Conservation Halton Board of Directors Meeting 05 21
ZOOM Meeting: .
https://us02web.zoom.us/j/88681632026?pwd=NUxQd1lldGE2eXRoV0poQkZpS3A3UT09 / Passcode 383987

Start: Thursday, June 17, 2021 - 3:00pm

End: Thursday, June 17, 2021 - 5:30pm

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1. Roll Call

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

3. Acceptance of Agenda

4. Presentation

   4.1. 2022 Preliminary Budget and Forecast (6.5 2022 Preliminary Budget and Forecasts) Hassaan Basit, President & CEO

5. Consent Items

   5.1. Approval of Conservation Halton Board of Directors Annual General Meeting Minutes dated April 22

   Approval of Conservation Halton Board of Directors Annual General Meeting Minutes dated April 22

   5.2. Approval of Conservation Halton Finance & Audit Committee Meeting Minutes dated June 3

   Approval of Conservation Halton Finance & Audit Committee Meeting Minutes dated June 3

   5.3. Monitoring Ecology Story Maps (CHBD 05 21 01)

   Monitoring Ecology Story Maps (CHBD 05 21 01)

   5.4. Source Water Protection Consultation Overview (CHBD 05 21 02)

   Source Water Consultation Overview (CHBD 05 21 02)

6. Action Items

6.1. Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2021 (CHBD 05 21 03)

Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2021 (CHBD 05 21 03)

CHG L&RP Report (Appendix A)

6.2. Appointment of Provincial Offences Officer under R.R.O. 1990, Regulation 108 pursuant to the CAA (CHBD 05 21 04)

Appointment of Provincial Offences Officer under R.R.O. 1990, Regulation 108 pursuant to the CAA (CHBD 05 21 04)

6.3. Appointment of Provincial Offences Officer under Ontario Regulation 162/06 pursuant to the Conservation Authorities Act

Appointment of Provincial Offences Officer under Ontario Regulation 162/06 pursuant to the Conservation Authorities Act (CHBD 05 21 05)

6.4. Budget Variance Report for the Period Ended April 30, 2021 and 2021 Projected Year End Amounts (CHBD 05 21 06)

Budget Variance Report for the Period Ended April 30, 2021 and 2021 Projected Year End Amounts (CHBD 05 21 06)

Budget Variance Report Financial Summary (Appendix B)

Reserve Continuity April 30 2021 Projected to December 31 2021 (Appendix C)

Capital Project Summary (Appendix D)

6.5. 2022 Preliminary Budget and Forecasts (CHBD 05 21 07)

2022 Preliminary Budget and Forecasts (CHBD 05 21 07)

2022 Preliminary Budget & Forecasts (Appendix E)

6.6. Governance Accountability and Transparency Initiative (CHBD 05 21 08)

Governance Accountability and Transparency Initiative (CHBD 05 21 08)

GATI Report Table (Appendix F)

6.7. Regulatory proposals (Phase 1) under the Conservation Authorities Act ERO number 019-2986CH File No.: PPO 048 (CHBD 05 21 09)

Regulatory proposals (Phase 1) under the Conservation Authorities Act ERO number 019-2986CH File No.: PPO 048 (CHBD 05 21 09)

CH Response ERO 019-2986 letter MECP 18 06 2021.pdf

6.8. Authorization Request for Award Approval Contract: Snowmaking Tracking, Control and Equipment Upgrade RFP # CH-042321 (CHBD 05 21 10)

Authorization Request for Award Approval Contract: Snowmaking Tracking, Control and Equipment Upgrade RFP # CH-042321 (CHBD 05 21 10)

7. CEO Verbal Update

8. CHF Update (Jim Sweetlove)

9. IN CAMERA

9.1. Legal Matter

10. Other Business

11. Adjournment

April
2021

MEETING NO: # Conservation Halton Board of Director Annual General Meeting 04 21

MINUTES

The Annual General Meeting of the Conservation Halton Board of Directors was held on Thursday, April 22 at 3:00 p.m. via Zoom Webinar.

