lift Gate and Hoist Refurbishment, East Gate (C22016) contract as a single source.**

Report

In 2015, Conservation Halton (CH) retained an engineering firm to undertake a detailed inspection of CH's flood control dams and spillways. Results of the investigation identified that the two existing component systems including lift gates, hoist motors, and drums (east and west) at the Kelso Dam were in poor condition and were recommended for refurbishment to ensure continued function.

In 2021, CH publicly posted a Request for Tender (RFT) to provide refurbishment of the west component system. A total of three (3) bids were received with Sutherland-Schultz Limited (SSL) being the lowest compliant bidder. SSL were subsequently awarded the work.

Sutherland-Schultz are recommended to provide refurbishment of the east component system due to the identical nature of the work performed in 2021. CH will benefit from significant cost savings due to SSL's familiarity with the project site, scope and risks. Furthermore, it is recommended that SSL fabricate and refurbish both component systems (east and west) to ensure equivalent operation and performance.

Based upon the above, SSL are recommended to be retained to provide refurbishment of the east component system at the Kelso Dam for \$156,351.00 plus HST, as a single source. The recommendation aligns with Conservation Halton's Purchasing Policy Section 2.8 *Negotiation, inclusive of Sole and Single Source that exceed \$100,00 must be approved by the Conservation Halton Board of Directors.*

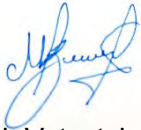
Impact on Strategic Goals

This report supports the Momentum priority of Natural Hazards and Water (strategic objective to optimize dam safety, operations, and flood forecasting within a sustainable funding model).

Financial Impact

The total cost of the construction services contract will be approximately \$156,351.00 plus HST, and will be funded from provincial grants (WECI) and reserves through the C22016 project.

Signed & respectfully submitted:



Mark Vytvytskyy
Chief Operating Officer

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

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

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 15

FROM: Marnie Piggot, Director Finance

DATE: June 23, 2022

SUBJECT: **Budget Variance Report for the Period Ended April 30, 2022 and 2022 Projected Year-End Amounts**

Recommendation

THAT the Conservation Halton Board of Directors **approves a transfer of up to \$20,000 from the Water Festival Reserve due to estimated increased staffing and bussing costs for the 2022 Water Festival event;**

And

THAT the Conservation Halton Board of Directors **approves the closing of and changes to the Dams and Channels capital project amounts noted on the Capital Project Summary Financial (Appendix I) based on provincial Water and Erosion Control Infrastructure (WECI) funding submissions noted in the staff report dated June 23, 2022;**

And

That the Conservation Halton Board of Directors **receives for information the staff report dated June 23, 2022 on the Budget Variance Report for the period ended April 30, 2022 and 2022 Projected Year End Amounts.**

Executive Summary

An operating surplus for 2022 of \$1,253,765 is projected in the attached Budget Variance Report Financial (Appendix H) and is summarized in the revenue and expense table below for the period ended April 30, 2022. Projected year-end amounts are based on conservative estimates by staff for the remainder of the year. The projected surplus is a favourable increase of \$881,647 compared to the budgeted surplus of \$372,118.

The surplus is primarily driven by a favourable Conservation Areas projected surplus totalling \$1,253,490. With a full Glen Eden winter ski season completed for fiscal 2022 and the relaxed impact of COVID-19 measures on park operations, there is an overall increase of program revenues across the Parks combined with a decrease in operating expenses as operations begin to normalize. The remainder of the surplus is attributed to the Watershed Management & Support Services programs (WMSS), totalling \$275. This slight surplus assumes a transfer from reserves of \$39,000 for projected legal expenses being the amount required to avoid a deficit position and is less than the 2022 budget reserve transfer of \$100,000.

The table below provides a summary of the projected year-end surplus compared to the budgeted year-end balances, as well as the total actuals amounts as of April 30, 2022.

Budget Summary	2022 Projected Year End	2022 Budget	Budget Variance	Actual April 30, 2022
Revenue				
Program Revenue	\$ 19,647,399	\$ 19,193,296	\$ 454,103	\$ 10,809,494
Municipal Funding	10,183,174	10,172,173	11,001	3,390,724
Other Funding & Municipal Special Levies	1,631,149	1,387,363	243,786	611,374
Internal Chargeback Recoveries	2,067,736	1,891,702	176,034	556,542
Transfers from Reserves	51,385	142,500	(91,115)	885
Provincial Funding	814,373	659,875	154,498	159,005
Total Revenues	\$ 34,395,216	\$ 33,446,909	\$ 948,307	\$ 15,528,024
Expenses				
Corporate Services	\$ 6,513,135	\$ 6,372,829	\$ 140,306	\$ 2,155,541
Natural Hazards & Watershed Management	4,804,808	4,877,734	(72,926)	1,406,456
Permitting & Planning	5,483,365	5,067,385	415,980	1,790,597
<i>Conservation Lands & Recreation</i>				
Land Management	1,511,860	1,617,647	(105,788)	399,978
Parks & Recreation	13,702,232	14,013,145	(310,913)	4,872,055
Debt Financing	620,551	620,551	-	16,444
Transfers to Reserves	505,500	505,500	-	-
Total Expenses	\$ 33,141,451	\$ 33,074,791	\$ 66,660	\$ 10,641,071
Total Operating Surplus	\$ 1,253,765	\$ 372,118	\$ 881,647	\$ 4,886,954

Further details on the projected surplus and capital project life to date costs are provided in the attached Budget Variance Report Financial (Appendix I) and in the information contained in this report.

Additional appendices provided with this report include:

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

Report

Operating Program

The Budget Variance Report Financial (Appendix H) provides explanations by department for variances that are projected to be greater than 10% that exceed \$10,000 from the 2022 budget amounts.

Canadian Emergency Wage Subsidy (CEWS) claims received in 2021 continue to be excluded until Conservation Halton (CH) staff confirm eligibility requirements with more certainty. Although the impacts of COVID-19 are less compared to prior year, CH staff continue to monitor the potential

uncertainties surrounding the pandemic and continue to take a conservative approach for any estimates related to fiscal 2022.

Watershed Management & Support Services

Total WMSS revenue is projected to exceed the budget target by \$377,846. Significant variances of note contributing to the overall revenue increase include:

- Planning and permit fees projected to exceed the budget amount by \$500,824;
- Regional Infrastructure Team (RIT) funding decrease of (\$144,640) due to lowered program expenses in year; and

Projected WMSS expenses exceed the budget by \$377,572 and include:

- Planning & Regulation legal expenses projected to be \$360,422 over the budget amount.

Conservation Areas

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

Parks Operating Summary	2022 Projected Year End	2022 Budget	Budget Variance	Actual April 30, 2022
Revenue				
Ski (season passes, lift fees, lessons, rentals, retail)	\$ 6,762,301	\$ 6,674,000	\$ 88,301	\$ 6,722,301
Entry fees	3,073,016	2,269,000	804,016	848,016
Program & other	3,504,835	3,987,862	(483,027)	569,051
Annual park memberships	1,265,109	1,100,000	165,109	465,109
Municipal funding - Education & Outreach	350,462	355,279	(4,817)	186,132
Total Revenue	\$ 14,955,722	\$ 14,386,141	\$ 569,582	\$ 8,790,609
Expenses				
Staff salaries & benefits - full time	\$ 3,110,359	\$ 3,399,892	(\$ 289,533)	\$ 779,730
Staff salaries & benefits - part time	4,556,363	4,475,158	81,205	2,138,306
Materials & supplies and Purchased services	4,664,610	4,774,873	(110,262)	1,499,311
Internal chargeback - WMSS support services	1,370,900	1,364,100	6,800	454,708
Total Expenses	\$ 13,702,233	\$ 14,014,023	(\$ 311,790)	\$ 4,872,055
Parks Operating Surplus	\$ 1,253,490	\$ 372,118	\$ 881,372	\$ 3,918,554

With the full season, Kelso Glen Eden ski programs and the expected lessened impacts of COVID-19 across the Parks, total revenues are estimated to be higher than the budget amount by \$569,582. This is primarily attributed to an increase in entry fees and annual park memberships, offset by lower program revenues. The lower program revenue is mainly related to reduced offerings for Education and Maple Town programs that have not returned to the level anticipated in the 2022 budget. Additionally, Park expenses are projected to be favourable compared to budget by \$311,790 primarily

due to lower-than-expected staffing costs, with staffing vacancies as well as a WSIB refund received in year, and a decrease in general operating expenses.

Capital Program

The Capital Project Summary Financial (Appendix I) includes current capital projects, the respective approved project budget, life to date costs and the budget remaining to be spent. As of April 30, 2022 life to date capital expenses total \$3,952,041 or approximately 36% of the total capital budget.

Dams and channels capital projects are funded 50% provincially and 50% municipally through the Water Management Capital Reserve. Dams and channels capital projects completed by March 31, 2022 to meet the provincial Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNR) Water and Erosion Control Infrastructure (WECI) funding period are recommended to be closed as noted on the Capital Project Summary Financial (Appendix I). Costs for these projects overall were less than the total budget amounts by \$58,030.

Investments

Information on investment balances and investment revenue earned to April 30, 2022 is provided in the chart below. Current investments, including the long-term Water Management System fund, total almost \$43 million. Total market values for the investments held exceed the cost of the total investments. Investment balances have increased since December 31, 2021 with the successful Glen Eden operating season and the timing of municipal funding payments.

Investment	Investment Cost Book Value Apr. 30, 2022	Rates of Return	2022 YTD Investment Revenue	Investment Fair Market Value Apr. 30, 2022	Investment Cost Book Value Dec. 31, 2021
Bank Business Investment Account	\$ 4,988,834	0.8%	\$ 10,763	\$ 4,988,834	\$ 5,203,184
Bank 31 day Notice Plan	10,122,122	1.7%	36,316	10,122,122	10,085,806
GICs (Guaranteed Investment Certificates)	8,000,000	.7% - 1.8%	22,225	8,000,000	5,000,000
One Investment - High Interest Savings	2,320,033	1.0%	5,943	2,320,033	2,314,090
One Investment - Universal Bond Fund	4,465,221	-6.8%	21,844	4,112,014	4,443,377
One Investment - Equity Fund	614,604	-	-	1,358,435	614,604
Subtotal	30,510,814		97,090	30,901,438	27,661,061
Long-term Water Management System Fund	12,463,524	2.8%	111,907	12,687,682	12,351,617
Total	\$ 42,974,338		\$ 208,997	\$ 43,589,120	\$ 40,012,678

Funds continue to be invested in accordance with the Conservation Halton Investment Policy in the following instruments:

- Bank Business Investment and Notice Plan Accounts;
- Bank short term money market instruments such as GICs; and
- One Investment High Interest Savings, Long-term Bond, and Equity Pooled Funds.

The current investment market is subject to increased market fluctuations with recent interest rate increases by the Bank of Canada of 0.5% in April, 0.5% again on June 1 and potential further rate hikes to address inflation. As a result, investment revenue is projected to exceed the 2022 budget

amounts. Investments held have varying maturity dates that will allow for reinvestment at higher rates. The investment funds include the CEWS funds received in 2021.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

The report Recommendation outlines the financial impacts of the Budget Variance Report for the period ended April 30, 2022 and the 2022 projected year end amounts.

Signed & respectfully submitted:



Marnie Piggot,
Director, Finance

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Marnie Piggot; Director Finance
905-336-1158, ext. 2240; mpiggot@hrca.on.ca;

Justin Wei; Senior Manager, Finance
905-336-1158, ext. 2300; jwei@hrca.on.ca;

Appendix H

Conservation Halton Budget Variance Report Financial Appendix

	NOTES	ACTUAL APRIL 30 2022	2022 PROJECTED	2022 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS)						
CORPORATE SERVICES						
<u>Expenditures</u>						
Salaries and Benefits		1,585,057	5,039,442	4,778,062	261,380	5.5%
Total Materials & Supplies and Purchased Services, Finance & other		570,484	1,473,692	1,594,767	(121,075)	(7.6%)
Debt Financing Charges		16,444	620,551	620,551	-	0.0%
Transfer to Reserves - Property Management		-	-	-	-	0.0%
Transfer to Reserves - State of Good Repair Levy		-	505,500	505,500	-	0.0%
Total Expenditures		2,171,985	7,639,186	7,498,880	140,306	1.9%
<u>Revenue</u>						
Program & Other Revenue		133,437	357,365	355,200	2,165	0.6%
Provincial Funding					-	0.0%
Municipal Funding		3,390,724	10,183,174	10,172,173	11,001	0.1%
Internal Chargeback Recoveries		349,867	1,120,500	1,091,500	29,000	2.7%
Reserve Funding		-	-	20,000	-	0.0%
Total Revenues		3,874,028	11,661,039	11,638,873	42,166	0.4%
TOTAL CORPORATE SERVICES		1,702,042	4,021,853	4,139,993	(118,140)	(2.9%)

Notes:
Corporate Services category includes: Office of the CEO, CH Foundation Administration, Finance, Human Resources, Marketing & Communications, Office of the COO, GIS, IT, Project Management Office, Risk & Health and Fleet Operations.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL APRIL 30 2022	2022 PROJECTED	2022 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
NATURAL HAZARDS & WATERSHED MANAGEMENT						
<u>Expenditures</u>						
Salaries and Benefits	1	1,040,975	3,383,370	3,094,471	288,899	9.3%
Total Materials & Supplies and Purchased Services	2	365,481	1,421,438	1,783,263	(361,825)	(20.3%)
Total Expenditures		1,406,456	4,804,808	4,877,734	(72,926)	(1.5%)
<u>Revenue</u>						
Program & Other Revenue	2	351,206	1,203,738	1,843,966	(640,228)	(34.7%)
Provincial Funding	2	96,505	689,373	534,875	154,498	28.9%
Other Municipal Funding	2	109,625	208,625	110,000	98,625	89.7%
Federal Funding	2	202,510	547,775	236,250	311,525	131.9%
Reserves		885	39,885	122,500	-	
Internal Chargeback Recoveries	1	97,152	664,045	546,032	118,013	21.6%
Total Revenues		857,882	3,353,442	3,393,623	42,433	1.3%
TOTAL NATURAL HAZARDS & WATERSHED MANAGEMENT		(548,574)	(1,451,366)	(1,484,111)	115,359	(7.8%)

Notes:

Natural Hazards & Watershed Management category includes: Flood Forecasting, Monitoring Ecology, Land Owner Outreach & Restoration, Restoration & Conservation, Hamilton Harbour Remedial Action Plan (HHRAP), Partnership Projects, Source Protection, and Watershed Strategies & Climate Change (WSCC).

- Salaries and Benefits are expected to exceed budget amounts in Science & Partnerships and Restoration by \$209K. As a result, the internal chargeback recoveries has increased by \$118K, with the remaining balance covered by savings in other expenses.
- Total Partnership Projects costs (incl. Salaries, Materials & Supplies, and Purchased Services) are estimated to be less than the budget amount by \$316K. This will be offset by the allocation of confirmed grants to other programs such as Partnership and Capital projects resulting in no impact to the overall surplus.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL APRIL 30 2022	2022 PROJECTED	2022 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PERMITTING & PLANNING						
<u>Expenditures</u>						
Salaries and Benefits		1,551,811	4,707,290	4,651,735	55,555	1.2%
Total Materials & Supplies and Purchased Services	3	238,786	776,076	415,650	360,426	86.7%
Total Expenditures		1,790,597	5,483,365	5,067,385	415,980	8.2%
<u>Revenue</u>						
Program & Other Revenue	4	1,570,885	3,421,924	2,921,100	500,824	17.1%
Provincial Funding		-	-	-	-	0.0%
Other Municipal Funding	5	174,475	378,010	522,650	(144,640)	(27.7%)
Internal Chargeback Recoveries		15,898	15,898	-	15,898	0.0%
Total Revenues		1,761,258	3,815,832	3,443,750	372,082	10.8%
TOTAL PERMITTING & PLANNING		(29,338)	(1,667,533)	(1,623,635)	(43,898)	2.7%

Notes:

Permitting & Planning category includes: Planning & Regulations, Floodplain Mapping, and the Regional Infrastructure Team (RIT).

3. Purchased Services include legal expenses that exceed the budget by \$360,426 primarily due to increase legal costs under Planning & Regs.

4. Program & Other Revenues are projected to exceed the budget amount by \$500,824 as a result of increased applications, permits and services in year.

5. Other municipal funding is projected to be lower than budget by (\$144,640) for the Regional Infrastructure Team (RIT). As RIT funding is based on actual expenses, there are savings in salaries and benefits primarily due to staffing vacancies with no impact on RIT work.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL APRIL 30 2022	2022 PROJECTED	2022 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
CONSERVATION LANDS & RECREATION (LAND MANAGEMENT)						
<u>Expenditures</u>						
Salaries and Benefits		358,746	1,131,792	1,232,227	(100,435)	(8.2%)
Chargeback - Parks staff support		23,924	70,360	71,770	(1,410)	(2.0%)
Total Materials & Supplies and Purchased Services		17,307	309,707	313,650	(3,943)	(1.3%)
Total Expenditures		399,978	1,511,860	1,617,647	(105,788)	(6.5%)
<u>Revenue</u>						
Program & Other Revenue		107,769	245,969	236,000	9,969	4.2%
Provincial Grants		62,500	125,000	125,000	-	0.0%
Other Municipal Funding		4,277	41,277	42,000	(723)	(1.7%)
Internal Chargeback Recoveries		69,701	196,933	182,400	14,533	8.0%
Total Revenues		244,247	609,179	585,400	23,779	4.1%
TOTAL CONSERVATION LANDS & RECREATION (LAND MANAGEMENT)		(155,730)	(902,680)	(1,032,247)	129,567	(12.6%)

Notes:
Conservation Lands & Recreation (Lands Management) includes: Forestry, Property Management, and Security.

TOTAL WMSS REVENUE	6,737,416	19,439,492	19,061,646	377,846	2.0%
TOTAL WMSS EXPENDITURES	5,769,016	19,439,218	19,061,646	377,572	2.0%
TOTAL	968,400	273	-	273	

Conservation Halton
Budget Variance Report Financial Appendix

	ACTUAL APRIL 30 2022	2022 PROJECTED	2022 BUDGET	\$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
NOTES					
CONSERVATION LANDS & RECREATION (RECREATION)					
<u>Expenditures</u>					
Salaries and Benefits	3,063,687	7,666,722	8,057,964	(391,242)	(4.9%)
Total Materials & Supplies and Purchased Services	1,353,660	4,664,610	4,591,081	73,529	1.6%
Internal Chargeback - WMSS Support Services to Parks	454,708	1,370,900	1,364,100	6,800	0.5%
Total Expenditures	4,872,055	13,702,232	14,013,145	(310,913)	(2.2%)
<u>Revenue</u>					
Program Revenue	8,646,197	14,418,400	13,837,030	581,370	4.2%
Other Revenue	-	55,000	65,000	(10,000)	(15.4%)
Municipal Funding	120,488	400,462	411,463	(11,001)	(2.7%)
Reserve Funding (Outreach)	-	11,500	-	11,500	0.0%
Internal Chargeback Recovery - Parks to WMSS	23,924	70,360	71,770	(1,410)	(2.0%)
Total Revenues	8,790,610	14,955,722	14,385,263	570,460	4.0%
TOTAL - TRANSFER TO (FROM) CONSERVATION LANDS & RECREATION (RECREATION)	3,918,554	1,253,490	372,118	881,372	236.9%

Notes:

Conservation Land & Recreation (Recreation) includes: Education & Awareness, Recreation, Risk Management, and Visitor Experience programming.

Appendix I

CONSERVATION HALTON CAPITAL PROJECT SUMMARY FINANCIAL APPENDIX AS AT APRIL 30 2022

Capital Project Description	Total Capital Budget	Prior Years Capital Costs	2022 Capital Costs	Total Capital Costs	Total Unspent	Project to be Closed	Capital Project Funding
Watershed Management & Support Services (WMSS)							
Hilton Falls Dam Diversion Structure Upgrade Construction Phase 2	609,000	\$630,992		630,992	(21,992)	CLOSE	50% Provincial; 50% Reserve
Milton Channel Main & Millside Slab Repair	255,927	\$175,905		175,905	80,022	CLOSE	50% Provincial; 50% Reserve
Kelso Dam Lift Gates and Hoists Refurbishment - West Gate	173,000	\$5,409	167,591	173,000	0	CLOSE	50% Provincial; 50% Reserve
Kelso Dam Lift Gates and Hoists Refurbishment & East Gate	395,970	\$49,791	38,927	88,718	307,252		50% Provincial; 50% Reserve
Milton Channel - Kingsleigh Court	190,000	\$0		-	190,000		50% Provincial; 50% Reserve
Hilton Falls Dam - 96" Actuator & Trashrack	130,000	\$0		-	130,000		50% Provincial; 50% Reserve
Mountsberg Dam Safety Review	80,000	\$0		-	80,000		50% Provincial; 50% Reserve
Scotch Block Dam Intake Assessment	25,000	\$0		-	25,000		50% Provincial; 50% Reserve
Emerald Ash Borer **	877,664		555,086	555,086	322,578		Municipal - EAB; Lumber sales
Flood Forecasting & Warning **	215,862		5,576	5,576	210,286		Municipal
Floodplain Mapping - 2019 (Urban Milton; Morrison-Wedgewood)	506,626	\$469,638		469,638	36,988		50% Federal NDMP; 50% Municipal
Floodplain Mapping - 2020	330,000	\$111,335	62,105	173,441	156,559		Other Municipal Halton Region
Floodplain Mapping - 2021 (East Burlington)	975,000	\$270,816	101,180	371,996	603,004		50% Halton Region; 50% NDMP
Floodplain Mapping - 2022	525,000	\$0		-	525,000		Other Municipal Halton Region
Watershed Planning	80,000	\$0		-	80,000		Municipal
Watershed Database Management System**	43,269			-	43,269		Municipal
WMSS Facility & Admin. Office Renovations - non SOGR **	158,602			-	158,602		Reserve - Building; CCRF Grant
WMSS Facility & Admin. Office - State of Good Repair (SOGR) **	213,816		48,992	48,992	164,824		Reserve - Building SOGR
Green Infrastructure Low Impact Development - Admin. Office	798,000	\$0		-	798,000		Debt Financing \$500K; CCRF Grant
Operations Centre Study and Design	100,000	\$0		-	100,000		Reserves
Information Technology - WMSS **	105,108		14,321	14,321	90,787		Municipal
Digital Transformation - WMSS **	401,047	\$0		-	401,047		Municipal; Reserves \$200K
Asset Management Plan	40,000	\$2,621	21,315	23,936	16,064		Municipal
Compensation Review	30,000	\$0		-	30,000		Municipal
Financial system upgrades	75,000	\$0		-	75,000		Municipal
Website Upgrade	100,000	\$58,969		58,969	41,031		Municipal; Reserves
Payroll System Upgrade - Phase 2 (Phase 1 Completed)	89,500	\$69,736		69,736	19,764		Municipal; Reserves
GIS Imagery Data Acquisition (Lidar; Ortho)	115,000	\$21,168		21,168	93,832		Municipal
Vehicle and Equipment Replacements - WMSS	94,000	\$0		-	94,000		Reserve; Vehicle Sales
Giant's Rib Geopark	200,000	\$0		-	200,000	CLOSE	Other funding
Property Management	75,000	\$0		-	75,000		Municipal
Speyside Weir Removal	176,000	\$0	4,088	4,088	171,912		Reserve
Roots Ridge Acquisition & Restoration	61,250	\$0	68,050	68,050	(6,800)		Federal; Reserve
Fuciarelli Restoration	43,000	\$0	29,150	29,150	13,850		Federal
Conservation Areas Facility & Infrastructure:				-	-		
Kelso/Glen Eden - Water/Wastewater Servicing	704,035	\$627,593		627,593	76,442		Reserve; Dev. Contribution funds
Kelso & Crawford Lake Visitor Centres (Dev. Contr'n Projects)	625,000	\$162,521		162,521	462,479		Dev. Contribution funds
Kelso/Glen Eden - Ski/Snowboarding Capital Expenditures	950,000	\$0	39,100	39,100	910,900		Reserve
Kelso Quarry Park	100,000	\$0	59,726	59,726	40,274		Reserve; Other Funding
Crawford Lake Boardwalk	2,280,000	\$5,283	22,500	27,783	2,252,217		ICIP Grant; Dev. Contr'n funds
Facility and Infrastructure Major Maintenance **	515,171	\$0		-	515,171		Reserve
Enhancing Trail Systems and Park Infrastructure	1,041,500	\$45,132	1,691	46,822	994,678		ICIP Grant
Foundation Funded Capital Projects	100,000	\$0		-	100,000		CH Foundation
Information Technology Infrastructure - Conservation Areas **	156,703	\$0	5,735	5,735	150,968		Reserve
Vehicle and Equipment replacements - Conservation Areas	269,903	\$0		-	269,903		Reserve; Vehicle Sales
Total Capital Projects	\$15,029,953	\$2,706,909	\$1,245,132	\$3,952,041	\$11,077,912		