Members Present:

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

Absent:

Hamza Ansari
Zobia Jawed

Staff present

Kim Barrett, Associate Director, Science & Partnerships
Hassaan Basit, President & CEO/Secretary-Treasurer
Garner Beckett, Executive Director, Conservation Halton Foundation
Adriana Birza, Manager, Office of the President & CEO
Stephanie Bright, Public Relations Specialist
Niamh Buckley, Administrative Assistant, Office of the President & CEO
Lindsay Campbell, Project Coordinator, Terrestrial Restoration
Nigel Finney, Project Manager, Restoration & Conservation
Nikki Garstang, Health & Safety Specialist
Chitra Gowda, Senior Manager, Watershed Planning & Source Protection
Matt Howatt, Regional Infrastructure Lead
Craig Machan, Associate Director, Park Operations
Kellie McCormack, Associate Director, Planning & Regulations
Alex Meeker, Water Resources Engineer

Marnie Piggot, Director, Finance
Plezzie Ramirez, Director, Human Resources
Jill Ramseyer, Director, Corporate Compliance
Pavan Seth, Procurement Specialist
Barb Veale, Director, Planning & Watershed Management
Mark Vytvytskyy, COO

1. Roll Call

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

There were **NONE.**

3. Acceptance of AMENDED Agenda to include
- 5.6 Authorization Request for President & CEO to Award Contract: Flood Hazard Mapping – East Burlington Creeks (Tuck, Shoreacres, Appleby, and Sheldon Creeks), RFP # S79-2021 (CHBD 04 21 11)
- In Camera Item brought forward by Councillor Allan Elgar (CHBD 04 21 12)

CHBD 04 01 Moved by: Allan Elgar
Seconded by: Cathy Duddeck

THAT the Amended Agenda **be approved.**

Carried

4. Consent Items

4.1 Approval of Conservation Halton Board of Directors Meeting Minutes dated March 25

4.2 Approval of Conservation Halton Board of Directors Inaugural Meeting Minutes dated March 25

4.3 Approval of Conservation Halton Governance & Risk Committee Meeting Minutes dated March 25

4.4 Approval of Conversation Halton Finance & Audit Committee Meeting Minutes dated April 8

4.5 Purchasing Activity Memo - February 1 - March 31 (CHBD 04 21 01)

4.6. Health & Safety Update (Q4 2020 – Q1 2021) (CHBD 04 21 02)

4.7. Provincial consultation on growing the size of the Greenbelt ERO No. 019-3136 CH File No.: PPL 046 (CHBD 04 21 03)

4.8. Permits & Letters of Permission issued under Ontario Regulation 162/06 from January 1 to March 31, 2021
(CHBD 04 21 04)

The consent items **were adopted**.

5. Action Items

5.1. Update on the Reid Road Reservoir Quarry and the Proposal to Designate as an Undertaking under the Environmental Assessment Act ERO No. 019-2876
CH File No.: PQ 018
(CHBD 04 21 05)

CHBD 04 02 Moved by: Mike Cluett
Seconded by: Jean Williams

THAT the Conservation Halton Board of Directors **receives for information the Staff report entitled "Update on the Reid Road Reservoir Quarry and the Proposal to Designate the Reid Road Quarry as an Undertaking under the *Environmental Assessment Act*."**

And

THAT the Conservation Halton Board of Directors **directs staff to circulate the staff report entitled "Update on the Reid Road Reservoir Quarry and the Proposal to Designate as an Undertaking under the *Environmental Assessment Act*" to the Region of Halton, Town of Milton and the Ministry of Natural Resources and Forestry for information.**

Carried

5.2 Conservation Halton Mapping Transition and Implementation Protocol Work Plan
(CHBD 04 21 06)

CHBD 04 03 Moved by: Stephen Gilmour
Seconded by: Jim Sweetlove

THAT the Conservation Halton Board of Directors **approves the Conservation Halton Mapping Transition and Implementation Protocol Work Plan.**

Carried

5.3 Conservation Halton Spill Policy Review and Update Work Plan
(CHBD 04 21 07)

CHBD 04 04 Moved by: Zeeshan Hamid
Seconded by: Rick Di Lorenzo

THAT the Conservation Halton Board of Directors **approves the Conservation Halton Spill Policy Review and Update Work Plan.**

Carried

5.4 2020 Audited Financial Statements
(CHBD 04 21 08)

CHBD 04 05 Moved by: Jim Sweetlove
Seconded by: Marianne Meed Ward

That the Conservation Board of Directors **approves the attached audited financial statements for the year ended December 31, 2020 as recommended by the Finance & Audit Committee at their meeting on April 8, 2021.**