CONSERVATION HALTON
Reserve Continuity
April 30, 2022

Name of Reserve	Reserve Balances Jan 1, 2022	2022 Budget & Previously Approved Reserve Transfers	Reserve Balances Prior to Transfers to be Approved	Reserve Transfers to be Approved Jun. 23, 2022	Reserve Balances Dec 31, 2022
Watershed Management & Support Services					
Vehicle and equipment	\$704,901	\$ (94,000)	\$ 610,901		\$ 610,901
Building - State of Good Repair	418,674	164,000 (213,816)	368,858		368,858
Building	316,872	(258,602)	58,270		58,270
Watershed Management Capital - Municipal Funds	740,360	316,500 (350,485)	706,375		706,375
Watershed Management Capital - Self Generated Funds	434,909		434,909		434,909
Watershed Management & Support Services Stabilization	1,789,212	(470,000)	1,319,212		1,319,212
Debt Financing Charges	471,596		471,596		471,596
Digital Transformation	278,400	(200,000)	78,400		78,400
Legal - Planning & Watershed Management	941,995		941,995		941,995
Legal - Corporate	200,000		200,000		200,000
Water Festival	188,911	(10,000)	178,911	(20,000)	158,911
Land Securement	88,739	25,000	113,739		113,739
Property Management	1,084,042		1,084,042		1,084,042
Stewardship and restoration	409,051	(63,500)	345,551		345,551
Conservation Areas					
Capital	2,629,690	372,118 (1,532,903)	1,468,905		1,468,905
Revenue Stabilization	730,490		730,490		730,490
Total Reserves	\$11,427,842	\$ (2,315,688)	\$ 9,112,154	\$ (20,000)	\$ 9,092,154

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 16

FROM: Marnie Piggot, Director, Finance

DATE: June 23, 2022

SUBJECT: Asset Management Plan (2022) – Dams and Channels

Recommendation

THAT the Conservation Halton Board of Directors **approves the Asset Management Plan (2022) – Dams and Channels.**

Report

The Finance & Audit Committee recommended at their June 9 meeting that the Asset Management (AM) Plan (2022) – Dams and Channels be forwarded to the Conservation Halton (CH) Board of Directors for approval.

CH staff prepared its AM Plan for Dams and Channels in mid-2017. Completion of an AM Plan was a request from the Region of Halton in the 2017 budget municipal funding approval. The recent changes in the Conservation Authority Act regulations now require all Conservation Authorities to complete AM Plans.

CH undertook a phased approach for the completion of its AM plans for its assets from 2017 to 2020. Five-year updates of the AM plans are proposed in line with best practices and the AM plan updates are provided for in the annual budget and forecasts.

Watson & Associates was engaged to update the 2022 AM plan for Dams and Channels with staff assistance. Watson was previously awarded consulting services through a request for proposal to assist staff with the development of AM plans for facilities in 2019 and for all other assets in 2020.

The attached AM Plan (Appendix K) prepared by Watson and CH staff contains details on the Levels of Service, Lifecycle Management Strategy and Financial Strategy for CH's four dams and three channels.

A summary of key points from the AM Plan (2022) Dams and Channels are as follows:

- 1) Dams and Channels current replacement cost in Table 1-1 (Appendix K) totals \$310.5 million. This is substantially higher than the 2017 plan total replacement cost of \$94.9 million for a few reasons. Staff have much more information on dams and channels costs through various studies and maintenance projects completed since 2017 that has provided much better costing information that was not available when the first plan was developed. Also, the costing approach in the 2022 plan update is much more comprehensive with the incorporation of dam major

components and their associated lifecycle activities based on historic costs, similar projects in the province as well as staff knowledge and expertise.

2) Overall condition assessment of the dams and channels:

Dams – Table 1-5 (Appendix K) provides an assessment by dam and the various dam components. Condition ratings are shown as good and very good for CH's four dams at Kelso, Hilton Falls, Mountsberg and Scotch Block. The updated assessment is a significant improvement from the previous AM plan that provided an overall condition assessment of one dam as good, two dams rated as fair, and Kelso Dam rated in poor condition. The improved condition assessment is the result of significant maintenance work completed since the first plan was prepared, the major rehabilitation at Kelso Dam and additional information obtained through other assessments and studies.

Channels – Table 1-6 (Appendix K) provides the condition assessments for the main branches of Conservation Halton's three channels, Morrison-Wedgewood, Milton and Hager-Rambo. The updated plan indicates condition assessment ratings of good for the most part, with some channel sections noted in fair condition. Again, this is a significant improvement from the 2017 plan that reported two channels in fair condition and one channel in poor condition. This implied improvement can be attributed primarily to a more detailed approach in assessing channel conditions based on a 2020- 2021 channel assessment study. Additionally, some improvement can be attributed to channel repairs made over the last five years, primarily for the Milton Channel.

3) Section 3 of the report provides the estimated average annual lifecycle requirements for the dams and channels totalling \$1,133,000. This amount is detailed in the report as follows:

- \$245,000 is shown in Figure 3-2 as the Dams average annual cost over the next 20 years.
- \$888,000 in Figure 3-4 provides the Channels average annual lifecycle cost over the next 15 years.

4) The financing strategy in the plan continues to assume the annual lifecycle cost requirements will be funded 50% provincially and 50% through the municipally funded State of Good Repair levy transferred to the Watershed Management Capital Reserve. Based on 50% of the total annual lifecycle costs for dams and channels of \$1,133,000 funded municipally this results in a current annual municipal lifecycle funding target of \$567,000. The target funding level has decreased from the previous plan that recommended target municipal reserve funding of \$750,000. The decrease in the amount is the result of the significant improvement work completed over the five-year period since the plan was completed, enhanced information that is now available and the current reserve funding level.

Table A-5 (Appendix K) provides the capital forecast for dams and channels including estimated costs and funding sources. The municipal lifecycle funding target of \$567,000 is proposed to increase in the plan annually by 4% based on 20-year average Statistics Canada Building Construction Price Index. The plan recommends increases in the State of Good Repair levy to reach the target municipal funding level by 2028.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

The AM Plan (2022) – Dams & Channels recommends a current target for annual municipal funding of \$567,000 based on estimated annual costs and current joint funding of these costs from the province. The updated plan includes a financing strategy to reach target municipal funding plus inflation by 2028. The State of Good Repair levy in the 2022 budget is \$316,500 and the plan proposes an increase in the SOGR levy of \$46,200 for 2023 to \$362,700. The increase of \$46,200 in the SOGR levy for Dams & Channels has been included in the 2023 preliminary budget consistent with the financing strategy in the updated plan.

Signed & respectfully submitted:



Marnie Piggot
Director, Finance

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Marnie Piggot; Director Finance
905-336-1158, ext. 2240; mpiggot@hrca.on.ca;



Asset Management Plan (2022)

Dams and Channels

Conservation Halton

May 27, 2022

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca

Table of Contents

	Page
Executive Summary	i
1. Introduction.....	1-1
1.1 Overview.....	1-1
1.2 Asset Management Plan Development.....	1-2
1.3 Asset Details.....	1-3
1.3.1 Dams	1-3
1.3.2 Channels.....	1-4
1.4 Asset Condition.....	1-5
1.4.1 Dams	1-6
1.4.2 Channels.....	1-8
2. Levels of Service	2-1
3. Lifecycle Management Strategies	3-1
3.1 Introduction	3-1
3.2 Dams – Lifecycle Management Strategies.....	3-1
3.2.1 Decision Making Process.....	3-1
3.2.2 Estimating Long-run Needs.....	3-2
3.3 Channels – Lifecycle Management Strategies.....	3-6
3.3.1 Decision Making Process.....	3-6
3.3.2 Estimating Long-run Needs.....	3-7
3.4 Procurement Methods.....	3-9
3.5 Risk Strategy	3-10
4. Financial Strategy.....	4-1
4.1 Introduction	4-1
4.2 Annual Costs	4-1
4.3 Funding.....	4-1
4.4 Budget Process	4-3
Appendix A: Technical Appendix	A-1



List of Acronyms and Abbreviations

DSR	Dam Safety Review
MNDMNRF	Ministry of Northern Development, Mines, Natural Resources and Forestry
QEW	Queen Elizabeth Way
WECI	Water and Erosion Control Infrastructure Program



Executive Summary



Executive Summary

One of Conservation Halton's three main areas of focus is water resource management. The assets that support this area of focus are three channels with a combined length of 11.6 kilometres and four dams. Significant investments have been made historically in constructing Conservation Halton's dams and channels. Their current replacement cost is estimated at \$310.5 million, as summarized in Table ES-1 below.

Table ES-1: Summary Information by Dam and Channel

Asset Category	Quantity	Units	Replacement Value
Dams	4	Number	\$90,500,000
Channels	11.6	Kilometres	\$220,000,000
Total			\$310,500,000

Conservation Halton takes a proactive approach to managing these critical assets in a way that connects its strategic priorities to specific investment decisions. This asset management plan documents Conservation Halton's approach to managing the dams and channels in support of its service mandate. Specifically, the asset management plan provides summary information on the physical characteristics and current condition of assets, the levels of service they provide, how they are being managed, and outlines a sustainable financial strategy to support planned capital projects related to the assets. It also establishes a long-term funding target that would allow Conservation Halton to sustain the assets over the long term.

Since the first asset management plan for dams and channels was completed in 2017, substantial investments have been made in the lifecycle renewal of the assets, including major work done at the Kelso Dam and the Milton Channel. The effects of these investments are demonstrated by an improvement in the overall condition and other performance measures, as documented by recent studies and assessments. While the average condition of both dams and channels is now Good, there are some areas that will require attention over the coming years. Conservation Halton has developed a 20-year capital plan which addresses the remaining dam components in Fair and Poor condition and channel segments that are in Fair condition.



A lifecycle management strategy is included in the plan to ensure the sustainable provision of services beyond the next 20 years. The lifecycle management strategy documents the lifecycle activities that need to be performed over the full lifecycle of assets to ensure they perform as intended and do not require premature replacement. A key output of the lifecycle management strategy is an estimate of long-run funding needs that is used to establish a sustainable annual lifecycle funding target. The annual lifecycle funding target for dams and channels has been estimated at approximately \$1.13 million in current dollars. This amount comprises \$245,000 for dams and \$888,000 for channels.

Capital expenditures related to dams and channels are funded 50% by the Province of Ontario through the Water and Erosion Control Infrastructure Program and 50% by contributions from municipal partners through the State of Good Repair levy. In 2022, \$316,500 from the municipal State of Good Repair levy was allocated to dams and channels. This amount needs to be increased to \$567,000 (i.e., half the total lifecycle funding target). It is recommended that Conservation Halton phase in the increase over the next six years. Details of how the increase will be phased in and how adjustments will be made to the lifecycle funding target to account for inflation^[1] are provided in the Financial Strategy section and Table A-4 in Appendix A. The phase-in does not jeopardize Conservation Halton's long-term financial sustainability. The financial strategy has been designed to eliminate the need for additional debt financing while at the same time maintaining a relatively stable balance in the State of Good Repair reserve.

^[1] An annual capital inflation factor of 4.0% is used in the financial analysis. It aligns closely with the historical 20-year annual average rate of inflation in Statistics Canada's Building Construction Price Index.



Report



1. Introduction

1.1 Overview

Conservation Halton's vision is to sustain a healthy watershed with clean streams, vigorous forests, abundant green space, and balanced growth that results in strong livable communities. Conservation Halton has three main areas of focus: water resource management, forest resource management, and lifelong education and recreation. This report covers assets that support the first area of focus, water resource management.

Conservation Halton completed an asset management plan for its assets in a phased approach:

- Phase 1 covered flood control infrastructure consisting mainly of dams and channels;
- Phase 2 covered all Conservation Halton staff and park facilities; and
- Phase 3 covered all other assets not included in Phase 1 or Phase 2.

Phase 1 was completed by Conservation Halton staff in 2017. Watson & Associates Economists Ltd. (Watson) completed Phase 2 in 2019 and Phase 3 in 2020.

Conservation Halton intends to update its asset management plans on a five-year cycle. This report is the first five-year update of the Phase 1 report, "Asset Management Plan for Dams & Channels."

This plan covers all major infrastructure assets related to dams and channels. Table 1-1 shows a summary of the assets covered in this report. The total replacement value of these assets is \$310.5 million. These assets are key resources that support safe communities through the management of flooding and erosion. They support Conservation Halton's strategic priority: "Protect people, property, drinking water sources and natural resources to support development that is in balance with the environment."



Table 1-1: Asset Summary

Asset Category	Quantity	Units	Replacement Value
Dams	4	Number	\$90,500,000
Channels	11.6	Kilometres	\$220,000,000
Total			\$310,500,000

The main objective when developing an asset management plan is to use the organization's best available information to develop a comprehensive long-term plan for the assets covered by the plan. The plan is intended to be a tool for staff to use during various decision-making processes, including the annual budgeting process and when working with other stakeholders. In particular, the plan will help Conservation Halton work with municipalities located in the watershed that provide financial support, Halton Region being the largest municipal funder. In addition, the plan should provide a sufficiently documented framework that will enable continual improvement and updates of the plan to ensure its relevancy over the long term. Ultimately, the goal is for Conservation Halton to be able to manage dams and channels in a manner that will support a sustainable provision of services.

This updated plan builds on the work done in 2017, incorporating results from studies and reports completed since then and further insights from Conservation Halton staff. Through the implementation of the asset management plan, Conservation Halton's practice should evolve to provide services at the levels proposed within this document. Therefore, the asset management plan and the progress with respect to its implementation will be evaluated based on Conservation Halton's ability to meet these goals and objectives.

1.2 Asset Management Plan Development

The asset management plan was developed using an approach that leverages staff input in identifying current levels of service and proposed asset management strategies. The development of this asset management plan is based on the steps summarized below:



1. Review the 2017 asset management plan, “Asset Management Plan for Dams & Channels.”
2. Compile available information pertaining to dams and channels that can be used to update the analysis completed in 2017. This includes Dam Safety Reviews (DSRs) and a condition assessment and capital improvement plan for channels.
3. Develop a methodology for aggregating condition assessment data.
4. Review the levels of service framework included in the 2017 asset management plan and refine it based on discussions with Conservation Halton staff.
5. Review the lifecycle management strategy identified in the 2017 asset management plan and refine it using current data and knowledge.
6. Develop a financial strategy to support the updated lifecycle management strategy. The financial plan informs how the capital expenses arising from the asset management strategy will be funded over the forecast period.
7. Document the asset management plan in a formal report to inform future decision-making and to communicate plans to stakeholders.

Asset management plans are developed in an iterative process. This plan has been developed based on current data and an understanding of how the assets covered in this plan are currently used. Future updates to this plan may need to revisit assumptions used in the development of the plan to better reflect new data and insights on the performance of dams and channels.

1.3 Asset Details

1.3.1 Dams

Conservation Halton’s dams, along with many of the major dams within other Conservation Authorities across the Greater Toronto Area, were built as a direct response to the devastation associated with Hurricane Hazel in October 1954. Most facilities were constructed in the 1960s and 1970s. Post 1970, a more passive approach to hazard management, including land acquisition and regulation, was adopted instead of building costly engineered structures.



There are four dams located within the Conservation Halton watershed:

- The Hilton Falls and Kelso Dams are located north and south of Highway 401 in the Town of Milton on the main branch of Sixteen Mile Creek and discharge downstream through downtown Milton.
- The Mountsberg Dam is located within the Bronte Creek watershed, straddling the boundary between the City of Hamilton and the Township of Puslinch. This reservoir discharges downstream to Mountsberg Creek which outlets into Bronte Creek, upstream of the community of Carlisle.
- The Scotch Block Dam is located upstream of Regional Road 25 within the Town of Halton Hills, on Middle Sixteen Mile Creek. This reservoir discharges downstream through the communities of Mansewood, Hornby and Drumquin.

The replacement costs and original construction years of each dam are shown in Table 1-2. The replacement costs for the dams were estimated using the bulk quantities and unit pricing shown in Table A-1 in Appendix A.

Table 1-2: Dam Replacement Cost and Year Built

Dam	Year Built	Replacement Cost
Kelso	1962	\$28,000,000
Hilton Falls	1974	\$36,000,000
Mountsberg	1967	\$4,500,000
Scotch Block	1971	\$22,000,000
Total		\$90,500,000

1.3.2 Channels

There are three concrete-lined channels for which Conservation Halton is responsible. The replacement costs, lengths, and original construction years of each channel are shown in Table 1-3. The replacement costs for the channels were estimated based on



an average cost per slab for the concrete slabs that make up the concrete linings. The estimated average replacement cost per slab is \$31,200.^[1]

Table 1-3: Channel Length, Replacement Cost, and Year Built

Channel	Length (km)	Number of Slabs	Year Built	Replacement Cost
Morrison-Wedgewood	4.1	2,503	1969	\$78,100,000
Milton	3.0	2,222	1974-1982	\$69,300,000
Hager-Rambo	4.5	2,339	1976	\$73,000,000
Total	11.6	7,064	-	\$220,400,000

1.4 Asset Condition

The asset conditions reported for dams and channels are based on the Canadian National Infrastructure Report Card^[2] 5-point rating scale shown in Table 1-4. For both dams and channels, Conservation Halton staff assigned condition ratings based on recent third party engineering reports, condition assessments and their working knowledge of the assets.

^[1] The replacement cost of \$31,200 per slab is from the 2021 Channels Condition Assessment and Capital Improvements Plan completed by Ecosystems Recovery Inc.

^[2] Canadian Infrastructure Report Card; Volume 1: 2012; Municipal Roads and Water Systems; www.canadainfrastructure.ca; p. 59.



Table 1-4: 5-point Condition Rating Scale

Condition Rating	Condition Score	Description
Very Good	5	The infrastructure in the system or network is generally in very good condition, typically new or recently rehabilitated. A few elements show general signs of deterioration that require attention.
Good	4	The infrastructure in the system or network is in good condition; some elements show general signs of deterioration that require attention. A few elements exhibit significant deficiencies.
Fair	3	The infrastructure in the system or networks is in fair condition; it shows general signs of deterioration and requires attention. Some elements exhibit significant deficiencies.
Poor	2	The infrastructure in the system or network is in poor condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration.
Very Poor	1	The infrastructure in the system or network is in unacceptable condition with widespread signs of advanced deterioration. Many components in the system exhibit signs of imminent failure, which is affecting service.

1.4.1 Dams

For assigning condition ratings, dams were broken down into a total of 118 major components in six categories.^[1] Once condition ratings were assigned to all major components, they were aggregated to the category and dam levels using a weighted average. The weights are based on the average annual lifecycle cost of the component and are listed in Table A-2 in Appendix A. The condition rating and weight of each major component are detailed in Table A-3 of Appendix A. The overall average condition rating of dams is Good. Table 1-5 summarizes condition by dam and component category.

^[1] The 118 major components are distributed across dams as follows: Kelso, 37 major components; Hilton Falls, 31 major components; Mountsberg, 16 major components; Scotch Block, 34 major components.

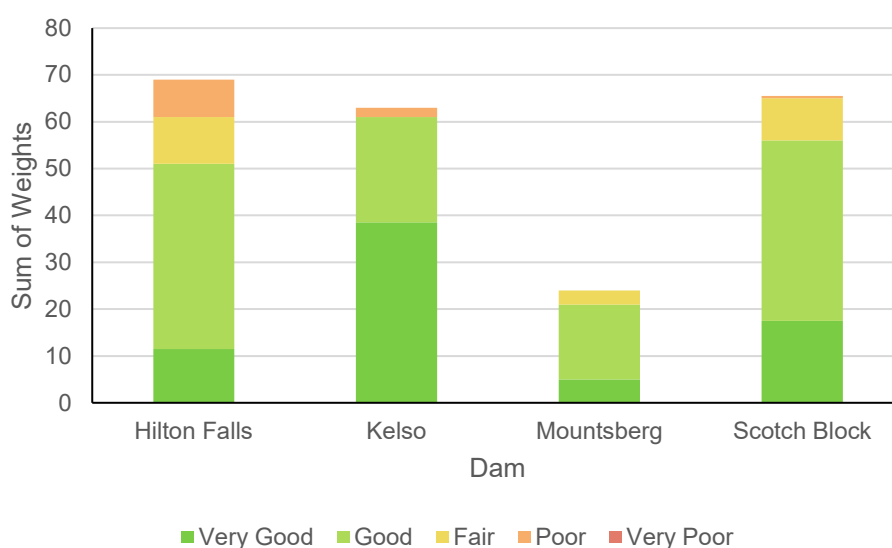


Figure 1-1 shows the sum of the major component weights by condition. It shows some major components are rated as Fair and Poor, all of which have been identified for repair, replacement or study within the 10 year capital budget, or will be managed through operations and maintenance.