Carried

5.5 Appointment of Auditor for 2021
(CHBD 04 21 09)

CHBD 04 06 Moved by: Dave Gittings
Seconded by: Allan Elgar

THAT Conservation Halton Board of Directors **approves the reappointment of KPMG LLP as auditor for Conservation Halton for the 2021 fiscal year as recommended by the Finance & Audit Committee.**

5.6 Authorization Request for President & CEO to Award Contract:
Flood Hazard Mapping – East Burlington Creeks (Tuck, Shoreacres, Appleby, and Sheldon Creeks), RFP # S79-2021
(CHBD 04 21 11)

CHBD 04 07 Moved by: Marianne Meed Ward
Seconded by: Jean Williams

THAT the Conservation Halton Board of Directors **delegates authority to the President and CEO to award the Flood Hazard Mapping - East Burlington Creeks (Tuck, Shoreacres, Appleby & Sheldon Creeks), RFP # S79-2021 contract subject to the securement of the National Disaster Mitigation Program funding and provided that the contract value falls within the approved budget amount.**

Carried

6. CEO Verbal Update/Presentation
(Hassaan Basit)

CEO Hassaan Basit shared a presentation on Conservation Halton “2020 Year in Review” and a video highlighting the success of Metamorphosis throughout the past four years.

As we move into the next four-year cycle driven by Momentum, the CEO provided some of the factors that are driving this plan. Due to the demand on CH parks as the Halton Region continues to grow along, with the realities that we are witnessing due to climate change, sustainability will be a main focus.

A copy of the video will be shared with Board Members.

Councillor Dave Gittings asked if the data that is being gathered from the park pass system has led to any significant findings. The CEO advised that at this point CH has been working with Park Pass for 9 months and in another couple of months CH will be able to better use the data to identify trends and commonalities and will share a report at an upcoming CH Board Meeting. This data will be a useful tool for marketing to our target audience.

Councillor Allan Elgar inquired if the Digital Map-base tree inventory program "Tree Plotter" was developed by CH or purchased the software. The CEO confirmed that we had purchased the software. CH staff will share a presentation with the Board on this in the coming months.

The CEO provided the parks impact updates as a result of the recent lockdown implemented by the Province:

- Park Visitation has been reduced by 10% out of caution and to avoid over crowding of visitors.

The CEO provided an update on the CA working group:

- It is anticipated that there will be a high-level proposal/overview for Conservation Authority Act regulations posted to the Environmental Registry within the next few weeks.
- The Conservation Authorities Act working group continues to meet with MECP and MNRF staff to provide advice and recommendations.

CH has launched a *Community of Learning (COL)* which is being rolled out along with *Momentum:*

- COL is a platform for all staff across the organization to share projects, ideas, innovations, initiatives, successes, and skills to support collaborative learning and knowledge sharing.
- This is in line with our People & Talent Priority to Attract, support and invest in the brightest and most passionate people to collectively achieve.

7. CHF Update
(Jim Sweetlove)

At the CHF Board Meeting on April 14, the audited financial statements were approved for 2020. Chair Jim Sweetlove noted that despite COVID-19, CHF had allocated $518.095 to Conservation Halton programs compared to $379, 321 in 2019.

The CHF Gala *"Terra Ferma"* has been tentatively confirmed for September 16.

At the CHF Board Meeting on April 14, CHF Vice Chair Bill Mann had shared a presentation on Indigenous Understanding 101 which speaks to the indigenous cultural aspect of this area and how it has changed through the years.

CHF Chair, Jim Sweetlove also congratulated Garner Beckett on his newly well-deserved title change to CHF Executive Director.

8. In Camera

CHBD 04 08 Moved by: Moya Johnson
Seconded by: Bryan Lewis

THAT the Conservation Halton Board of Directors **convene In Camera**

Carried

8.1 Legal Matter
(CHBD 04 21 10)

8.2 Property Update Matter
(CHBD 04 21 12)

CHBD 04 09 Moved by: Jean Williams
Seconded by: Mike Cluett

THAT the Conservation Halton Staff **reconvene in public forum**

Carried

CHBD 04 10 Moved by: Jean Williams
Seconded by: Mike Cluett

THAT the Conservation Halton Board of Directors d**irect staff to proceed as discussed In Camera.**

Carried

9. Other Business

There was **NO** other business

10. Adjournment

CHBD 04 11 Moved by: Allan Elgar

THAT the Conservation Halton Board of Directors Meeting/Annual General meeting **be adjourned at 5:14 p.m.**

Carried

June
2021

MEETING NO: # Conservation Halton Finance & Audit Committee 02 21

MINUTES

A meeting of the Finance & Audit Committee was held on Thursday, June 3, 2021 via Zoom videoconference at 9:30 a.m.