Table 1-5: Component Category Condition by Dam

Category	Kelso	Hilton Falls		Mountsberg	Scotch Block	All Dams
Civil	Very Good	Good		Good	Good	Good
Electrical	Very Good	Good		Very Good	Very Good	Very Good
Instrumentation	Very Good	Good		Very Good	Good	Good
Mechanical	Very Good	Good		Good	Good	Good
Safety Systems	Very Good	Very Good		Very Good	Good	Good
Structural	Good	Good		Good	Good	Good
All Components	Very Good	Good		Good	Good	Good

Figure 1-1: Sum of Major Component Weights by Dam and Condition Rating





1.4.2 Channels

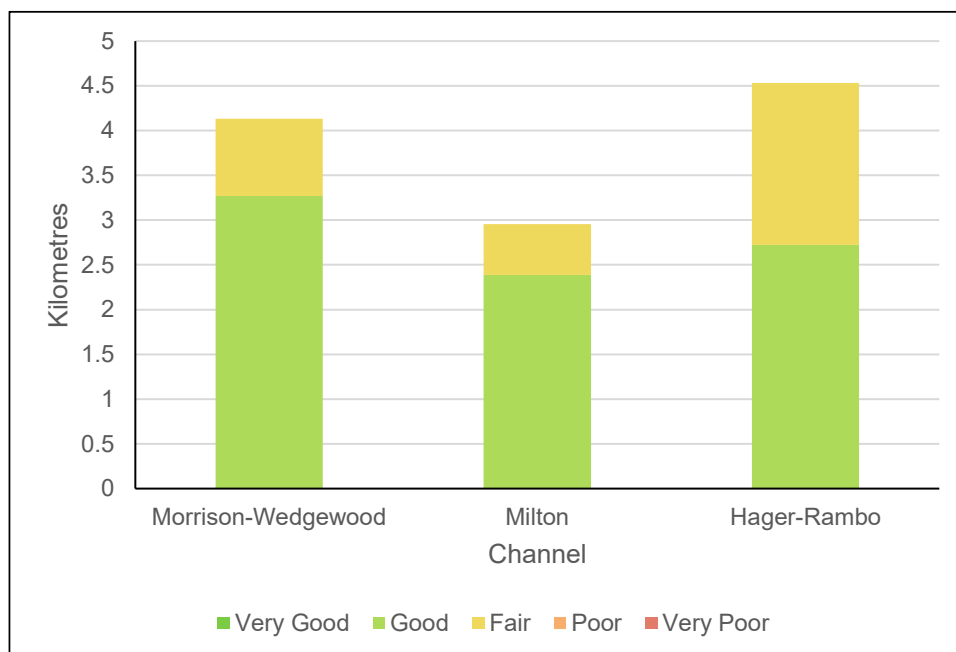
For assigning condition ratings, the channels were broken down into 21 segments bounded by roads or other features which intersect or cross the channels. Table 1-6 shows the segments, their lengths, and their condition ratings. The segment lengths were used to calculate weighted averages of the condition ratings. On average, each of the three channels is rated as Good.

Table 1-6: Length and Condition of Channel Segments

Channel	Branch	Segment of Channel	Length (km)	Condition Rating
Morrison-Wedgewood	Main	16 Mile Creek to Sixth Line	0.58	Good
	Main	Sixth Line to Kent Ave.	0.39	Good
	Main	Kent Ave. to Trafalgar Rd.	0.86	Fair
	Main	Trafalgar Rd. to Eighth Line	0.84	Good
	Main	Eighth Line to Intake	1.47	Good
	Morrison-Wedgewood Subtotal		4.13	Good
Milton	Main	Steeles to WI Dick Bridge	0.57	Fair
	Main	WI Dick Bridge to Woodward Ave.	0.36	Good
	Main	Woodward Ave. to CN Railway	0.28	Good
	Main	CN Railway to Main St. E	0.31	Good
	Side	Mill Pond to Main St. E	0.23	Good
	Main	Main St. E to Pine St.	0.20	Good
	Main	Pine St. to Outlet	1.00	Good
	Milton Subtotal		2.95	Good
Hager-Rambo	Main	QEW to Maple Ave.	0.42	Good
	Main	Maple Ave. to Thorpe Rd.	0.25	Good
	Main	Thorpe Rd. to CN Railway	0.75	Good
	Side	Freeman Pond to CN Railway	0.59	Fair
	Side	CN Railway to Plains Rd. E	0.17	Good
	Side	Plains Rd. E to Main Branch	0.60	Good
	Main	CN Railway to Brant St.	0.54	Good
	Main	Brant St. to Fairview St.	0.48	Fair
	Main	Fairview St. to End	0.75	Fair
	Hager-Rambo Subtotal		4.53	Good
All Channels Total			11.62	Good



Figure 1-2: Sum of Channel Lengths by Channel and Condition Rating





2. Levels of Service

In the context of asset management, levels of service set out the specific outputs or objectives that an organisation intends its physical assets to deliver.^[1] In doing so, levels of service provide a platform for asset management decisions. Community levels of service identify service objectives, and technical levels of service provide quantifiable metrics that measure the performance of the assets relative to those service objectives.

Conservation Halton's levels of service framework is contained in two tables – Table 2-1 and Table 2-2. Table 2-1 identifies relevant service attributes and defines community levels of service for each of those attributes. The service attributes are intended to capture all major aspects that are of interest to the users of a service. The community levels of service are presented as statements describing the service objectives and outcomes that Conservation Halton intends the dams and channels infrastructure to deliver. Table 2-2 describes the technical levels of service connected to each of the service attributes and shows the current performance for each performance measure, the target for the performance measure and a target date for achieving the target if current performance is below the target.

The levels of service framework has been revised with an emphasis on service aspects that are typically addressed through capital lifecycle activities^[2]. Three of the seven performance measures now being reported have been carried forward from the 2017 asset management plan. The performance for all three of these measures has improved relative to 2016. A brief discussion of the factors that have contributed to improved performance is provided below:

- The average condition of dams has improved as a result of investments made over the last five years to address deficiencies.
- The average condition of channels has improved for two reasons. First, investments were made over the past five years to address deficiencies in the Milton Channel. Second, a different condition assessment methodology was

^[1] It is important to note that physical assets are only a portion of what is required to deliver broader service objectives.

^[2] For physical assets, an organisation should consider both major (capital) lifecycle activities as well as operational and maintenance activities, as all of these contribute to the overall level of service being provided. However, operational and maintenance aspects fall outside the scope of the asset management plan.



used which changed focus away from ancillary details like fencing and emphasized concrete condition.

- The percentage of dams that meet or exceed applicable regulatory criteria and accepted technical guidelines rose because of the substantial capital improvements performed on the assets. One example was the major work done at the Kelso Dam from 2015 to 2019 which addressed internal erosion and piping issues through the construction of energy dissipation, embankment grouting and instrumentation upgrades.

Table 2-1: Community Levels of Service

Service Attribute	Community Levels of Service
Condition	Ensure flood control infrastructure is well maintained to ensure safe and reliable function.
Capacity	Ensure flood control infrastructure protects public safety, and reduces property damage associated with riverine flooding events
Responsiveness	Ensure that identified safety and maintenance concerns with flood control infrastructure are addressed in a timely manner



Table 2-2: Technical Levels of Service

Service Attribute	Technical Levels of Service	2016 Performance ^[1]	2021 Performance	Target	Timeframe for Achieving Target
Condition	Average condition of dams	Fair	Good	Good or better	Maintain
	Percentage of dam components in a condition of Good or Very Good	Not Available	86%	90%	2026
	Average condition of channels	Fair	Good	Good or better	Maintain
	Percentage of channel length in a condition of Good or Very Good	Not Available	72%	80%	2026
Capacity	Percentage of dams that meet or exceed applicable regulatory criteria and accepted technical guidelines	75%	100%	100%	Maintain
	Number of over-topping events within the channels	Not Available	0	0	Maintain
Responsiveness	Percentage of identified safety, maintenance, inspection, and repair concerns addressed within assigned response time	Not Available	95%	90%	Maintain

^[1] From the 2017 Dams & Channels Asset Management Plan.



3. Lifecycle Management Strategies

3.1 Introduction

This chapter details the lifecycle management strategies required to achieve the proposed levels of service presented in Chapter 2. A lifecycle management strategy identifies the recommended lifecycle activities required to achieve the levels of service discussed. Within the context of this asset management plan, lifecycle activities are the specified actions that can be performed on an asset in order to ensure it is performing at an appropriate level and/or to extend its service life.^[1] These actions can be carried out on a planned schedule in a prescriptive manner or through a dynamic approach where the lifecycle activities are only carried out when specified conditions are met.

The following two sections contain the lifecycle management strategies for Conservation Halton's dams and channels, respectively. The lifecycle management strategy for each asset is presented in two parts. The first part, Decision Making Process, discusses how projects are selected and prioritized for implementation. The second part, Estimating Long-run Needs, presents a generalized lifecycle model for how assets and their components are typically maintained and replaced. The generalized lifecycle model is used to estimate average annual lifecycle costs. The final sections present Conservation Halton's procurement methods and risk analysis.

3.2 Dams – Lifecycle Management Strategies

3.2.1 *Decision Making Process*

Conservation Halton staff visit each dam location on a regular basis to carry out visual inspections and dam operations, and to perform minor maintenance and repairs as required. Security staff conduct visits to each site several times a week to inspect for signs of vandalism and ensure buildings and security access points are locked and secured. Furthermore, cameras installed at each of the dams allow staff to remotely monitor the dams at any time.

^[1] The full lifecycle of an asset includes activities such as initial planning and maintenance which are typically addressed through master planning studies and maintenance management, respectively.



Annual inspections are conducted by Conservation Halton staff who are professional engineers or technologists. During the inspections, staff identify any overall concerns, take photos to document the condition of assets, test or inspect all components, and subsequently document all results.

DSRs are done for each dam, typically on a 10-year cycle or as defined by legislation or industry best practices. A DSR is a systematic review and evaluation of all aspects of design, construction, maintenance, operation, and surveillance, as well as other factors, processes and systems affecting a dam's safety. The Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNR) and the Canadian Dam Association publish best management practices and frameworks for dam owners and engineers which guide how DSRs are completed. DSRs identify capital project recommendations for Conservation Halton's consideration.

Each year, Conservation Halton staff review recent engineering studies, DSR's, condition assessments, and any other available information to identify outstanding deficiencies that need to be corrected either through operations and maintenance or through capital projects. The capital projects are then prioritized and assigned to specific years in a 10-year capital forecast. Project prioritization is based on a combination of recommended repair timelines, procurement limitations, concurrent project conflicts, and funding availability while simultaneously trying to maintain annual funding needs.

3.2.2 *Estimating Long-run Needs*

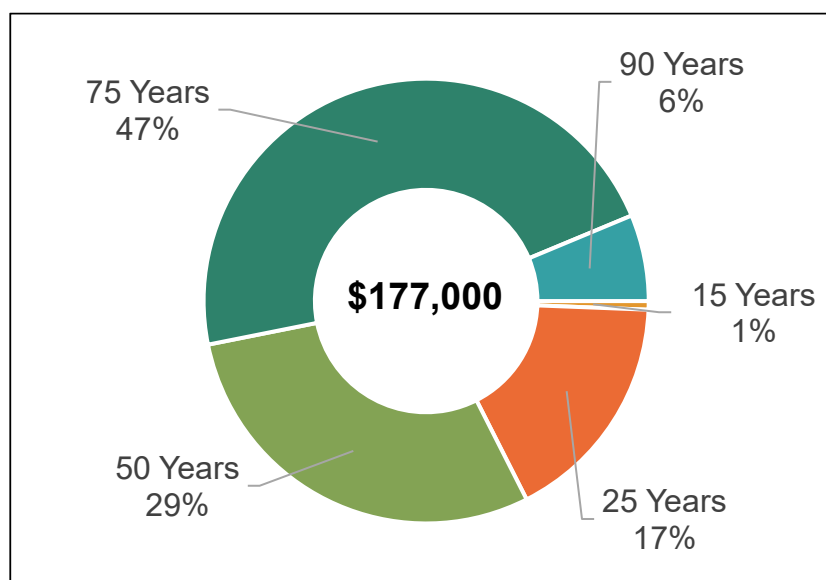
The long-run capital investment needs for dams have been estimated based on a component level analysis using the same componentization used to report on the condition of dams. There are two broad lifecycle strategies used for dam components. Of the 118 components listed, 77 are eventually replaced in their entirety. These components may have rehabilitation lifecycle activities part way through their useful life or may simply be replaced when they no longer function as intended. These 77 components have a total replacement cost of \$3.7 million, 4% of the estimated total replacement cost of \$90.5 million for the dams. The remaining 41 components are not expected to be replaced in their entirety. This is because they can be maintained through sequences of rehabilitations that restore the components to an as-new condition. Table A-4 in Appendix A shows the lifecycle assumptions for each component identifying lifecycle activities, the year the activity takes place in the asset's



lifecycle, the cost of the lifecycle activity for the component, and notes describing the lifecycle activity.

Whether or not a component is replaced, it has a well-defined lifecycle that ends at the last lifecycle activity identified. An average annual rehabilitation and replacement cost can be calculated for each component by summing all the lifecycle costs identified for a component and dividing the total by the age at which the last lifecycle activity is performed. Summing the average annual rehabilitation and replacement costs for all dam components results in a total average annual cost for all dams of \$177,000 per year for component rehabilitation and replacement. The lengths of the lifecycles of components range from 15 to 90 years. Figure 3-1 shows that most of the rehabilitation and replacement costs are related to components with long lifecycles. Because of this, lifecycle expenditures may be lumpy, with significant peaks and valleys on a timescale of decades.

Figure 3-1: Distribution of Average Annual Component Rehabilitation and Replacement Cost by Lifecycle Length



In addition to rehabilitating and replacing dam components, various studies and assessments need to be completed on a regular basis to ensure that the dams are performing as required. Table 3-1 shows the studies and assessments Conservation Halton undertakes for dams, how often they need to be done, their estimated cost, and the resulting average annual cost. For all studies and assessments together, the average annual cost is \$68,300 per year. These costs should be included in the total



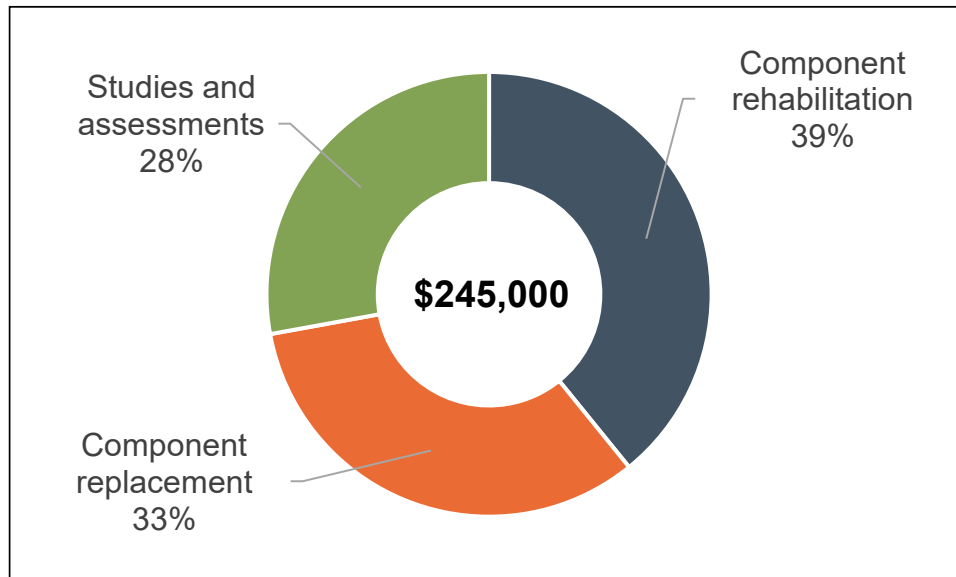
annual lifecycle costs because they are an integral part of the asset lifecycle. The average annual lifecycle cost for dams, including the cost of studies and assessments, is \$245,000 per year. Figure 3-2 shows the breakdown of average annual lifecycle costs between component rehabilitation, component replacement, and studies and assessments.

Table 3-1: Dam Studies and Assessments

Recurring Studies	Quantity	Frequency	Unit Price	Total	Average Annual Cost
Dam Safety Reviews	4 (one per dam)	10 Year	\$97,000	\$388,000	\$38,800
Breach Analysis and Inundation Mapping	4 (one per dam)	20 Year	\$60,000	\$240,000	\$12,000
Public Safety Assessment	1 (covers all four dams)	5 Year	\$41,000	\$41,000	\$8,200
Seismic Hazard Assessment and Impact Study	1 (covers all four dams)	10 Year	\$54,000	\$54,000	\$5,400
Gate and Valve Inspection	1 (covers all four dams)	10 Year	\$40,000	\$40,000	\$4,000
Total				\$763,000	\$68,300



Figure 3-2: Dams – Distribution of Average Annual Lifecycle Cost

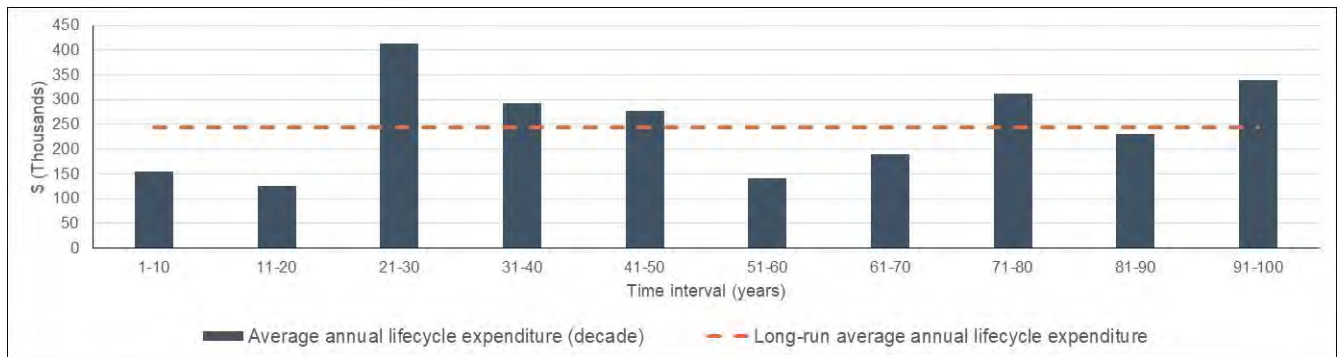


In addition to estimating average annual lifecycle costs, the lifecycle management strategies can be used to forecast expenditures by year if data is available on where each component is in its lifecycle. Conservation Halton staff provided data on the date of initial construction or installation of each of the 118 components. They then reviewed the components' remaining useful lives to determine if any adjustments needed to be made to reflect actual condition or planned work on components. The adjusted remaining useful lives were used to create a long-run forecast of lifecycle activities and the associated costs.

Figure 3-3 shows the forecast of lifecycle expenditures, averaged by decade. Based on this forecast, the lifecycle expenditures over the next two decades will be lower than the long-run average, while the reverse is true for the following three decades. This creates a potential opportunity for Conservation Halton to accumulate funds in reserves over the next two decades to help offset the higher-than-average expenditures forecast for the following three decades.



Figure 3-3: Dams – Average Annual Lifecycle Expenditures by Decade



3.3 Channels – Lifecycle Management Strategies

3.3.1 Decision Making Process

Conservation Halton staff perform site visits of each channel on a regular basis and also respond immediately to any public complaints regarding specific locations. Visual inspections are carried out as well as routine maintenance and repairs involving grass cutting, tree pruning and removal, garbage and debris removal, fence repairs and sediment removal.

Conservation Halton staff perform two types of inspections on a regular basis – detailed and general. Detailed inspections are conducted every three years, typically occurring in the spring prior to vegetation growth, and take approximately two weeks per channel. During these detailed inspections, staff identify any overall concerns, take photos to document the condition of assets, measure size and document the direction of cracks, and subsequently document all results. General inspections are conducted annually between detailed inspections to identify any major issues. These inspections are carried out over one to two days per channel.

In addition to the regular inspections performed by Conservation Halton staff, in 2021 a Channel Condition Assessment and Capital Improvement Plan was completed by Ecosystem Recovery Inc. This study provided recommendations for capital improvements and replacements to be completed over the next 15 years.



3.3.2 Estimating Long-run Needs

The analysis of lifecycle costs related to channels mainly revolves around the concrete slabs that line the channels. Other site-related assets, such as fencing, are assumed to be maintained on an ongoing basis through the operating budget.

Lifecycle models similar to those used for dams, with lifecycle activities assigned to years, are not appropriate for channels. Once set, concrete is a very durable material. Individual channel slabs could last indefinitely with appropriate maintenance if there are no adverse events that damage or place excessive loads on them. Lifecycle activities are not done at a predictable time to address accumulated wear and tear. Instead, they are done to address unexpected low-probability, event-driven failures that could happen at any time in a slab's life. If failures are driven by random events rather than wear and tear, it is reasonable to expect capital costs to remain relatively stable from decade to decade.

For this iteration of the asset management plan, it has been assumed that the long-run, average annual needs will be similar to the needs identified in the Channel Condition Assessment and Capital Improvement Plan (Channel Plan) that was completed in 2021. The Channel Plan includes a capital forecast for the next 15 years. Table 3-2 shows average annual costs per kilometre of channel for the lifecycle activities identified in the Channel Plan. The total average annual cost over the next 15 years for the 11.6 kilometres of channels is approximately \$880,000 per year.



Table 3-2: Channel Lifecycle Activities

Lifecycle Activity	Description	Cost per Kilometre per Year
Crack Repair	Includes tree removal (where required) and minor crack repairs by filling cracks with backer rods and hot poured rubberized sealant as per OPSD 508.020. Cracks greater than 25 mm will require repair with concrete grout.	\$5,480
Weeper Repair	Includes tree/vegetation removal, existing weeper removal and replacement with 75 mm PVC pipe.	\$7,630
Spalling Repair	Includes non-structural concrete patch repair.	\$280
Sediment and Vegetation Removal	Includes erosion and sediment control, dewatering (if required), flow bypass and isolation, mechanical sediment removal and disposal of sediment and vegetation at landfill.	\$3,120
Gabion Basket Replacement	Includes erosion and sediment control, flow bypass and isolation, removal of existing baskets, supply and installation of backfill material, and supply and installation of gabion baskets.	\$140
Slab Replacement	Slab replacement includes concrete removals, void filling (50% volume), pouring and forming new concrete slab, joint sealing and weeper replacement.	\$59,090
Total		\$75,738

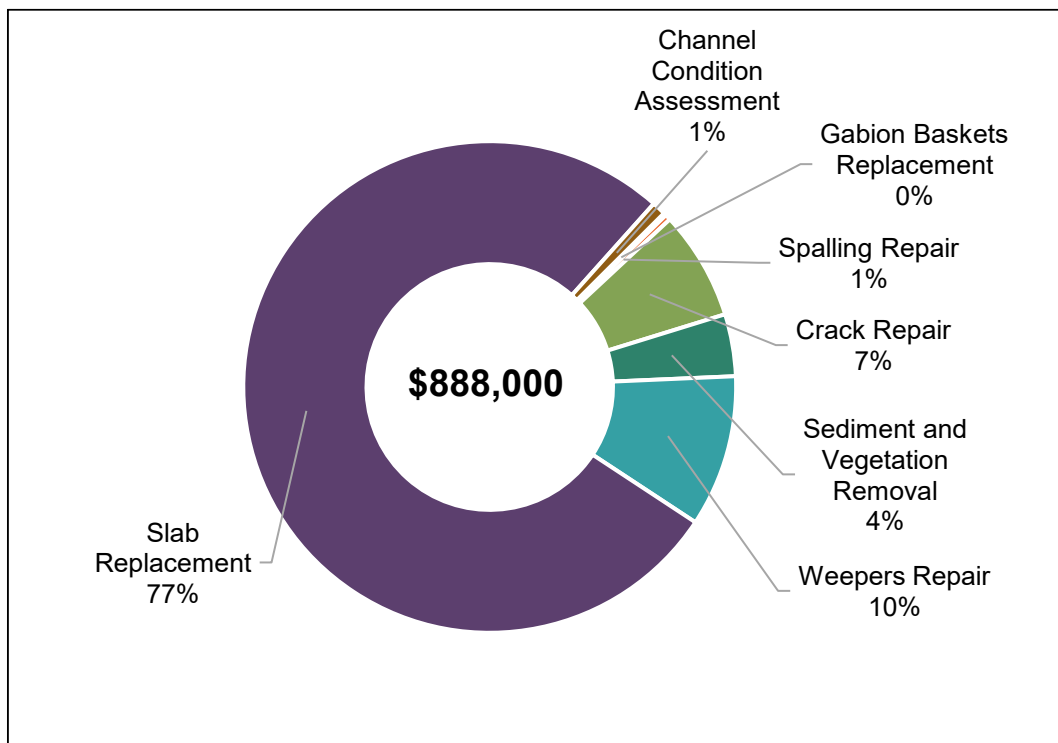
The estimate of long-run needs may change significantly in the future as more data becomes available. Based on discussions with Conservation Halton staff and the methodology used for the forecast in the Channel Plan, the investment needs identified in the 15-year capital plan are being considered high-level estimates, mainly because detailed design work has not yet been done. Actual project costs could be significantly higher or lower and may lead to revisions to the estimate of long-run needs that will be addressed in future updates of this asset management plan. It is also possible that the long-run average annual needs will be somewhat lower than the average over the next 15 years because there is a backlog of work being addressed in the 15-year capital plan.

In addition to the lifecycle activities related to concrete slabs, Conservation Halton intends to do a formal condition assessment of the channels every five years at a cost of \$40,000. The annualized cost of the quinquennial condition assessment (\$8,000)



should be included in the total annual lifecycle cost of channels because it is considered to be an integral part of the asset lifecycle. This brings the total average annual lifecycle need for channels to \$888,000 per year. Figure 3-4 shows the distribution of the average annual lifecycle cost by lifecycle activity.

Figure 3-4: Channels – Distribution of Average Annual Lifecycle Cost



3.4 Procurement Methods

In addition to the physical lifecycle activities discussed in the previous two sections, Conservation Halton also leverages non-infrastructure solutions where appropriate to reduce asset-related costs and improve asset performance. One of these non-infrastructure solutions is Conservation Halton's Board-approved Purchasing Policy, which guides all procurement practices. It allows for a range of procurement practices to ensure the best value when purchasing goods and services. The key objectives of the policy are to:

- Procure goods and services in an efficient and cost-effective manner;
- Encourage open competitive bidding;



- Ensure objectivity and integrity of the procurement process;
- Ensure fairness between bidders;
- Maximize savings for the taxpayers; and
- Have regard for the conservation and preservation of the natural environment.

3.5 Risk Strategy

Risks relating to infrastructure failure are mitigated through ongoing inspection and maintenance programs which provide the necessary data to identify the work required to achieve and/or maintain the established levels of service. Further, annual capital and operating budgets, as well as 10-year capital forecasts, are updated accordingly to reflect the corresponding funding requirements.

Since 2010, regular inspection protocols have been followed by Conservation Halton staff and a database has been created to store detailed information including asset condition information and photos taken during inspections. The database is also useful in managing the risk of knowledge retention in the event of staff turnover.

Dams and channels were built based on standards that were in place at the time of construction. Standards and expectations for the service delivery of these assets can change over their lifecycle (e.g., in response to changing patterns of extreme weather events resulting from climate change). Conservation Halton manages the risks associated with changing standards by conducting the DSRs mentioned earlier in this report. The DSRs are intended to review the structures relative to current standards and guidelines and propose upgrades to keep them functioning in accordance with current requirements.

The provincial Water and Erosion Control Infrastructure (WECI) program managed by MNDMNR, has historically provided matching funds to conservation authorities to finance capital expenditures for dams and channels major repair projects to ensure flood control structures provide safety and protection to the public. The WECI funding program, however, has been consistently over-subscribed, indicating there is a greater demand than the available funding. This could impact the future funding available to maintain assets in a good state of repair to continue delivering the expected levels of service.



4. Financial Strategy

4.1 Introduction

This chapter details the financing strategy that would sustainably fund the lifecycle management strategies presented in Chapter 3. The strategy presented is a suggested approach that should be examined and re-evaluated during the annual budgeting processes to ensure the sustainability of Conservation Halton's financial position as it relates to its dams and channels assets.

The financing strategy in this asset management plan has been developed for a 20-year forecast period to enable Conservation Halton to evaluate the sustainability of its dams and channels over this time horizon. The recommended financing strategy identifies rehabilitation and replacement activities required over the forecast period, as described in preceding sections of this plan.

4.2 Annual Costs

The capital expenditures projected for the 2022 to 2041 forecast period are shown in Table A-5 in Appendix A. The expenditure forecast for dams and channels is based on the lifecycle activities identified in preceding sections of this plan.

The expenditure forecast uses a capital inflation factor of 4.0% annually, which aligns closely with the historical 20-year annual average rate of inflation as witnessed in Statistics Canada's Building Construction Price Index.^[1]

4.3 Funding

Full details of the recommended strategy to finance the asset lifecycle costs are provided in Table A-5 and Table A-6 in Appendix A. The funding forecast was based on the funding sources identified in Conservation Halton's 2022 budget.

^[1] Statistics Canada. [Table 18-10-0135-01 Building construction price indexes, by type of building](#). Toronto series, Non-residential buildings [2362], Q4-2001 to Q4-2021.



The lifecycle costs required to sustain established levels of service targets are being funded from two major sources:

- Provincial funding through the WECl grant; and
- Contributions from municipal partners supported from their tax levy through the State of Good Repair levy.

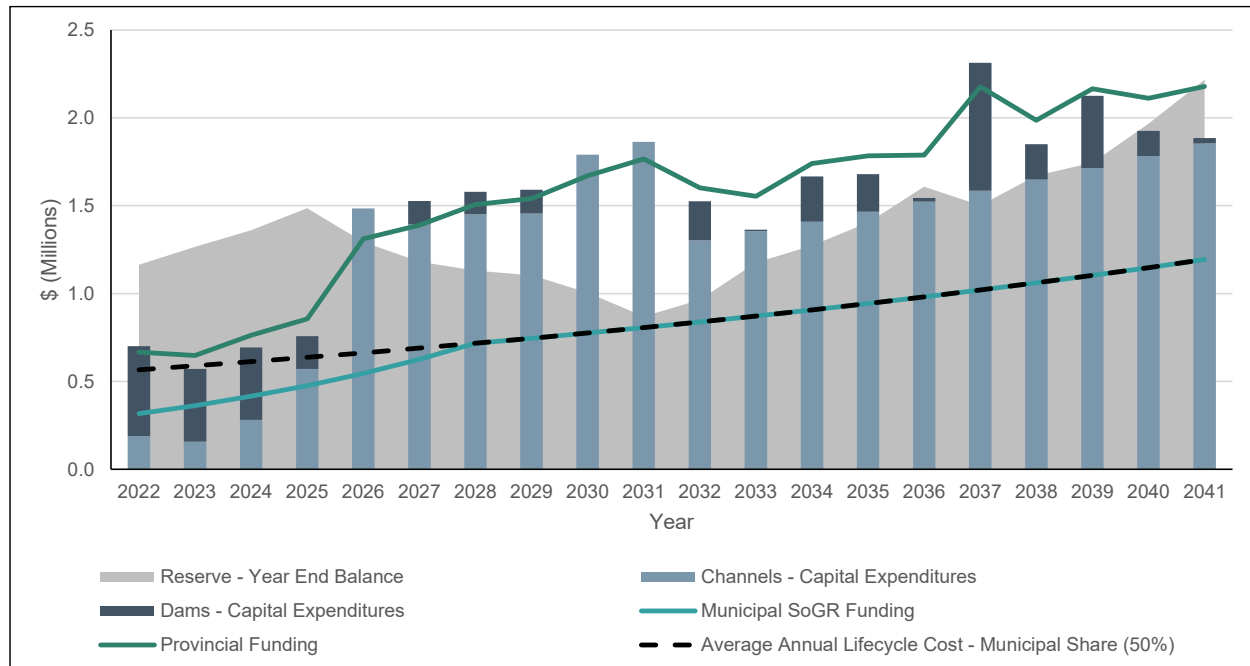
Historically, the provincial WECl grant has covered 50% of the cost of capital projects for dams and channels. While a grant such as the WECl grant can be changed or cancelled at any time, it is included as a source of capital funding in the financial analysis. If the parameters of the grant change in the future, this financial strategy will need to be reviewed and updated.

In 2022, \$316,500 from the municipal State of Good Repair levy was allocated to dams and channels. Based on the sustainable lifecycle funding target identified for dams and channels in this report, the annual lifecycle funding contribution from municipalities for dams and channels should be approximately \$567,000 in current dollars. The municipal lifecycle funding target of \$567,000 represents an increase of approximately 79% relative to the current (2022) level of municipal funding. Given the magnitude of increase required to achieve a sustainable level of funding, it is recommended that Conservation Halton phases in the increase over the next six years, increasing funding by 15% annually until 2028. After reaching the lifecycle funding target in 2028, funding will increase with capital inflation at 4% per year. The asset management plan and the annual lifecycle funding target are expected to be reviewed again in 2027.

The financial strategy is illustrated graphically in Figure 4-1. The vertical bars show capital expenditures for dams and channels. The solid lines show funding and are stacked, meaning the top line for provincial funding shows total overall funding. The dotted black line shows half the annual lifecycle target. This is the amount that municipalities should be contributing to the State of Good Repair reserve. The other 50% of lifecycle funding required is expected to be covered by provincial WECl funding. The financial analysis assumes a capital inflation rate of 4% and 1% interest earnings on reserves. The illustration shows that this is a sustainable strategy, in that it would allow Conservation Halton to fund all the capital lifecycle expenditures forecast for dams and channels over the next 20 years without the need for additional debt financing and while maintaining reserves.



Figure 4-1: Financial Forecast Summary (Inflated \$)



4.4 Budget Process

This final section describes how Conservation Halton produces its capital budgets. Through the annual budget process, engineering staff develop capital budget requests following the guidelines of the Tangible Capital Asset Policy and the Budget Principles. The budget requests are reviewed with the program area and the Finance department to assess the program needs, trends, and priorities. The review includes actual costs incurred in the past for similar projects, as well as current costs to date for projects in progress to determine adequate project funding requirements. Once the requested budget is finalized, financing options are determined based on the optimal funding structure, taking into account the following key sources of financing:

- Grants and other recoveries;
- Reserves;
- Municipal funding; and
- Debentures.

Grants are sought when applicable funding opportunities arise for eligible projects. Grant funding may impact the timing of projects carried out as a result of funding



approval received and the project completion requirements according to the funding agreement.

The State of Good Repair reserve helps smooth the funding requirements for dams and channels capital projects. The balance in this reserve as of December 31, 2021 was \$1,175,271.

Municipal funding is apportioned to Conservation Halton's watershed municipalities in accordance with apportionment and current value assessment information provided by the Province of Ontario. Where capital projects benefit more than one watershed municipality, the funding is apportioned to each of the municipalities in the watershed. Where capital projects benefit only one watershed municipality, funding will be apportioned 100% to that municipality.

Since debenture funding creates a burden on the operating budget in future years, this source of financing is carefully considered in funding the capital budget.



Appendices



Appendix A: Technical Appendix

Table A-1: Dam Replacement Cost Assumptions

Dam	Item	Quantity	Unit	Unit Price	Total	Notes
Kelso	Engineering	1	L.S.	10%	\$2,236,350	10% of construction cost
	Temp. Works	1	L.S.	15%	\$3,354,525	15% of construction cost (dewatering, cofferdam, ground support etc.)
	Backfill	68,500	m ³	\$150	\$10,275,000	Based on typical cross section (250 sq.m * 274 m long)
	Concrete	1,811	m ³	\$1,000	\$1,811,000	From Hatch 3D Model
	Excavation	13,700	m ³	\$75	\$1,027,500	Assume 1:5 cut:fill ratio
	Stilling Basin	1	L.S.	\$8,500,000	\$8,500,000	Project cost from 2015-2019
	Mechanical	1	L.S.	\$395,000	\$395,000	Sum from lifecycle replacement activities
	Electrical	1	L.S.	\$35,000	\$35,000	Sum from lifecycle replacement activities
	Instrumentation	1	L.S.	\$100,000	\$100,000	Sum from lifecycle replacement activities
	Safety Systems	1	L.S.	\$145,000	\$145,000	Sum from lifecycle replacement activities
	Control Building	1	L.S.	\$75,000	\$75,000	Sum from lifecycle replacement activities
	Kelso Subtotal				\$28,000,000	



Dam	Item	Quantity	Unit	Unit Price	Total	Notes
Hilton Falls	Engineering	1	L.S.	8%	\$2,572,320	8% of construction cost
	Temp. Works	1	L.S.	5%	\$1,607,700	5% of construction cost
	Grout Curtain	150	stages	\$1,500	\$225,000	From previous projects
	Backfill	225,000	m ³	\$125	\$28,125,000	Based on typical cross section (900 sq.m * 250 m long)
	Concrete	1,350	m ³	\$1,000	\$1,350,000	Assumed to be 75% of Kelso
	Excavation	22,500	m ³	\$75	\$1,687,500	Assume 1:10 cut fill ratio
	Mechanical	1	L.S.	\$490,000	\$490,000	Sum from lifecycle replacement activities
	Electrical	1	L.S.	\$51,500	\$51,500	Sum from lifecycle replacement activities
	Instrumentation	1	L.S.	\$100,000	\$100,000	Sum from lifecycle replacement activities
	Safety Systems	1	L.S.	\$50,000	\$50,000	Sum from lifecycle replacement activities
	Control Building	1	L.S.	\$75,000	\$75,000	Sum from lifecycle replacement activities
	Hilton Falls Subtotal				\$36,000,000	
Mountsberg	Engineering	1	L.S.	20%	\$666,380	20% of construction cost
	Temp. Works	1	L.S.	15%	\$499,785	15% of construction cost
	Anchoring	1	L.S.	\$1,000,000	\$1,000,000	From previous project
	Backfill	4,200	m ³	\$250	\$1,050,000	Based on typical cross section (60 sq.m * 70 m long)
	Concrete	432	m ³	\$2,000	\$864,000	Based on typical cross section (6 sq.m * 72 m long)
	Excavation	1,386	m ³	\$150	\$207,900	Assume 1:3 cut:fill ratio
	Mechanical	1	L.S.	\$75,000	\$75,000	Sum from lifecycle replacement activities
	Electrical	1	L.S.	\$10,000	\$10,000	Sum from lifecycle replacement activities
	Instrumentation	1	L.S.	\$10,000	\$10,000	Sum from lifecycle replacement activities
	Safety Systems	1	L.S.	\$40,000	\$40,000	Sum from lifecycle replacement activities
	Control Building	1	L.S.	\$75,000	\$75,000	Sum from lifecycle replacement activities
	Mountsberg Subtotal				\$4,500,000	



Dam	Item	Quantity	Unit	Unit Price	Total	Notes
Scotch Block	Engineering	1	L.S.	10%	\$1,764,500	10% of construction cost
	Temp. Works	1	L.S.	15%	\$2,646,750	15% of construction cost
	Backfill	80,000	m³	\$150	\$12,000,000	Based on typical cross section (800 sq.m * 100 m long)
	Concrete	2,260	m³	\$1,000	\$2,260,000	Assumed to be 125% of Kelso
	Excavation	20,000	m³	\$75	\$1,500,000	Assume 1:4 cut:fill ratio
	Mechanical	1	L.S.	\$1,400,000	\$1,400,000	Sum from lifecycle replacement activities
	Electrical	1	L.S.	\$225,000	\$225,000	Sum from lifecycle replacement activities
	Instrumentation	1	L.S.	\$45,000	\$45,000	Sum from lifecycle replacement activities
	Safety Systems	1	L.S.	\$65,000	\$65,000	Sum from lifecycle replacement activities
	Control Building	1	L.S.	\$150,000	\$150,000	Sum from lifecycle replacement activities
	Scotch Block Subtotal				\$22,000,000	
All Dams Total				\$90,500,000		

Table A-2: Weights for Aggregating Condition of Dam Major Components

Annual Asset Cost	Condition Weight
\$0 - \$600	0.5
\$600 - \$1,200	1
\$1,200 - \$1,800	2
\$1,800 - \$2,400	3
\$2,400 - \$3,000	4
\$3,000 and over	5



Table A-3: Dam Major Component Weights and Condition Ratings

Dam	Component Category	Description of Major Components	Weight	Condition Rating
Kelso	Civil	Embankment Dam	4	Very Good
		Crest (Paved)	5	Very Good
		Emergency Spillway	2	Very Good
		Reservoir	4	Good
	Structural	Concrete Intake and Culverts (Upstream of Outlet)	5	Good
		Concrete Stilling Basin (Downstream of Outlet)	5	Very Good
		Stoplog Bays	2	Very Good
		3 Cable Guide Rail (Crest)	2	Poor
		Dam Control Building	1	Good
		Gauge Building	0.5	Good
		Intake Handrail	1	Very Good
		Lift Gate Hoist Superstructure (West)	2	Good
		Lift Gate Hoist Superstructure (East)	2	Good
		Stoplog Hoist Superstructure	0.5	Very Good
		Upstream Splash Wall	3	Good
	Mechanical	Stoplogs	1	Very Good
		Stoplog Lifter	0.5	Very Good
		Vertical Wheeled Lift Gate (West)	1	Very Good
		Wire Rope Hoist (West)	1	Very Good
		Vertical Wheeled Lift Gate (East)	1	Very Good
		Wire Rope Hoist (East)	1	Good
		60" Sluice Gate	1	Good
		60" Rotork Actuator and Stem	5	Very Good
	Electrical	Radar Speed Signs	0.5	Very Good
		LED Lighting	0.5	Very Good
		Portable Generator	0.5	Very Good
		Control Panels	0.5	Very Good
		Control Room Heater	0.5	Good
	Instrumentation	Embankment Monitoring	3	Very Good
	Safety Systems	Chain Link Fencing (Spillway Outlet)	1	Very Good
		Chain Link Fencing (Upstream Embankment)	1	Very Good
		Wooden Fencing (Stilling Basin)	0.5	Very Good
		Crest Gates	0.5	Very Good
		Safety Boom	2	Good
		Speed Bumps	0.5	Good
		Signage	0.5	Very Good
		Access Ladders and Safety Systems	1	Very Good
	Kelso Subtotal		63	Very Good



Dam	Component Category	Description of Major Components	Weight	Condition Rating
Hilton Falls	Civil	Embankment Dam	5	Good
		Crest (Paved)	5	Poor
		Diversion Dyke	2	Very Good
		Upstream Rip Rap	1	Good
		Reservoir	5	Good
	Structural	Concrete Spillway (Downstream of 72" Gate)	5	Good
		Concrete Spillway (Upstream of 72" Gate)	5	Good
		Control Room Access Shaft	1	Good
		3 Cable Guide Rail (Crest)	3	Poor
		Stilling Basin	5	Good
		Dam Control Building	1	Fair
		Diversion Structure	1	Good
		Trashrack Rail System	2	Fair
	Mechanical	96" Trashrack and Winch	1	Fair
		96" Intake Gate	3	Good
		96" Rotork Actuator	5	Fair
		72" Intake Gate	3	Good
		72" Rotork Actuator	5	Very Good
		12" Bypass Valve (Upper)	0.5	Good
		12" Bypass Valve (Lower)	0.5	Good
		Emergency Flap Gate	0.5	Good
	Electrical	High Voltage System	0.5	Very Good
		Control Panels	0.5	Very Good
		LED Lighting	1	Fair
		Portable Generator	0.5	Very Good
		Heaters	0.5	Very Good
	Instrumentation	Embankment Monitoring	4	Good
	Safety Systems	Chain Link Fencing (Spillway Outlet)	0.5	Very Good
		Chain Link Fencing (Upstream Embankment)	0.5	Very Good
		Control Shaft Access Systems	1	Very Good
		Signage	0.5	Very Good
	Hilton Falls Subtotal		69	Good



Dam	Component Category	Description of Major Components	Weight	Condition Rating
Mountsberg	Civil	Embankment Dam	5	Good
		Reservoir	5	Good
	Structural	Concrete Overflow Weir	5	Good
		Dam Control Building	1	Fair
		Stoplog Hoist Superstructure	0.5	Very Good
		Stoplogs	0.5	Very Good
	Mechanical	48" Sluice Gate	1	Fair
		48" Manual Actuator	1	Fair
		Trashrack	0.5	Very Good
	Electrical	Wind Turbine	0.5	Very Good
		Solar Panels	0.5	Very Good
		Inverter and Batteries	0.5	Very Good
	Instrumentation	Aeration System	0.5	Very Good
	Safety Systems	Chain Link Fencing	1	Very Good
		Safety Boom	1	Good
		Signage	0.5	Very Good
	Mountsberg Subtotal		24	Good



Dam	Component Category	Description of Major Components	Weight	Condition Rating
Scotch Block	Civil	East Embankment Dam	5	Good
		West Embankment Subdrain System	1	Very Good
		Access Road and Parking Lot	2	Very Good
		Reservoir	5	Good
		Spillway Outlet Rip Rap	1	Good
		36" Gabion Outlet	1	Good
	Structural	Emergency Concrete Spillway	5	Fair
		Dam Control Building (East)	1	Good
		Dam Control Building (West)	1	Good
		Gauge Building	0.5	Good
		36" Spillway (Upstream)	5	Good
		36" Spillway (Downstream)	5	Good
	Mechanical	Obermyer Emergency Spillway Gate	5	Very Good
		Obermeyer Gate Bladder System	5	Good
		36" Sluice Gate (Upstream)	1	Fair
		36" Actuator (Upstream)	3	Good
		36" Sluice Gate (Downstream)	1	Fair
		36" Actuator (Downstream)	3	Good
		12" By-Pass Valve and Actuator	0.5	Poor
		Diesel Fuel Tank	0.5	Very Good
	Electrical	High Voltage System	0.5	Very Good
		Obermyer Emergency Spillway Gate Electrical System	5	Very Good
		East Building Distribution Control Panels	0.5	Very Good
		West Building Distribution Control Panels	0.5	Very Good
		LED Lighting	0.5	Very Good
		Backup Diesel Generator	1	Good
		Heaters	0.5	Very Good
	Instrumentation	Embankment Monitoring	1	Good
	Safety Systems	Chain Link Fencing (Spillway Outlet)	1	Fair
		Chain Link Fencing (Spillway Intake)	1	Fair
		Access Road Gate	0.5	Very Good
		Access Road Fencing	0.5	Very Good
		Safety Boom	1	Good
		Signage	0.5	Very Good
	Scotch Block Subtotal		65.5	Good
All Dams Total		221.5	Good	