Present: Hamza Ansari
Rob Burton (Chair)
Mike Cluett
Joanne Di Maio
Moya Johnson
Gerry Smallegange
Jim Sweetlove

Staff Present: Hassaan Basit, President & CEO/Secretary-Treasurer
Adriana Birza, Manager, Office of the President & CEO
Niamh Buckley, Administrative Assistant, Office of the President & CEO
Marnie Piggot, Director, Finance

Chair Rob Burton called the meeting to order at 9:35 a.m.

1. Roll Call

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

There were **NONE.**

3. Acceptance of Agenda

FA 02 01 Moved by: Gerry Smallegange
Seconded by: Moya Johnson

THAT the Finance and Audit Committee approves the agenda as distributed.

Carried

4. Action Items

4.1 2022 Preliminary Budget and Forecasts

FA 02 02 Moved by: Mike Cluett
Seconded by: Jim Sweetlove

THAT the Finance & Audit Committee **recommends to the Conservation Halton Board of Directors that the attached 2022 preliminary budget be approved for budget discussion purposes with funding watershed municipalities;**

And

THAT preliminary design, engineering, and consultation costs included in the 2022 budget that may be incurred in 2021 for the Crawford Lake Boardwalk capital project **be approved and funded by the Conservation Areas Capital Reserve if required until formal funding agreements are confirmed.**

Carried

5. Other Business

There was **No** other business

6. Adjournment

FA 02 03 Moved by: Moya Johnson

THAT the Finance & Audit Committee Meeting be adjourned at 9:50 A.M.

Carried

June
2021

TO: Conservation Halton Board of Directors

MEMO: CHBD 05 21 01

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

DATE: June 17, 2021

SUBJECT: **Monitoring Ecology Story Maps**

MEMO

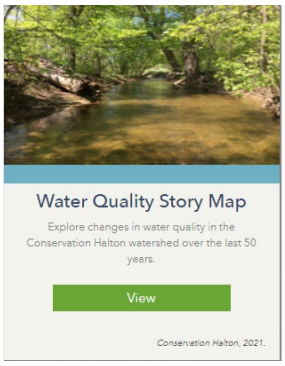
Story maps provide a platform for digital storytelling, combining text, photos, video, and other media with interactive maps that allow the reader to customize their view and dive deeper into specific content of interest.

Conservation Halton has published two new story maps. These products reflect the ongoing evolution of the story map series to highlight changes in watershed conditions over time, including:

- A water quality map which shows how the concentration of water quality conditions have changed between 1964 – 2019.
- A "How Much Habitat is Enough?" story map which features a dashboard that lets the user explore how the percentage of forest cover, wetland cover, etc. has changed over time within the watershed, subwatershed, municipality or on Conservation Halton (CH) lands.

Water Quality

https://storymaps.arcgis.com/stories/575b6c06716848089882382ff422c082



Journey through the watershed on a sampling run as staff collect water samples through the Provincial Water Quality Monitoring Program. There are photos, descriptions and a map showing the location of each of our 11 stations across the watershed, along with a summary of results from 2015 – 2019.

This story map showcases 55 years of water quality sampling at Conservation Halton. Time lapse maps at the end of the story map show how concentrations of chloride, total phosphorus, total suspended sediment, nitrate, and zinc have changed during this time. Results of note are outlined below.

<u>The Good News</u>

- Total phosphorus concentrations have generally remained stable over the last 50 years, but there have been significant decreases seen at the mouths of both Grindstone Creek and Sixteen Mile Creek. While phosphorus is essential for plant growth, there is a fine balance between too little and too much.

- Suspended sediment levels have remained stable over the last 40 years. Data from 2015 to 2019 shows that there is a lot of sediment moving through the watershed during heavy rainstorms, with values 10 times greater than the guideline seen each year. However, during normal, dry conditions, the water is clear, and samples are all below the guideline. The Landowner Outreach and Restoration team provides support and implementation of projects that reduce sources of suspended sediment, such as restriction of livestock access to streams and planting riparian buffers.
- Significant decreases in nitrate have been seen at most sites over the last 20 to 40 years. Very few samples have exceeded the guideline and no sites have had a median annual concentration above the guideline since 2004. This is likely a result of increased use of best management practices on rural properties and improvements to wastewater treatment plant operations.
- Copper and iron levels have remained stable and below the guideline for the last 20 years. Excessive concentrations of these metals can be toxic to aquatic life.

The Bad News

- Significant increases in chloride have occurred over the last 50 years, with most sites having at **least one sample above the objective each year for the last decade. Chloride concentrations** continued to be high between 2015 and 2019, although some decreases were seen in this five-year period. Our findings are consistent with research from across the GTA, with a study published in March 2021 indicating that chloride concentrations in nearly 90% of streams exceeded federal guidelines for the protection of aquatic life (https://www.utoronto.ca/news/u-t-study-shows-winter-road-salt-poses-year-round-threat-aquatic-life-toronto-s-rivers). High chloride levels are toxic to freshwater species. Chloride is particularly challenging to address because it is not removed by stormwater management practices; the most effective means of mitigation is to reduce salt application rates.
- Median annual total phosphorus concentrations exceeded the guideline at ten out of the eleven sites during at least one year between 2015 and 2019. While phosphorus is not directly toxic to aquatic animals, levels above the guideline can cause an explosion of plant and algae growth, which changes the habitat and oxygen regime of the stream.
- A significant increase has been seen in zinc at most sites over the last 20 years. While most samples remain below the guideline, a continued increase will imminently impact aquatic communities.

How Much Habitat is Enough?

https://storymaps.arcgis.com/stories/449373496c20412c8dcc2d2f9ac8f75a

This story map assesses Conservation Halton's landscape metrics against science-based Environment Canada guidelines on how much habitat is enough to sustain our native species and ecosystems. The recommended guidelines are included in the following table. It assesses wetlands, riparian vegetation, impervious cover, forest cover, interior forest cover and grasslands.

Parameter Measured	Recommended Guideline from "How Much Habitat is Enough" Third Edition
Percent wetlands in the watershed and subwatersheds	Ensure no net loss of wetland area and focus on maintaining and restoring wetland functions at a watershed and subwatershed scale based on historic reference conditions. At a minimum, the greater of (a) 10% of each major watershed and 6% of each subwatershed, or (b) 40% of the historic watershed wetland coverage, should be protected and restored.
Percent of stream length naturally vegetated	75% of stream length should be naturally vegetated. Both sides of a stream should have a minimum 30 metre wide naturally vegetated riparian area to provide and protect aquatic habitat.
Percent of an urbanizing watershed that is impervious	Urbanizing watersheds should maintain less than 10% impervious land cover in order to preserve the abundance and biodiversity of aquatic species. In urban systems that are highly degraded, a second threshold is likely reached at the 25 to 30% level.
Percent forest cover	30% forest cover at the watershed scale is the minimum forest cover threshold. 40% forest cover at the watershed scale equates to a medium-risk approach that is likely to support more than one half of the potential species richness, and moderately healthy aquatic systems. 50% forest cover or more at the watershed scale equates to a low-risk approach that is likely to support most of the potential species, and healthy aquatic systems.
Percent of interior forest cover (forest cover 100m beyond the forest edge)	The proportion of forest cover that is 100m or more from the forest edge should be greater than 10%.
Grassland patch size	Maintain and create small and large grassland patches in existing and potential local grassland landscapes, with an average grassland patch area of greater than or equal to 50 hectares and at least one 100-hectare patch.