Table A-4: Dam Major Component Lifecycles

Dam	Category	Description of Major Components	Lifecycle Activity	Activity Years	Activity Cost	Activity Notes
Kelso	Civil	Embankment Dam	Minor Rehab	25, 50	\$25,000	Re-grading, toe drain cleanout
			Major Rehab	75	\$150,000	Re-grading, infilling
		Crest (Paved)	Replace	25	\$154,035	Re-pave
		Emergency Spillway	Minor Rehab	25, 50	\$25,000	Re-grading, survey, parking repairs
			Major Rehab	75	\$75,000	Re-grading, erosion control, parking repairs
	Structural	Reservoir	Rehab	90	\$250,000	Dredging, bathymetry, shoreline repairs
		Concrete Intake and Culverts (Upstream of Outlet)	Minor Rehab	25, 50	\$30,000	Minor concrete repair program
			Major Rehab	75	\$250,000	Major concrete repair program
		Concrete Stilling Basin (D/S of Outlet)	Minor Rehab	25, 50	\$30,000	Minor concrete repair program
			Major Rehab	75	\$250,000	Major concrete repair program
		Stoplog Bays	Rehab	25	\$30,000	Repaint steel, replace minor components
		3 Cable Guide Rail (Crest)	Replace	50	\$75,000	Replace
		Dam Control Building	Rehab	25	\$20,000	Repair roof, cladding, services etc.
		Gauge Building	Replace	75	\$20,635	Replace
		Intake Handrail	Replace	75	\$47,396	Replace
		Lift Gate Hoist Superstructure (West)	Minor Rehab	25, 50	\$25,000	Re-paint, minor structural repairs
			Major Rehab	75	\$75,000	Re-paint, major structural repairs
		Lift Gate Hoist Superstructure (East)	Minor Rehab	25, 50	\$25,000	Re-paint, minor structural repairs
			Major Rehab	75	\$75,000	Re-paint, major structural repairs
		Stoplog Hoist Superstructure	Minor Rehab	25, 50	\$5,563	Re-paint, minor structural repairs
			Major Rehab	75	\$15,000	Re-paint, major structural repairs
		Upstream Splash Wall	Minor Rehab	25, 50	\$25,000	Minor concrete repair program
			Major Rehab	75	\$100,000	Major concrete repair program including replacement of sections
	Mechanical	Stoplogs	Replace	25	\$23,961	Replace
		Stoplog Lifter	Replace	50	\$7,242	Replace
		Vertical Wheeled Lift Gate (West)	Rehab	25	\$15,000	Re-paint, minor structural repairs
			Replace	75	\$62,158	Replace
		Wire Rope Hoist (West)	Minor Rehab	25	\$10,000	Re-paint, minor repairs
			Major Rehab	50	\$20,719	Re-cable, gearbox rehab
		Vertical Wheeled Lift Gate (East)	Rehab	50	\$15,000	Re-paint, minor structural repairs
			Replace	75	\$60,000	Replace
		Wire Rope Hoist (East)	Minor Rehab	25	\$10,000	Re-paint, minor repairs
			Major Rehab	50	\$20,719	Re-cable, gearbox rehab
		60" Sluice Gate	Replace	75	\$50,000	Replace
		60" Rotork Actuator and Stem	Rehab	25	\$25,000	Re-paint, minor structural repairs
			Replace	50	\$165,886	Replace
	Electrical	Radar Speed Signs	Replace	15	\$6,216	Replace
		LED Lighting	Replace	25	\$11,849	Replace
		Portable Generator	Replace	25	\$5,180	Replace
		Control Panels	Replace	50	\$9,293	Replace
		Control Room Heater	Replace	50	\$1,500	Replace



Dam	Category	Description of Major Components	Lifecycle Activity	Activity Years	Activity Cost	Activity Notes
	Instrumentation	Embankment Monitoring	Rehab	25, 50	\$25,000	Calibration, sensor replacement, new installation
			Replace	75	\$102,138	Replace
	Safety Systems	Chain Link Fencing (Spillway Outlet)	Replace	25	\$28,525	Replace
		Chain Link Fencing (Upstream Embankment)	Replace	25	\$17,773	Replace
		Wooden Fencing (Stilling Basin)	Replace	15	\$5,705	Replace
		Crest Gates	Replace	50	\$5,563	Replace
		Safety Boom	Replace	25	\$43,484	Replace
		Speed Bumps	Replace	25	\$2,225	Replace
		Signage	Replace	25	\$1,185	Replace
		Access Ladders and Safety Systems	Replace	50	\$41,471	Replace
Hilton Falls	Civil	Embankment Dam	Minor Rehab	25, 50	\$25,000	Re-grading, toe drain cleanout
		Crest (Paved)	Major Rehab	75	\$150,000	Re-grading, infilling
			Replace	25	\$150,000	Replace
		Diversion Dyke	Minor Rehab	50	\$25,000	Re-grading, survey
		Diversion Dyke	Major Rehab	75	\$75,000	Re-grading, erosion control
		Upstream Rip Rap	Rehab	50	\$25,000	Re-grading, survey
	Structural	Reservoir	Rehab	90	\$250,000	Dredging, bathymetry, shoreline repairs
		Concrete Spillway (Downstream of 72" Gate)	Minor Rehab	25	\$50,000	Minor concrete repair program
			Minor Rehab	50	\$50,000	Minor concrete repair program
			Major Rehab	75	\$250,000	Major concrete repair program
		Concrete Spillway (Upstream of 72" Gate)	Minor Rehab	25, 50	\$50,000	Minor concrete repair program
			Major Rehab	75	\$250,000	Major concrete repair program
		Control Room Access Shaft	Minor Rehab	25, 50	\$10,000	Minor concrete repair program
			Major Rehab	75	\$50,000	Major concrete repair program
		3 Cable Guide Rail (Crest)	Replace	50	\$75,000	Replace
		Stilling Basin	Minor Rehab	25, 50	\$30,000	Minor concrete repair program
			Major Rehab	75	\$250,000	Major concrete repair program
		Dam Control Building	Rehab	25	\$20,000	Repair roof, cladding, services etc.
		Diversion Structure	Minor Rehab	25, 50	\$10,000	Minor concrete repair program
			Major Rehab	75	\$50,000	Major concrete repair program
		Trashrack Rail System	Minor Rehab	25, 50	\$15,000	Re-paint, support repair, minor structural repairs
			Major Rehab	75	\$75,000	Re-paint, support repair, major structural repairs
	Mechanical	96" Trashrack and Winch	Rehab	50	\$15,000	Re-paint, minor structural repairs
			Replace	75	\$50,000	Replace
		96" Intake Gate	Rehab	50	\$40,000	Re-paint, minor structural repairs
			Replace	75	\$75,000	Replace
		96" Rotork Actuator	Rehab	25	\$40,000	Re-paint, minor structural repairs
			Replace	50	\$125,000	Replace
		72" Intake Gate	Rehab	50	\$40,000	Re-paint, minor structural repairs
			Replace	75	\$75,000	Replace
		72" Rotork Actuator	Rehab	25	\$40,000	Re-paint, minor structural repairs
			Replace	50	\$100,000	Replace



Dam	Category	Description of Major Components	Lifecycle Activity	Activity Years	Activity Cost	Activity Notes	
		12" Bypass Valve (Upper)	Rehab	50	\$10,000	Re-paint, minor structural repairs	
			Replace	75	\$25,000	Replace	
		12" Bypass Valve (Lower)	Rehab	50	\$10,000	Re-paint, minor structural repairs	
			Replace	75	\$25,000	Replace	
		Emergency Flap Gate	Rehab	50	\$5,000	Re-paint, minor structural repairs	
			Replace	75	\$15,000	Replace	
		Electrical	High Voltage System	Replace	50	\$20,000	Replace
			Control Panels	Replace	50	\$10,000	Replace
	LED Lighting		Replace	25	\$15,000	Replace	
	Portable Generator		Replace	25	\$5,000	Replace	
	Heaters		Replace	50	\$1,500	Replace	
	Instrumentation	Embankment Monitoring	Rehab	25, 50	\$25,000	Calibration, sensor replacement, new installation	
			Replace	75	\$100,000	Replace	
	Safety Systems	Chain Link Fencing (Spillway Outlet)	Replace	25	\$4,450	Replace	
		Chain Link Fencing (Upstream Embankment)	Replace	25	\$5,924	Replace	
		Control Shaft Access Systems	Replace	25	\$15,576	Replace	
		Signage	Replace	25	\$1,185	Replace	
Mountsberg	Civil	Embankment Dam	Minor Rehab	25, 50	\$25,000	Re-grading, toe drain cleanout	
		Reservoir	Major Rehab	75	\$150,000	Re-grading, infilling	
			Rehab	90	\$250,000	Dredging, bathymetry, shoreline repairs	
	Structural	Concrete Overflow Weir	Minor Rehab	25, 50	\$25,000	Minor concrete repair program	
			Major Rehab	75	\$669,485	Major concrete repair program	
		Dam Control Building	Rehab	25	\$20,000	Repair roof, cladding, services etc.	
		Stoplog Hoist Superstructure	Minor Rehab	25, 50	\$5,000	Re-paint, minor structural repairs	
			Major Rehab	75	\$12,391	Re-paint, major structural repairs	
	Mechanical	Stoplogs	Replace	25	\$5,000	Replace	
		48" Sluice Gate	Rehab	25	\$10,000	Re-paint, minor structural repairs	
			Replace	75	\$30,000	Replace	
		48" Manual Actuator	Rehab	25	\$10,000	Re-paint, minor structural repairs	
			Replace	50	\$20,000	Replace	
		Trashrack	Minor Rehab	25, 50	\$2,500	Re-paint, minor structural repairs	
			Major Rehab	75	\$10,000	Re-paint, major structural repairs	
	Electrical	Wind Turbine	Replace	15	\$1,239	Replace	
		Solar Panels	Replace	15	\$1,859	Replace	
		Inverter and Batteries	Replace	15	\$1,859	Replace	
	Instrumentation	Aeration System	Replace	25	\$5,180	Replace	
	Safety Systems	Chain Link Fencing	Replace	25	\$18,586	Replace	
		Safety Boom	Replace	25	\$20,000	Replace	
		Signage	Replace	25	\$1,185	Replace	
Scotch Block	Civil	East Embankment Dam	Minor Rehab	25, 50	\$25,000	Re-grading, toe drain cleanout	
		West Embankment Subdrain System	Major Rehab	75	\$150,000	Re-grading, infilling	
			Minor Rehab	25	\$15,000	Flush, camera inspection	



Dam	Category	Description of Major Components	Lifecycle Activity	Activity Years	Activity Cost	Activity Notes
		Access Road and Parking Lot	Minor Rehab	25, 50	\$25,000	Re-grade, material top-off
			Major Rehab	75	\$40,000	Re-grading, infilling
		Reservoir	Rehab	90	\$250,000	Dredging, bathymetry, shoreline repairs
		Spillway Outlet Rip Rap	Rehab	50	\$25,000	Re-grade, material top-off
	Structural	36" Gabion Outlet	Rehab	50	\$25,000	Top off, repair
		Emergency Concrete Spillway	Minor Rehab	25, 50	\$50,000	Minor concrete repair program
			Major Rehab	75	\$250,000	Major concrete repair program
		Dam Control Building (East)	Rehab	25	\$15,000	Cladding, roof, doors, windows
		Dam Control Building (West)	Rehab	25	\$15,000	Cladding, roof, doors, windows
		Gauge Building	Replace	75	\$10,000	Replace
		36" Spillway (Upstream)	Minor Rehab	25, 50	\$50,000	Minor concrete repair program
			Major Rehab	75	\$150,000	Major concrete repair program
		36" Spillway (Downstream)	Minor Rehab	25, 50	\$50,000	Minor concrete repair program
			Major Rehab	75	\$150,000	Major concrete repair program
	Mechanical	Obermyer Emergency Spillway Gate	Rehab	25	\$50,000	Re-paint, minor structural repairs
			Replace	50	\$579,375	Replace
		Obermeyer Gate Bladder System	Rehab	25	\$75,000	Fix seals, repair equipment
			Replace	50	\$579,375	Replace
		36" Sluice Gate (Upstream)	Rehab	50	\$15,000	Re-paint, minor structural repairs
			Replace	75	\$30,000	Replace
		36" Actuator (Upstream)	Rehab	25	\$15,000	Re-paint, minor structural repairs
			Replace	50	\$75,000	Replace
		36" Sluice Gate (Downstream)	Rehab	50	\$15,000	Re-paint, minor structural repairs
			Replace	75	\$30,000	Replace
		36" Actuator (Downstream)	Rehab	25	\$15,000	Re-paint, minor structural repairs
			Replace	50	\$75,000	Replace
		12" By-Pass Valve and Actuator	Rehab	50	\$10,000	Re-paint, minor structural repairs
			Replace	75	\$20,000	Replace
	Electrical	Diesel Fuel Tank	Replace	50	\$5,000	Replace
		High Voltage System	Replace	50	\$20,000	Replace
		Obermyer Emergency Spillway Gate Electrical System	Replace	50	\$144,844	Replace
		East Building Distribution Control Panels	Replace	50	\$5,563	Replace
		West Building Distribution Control Panels	Replace	50	\$5,563	Replace
		LED Lighting	Replace	25	\$12,391	Replace
		Backup Diesel Generator	Rehab	25	\$10,000	Minor repairs
			Replace	50	\$25,000	Replace
	Instrumentation	Heaters	Replace	50	\$1,113	Replace
		Embankment Monitoring	Rehab	25, 50	\$7,500	Calibration, sensor replacement, new installation
	Safety Systems		Replace	75	\$44,503	Replace
		Chain Link Fencing (Spillway Outlet)	Replace	25	\$20,000	Replace
		Chain Link Fencing (Spillway Intake)	Replace	25	\$20,000	Replace
		Access Road Gate	Replace	25	\$3,194	Replace



Dam	Category	Description of Major Components	Lifecycle Activity	Activity Years	Activity Cost	Activity Notes
		Access Road Fencing	Replace	25	\$6,388	Replace
		Safety Boom	Replace	25	\$15,000	Replace
		Signage	Replace	25	\$1,185	Replace



Table A-5 Capital Budget Forecast (Inflated \$)

Description	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Asset Lifecycle Expenditures																				
Dams - Component rehabilitation and replacement	\$510,970	\$412,941	\$412,721	\$186,557	\$0	\$66,118	\$129,210	\$135,181	\$0	\$0	\$15,113	\$8,087	\$257,699	\$81,150	\$19,861	\$630,786	\$9,839	\$10,233	\$61,288	\$31,256
Dams - Studies	\$0	\$0	\$0	\$0	\$0	\$63,914	\$0	\$0	\$0	\$0	\$207,234	\$0	\$0	\$133,368	\$0	\$97,870	\$191,263	\$400,200	\$82,086	\$0
Channels - Slab rehabilitation and replacement	\$190,000	\$158,039	\$280,692	\$571,332	\$1,483,895	\$1,396,183	\$1,450,525	\$1,454,909	\$1,790,637	\$1,862,667	\$1,302,733	\$1,354,843	\$1,409,036	\$1,465,398	\$1,524,014	\$1,584,974	\$1,648,373	\$1,714,308	\$1,782,881	\$1,854,196
Channels - Studies	\$0	\$0	\$0	\$0	\$46,794	\$0	\$0	\$0	\$0	\$56,932	\$0	\$0	\$0	\$0	\$69,267	\$0	\$0	\$0	\$0	\$84,274
Capital Related																				
Debt financing - Existing debt	\$386,051	\$374,948	\$362,172	\$326,358	\$280,609	\$264,192	\$258,997	\$254,032	\$249,066	\$244,101	\$222,297	\$217,722	\$213,146	\$208,571	\$203,996	\$199,420	\$194,845	\$189,553	\$184,856	\$177,490
Debt financing - New debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Lifecycle Expenditures	\$1,087,021	\$945,928	\$1,055,585	\$1,084,247	\$1,811,299	\$1,790,407	\$1,838,732	\$1,844,121	\$2,039,703	\$2,163,701	\$1,747,377	\$1,580,652	\$1,879,882	\$1,888,487	\$1,817,137	\$2,513,051	\$2,044,320	\$2,314,295	\$2,111,110	\$2,147,216
Asset Lifecycle Financing																				
Debenture requirements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Municipal funding - Debt servicing	\$386,051	\$374,948	\$362,172	\$326,358	\$280,609	\$264,192	\$258,997	\$254,032	\$249,066	\$244,101	\$222,297	\$217,722	\$213,146	\$208,571	\$203,996	\$199,420	\$194,845	\$189,553	\$184,856	\$177,490
Reserve - Watershed Management Capital	\$350,485	\$285,490	\$346,707	\$378,944	\$765,345	\$763,107	\$789,868	\$795,045	\$895,318	\$959,800	\$762,540	\$681,465	\$833,368	\$839,958	\$806,571	\$1,156,815	\$924,738	\$1,062,371	\$963,127	\$984,863
Provincial funding	\$350,485	\$285,490	\$346,707	\$378,944	\$765,345	\$763,107	\$789,868	\$795,045	\$895,318	\$959,800	\$762,540	\$681,465	\$833,368	\$839,958	\$806,571	\$1,156,815	\$924,738	\$1,062,371	\$963,127	\$984,863
Total Capital Financing	\$1,087,021	\$945,928	\$1,055,585	\$1,084,247	\$1,811,299	\$1,790,407	\$1,838,732	\$1,844,121	\$2,039,703	\$2,163,701	\$1,747,377	\$1,580,652	\$1,879,882	\$1,888,487	\$1,817,137	\$2,513,051	\$2,044,320	\$2,314,295	\$2,111,110	\$2,147,216
Total Capital Expenditures less Financing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Table A-6 Reserves and Reserve Fund Continuity Schedule

Description	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Opening balance	\$1,175,271	\$1,164,452	\$1,265,726	\$1,360,674	\$1,486,244	\$1,294,292	\$1,181,244	\$1,131,137	\$1,103,761	\$1,004,681	\$869,818	\$964,068	\$1,175,969	\$1,273,923	\$1,403,824	\$1,608,156	\$1,502,464	\$1,670,277	\$1,745,307	\$1,966,658
SOGR contribution	\$316,500	\$362,703	\$415,651	\$476,328	\$545,863	\$625,548	\$716,867	\$745,541	\$775,363	\$806,377	\$838,632	\$872,178	\$907,065	\$943,347	\$981,081	\$1,020,325	\$1,061,138	\$1,103,583	\$1,147,726	\$1,193,635
Transfer to capital	\$350,485	\$285,490	\$346,707	\$378,944	\$765,345	\$763,107	\$789,868	\$795,045	\$895,318	\$959,800	\$762,540	\$681,465	\$833,368	\$839,958	\$806,571	\$1,156,815	\$924,738	\$1,062,371	\$963,127	\$984,863
Interest	\$23,166	\$24,061	\$26,004	\$28,187	\$27,530	\$24,510	\$22,895	\$22,128	\$20,876	\$18,559	\$18,157	\$21,188	\$24,256	\$26,512	\$29,822	\$30,798	\$31,413	\$33,818	\$36,752	\$41,421
Closing Balance	\$1,164,452	\$1,265,726	\$1,360,674	\$1,486,244	\$1,294,292	\$1,181,244	\$1,131,137	\$1,103,761	\$1,004,681	\$869,818	\$964,068	\$1,175,969	\$1,273,923	\$1,403,824	\$1,608,156	\$1,502,464	\$1,670,277	\$1,745,307	\$1,966,658	\$2,216,852

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 17

FROM: Marnie Piggot, Director, Finance

DATE: June 23, 2022

SUBJECT: Appointment of Auditor for 2022 Year-End Audit

Recommendation

THAT the Conservation Halton Board of Directors **approves the reappointment of KPMG LLP as auditor for Conservation Halton for the 2022 Fiscal Year-End Audit;**

And

THAT The Conservation Halton Board of Directors **approves the KPMG LLP audit fees noted in the report for up to a further five years subject to annual reappointment as auditors for Conservation Halton.**

Report

According to the Conservation Halton (CH) By-law Governance Section C.6, the General Membership shall appoint an auditor for the coming year in accordance with Section 38 of the Conservation Authorities Act.

The Finance & Audit Committee recommended at their June 9 meeting that the reappointment of KPMG for forwarded to the CH Board of Directors for approval.

A Request for Proposal (RFP) for the Provision of External Audit Services was issued by CH in 2017. The RFP provided for a term from 2017 to 2021 with the option to renew annually for up to a further five years.

The Finance & Audit Committee and CH Board of Directors approved the Audit Services award based on the 2017 RFP as follows:

*That the Finance Committee approves **the appointment of the firm of KPMG LLP as external auditors for CH for up to a five-year term for the fiscal years 2017 to 2021, with the option to renew annually for up to an additional five years.***

Audit fees were requested in the RFP for the fiscal years 2017 to 2021. KPMG fees ranged from \$25,500 to \$27,500.

After the completion of the 2021 year-end audit, staff requested fees from KPMG for up to a further five-year term for the 2022 to 2026 fiscal year end audits. Proposed fees were received from KPMG as follows:

2022	\$30,800
2023	\$32,000
2024	\$33,200
2025	\$34,150
2026	\$35,175

Staff recommend the reappointment of KPMG as auditors for CH for 2022 based on the services provided to date. The fee increase for the 2022 year-end audit is reasonable at \$3,300 and is within the 2022 budget estimate. Fees increases proposed by KPMG over the 2022 to 2026 term range from 2.9% to 3.9%.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

The 2022 audit fee of \$30,800 proposed by KPMG LLP is provided for in the 2022 budget.

Signed & respectfully submitted:



Marnie Piggot
Director, Finance

Approved for circulation:



Hassaan Basit
CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Marnie Piggot; Director Finance
905-336-1158, ext. 2240; mpiggot@hrca.on.ca;

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 22 18

FROM: Marnie Piggot, Director Finance

DATE: June -239, 2022

SUBJECT: 2023 Preliminary Budget and Forecasts

Recommendation

That the Conservation Halton Board of Directors **approves the attached 2023 preliminary budget for budget discussion purposes with funding watershed municipalities.**

Executive Summary

The Finance & Audit Committee recommended at their June 9 meeting that the 2023 preliminary budget be forwarded to the Conservation Halton (CH) Board of Directors for approval for budget discussion purposes with funding municipalities.

The development of the 2023 preliminary budget is based on CH current budget principles while also reflecting the Programs & Services Inventory format presented earlier this year in accordance with the recent revisions to Conservation Authorities (CA) Act regulations.

The 2023 preliminary budget continues to balance the delivery of core programs and services, with Momentum strategic priorities, inflationary and growth-related pressures. The 2023 preliminary budget also incorporates shifts in priorities as a result of the CA Act regulation changes with the implementation of a new program, Watershed Strategies & Climate Change, along with requirements under the regulations to complete a Watershed-based Resource Management Strategy, Conservation Areas Strategy and Land Inventory.

The 2023 preliminary budget financial amounts are contained in the financial attachment (Appendix K). This report provides an overview of the 2023 preliminary budget, major drivers of the budget increase and details on proposed capital projects. A summary of the funding sources and program expenses in the proposed budget of almost \$42.4 million is provided in the following chart.