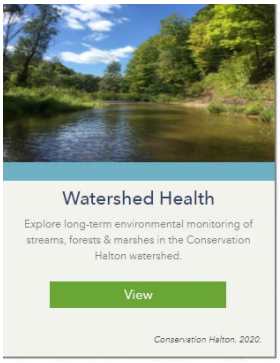
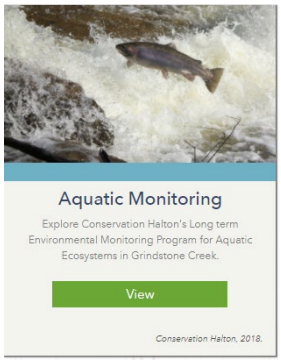
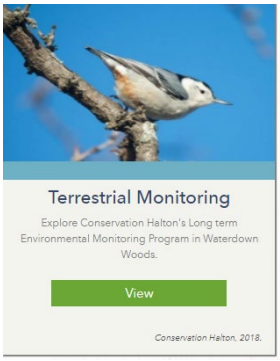
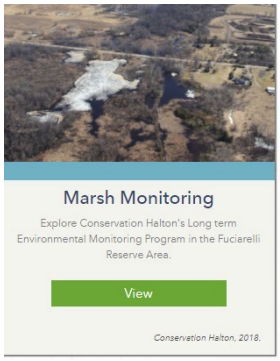
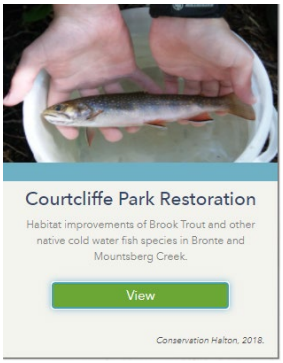
Do We Have Enough Habitat?

Natural habitats across the watershed provide a host of benefits to residents including recreation, mental health, and nature appreciation. In addition, natural areas buffer the impacts of climate change and moderate flooding and erosion hazards. Rural areas above the escarpment generally provide better and more quality habitat than the urban areas. These areas should be carefully managed to ensure that sensitive species continue to thrive. Habitats in urban areas provide suitable habitat for more common species and should be managed to withstand urban stresses.

- **Wetlands - More than 70% of historical wetlands have been lost**, and wetland coverage is unevenly distributed across the landscape. Wetland habitat is largely located upstream of the Niagara Escarpment in the Grindstone, Bronte, and Sixteen Mile Creek watersheds. Beyond these three watersheds, the majority of wetland habitat has been lost with **just over 1% wetland cover left within the urban watersheds of Burlington and Oakville**. Efforts to protect, restore, enhance, and expand wetland cover are important to increase habitat diversity and contribute to moderating water levels in a changing climate

- **Riparian Vegetation** - Riparian vegetation within CH's jurisdiction is mapped using forest and marsh vegetation. While grass, shrub, and herbaceous plants also provide important areas of riparian vegetation, this analysis was not included due to mapping challenges. This means that the values provided by the analysis are likely lower than actual coverage in the watershed. Despite this, **no watershed within the Conservation Halton jurisdiction meets the target of 75% of its stream length with riparian vegetation for 30 metres on either side of the stream**. In many areas, riparian vegetation does exist but efforts to extend the length and width of the buffer will contribute to improving stream health.
- **Impervious Cover** - Impervious surfaces dominate the landscape in Waterdown (Hamilton) urban Burlington, urban Oakville south of Highway 407 and urban Milton. Thus, many watersheds within CH's jurisdiction have a greater amount of impervious area than the suggested target. **Only Bronte Creek (at 9.7%) and the North Cootes Paradise (9.5%) watersheds fall below the maximum threshold of 10%. Several of the urban watersheds within Burlington and Oakville are well above the second threshold of 25 – 30%** suggesting consistent and significant decline in aquatic health for these areas.
- **Forest Cover** - **Overall forest cover is 25%**, although it is unevenly distributed. Forest cover is largely associated with lands above and directly below the Niagara Escarpment and within the valleys of Sixteen Mile, Fourteen Mile, Bronte, and Grindstone Creeks. Additional forest patches are spread throughout the landscape, many of which are fragmented and isolated from other forested areas. The largest percentage of forest cover is in the North Cootes Paradise watershed at 43.4% (276 ha), however the largest amount of forest cover in total is found within the Sixteen Mile Creek watershed and accounts for 5,879 hectares of land.
- **Interior Forest Cover** - **Interior forest habitat is minimal and is largely associated with the large expanses of forest found in the upper watershed above the Niagara Escarpment**. While this forest cover forms the largest swath of contiguous forest cover and the highest amount of interior forest cover in the watershed, the North Cootes Paradise watershed has the highest percentage of interior forest cover based on watershed size. Efforts to protect and maintain these areas, as well as to enhance existing forested edges, will help to increase interior forest cover.
- **Grasslands** - Grassland habitat is rare and is found in remnant patches of abandoned fields or as part of restoration projects. **Two restored grasslands are found within the Glenorchy Conservation Area and Bronte Creek Provincial Park and are 50 hectares and 70 hectares, respectively. These two areas meet the minimum guidelines for this habitat type**. These grasslands are within a few kilometres of each other, and their proximity allows for species such as birds and butterflies to move between the habitats.