Budget Summary	2023 Preliminary Budget	2022 Budget	Increase / (Decrease)
Revenue			
Program Revenue	\$ 18,713,896	\$ 17,154,550	\$ 1,559,346
Municipal Funding	11,206,825	10,795,636	411,189
Other Funding & Municipal Special Levies	6,387,525	5,785,373	602,152
Internal Chargeback Recoveries	2,956,477	2,283,751	672,726
Transfers from Reserves	2,321,299	2,570,888	(249,589)
Provincial Funding	796,294	1,601,584	(805,290)
Total Revenues	\$ 42,382,316	\$ 40,191,782	\$ 2,190,534
Expenses			
Corporate Services	\$ 7,221,521	\$ 6,372,829	\$ 848,692
Natural Hazards & Watershed Management	6,200,532	4,773,484	1,427,048
Permitting & Planning	5,115,717	5,067,385	48,332
Conservation Lands & Recreation			
Land Management	1,795,871	1,617,647	178,224
Parks & Recreation	15,623,173	14,385,263	1,237,910
Debt Financing	577,116	620,551	(43,435)
Transfers to Reserves	565,000	505,500	59,500
Capital	5,283,386	6,849,123	(1,565,737)
Total Expenses	\$ 42,382,316	\$ 40,191,782	\$ 2,190,534
Budgeted Surplus	\$ -	\$ -	\$ -

Highlights of the 2023 preliminary budget include:

- The 2023 preliminary budget has increased by \$2.2 million over the 2022 budget of \$40.2 million. Major drivers of the increase include:
 - \$873,000 in total staff salary and benefits costs assuming a 2.5% inflation increase.
 - \$602,000 for six new full-time equivalents (FTE) staff positions. Five positions are funded through new funding agreements and increased internal chargeback recoveries. One new FTE is proposed to be funded by a new special municipal levy for the Watershed Strategies & Climate Change program.
 - Estimated additional total compensation increases of \$355,000 associated with the compensation review being undertaken in 2022 for implementation in 2023.
 - \$754,000 for increased part time and project contract staff that are fully funded by increased program revenues and project grants.
 - \$118,000 in increased insurance expenses based on 2022 insurance premiums with \$98,000 of that related to the Glen Eden ski operation.
- Municipal funding in the 2023 preliminary budget is \$11,206,825. The proposed municipal funding increase is 3.8% or \$411,189. The guideline established by Halton Region for the

2022 budget was 3.7% based on 2% inflation. Operating and capital forecasts have been prepared with annual municipal funding increases ranging from 3.7% to 4.4%.

- Consistent with the CA Act Regulations, other municipal funding for Emerald Ash Borer treatment and Flood Plain Mapping are now referenced as Special Levies. A new Special Levy is proposed in the 2023 preliminary budget of \$179,000 for staff support and consulting services for the new Watershed Strategies & Climate Change program.
- Municipal State of Good Repair (SOGR) levies are proposed to increase in total by \$59,500. The increase includes \$46,200 for dams and channels to provide for the municipal funding level to reach the target amount plus inflation by 2028 based on the recently updated Asset Management Plan for Dams and Channels. The target municipal funding has been achieved for facilities in the 2023 budget with the increase of \$13,300 in the SOGR levy for buildings.
- Debt financing of \$1 million is requested in the 2023 preliminary budget consistent with the 2022 budget forecast for 2023 related to the new Central Works Operations Centre project.
- The Conservation Areas operating surplus in the 2023 preliminary budget of \$506,540 is higher than the 2022 budget surplus of \$372,118. Revenues are conservatively estimated based on 2021-2022 activity. Revenue increases are offset by increased park expenses for higher credit card charges with most sales now processed online, higher insurance premiums, facility maintenance and part time staff expenses including OMERS pension costs. Starting in 2023, OMERS requires CH to offer OMERS to all employees.

CH staff will be submitting the 2023 preliminary budget to Halton Region for their review and consideration this summer. The final budget presented in the fall will contain revisions related to the compensation review recommendations, updated debt financing charges and apportionment percentages when received. Potential updates to capital projects funded partly through developer contributions are anticipated with updates to the business cases for these projects. A comprehensive Budget & Business Plan document will be prepared for final budget approval in November.

Report

The 2023 preliminary budget summary by operating and capital programs and budget categories is provided in the following chart:

Programs	Operating Budget	Capital Budget	2023 Preliminary Budget	2022 Budget
Watershed Management & Support Services (WMSS)	\$ 21,475,757	\$ 4,040,273	\$ 25,516,030	\$ 21,993,616
Conservation Lands & Recreation (Recreation)	\$ 15,623,173	\$ 1,243,113	\$ 16,866,286	\$ 18,198,166
Total	\$ 37,098,930	\$ 5,283,386	\$ 42,382,316	\$ 40,191,782

Inflation has been assumed at 2.5% for the 2023 preliminary budget based on Bank of Canada and Province of Ontario inflation forecasts for 2023. The Bank of Canada aims to keep inflation at 2% beyond 2023.

2023 Preliminary Operating Budget

The operating budget of \$37.1 million provides for an investment of \$21.5 million in Watershed Management and Support Services (WMSS) programs and an investment of \$15.6 million in Conservation Lands & Recreation (Recreation).

Investing in Watershed Management & Support Services

The WMSS 2023 preliminary operating budget totals \$21.5 million. WMSS operating expense and funding amounts are detailed in the chart below. The budget increase of \$2.5 million is largely funded by program revenue, grants, reserves and internal chargeback recoveries. Municipal operating funding for WMSS programs is proposed to increase by \$317,429 for programs and services and by \$59,500 to fund increases to the State of Good Repair Levies for dams, channels and facilities.

Watershed Management & Support Services (WMSS)	2023 Preliminary Budget	2022 Budget	Increase / (Decrease)
Operating Expenses:			
Staff Salary & Benefits	\$ 15,132,187	\$ 13,191,614	\$ 1,940,573
Materials & Supplies	1,120,331	1,082,146	38,185
Purchased Services	3,020,608	2,833,184	187,424
Financial	60,130	79,000	(18,870)
Internal Chargebacks	1,000,385	645,401	354,984
Debt Financing Charges	577,116	620,551	(43,435)
Transfer to Reserves - Land Securement	25,000	25,000	-
Transfer to Reserves - SOGR Levy Dams & Channels	362,700	316,500	46,200
Transfer to Reserves - SOGR Levy Buildings	177,300	164,000	13,300
Total Operating Expenses - WMSS	\$ 21,475,757	\$ 18,957,396	\$ 2,518,361
Funding of Operating Expenses:			
Program Revenue	\$ 3,578,216	\$ 3,192,120	\$ 386,096
Provincial (Ministry NDMNRF) - Operating Grant	155,034	155,034	-
Municipal Funding	10,009,102	9,691,673	317,429
Municipal Funding - State of Good Repair Levies Dams & Channels and Buildings	540,000	480,500	59,500
Other Grants & Program Funding	3,978,535	3,038,188	940,347
Internal Chargeback Recoveries	2,884,707	2,206,381	678,326
Transfers from Reserves - Legal, WMSS Stabilization, Water Festival, Stewardship and	330,163	193,500	136,663
Total Operating Funding - WMSS	\$ 21,475,757	\$ 18,957,396	\$ 2,518,361

Staff salary & benefits increases of \$1,940,573 in the WMSS operating budget include:

- 5.0 FTE staff changes costing \$519,946 that are funded through agreements for Ecological Services and Source Protection, and internal chargeback recoveries through the CH Foundation and parks.
- Increased staff compensation of \$601,837 is based on a 2.5% inflationary increase to the staff salary bands and position review changes associated with the 2022 compensation review. Salaries are based on 96% of the top of the salary bands that approximate actual salary levels.
- Estimated compensation review impacts of \$284,000.
- Benefit expense increases estimated to cost \$101,009; and
- Increased part time staff costs of \$433,781 primarily for Partnership Project work that are fully funded by project grants.

Materials & Supplies and Purchased Services

The majority of the changes in these categories are related to increases and shifts between supplies and services for the Partnership Projects planned for 2023. Partnership Projects are fully funded by project grants and internal chargeback recoveries to the projects.

Internal Chargebacks

The increase in internal chargeback expenses of \$354,984 includes almost \$330,000 Ecology, Landowner Outreach and Restoration estimated staff time charges to the Partnership Projects and recovered through anticipated project grants.

Debt Financing Charges

Debt Financing Charges in the 2023 preliminary operating budget of \$577,116 are comprised of municipal debt financing charges of \$527,116 and \$50,000 for principal and interest payments on the property acquisition loan from the Hamilton Community Foundation (HCF). The HCF loan balance as of December 31, 2021 of \$168,588 is anticipated to be repaid by July 2025.

Municipal debt financing charges are based on the amounts in the 2022 budget forecast for 2023 provided by Halton Region staff. Debt financing charges are subject to change when updated by Halton Region staff with the budget submission. Debt financing charges are currently calculated based on interest rates ranging between 3.0%-3.2%, with repayment over thirty years for the Kelso Dam Capital Project and twenty years for other projects. Projects that have been debt financed to date include significant dams and channels capital projects and Administration Office major renovations. The Halton Region loan balance as of December 31, 2021 was \$4,831,225.

State of Good Repair (SOGR) Levy and Transfers to Reserves

An increase of \$59,500 in the SOGR Levy is attributed to an increase of \$46,200 for Dams & Channels to provide for the municipal funding level to reach the target amount plus inflation by 2028. The target municipal funding has been achieved for Facilities in the 2023 budget with the increase of \$13,300 in the SOGR levy for Facilities. The State of Good Repair Levy amounts are transferred to the Watershed Management Capital and Building SOGR Reserve to fund future capital works.

Program Revenue

The majority of this revenue increase is related to estimated planning and permit fees based on increased activity since 2020 and projected trends related to the Halton Region allocation program.

Other Grants & Program Funding

The estimated increase in funding through other grants and program funding of \$940,357 is primarily related to:

- Partnership Projects planned for 2023 and increased funding of almost \$500,000.
- Ecological Services Agreement with Halton Region approved in late 2021 that is providing \$253,000 in Planning & Regulations program funding for 2.0 new FTE positions.
- Source Protection program funding through MECP has increased by almost \$95,000 for a new staff position and other program work.

Internal Chargeback Recoveries

Internal chargeback recoveries increase of \$678,326 includes an increased recovery of Corporate Service staff costs from the parks of \$229,400 as well as the recovery of staff costs through Partnership Projects grants and the Conservation Halton Foundation.

Transfer from Reserves

Transfers from reserves to fund operating expenses of \$330,163 include the following:

- Estimated legal costs of \$100,000 related to Planning & Regulation activities are proposed to continue to be funded by a Transfer from the Legal Reserve.
- A transfer from the WMSS Stabilization Reserve of \$142,000 will partly fund the estimated compensation review costs.
- Transfers from the Water Festival, Stewardship & Restoration Reserve total \$88,163 to assist with funding the respective program expenses.

Investing in our Parks

The Conservation Lands & Recreation (Recreation) 2023 preliminary operating budget provides for an investment of \$15,623,173 into the parks. Operating expenses have increased by \$1,237,910 as detailed in the chart below.

Conservation Lands & Recreation (Recreation)	2023 Preliminary Budget	2022 Budget	Increase / (Decrease)
Operating Expenses:			
Staff Salary & Benefits	\$ 8,597,746	\$ 8,057,964	\$ 539,782
Materials & Supplies	1,889,689	1,874,353	15,336
Purchased Services	2,500,498	2,245,528	254,970
Financial	535,200	471,200	64,000
Internal Chargebacks - Corporate Services	1,593,500	1,364,100	229,400
Transfer to Reserve - Operating Surplus	506,540	372,118	134,422
Total Operating Expenses - Conservation Lands & Recreation (Recreation)	\$ 15,623,173	\$ 14,385,263	\$ 1,237,910
Funding of Operating Expenses:			
Program Fees	\$ 15,169,680	\$ 13,946,430	\$ 1,223,250
Municipal Funding - Park Education programs & Outreach	364,723	361,463	3,260
Internal Chargeback Recoveries	71,770	77,370	(5,600)
Transfer from Reserves	17,000	-	17,000
Total Operating Funding - Conservation Lands & Recreation (Recreation)	\$ 15,623,173	\$ 14,385,263	\$ 1,237,910

Staff Salary & Benefits are increasing by \$539,782 primarily due to increased part time staff costs of \$320,000 including estimated OMERS benefits offerings totalling almost \$220,000, staff compensation cost of living and benefit increases amounting to \$149,000, and estimated compensation review impacts totalling \$71,000.

Internal Chargebacks to the parks recreation programs for support services have increased in the 2023 preliminary operating budget by \$229,000 related to support staffing changes and estimated allocation of corporate services time spent on park programs.

Purchased Services increase of \$254,970 includes \$98,000 related to insurance premium increases, \$50,000 related to consulting fees for CA Act and master plan initiatives, \$40,000 increase related to WOW bus services returning. Remainder of increases are attributed to increased volume, activity and maintenance in the Parks.

Financial expenses increase of \$64,000 is attributed to increased credit card fees and point of sales system fees. These expense increases are more than offset by proposed increased park program fees.

Program fees have been increased by \$1,223,250 with the expectation of a return to full park operations. This revenue increase is based on assumed continued growth in park visitation and the potential implementation of fee increases.

2023 Preliminary Capital Budget

The 2023 preliminary capital budget represents an investment of \$5.3 million into infrastructure and studies allocated to WMSS programs of \$4.0 million and Conservation Areas of \$1.2 million.

The capital budget provides funding for the rehabilitation of flood control infrastructure, updating of flood plain mapping, investments in technology upgrades, fleet replacements, development of studies and plans, managing the impacts of Emerald Ash Borer, land management initiatives, infrastructure improvements and the implementation of Watershed Strategies & Climate Change initiatives.

Capital Projects		2023 Preliminary Budget	2022 Budget	Increase / (Decrease)
WMSS	<i>Emerald Ash Borer</i>	850,000	820,000	30,000
	<i>Flood Plain Mapping</i>	550,000	525,000	25,000
	<i>Dams & Channels SOGR Maintenance</i>	420,000	700,970	(280,970)
	<i>Flood Forecasting & Warning Program</i>	115,000	90,000	25,000
	<i>Watershed Strategies & Climate Change</i>	179,000	-	179,000
	<i>Spongy (LDD) Moth Treatment</i>	100,000	-	100,000
	<i>Other Projects</i>	503,273	448,250	55,023
	<i>Facilities Infrastructure</i>			
	Administration Office SOGR & Restoration	225,000	200,000	25,000
	Central Works Operations Centre & Field Office	1,000,000	-	1,000,000
	<i>Digital Transformation</i>			
	IT Infrastructure	98,000	52,000	46,000
	Document Management	-	200,000	(200,000)
Total WMSS		4,040,273	3,036,220	1,004,053
Parks	<i>Conservation Lands & Recreation (Recreation)</i>			
	Facility, Infrastructure & Ski Hill	1,038,000	1,163,000	(125,000)
	Kelso Quarry Park / Area 8	125,000	100,000	25,000
	Fleet replacement	80,113	269,903	(189,790)
	Crawford Lake Boardwalk	-	2,280,000	(2,280,000)
Total Parks		1,243,113	3,812,903	(2,569,790)
Total Capital		5,283,386	6,849,123	(1,565,737)

Dams & Channels SOGR Maintenance costs of \$420,000 are based on staff assessments of capital work priorities according to consulting engineering studies such as dam safety reviews. These costs are assumed to be funded 50% provincially and 50% municipally through the State of Good Repair Levy reserve funding. The overall amount in the 2023 preliminary budget and has been reduced compared to prior budget capital forecasts as a result of estimates in updated Dam Safety Reviews and Channels Study.

Watershed Strategies & Climate Change initiatives of \$179,000 in 2023 are related to consulting and staffing requirements. Project expenses for 2023 are to be funded via a special municipal levy transfer.

Facilities Infrastructure capital work of \$1,225,000 will fund state of good repair maintenance and office space renovations. Office renovations work will continue to ramp up through 2023. The Central

Work Operations Centre is proposed to begin in 2023 with completion in 2024. Design work of the new facility is currently underway.

Parks Facility, Infrastructure & Ski Hill costs of \$1,038,000 include \$525,000 for ski hill improvements and \$513,000 for facilities improvements.

Sources of Capital Budget Funding

A summary of the 2023 proposed capital funding sources is provided in the chart below:

Capital Budget Funding	2023 Preliminary Budget	2022 Budget	Increase / (Decrease)
WMSS:			
Provincial Funding - Dams & Channels	\$ 210,000	\$ 350,485	\$ (140,485)
Municipal Funding	\$ 293,000	\$ 262,000	\$ 31,000
Municipal Special Levy - EAB	\$ 834,000	\$ 804,000	\$ 30,000
Municipal Special Levy - Flood Plain Mapping	\$ 550,000	\$ 525,000	\$ 25,000
Municipal Funding Other - Watershed Strategies & Climate Change	\$ 179,000	\$ -	\$ 179,000
Municipal Debt Financing	\$ 1,000,000	\$ -	\$ 1,000,000
Other Funding Grants and Program Funding	\$ 243,250	\$ 250,250	\$ (7,000)
Transfer from Reserves	\$ 731,023	\$ 844,485	\$ (113,462)
Conservation Lands & Recreation (Recreation):			
Transfer from Reserves	\$ 1,243,113	\$ 1,532,903	\$ (289,790)
Other Funding Grants and Program Funding	\$ -	\$ 1,671,924	\$ (1,671,924)
Developer Contributions	\$ -	\$ 608,076	\$ (608,076)
Total Capital Funding	\$ 5,283,386	\$ 6,849,123	\$ (1,565,737)

Special Levies for Emerald Ash Borer (EAB) treatment and Flood Plain Mapping are consistent with the business plans submitted to Halton Region for these projects.

Reserve Transfers

The summary below provides the recommended transfers to and from reserves in the 2023 preliminary budget and the resulting projected reserve balances at December 31, 2023. A reserve continuity schedule with reserve balances to 2032 is also provided in the financial attachment.

Conservation Halton Reserves	Reserves Projected Balance Dec. 31, 2022	Contribution from Municipal Funding	Contribution from Surplus	State of Good Repair Levy	Contribution to Capital Projects	Contribution to Operating Expenses	Reserves Projected Balance Dec. 31, 2023
Watershed Management & Support Services							
Vehicle and Equipment	\$ 610,901				\$ (164,023)		\$ 446,878
Building	116,872				(100,000)		16,872
Building - State of Good Repair	364,820			177,300	(150,000)		392,120
Watershed Management Capital - Municipal Funds and Self-Generated Funds	1,141,285			362,700	(210,000)		1,293,985
Watershed Management & Support Services Stabilization	1,319,212					(142,000)	1,177,212
Capital Projects - Debt Financing Charges	471,596						471,596
Digital Transformation	78,400				-		78,400
Legal - Planning & Watershed Management	941,995					(100,000)	841,995
Legal - Corporate	200,000						200,000
Water Festival	178,911				-	(10,000)	168,911
Land Securement	113,739	25,000					138,739
Property Management	1,084,043				(100,000)		984,043
Stewardship and Restoration	345,551				(7,000)	(95,163)	243,388
Conservation Areas							
Capital	1,468,906		506,540		(1,243,113)		732,333
Stabilization	1,146,490						1,146,490
Total Reserves	\$ 9,582,721	\$ 25,000	\$ 506,540	\$ 540,000	\$ (1,974,136)	\$ (347,163)	\$ 8,332,962

Municipal Funding

Base municipal funding in the 2023 preliminary budget totals almost \$11.2 million. The \$411,189 increase requested in municipal funding represents a 3.8% increase over the amount requested in 2022. The Region of Halton budget guideline established for the 2022 budget was 3.7% based on 2% inflation. There is potential for the guideline to be slightly higher than the previous guideline with increased inflation anticipated to be higher for 2023. The guideline for the 2023 budget is anticipated to be received in July 2022.

Municipal Funding	2023 Preliminary Municipal Funding	2022 Municipal Funding	Increase / (Decrease)
Operating	\$ 10,373,825	\$ 10,053,136	3.2%
Capital	293,000	262,000	11.8%
	10,666,825	10,315,136	3.4%
Add: State of Good Repair (SOGR) Levy - Dams & Channels, Buildings	540,000	480,500	12.4%
Total Municipal Funding	\$ 11,206,825	\$ 10,795,636	3.8%

Base municipal funding continues to be less than 30% of funding sources in the budget. The municipal funding increase included in the 2022 budget forecast for 2023 was 3.6%. A municipal funding forecast is provided in the financial attachment with annual municipal funding increases ranging from 3.7% to 4.4%.

2023 Preliminary Budget and Operating Forecast 2024-2032

Key assumptions and drivers included in the budget and operating forecast are as follows:

- The addition of two new staff positions per year have been assumed in the Watershed Management and Support Services (WMSS) operating forecast that reflect future growth and maintaining program service levels. Program service level reviews are completed annually as part of the budget process to reflect service level changes.
- Compensation and other expenses in the forecast have been assumed to increase annually at the estimated rate of inflation of 2.0%.
- Program revenues for Watershed Management and Support Services program are assumed to increase annually by inflation and increase 3.5% annually for the parks.

The operating forecast includes the estimated costs of servicing existing debt and new debt financing for anticipated capital projects for the 50% municipal portion of dams and channels capital projects and for major facility projects proposed at the Administration Office and Operations Centre. The estimated debt financing charges included in the operating forecast related to municipal debt financing have been provided by Halton Region staff for the 2022 budget forecast and are subject to revision.

2023 Preliminary Budget and Capital Forecast 2024-2032

The development of the capital budget forecast and overall financing strategy considers the following: 1) strategic initiatives in Conservation Halton's strategic plan Momentum; 2) capital priorities identified in Asset Management Plans; 3) Emerald Ash Borer and Flood Plain Mapping Business Plans; and 4) Park Master Plans. The capital budget as proposed will ensure assets are maintained in a state of good repair and address the impact of growth in the region on CH's infrastructure while ensuring long-term fiscal sustainability.

The largest portions of the Watershed Management and Support Services capital budgets are financing of the operations centre along with dams and channels. The operations centre capital costs are debt financed and forecasted over 2023-24, totalling \$2.5M. Dams and channels capital projects are based on information prepared by staff. Dams and channels capital projects are assumed to be funded 50% municipally through the State of Good Repair Levy reserve funding and debt financing for channel and Scotch Block Dam repairs and the remaining 50% provincially which is approved through a grant application process.

Conservation Lands & Recreation (Recreation) capital projects in the forecast continue to include three projects totaling approximately \$24 million based on business cases previously provided to the Board. The capital projects are related to recreation centres along with water distribution and sewer collection systems. Staff are proceeding with assessing park operations and changing visitor demands to develop updated business cases to ensure sustainable capital investments in these projects, while leveraging available infrastructure grant funding.

The strategic plan initiatives included in the capital forecast will enable CH to invest in innovation and technology to continue to modernize operations, streamline service delivery and improve resource management.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

CH staff have developed a preliminary budget for 2023 with consideration of current fiscal pressures and the need to balance these pressures with providing core services in a growing watershed and meeting strategic plan objectives.

The 2023 preliminary budget addresses increased costs through operational efficiencies and continuous improvements and includes an increase of 3.8% in base municipal funding. A new special levy for Watershed Strategies & Climate Change of \$179,000 is also proposed in the 2023 budget and forecast.

The proposed 2023 preliminary budget continues to provide for investments in programs to enhance service delivery, digital transformation initiatives, watershed planning work, greenspace and property management initiatives, floodplain mapping, flood forecasting, and improved user experiences at our parks.

Signed & respectfully submitted:



Marnie Piggot,
Director, Finance

Approved for circulation:



Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Marnie Piggot; Director Finance
905-336-1158, ext. 2240; mpiggot@hrca.on.ca;

2023 PRELIMINARY BUDGET

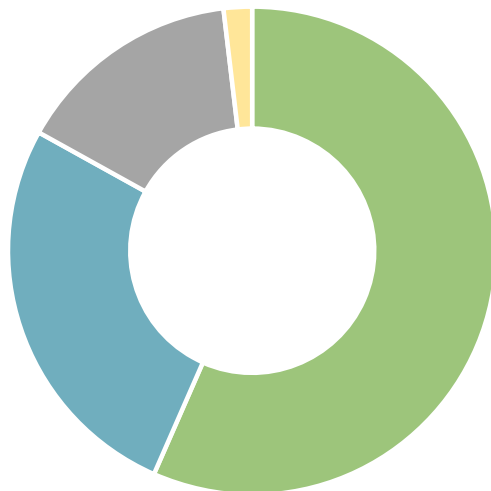


TABLE OF CONTENTS

2023 Preliminary Budget Summary	3
2023 Preliminary Operating Budget.....	4
2023 Preliminary Capital Budget.....	9
Operating Budget & Forecast 2024-2032.....	13
Capital Budget & Forecast 2024-2032.....	19
2023 Preliminary Budget - Municipal Funding.....	23
2023 Preliminary Budget - Reserves.....	27

2023 PRELIMINARY BUDGET SUMMARY

Total Budget Funding Sources \$42,382,316



- Program Revenue, Internal Chargeback Recoveries & Reserves 57%
- Municipal Funding 26%
- Other Funding 15%
- Provincial Funding 2%

Operating Budget	2023 Budget	2022 Budget
Corporate Services	7,221,521	6,372,829
Natural Hazards & Watershed Management	6,200,532	4,773,484
Permitting & Planning	5,115,717	5,067,385
Conservation Lands & Recreation (Land Mgmt)	1,795,871	1,617,647
Debt Financing	577,116	620,551
Reserves	25,000	25,000
Conservation Lands & Recreation (Recreation)	15,623,173	14,385,263
State of Good Repair Levy - Dam & Channels; Building	540,000	480,500
	<u>37,098,930</u>	<u>33,342,659</u>

Capital Budget	2023 Budget	2022 Budget
Corporate Services	1,542,023	616,000
Natural Hazards & Watershed Management	848,250	950,220
Permitting & Planning	550,000	525,000
Conservation Lands & Recreation (Land Mgmt)	1,100,000	945,000
Conservation Lands & Recreation (Recreation)	1,243,113	3,812,903
	<u>5,283,386</u>	<u>6,849,123</u>

Total Operating & Capital Budget	\$ 42,382,316	\$ 40,191,782
---	----------------------	----------------------

2023 PRELIMINARY OPERATING BUDGET



WATERSHED MANAGEMENT & SUPPORT SERVICES

2023 PRELIMINARY OPERATING BUDGET

Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	2023 Budget Funding Sources					
					Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargeback Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS) PROGRAMS										
1 CORPORATE SERVICES										
Office of President & CEO		655,952	711,907	753,561	128,500			23,600		729,961
Conservation Halton Foundation Administration		163,179	153,015	270,781				153,000		117,781
Finance		730,812	779,944	853,517				262,600		462,417
Fleet Operations		165,921	160,589	201,940						201,940
General Corporate Services		22,723	-	284,000					142,000	142,000
Human Resources		633,230	747,866	768,678				221,800	-	546,878
Marketing and Communications		612,952	809,860	904,754				361,000	10,000	533,754
Office of Chief Operating Officer (COO)										
Administration & Procurement		291,773	299,847	490,045	6,500			118,200		371,845
Information Technology		455,697	477,979	513,583				65,700		447,883
Geographical Information Systems (GIS)		420,795	526,918	565,891						559,391
Risk & Health		762,301	788,507	666,803				201,900		464,903
Administration Office Facility		165,004	199,840	192,249						192,249
Project Management		423,974	434,469	467,393				50,000	119,400	297,993
Construction		262,283	282,088	288,326					52,700	235,626
	13.3%	5,766,596	6,372,829	7,221,521	135,000	-	50,000	1,579,900	152,000	5,304,621

WATERSHED MANAGEMENT & SUPPORT SERVICES

2023 PRELIMINARY OPERATING BUDGET

Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	2023 Budget Funding Sources					
					Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargeback Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS) PROGRAMS										
2 NATURAL HAZARDS & WATERSHED MANAGEMENT										
Flood Forecasting & Operations		526,929	608,217	592,314		155,034	10,000	15,000		412,280
Watershed Strategies & Climate Change										
Watershed Strategies & Climate Change Administration		216,551	100,000	473,553				18,000	100,000	355,553
Source Protection		246,174	211,141	306,260		306,260		-		-
Science & Partnerships										
Monitoring Ecology		643,574	630,848	696,776	14,716			55,884		626,176
Landowner Outreach & Restoration (prev. Stewardship)		671,898	619,394	752,222	62,500		26,580	245,110	47,500	370,532
Hamilton Harbour Remedial Action Plan (HHRAP)		331,751	289,092	307,438			318,198			(10,760)
Partnership Projects		864,662	350,030	865,680			865,680			-
Restoration & Conservation										
Restoration		428,209	486,395	744,411			18,000	595,563		130,848
Partnership Projects		581,583	1,478,367	1,461,878			1,431,215		30,663	-
	29.9%	4,511,331	4,773,484	6,200,532	77,216	461,294	2,669,673	929,557	178,163	1,884,629

WATERSHED MANAGEMENT & SUPPORT SERVICES

2023 PRELIMINARY OPERATING BUDGET

Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargeback Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS) PROGRAMS										
3 PERMITTING & PLANNING										
Planning & Regulations		4,647,074	4,310,991	4,347,860	3,208,000		252,832	30,750	-	856,278
Floodplain Mapping		241,791	246,492	252,959	-			-		252,959
Regional Infrastructure Team (RIT)		421,261	509,902	514,898			527,770			(12,872)
	1.0%	5,310,126	5,067,385	5,115,717	3,208,000	-	780,602	30,750	-	1,096,365
4 CONSERVATION LANDS & RECREATION (Land Management)										
Property Management		51,346	196,890	324,128	38,000	125,000		52,700		108,428
Security		426,898	449,070	472,880				181,800		291,080
Forestry		918,355	971,687	998,863	120,000		47,000	110,000		721,863
	11.0%	1,396,600	1,617,647	1,795,871	158,000	125,000	47,000	344,500	-	1,121,371
5 DEBT FINANCING CHARGES										
TRANSFER TO RESERVE - VEHICLE & EQUIPMENT	(7.0%)	573,213	620,551	577,116						577,116
TRANSFER TO RESERVES - WMSS STABILIZATION, PROPERTY MANAGEMENT, STEWARDSHIP AND RESTORATION; ALLOCATED		-	-	-						-
6 SURPLUS		1,727,623	-	-						-
7 TRANSFER TO RESERVES - STATE OF GOOD REPAIR (SOGR) LEVY	12.4%	478,500	480,500	540,000						540,000
8 TRANSFER TO RESERVE - LAND SECUREMENT	0.0%	25,000	25,000	25,000						25,000
TOTAL OPERATING WATERSHED MGMT & SUPPORT SERVICES (WMSS)										
	13.3%	19,788,988	18,957,396	21,475,757	3,578,216	586,294	3,547,275	2,884,707	330,163	10,549,102

CONSERVATION AREAS

2023 PRELIMINAY OPERATING BUDGET

Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	2023 Budget Funding Sources					
					Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargeback Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
CONSERVATION LANDS & RECREATION (Recreation)										
Parks & Recreation										
Conservation Areas Administration		1,527,987	1,466,508	1,868,305	1,425,000			71,770		
Fleet Operations		135,396	117,090	124,590						
Kelso/ Glen Eden		5,497,443	8,153,133	8,455,932	10,422,250					
Crawford Lake / Mountsberg / Robert Edmondson		1,780,308	2,026,675	2,171,622	1,895,500		-			240,000
Rattlesnake Point / Hilton Falls/ Mount Nemo		480,289	559,896	585,531	1,251,500					
Outreach		198,990	325,743	317,153	125,430		50,000	-	17,000	124,723
Transfer Surplus to Conservation Area reserves		(270,078)	372,118	506,540						
Subtotal Conservation Lands & Recreation (Recreation) - Operating before Internal Chargeback - Corporate Services	7.7%	9,350,334	13,021,163	14,029,673	15,119,680	-	50,000	71,770	17,000	364,723
Internal Chargeback - Corporate Services	16.8%	1,049,500	1,364,100	1,593,500						
TOTAL OPERATING CONSERVATION LANDS & RECREATION (Recreation)	8.6%	10,399,834	14,385,263	15,623,173	15,119,680	-	50,000	71,770	17,000	364,723

2023 PRELIMINARY CAPITAL BUDGET



2023 PRELIMINARY CAPITAL BUDGET SUMMARY

Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	2023 Budget Funding Sources					
					Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargebac k Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
CAPITAL										
Capital - Watershed Management & Support Services										
10a (WMSS)										
Corporate Services										
Asset Management Plan		2,621	40,000	50,000					50,000	-
Compensation review		-	30,000	-						-
Program Rates & Fees Review		-	-	30,000						30,000
GIS Data		10,722	-	-						-
IT Infrastructure		117,470	52,000	98,000						98,000
Digital Transformation		-	200,000	-					-	-
Website Upgrade		58,969	-	-					-	-
Administration Office Renovations		-	100,000	100,000					100,000	-
Central Works Operations Centre & Field Office		-	-	1,000,000			1,000,000			-
Facilities - State of Good Repair		66,212	100,000	100,000					100,000	-
Fleet Management		47,045	94,000	164,023					164,023	-

2023 PRELIMINARY CAPITAL BUDGET SUMMARY

Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	2023 Budget Funding Sources					
					Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargebac k Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
CAPITAL										
Capital - Watershed Management & Support Services										
10a (WMSS)										
Natural Hazards & Watershed Management										
Dams & Channels SOGR Maintenance		1,300,875	700,970	420,000		210,000	-		210,000	-
Flood Forecasting & Warning Program		25,663	90,000	115,000						115,000
Watershed Planning		-	55,000	-			-			-
Watershed Strategies & Climate Change		-	-	179,000			179,000			-
Roots Ridge Aquisition		-	61,250	-						
Roots Ridge Restoration		-	-	73,100			73,100			
Fuciarelli Restoration		-	43,000	36,150			29,150		7,000	
Speyside Weir		-	-	25,000			25,000			
Permitting & Planning										
Flood Plain Mapping Update		389,428	525,000	550,000			550,000			-
Conservation Lands & Recreation (Land Management)										
Emerald Ash Borer		772,225	820,000	850,000	16,000		834,000			-
Property Management Projects		-	25,000	50,000						50,000
Spongy Moth (LDD Moth) Management		60,473	-	100,000					100,000	-
Other Foundation Funded Projects		-	100,000	100,000			100,000			-
TOTAL CAPITAL WMSS	33.1%	2,851,703	3,036,220	4,040,273	16,000	210,000	2,790,250	-	731,023	293,000

2023 PRELIMINARY CAPITAL BUDGET SUMMARY

					2023 Budget Funding Sources					
Description	% Increase (decrease) over PY Budget	2021 Actual	2022 Budget Expenses	2023 Budget Expenses	Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Internal Chargebac k Recovery (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
CAPITAL										
10b Capital - Conservation Lands & Recreation (Recreation)										
Skihill Improvements		249,051	950,000	525,000					525,000	-
Facility Major Maintenance & IT Infrastructure		760,495	213,000	513,000					513,000	-
Fleet replacement		60,799	269,903	80,113					80,113	-
Developer Contribution Projects										
-Crawford Lake Boardwalk		-	2,280,000	-		-	-		-	-
-Kelso Quarry Park / Area 8		-	100,000	125,000					125,000	-
TOTAL CAPITAL CONSERVATION LANDS & RECREATION (Recreation)										
	(67.4%)	1,070,344	3,812,903	1,243,113	-	-	-	-	1,243,113	-
TOTAL CAPITAL PROJECTS										
	(22.9%)	3,922,047	6,849,123	5,283,386	16,000	210,000	2,790,250	-	1,974,136	293,000

2023 PRELIMINARY OPERATING BUDGET & FORECAST

2024 - 2032



2023 PRELIMINARY OPERATING BUDGET

FORECAST 2024 - 2032

2023 PRELIMINARY OPERATING BUDGET

Conservation Halton WMSS Operating Expenditures

Purchased Services

	2023 Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Balance, beginning of year	2,833,184	3,020,608	3,080,608	3,142,608	3,205,608	3,269,608	3,334,608	3,401,608	3,469,608	3,538,608
Risk & Health - insurance increase	20,000									
IT Cybersecurity recommendations	30,000									
Science & Partnerships - HHRAP and Partnership Projects services	229,641									
Project Management Office (PMO) - Restoration Partnership Projects	(85,850)									
General increases (decreases) (Assumed 2023-2032 2% inflation)	(6,367)	60,000	62,000	63,000	64,000	65,000	67,000	68,000	69,000	71,000
Balance, end of year	3,020,608	3,080,608	3,142,608	3,205,608	3,269,608	3,334,608	3,401,608	3,469,608	3,538,608	3,609,608

Financial

Balance, beginning of year	79,000	60,130	61,330	62,530	63,830	65,130	66,430	67,730	69,130	70,530
General increases (Decr. Copier leases; 2023-2032 Assumed 2.0% inflation)	(18,870)	1,200	1,200	1,300	1,300	1,300	1,300	1,400	1,400	1,400
Balance, end of year	60,130	61,330	62,530	63,830	65,130	66,430	67,730	69,130	70,530	71,930

Internal Chargebacks

Balance, beginning of year	645,401	1,000,385	1,020,393	1,040,801	1,061,617	1,082,849	1,104,506	1,126,596	1,149,128	1,172,111
General increases	354,984	20,008	20,408	20,816	21,232	21,657	22,090	22,532	22,983	23,442
Balance, end of year	1,000,385	1,020,393	1,040,801	1,061,617	1,082,849	1,104,506	1,126,596	1,149,128	1,172,111	1,195,553

FORECAST 2024 - 2032

2023 PRELIMINARY OPERATING BUDGET

Conservation Halton WMSS Operating Expenditures	Ten Year Operating Expenditures and Funding Budget & Forecast Watershed Management & Support Services (WMSS)									
	2023 Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Debt Financing Charges (Hamilton Community Fdn & Halton Region)										
Balance, beginning of year	620,551	577,116	643,857	636,408	530,977	501,857	491,592	481,847	472,102	462,357
Decrease in debt financing charges - Ham. Comm. Foundation	-	-	(25,000)	(25,000)	-	-	-	-	-	-
Increase/ (decrease) in debt financing charges - Halton Region	(43,435)	66,741	17,551	(80,431)	(29,120)	(10,265)	(9,745)	(9,745)	(9,745)	-
Total Debt Financing Charges	577,116	643,857	636,408	530,977	501,857	491,592	481,847	472,102	462,357	462,357
Transfer to Reserves - State of Good Repair Levy (Dams & Channels)	362,700	415,700	476,300	545,900	625,500	716,900	745,500	775,400	806,400	838,600
Transfer to Reserves - State of Good Repair Levy (Buildings)	177,300	183,900	190,700	197,800	205,100	212,700	220,600	228,800	237,300	246,100
Transfer to Reserves - Land Securement	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Transfers to Reserves - Motor Pool	-	-	-	-	-	-	100,000	125,000	200,000	150,000
Total Operating Expenses - WMSS	21,475,757	22,221,706	22,916,165	23,538,850	24,264,962	25,039,954	25,872,799	26,650,286	27,499,124	28,253,266
Funding of Operating Expenditures										
Program Revenue	3,578,216	3,757,100	3,945,000	4,023,900	4,104,400	4,309,600	4,395,800	4,483,700	4,573,400	4,664,900
Ministry of Natural Resources & Forestry - Operating Grant	155,034	155,034	155,034	155,034	155,034	155,034	155,034	155,034	155,034	155,034
Municipal Funding - Operating (Total incl. Education)	10,373,825	10,898,889	11,306,989	11,670,163	12,092,416	12,424,204	12,992,302	13,499,104	14,071,121	14,542,010
Municipal State of Good Repair Levies - Dams & Channels and Buildings	540,000	599,600	667,000	743,700	830,600	929,600	966,100	1,004,200	1,043,700	1,084,700
Other Grants & Program Funding	3,978,535	4,055,600	4,134,200	4,214,400	4,296,200	4,379,500	4,464,700	4,551,500	4,640,000	4,730,300
Internal Chargeback Recoveries	2,519,984	2,625,483	2,677,942	2,731,653	2,786,312	2,842,016	2,898,863	2,956,748	3,015,869	3,076,322
Transfers from Reserves - Legal, WMSS Stabilization, Water Festival, Stewardship and Restoration	330,163	130,000	30,000	-	-	-	-	-	-	-
Total Operating Funding - WMSS	21,475,757	22,221,706	22,916,165	23,538,850	24,264,962	25,039,954	25,872,799	26,650,286	27,499,124	28,253,266

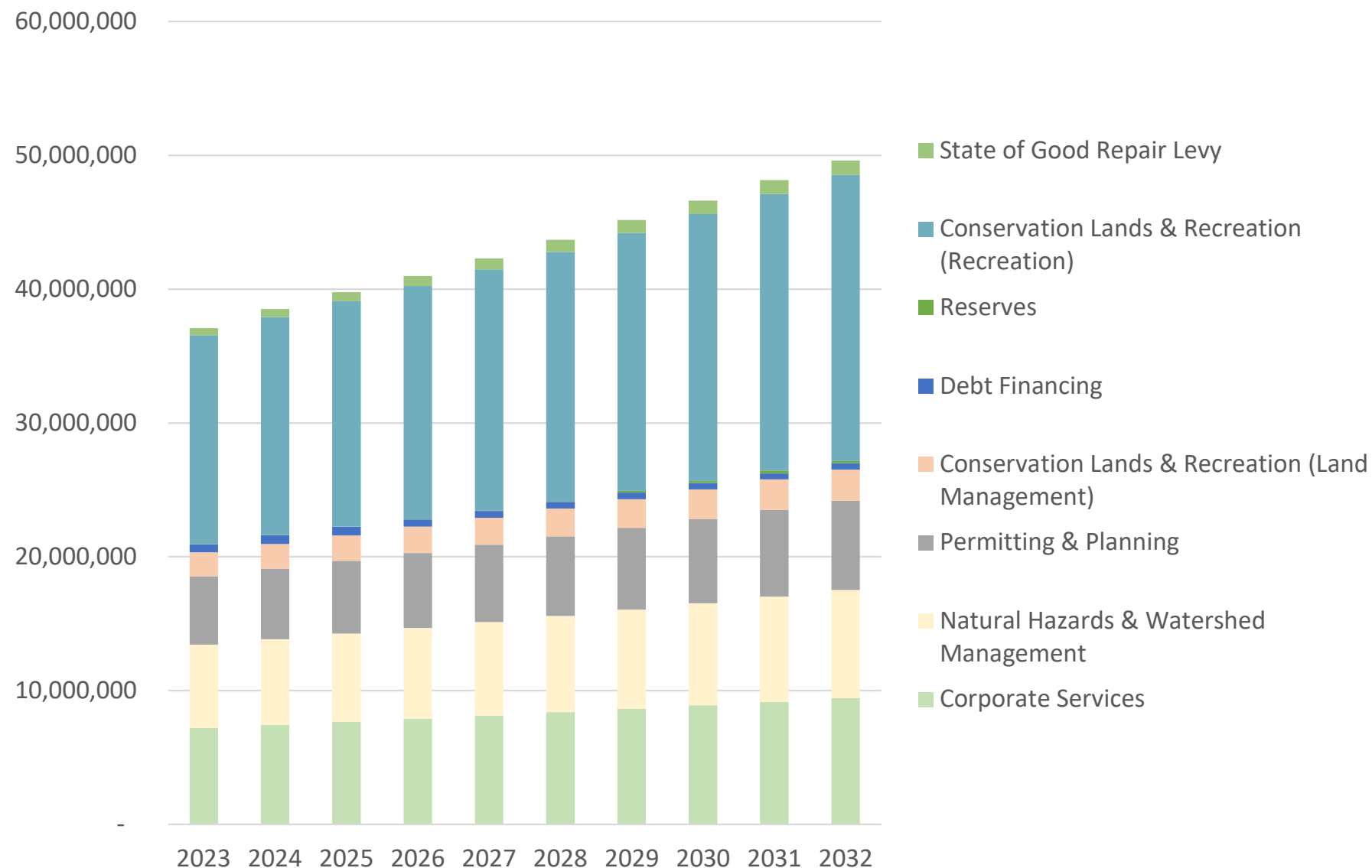
FORECAST 2024 - 2032

2023 PRELIMINARY OPERATING BUDGET

	Ten Year Operating Expenditures and Funding Budget & Forecast - Conservation Areas									
	2023 Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Conservation Halton Conservation Areas Operating Expenditures										
Salaries & Benefits	8,597,746	8,769,701	8,945,095	9,123,997	9,306,477	9,632,203	9,969,331	10,318,257	10,679,396	11,053,175
Materials & Supplies	1,889,689	1,927,483	1,966,032	2,005,353	2,045,460	2,117,051	2,191,148	2,267,838	2,347,213	2,429,365
Purchased Services	2,500,498	2,550,508	2,601,518	2,653,548	2,706,619	2,801,351	2,899,398	3,000,877	3,105,908	3,214,615
Financial	535,200	545,904	556,822	567,959	579,318	599,594	620,580	642,300	664,780	688,048
Internal Chargebacks - Corporate Services	1,593,500	1,665,400	1,698,700	1,732,700	1,767,400	1,802,700	1,838,800	1,875,600	1,913,100	1,951,400
Transfer to Reserve - Operating Surplus	506,540	840,548	1,092,498	1,357,682	1,636,668	1,710,575	1,787,305	1,867,082	1,950,032	2,036,187
Total Operating Expenses - Conservation Areas	15,623,173	16,299,544	16,860,666	17,441,239	18,041,942	18,663,474	19,306,562	19,971,955	20,660,429	21,372,790
Operating Funding - Conservation Areas										
Program Fees	15,169,680	15,854,321	16,406,538	16,978,029	17,569,468	18,181,551	18,815,000	19,470,561	20,149,008	20,851,140
Transfer from Reserve (Outreach)	17,000	-	-	-	-	-	-	-	-	-
Municipal Funding - Park Education programs & Outreach	364,723	372,017	379,458	387,047	394,788	402,684	410,737	418,952	427,331	435,878
Internal Chargeback Recoveries	71,770	73,205	74,670	76,163	77,686	79,240	80,825	82,441	84,090	85,772
Total Operating Funding - Conservation Areas	15,623,173	16,299,544	16,860,666	17,441,239	18,041,942	18,663,474	19,306,562	19,971,955	20,660,429	21,372,790

FORECAST 2024 - 2032

2023 PRELIMINARY OPERATING BUDGET



2023 PRELIMINARY CAPITAL BUDGET & FORECAST

2024 - 2032



FORECAST 2024 - 2032

2023 PRELIMINARY CAPITAL BUDGET

Conservation Halton WMSS Capital Expenditures	Ten Year Capital Expenditures and Funding Budget & Forecast - Watershed Management & Support Services									
	2023 Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Corporate Services										
Asset Management Plan	50,000	40,000	35,000	-	-	75,000	50,000	-	-	-
Program Rates & Fees Review	30,000	-	-	-	-	-	35,000	-	-	-
Compensation Review	-	-	-	32,000	-	-	-	35,000	-	-
GIS Data Acquisition	-	-	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Website Upgrade	-	-	-	-	-	50,000	-	-	-	-
Digitizing of paper files	-	-	-	-	-	-	-	-	-	-
IT Infrastructure - Digital Transformation	-	-	-	-	-	-	-	-	-	-
IT Infrastructure - upgrades - WMSS	98,000	77,000	72,000	82,000	62,000	114,000	62,000	82,000	117,000	97,000
Administration Office & Other Facility Renovations	200,000	157,011	209,468	170,595	60,633	225,179	84,936	316,413	406,574	279,101
Central Works Operations Centre & Field Office	1,000,000	1,500,000	-	-	-	-	-	-	-	-
Fleet Management	164,023	56,712	31,208	65,585	29,924	91,849	110,571	135,024	171,967	164,289
Total Corporate Services	1,542,023	1,830,723	362,676	365,180	167,557	571,028	357,507	583,437	710,541	555,390
Natural Hazards & Watershed Management										
Flood Forecasting & Operations										
Flood Forecasting & Warning Program	115,000	75,000	70,000	70,000	40,000	40,000	40,000	40,000	32,500	32,500
Dams and Channels Major Maintenance Projects:										
Scotch Block Dam	55,000	188,000	-	-	-	132,000	-	-	-	-
Hilton Falls Dam	-	246,000	-	-	-	-	103,000	-	-	-
Kelso Dam	165,000	-	-	-	-	-	103,000	-	-	-
Mountsberg Dam	112,000	-	-	-	-	-	-	-	-	116,000
Morrison-Wedgewood Channel	-	53,000	110,000	480,000	498,000	518,000	539,000	560,000	647,000	606,000
Other Dams and Channels	88,000	134,000	1,022,000	623,000	781,000	721,000	752,000	905,000	852,000	846,000
Dam Public Safety Projects	-	-	-	54,000	69,000	-	-	-	-	-
	535,000	696,000	1,202,000	1,227,000	1,388,000	1,411,000	1,537,000	1,505,000	1,531,500	1,600,500
Restoration & Conservation										
Speyside Weir Removal	25,000	12,000	5,000	-	-	-	-	-	-	-
Restoration projects - Roots Ridge, Fuciarelli	109,250	-	-	-	-	-	-	-	-	-
	134,250	12,000	5,000	-	-	-	-	-	-	-
Watershed Strategies & Climate Change										
Watershed Strategies & Climate Change	179,000	186,000	193,000	201,000	209,000	217,000	226,000	235,000	244,000	254,000
	179,000	186,000	193,000	201,000	209,000	217,000	226,000	235,000	244,000	254,000
Total Natural Hazards & Watershed Management	848,250	894,000	1,400,000	1,428,000	1,597,000	1,628,000	1,763,000	1,740,000	1,775,500	204 1,500

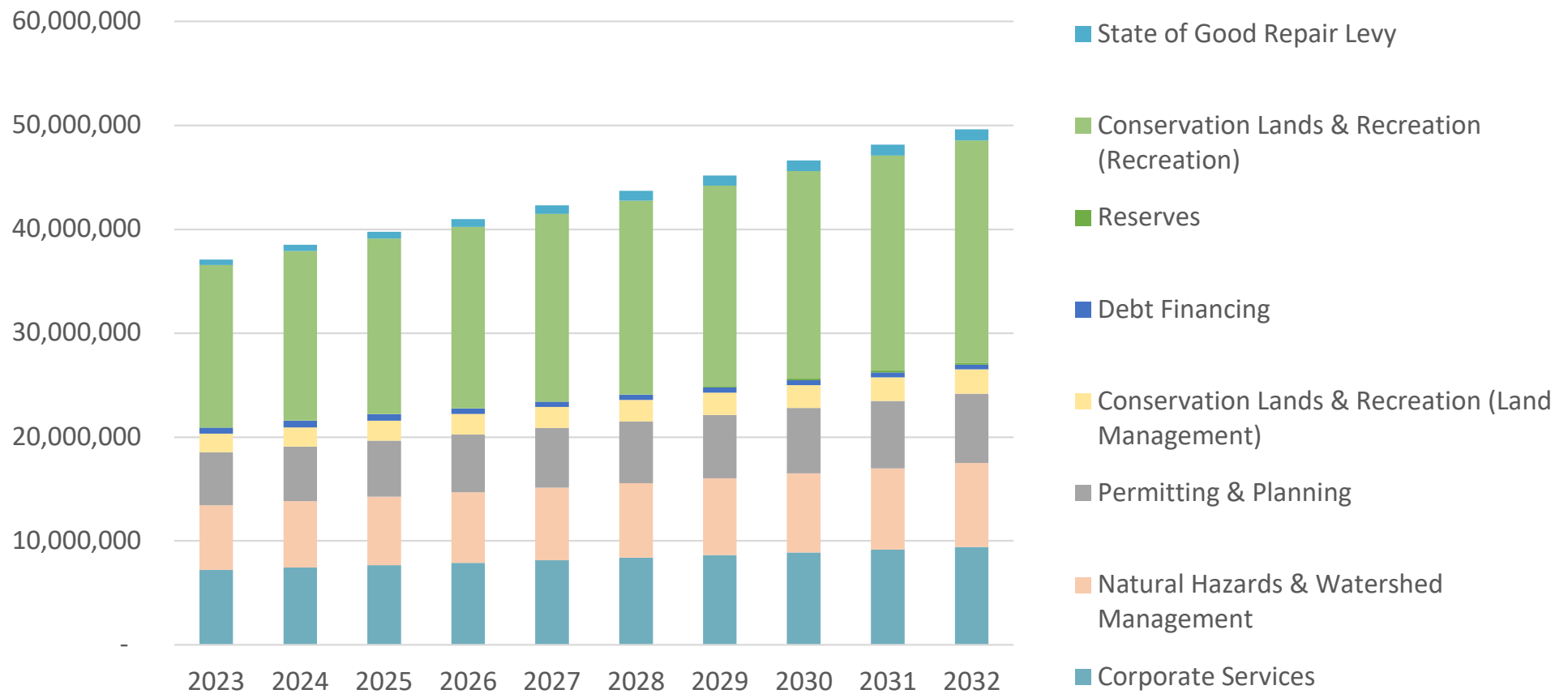
FORECAST 2024 - 2032

2023 PRELIMINARY CAPITAL BUDGET

Conservation Halton WMSS Capital Expenditures	Ten Year Capital Expenditures and Funding Budget & Forecast - Watershed Management & Support Services									
	2023 Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Permitting & Planning										
Flood Plain Mapping (Updates; 2027 & on ongoing maintenance)	550,000	500,000	525,000	240,000	100,000	102,000	104,000	106,000	108,000	110,000
Total Permitting & Planning	550,000	500,000	525,000	240,000	100,000	102,000	104,000	106,000	108,000	110,000
Conservation Lands & Recreation (Land Management)										
Watershed Implementation Plan	-	-	-	50,000	50,000	50,000	75,000	75,000	50,000	125,000
Spongy / LDD Moth Management	100,000	-	-	-	-	-	-	-	-	-
Emerald Ash Borer (EAB) Management	850,000	834,000	794,000	794,000	-	-	-	-	-	-
Conservation Halton Foundation funded projects	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Property Management Projects	50,000	50,000	50,000	50,000	50,000	50,000	25,000	50,000	50,000	50,000
Total Conservation Lands & Rec. (Land Mgmt)	1,100,000	984,000	944,000	994,000	200,000	200,000	200,000	225,000	200,000	275,000
Total Capital Expenditures - WMSS	4,040,273	4,208,723	3,231,676	3,027,180	2,064,557	2,501,028	2,424,507	2,654,437	2,794,041	2,794,890

FORECAST 2024 - 2032

2023 PRELIMINARY CAPITAL BUDGET



2023 PRELIMINARY BUDGET: **MUNICIPAL FUNDING**



2023 PRELIMINARY BUDGET: MUNICIPAL FUNDING

Budget Category	2023 Preliminary Budget	2023 Preliminary Municipal Funding	2022 Municipal Funding	Municipal Funding % Increase
Operating (excl. SOGR levy)	\$36,558,930	\$10,373,825	\$10,053,136	3.2%
Capital	5,283,386	293,000	262,000	11.8%
State of Good Repair (SOGR) Levy - Dams & Channels;	41,842,316	10,666,825	10,315,136	3.4%
Buildings	540,000	540,000	480,500	12.4%
Total	\$42,382,316	\$11,206,825	\$10,795,636	3.8%

2023 PRELIMINARY MUNICIPAL APPORTIONMENT

Municipal funding is apportioned to the Region of Halton, City of Hamilton, Region of Peel and Township of Puslinch.

Apportionment refers to the proportion of funding allocated to the municipalities within the Conservation Halton watershed as outlined in Ontario Regulation 670/00. The municipal apportionment percentages are provided annually to Conservation Authorities by the Ontario Ministry of the Environment, Conservation and Parks.

Under the legislation, Conservation Authorities apportion costs to the participating municipalities on the basis of the benefit derived or to be derived by each participating municipality determined by calculating the ratio that each participating municipality's current value assessment modified for the area of the municipality that lies within the watershed to the total modified current value assessment in the Conservation Authority's watershed.

The 2023 preliminary apportionment is based on 2022 apportionment percentages. Updated current value assessment data and apportionment will be received from the province in September 2022.

Municipality:	Apportion- ment % 2023	Municipal Funding 2023	Apportion- ment % 2022	Municipal Funding 2022	% Increase
Region of Halton	87.8985%	\$9,850,631	87.8985%	\$9,489,202	3.8%
Region of Peel	4.6944%	526,093	4.6944%	506,790	3.8%
City of Hamilton	7.1904%	805,816	7.1904%	776,249	3.8%
Township of Puslinch	0.2167%	24,284	0.2167%	23,393	3.8%
	100.0000%	\$11,206,824	100.0000%	\$10,795,634	

2023 PRELIMINARY MUNICIPAL FUNDING FORECAST

The State of Good Repair long-term financing strategy developed in the 2019 budget proposed a municipal funding increase in the budget and operating forecast between 4 – 4.5% annually. The annual increases will ensure funds are available to meet both current and future programming and organizational needs.

	BUDGET	FORECAST			
	2023 Preliminary	2024	2025	2026	2027
Municipal Funding					
Operating	\$ 10,373,825	\$10,898,889	\$11,306,989	\$11,670,163	\$12,092,416
Capital	\$ 293,000	\$ 202,000	\$ 242,000	\$ 299,000	\$ 317,000
Municipal Funding - Total excluding SOGR Levy	\$ 10,666,825	\$ 11,100,889	\$ 11,548,989	\$ 11,969,163	\$ 12,409,416
% Change	3.4%	4.1%	4.0%	3.6%	3.7%
State of Good Repair Levy - Dams and Channels	362,700	415,700	476,300	545,900	625,500
State of Good Repair Levy - Buildings	177,300	183,900	190,700	197,800	205,100
State of Good Repair (SOGR) Levy	\$ 540,000	\$ 599,600	\$ 667,000	\$ 743,700	\$ 830,600
Municipal Funding - Total including SOGR Levy	\$ 11,206,825	\$ 11,700,489	\$ 12,215,989	\$ 12,712,863	\$ 13,240,016
% Change	3.8%	4.4%	4.4%	4.1%	4.1%

2023 PRELIMINARY BUDGET: RESERVES



RESERVES

	Reserves Projected Balance Dec. 31, 2022	Contribution from Municipal Funding	Contribution from Surplus	State of Good Repair Levy	Contribution to Capital Projects	Contribution to Operating Expenses	Reserves Projected Balance Dec. 31, 2023
Conservation Halton Reserves							
Watershed Management & Support Services							
Vehicle and Equipment	610,901				(164,023)		446,878
Building	116,872				(100,000)		16,872
Building - State of Good Repair	364,820			177,300	(150,000)		392,120
Watershed Management Capital - Municipal Funds and Self Generated Funds	1,141,285			362,700	(210,000)		1,293,985
Watershed Management & Support Services Stabilization	1,319,212					(142,000)	1,177,212
Capital Projects - Debt Financing Charges	471,596						471,596
Digital Transformation	78,400				-		78,400
Legal - Planning & Watershed Management	941,995					(100,000)	841,995
Legal - Corporate	200,000						200,000
Water Festival	178,911				-	(10,000)	168,911
Land Securement	113,739	25,000					138,739
Property Management	1,084,043				(100,000)		984,043
Stewardship and Restoration	345,551				(7,000)	(95,163)	243,388
Conservation Areas							
Capital	1,468,906		506,540		(1,243,113)		732,333
Stabilization	1,146,490						1,146,490
Total Reserves	9,582,721	25,000	506,540	540,000	(1,974,136)	(347,163)	8,332,962

RESERVES CONTINUITY

Conservation Halton	Projected 2022	2023 Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Watershed Management & Support Services Reserves											
Vehicle and Equipment, beginning	\$ 704,901	\$ 610,901	\$ 446,878	\$ 390,166	\$ 358,958	\$ 293,373	\$ 263,449	\$ 171,600	\$ 161,029	\$ 151,005	\$ 179,038
Transfer to Reserve - Reserve funding (municipal)	-	-	-	-	-	-	-	100,000	125,000	200,000	150,000
Transfer from Reserve - Capital expenditures	(94,000)	(164,023)	(56,712)	(31,208)	(65,585)	(29,924)	(91,849)	(110,571)	(135,024)	(171,967)	(164,289)
Vehicle and Equipment	\$ 610,901	\$ 446,878	\$ 390,166	\$ 358,958	\$ 293,373	\$ 263,449	\$ 171,600	\$ 161,029	\$ 151,005	\$ 179,038	\$ 164,749
Building, beg. of year	\$ 316,872	\$ 116,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872
Transfer from Reserve - Capital expenditures	(200,000)	(100,000)	-	-	-	-	-	-	-	-	-
Building	\$ 116,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872	\$ 16,872
Building - State of Good Repair, beginning of year	\$ 418,674	\$ 364,820	\$ 392,120	\$ 379,009	\$ 360,241	\$ 387,446	\$ 531,913	\$ 519,434	\$ 655,098	\$ 567,485	\$ 398,211
Transfer to Reserve - SOGR Levy	164,000	177,300	183,900	190,700	197,800	205,100	212,700	220,600	228,800	237,300	246,100
Transfer from Reserve - Capital expenditures	(217,854)	(150,000)	(197,011)	(209,468)	(170,595)	(60,633)	(225,179)	(84,936)	(316,413)	(406,574)	(279,101)
Building - State of Good Repair	\$ 364,820	\$ 392,120	\$ 379,009	\$ 360,241	\$ 387,446	\$ 531,913	\$ 519,434	\$ 655,098	\$ 567,485	\$ 398,211	\$ 365,210
Watershed Mgmt Cap.-Municipal & Self Generated	\$ 1,175,271	\$ 1,141,285	\$ 1,293,985	\$ 1,399,185	\$ 1,309,485	\$ 1,276,885	\$ 1,228,385	\$ 1,259,785	\$ 1,256,785	\$ 1,299,685	\$ 1,356,585
Transfer to Reserves - SOGR Levy	316,500	362,700	415,700	476,300	545,900	625,500	716,900	745,500	775,400	806,400	838,600
Transfer from Reserves - Capital expenditures	(350,485)	(210,000)	(310,500)	(566,000)	(578,500)	(674,000)	(685,500)	(748,500)	(732,500)	(749,500)	(784,000)
Watershed Management Capital - Municipal Funds and Self Generated Funds	\$ 1,141,285	\$ 1,293,985	\$ 1,399,185	\$ 1,309,485	\$ 1,276,885	\$ 1,228,385	\$ 1,259,785	\$ 1,256,785	\$ 1,299,685	\$ 1,356,585	\$ 1,411,185
Watershed Mgmt & Support Services Stabilization	\$ 1,789,212	\$ 1,319,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212
Transfer from Reserve	(470,000)	(142,000)	-	-	-	-	-	-	-	-	-
Watershed Mgmt & Support Serv. Stabilization	\$ 1,319,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212	\$ 1,177,212

RESERVES CONTINUITY

Conservation Halton	Projected 2022	2023									
		Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032
Watershed Management & Support Services Reserves											
Capital Projects - Debt Financing Charges	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596	\$ 471,596
Digital Transformation, beginning of year	\$ 278,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400
Transfer from Reserve	(200,000)	-	-	-	-	-	-	-	-	-	-
Digital Transformation	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400	\$ 78,400
Legal - Planning & Watershed Management	\$ 941,995	941,995	841,995	741,995	741,995	741,995	741,995	741,995	741,995	741,995	741,995
Transfer from Reserve	-	(100,000)	(100,000)	-	-	-	-	-	-	-	-
Legal - Planning & Watershed Management	\$ 941,995	\$ 841,995	\$ 741,995	\$ 741,995	\$ 741,995	\$ 741,995	\$ 741,995	\$ 741,995	\$ 741,995	\$ 741,995	\$ 741,995
Legal - Corporate	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Water Festival	\$ 188,911	\$ 178,911	\$ 168,911	\$ 158,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911
Transfer from Reserve	(10,000)	(10,000)	(10,000)	(10,000)	-	-	-	-	-	-	-
Water Festival	\$ 178,911	\$ 168,911	\$ 158,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911	\$ 148,911
Land Securement	\$ 88,739	\$ 113,739	\$ 138,739	\$ 163,739	\$ 188,739	\$ 213,739	\$ 238,739	\$ 263,739	\$ 288,739	\$ 313,739	\$ 338,739
Transfer to Reserve - Reserve funding (municipal)	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Land Securement	\$ 113,739	\$ 138,739	\$ 163,739	\$ 188,739	\$ 213,739	\$ 238,739	\$ 263,739	\$ 288,739	\$ 313,739	\$ 338,739	\$ 363,739
Property Management	\$ 1,084,043	\$ 1,084,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043
Transfer from Reserve	-	(100,000)	-	-	-	-	-	-	-	-	-
Property Management	\$ 1,084,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043	\$ 984,043
Stewardship & Restoration	\$ 409,051	\$ 345,551	\$ 243,388	\$ 223,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388
Transfer to (from) Reserve	(63,500)	(102,163)	(20,000)	(20,000)	-	-	-	-	-	-	-
Stewardship and Restoration	\$ 345,551	\$ 243,388	\$ 223,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388	\$ 203,388

RESERVES CONTINUITY

Conservation Halton	Projected 2022	2023										
		Preliminary	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Conservation Areas												
Stabilization	\$ 730,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490
Transfer to Reserve - target balance	416,000	-	-									
Stabilization	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490	\$ 1,146,490
Capital	2,629,691	1,468,906	732,333	233,176	714,984	1,116,933	1,885,765	973,562	1,665,886	538,087	1,302,634	
Transfer to Reserve - Operating Surplus	372,118	506,540	840,548	1,092,498	1,357,682	1,636,668	1,710,575	1,787,305	1,867,082	1,950,032	2,036,187	
Transfer from Reserve - Capital expenditures	(1,532,903)	(1,243,113)	(1,339,705)	(610,690)	(955,734)	(867,835)	(2,622,778)	(1,094,981)	(2,994,881)	(1,185,486)	(1,274,737)	
Capital	\$ 1,468,906	\$ 732,333	\$ 233,176	\$ 714,984	\$ 1,116,933	\$ 1,885,765	\$ 973,562	\$ 1,665,886	\$ 538,087	\$ 1,302,634	\$ 2,064,084	
TOTAL RESERVES	\$ 9,582,721	\$ 8,332,962	\$ 7,764,182	\$ 8,101,314	\$ 8,457,283	\$ 9,317,158	\$ 8,357,027	\$ 9,196,444	\$ 8,038,908	\$ 8,744,114	\$ 9,537,874	

momentum

GREEN • RESILIENT • CONNECTED

THANK YOU

Diversity and Inclusion

We endeavor to understand, accept and appreciate the value of our differences and encourage authenticity.

Learning and Innovation

We embrace the need for continuous improvement, the opportunity to learn from others and the benefits of sharing knowledge.

Person-Centered Service

We make people a priority through customer-centred engagement, proactive problem-solving and high-quality service.

Collaboration

We seek out and trust in the skills, expertise and experience of others in order to achieve our common ambition.

Sustainability

We consider the environmental impact of everything we do and always keep future generations in mind when making decisions.

Integrity

We make decisions with accountability, transparency and a strong sense of personal responsibility for our choices and actions.

Resilience

We are positive and proud of our ability to quickly and effectively respond to change.



North Aldershot Environmental Protection Association

May 26, 2022

Dear Hassaan,

There is a proposed development in North Aldershot by Penta Properties that would have serious environmental and social impacts on the area. The development encompasses the area of Waterdown Road, Ireson Road and Horning Road, and includes the extension and widening of Horning Road to construct twenty-seven homes. The proposal also includes the construction of a water reservoir to support these new homes.

Meetings have been held at the City of Burlington and the Region of Halton with the developer behind closed doors, and without any consultation or advisement to the people of North Aldershot. We are not opposed to development, but we are vehemently opposed to the destruction of natural habitats and this unique and valuable ecosystem in particular.

This land is part of a vital corridor between Cootes Paradise and the Escarpment which was established as a "protected, permanent and connected nature lands sanctuary that promotes ecosystem and human health." The development would sever this corridor that is vital for ecosystem connectivity and wildlife movement.

The proposed development is also in direct conflict with the stated goal of the Niagara Escarpment Planning and Development Act to "ensure only such development occurs as is compatible with that natural environment."

The Niagara Escarpment Commission even today show the area north of the hydro lines on their website as a 'escarpment protection area'. Yet we find out from Regional Councilor Kelvin Galbraith that the NEC made an Amendment in February 2020, without any reference to the people living here, that allows the developer to destroy this important ecosystem and the vast areas of natural habitat surrounding it through pollution, habitat fragmentation and destruction.

It is an absolute travesty that the area between Horning Road and the hydro lines to the south was even under consideration for development. Please come visit and see for yourself.

We look forward to your support and for you advocating for this vital ecosystem.

James Forte

On behalf of the North Aldershot Environmental Protection Association

[email:protectnorthaldershot@gmail.com](mailto:protectnorthaldershot@gmail.com)

[Instagram @NorthAldershotEPA](#)