Other monitoring and restoration story maps are available at Conservation Halton's Open Data Hub https://conservationhalton-camaps.opendata.arcgis.com/pages/story-maps and are listed below.

	Monitoring Watershed Health – summarizes 2019 condition of streams (fisheries, benthic invertebrates, water temperature), forests (tree health, forest birds, forest salamanders), marshes (birds, amphibians) and trends across all three habitat types. https://camaps.maps.arcgis.com/apps/MapSeries/index.html?appid=ad0c736957fb401794b5d5b1ab4d7eb5		Watershed Report Card – CH produces a watershed report card every 5 years to make residents. This is reporting process is undertaken by most conservation authorities and provides scientific information on the state of Ontario's watersheds. https://camaps.maps.arcgis.com/apps/MapJournal/index.html?appid=0d98b4a22c5947e4a0f696f5c50a7810
	Aquatic Monitoring - provides monitoring results for 2017 through the Grindstone Creek watershed from its headwaters to its mouth at Hamilton Harbour. ://gis.conservationhalton.net/AquaticMonitoring/		Terrestrial Monitoring – provides monitoring results from Waterdown Woods since 2006. Monitoring includes ground vegetation, shrubs and saplings, tree health, tree mortality, forest breeding birds, Red-backed Salamander abundance and invasive species such as Garlic Mustard and Fall Cankerworm. https://camaps.maps.arcgis.com/apps/MapJournal/index.html?appid=5c5b47db21fb4d6dbd2e348fc14d93e3
	Marsh Monitoring - since 2001, monitoring has been done at the Fuciarelli Resource Management Area in Hamilton. Results show a generally healthy marsh community. https://camaps.maps.arcgis.com/apps/MapJournal/index.html?appid=2efe2c3ba26d42cabbfe1cc096db262f		Courtcliffe Park Restoration – follows a complex restoration project resulting in habitat improvements for Brook Trout and other native cold water fish species which live in Bronte and Mountsberg Creek. https://camaps.maps.arcgis.com/apps/MapJournal/index.html?appid=02c526f8dab44c579603f49322916aee

Summary

Story maps are a useful communication tool for conveying technical information to users which is easy to understand, visually appealing and based on science. Future story maps will become increasingly user-friendly and interactive. The overall goal is to increase understanding, awareness, and action to protect significant natural features and improve watershed conditions. This will be achieved by building CH's monitoring program and analytical capabilities to ensure that they are scientifically defensible and robust enough to "tell the story" about how the conditions and trends within the watershed are changing, especially in the face of climate change. To this end, it is important to identify and utilize a variety of innovative and interactive communication tools to convey key findings and messages in a simple, clear, and engaging manner.

June
2021

TO: **Conservation Halton Board of Directors**

MEMO: # CHBD 05 21 02

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

DATE: June 17, 2021

SUBJECT: **Source Water Protection Consultation Overview**

MEMO

The drinking water source protection program for the Halton-Hamilton Source Protection Region (HHSPR) is implemented by Conservation Halton and the Hamilton Conservation Authority who function as source protection authorities under Ontario's *Clean Water Act, 2006*.

Staff are undertaking comprehensive amendments to the assessment reports, source protection plan, and explanatory document per Section 36 of the *Clean Water Act, 2006*. These amendments are brought to the Halton-Hamilton Source Protection Committee (HHSPC) for review and endorsement. Table 1 provides an overview of the timelines of consultation to result in a submission to the Ministry of the Environment, Conservation and Parks (MECP).

No.	Step	Timeline
1	Need for revisions/updates identified	2018 onwards
2	Development of comprehensive amendments (in consultation with HHSPC)	April 1, 2019 to June 20, 2021
3	Early engagement (with MECP), HHSPC review	June 21 to Aug. 16, 2021
4	Pre-consultation (with MECP and all policy implementers), address comments received and HHSPC meeting with follow up	Aug. 17 to Oct. 15, 2021
5	Public consultation (minimum 35 days), address comments received, HHSPC meeting with follow up, SPA Board meetings	Oct. 18, 2021 to March 14, 2022
6	Submission to MECP	March 15, 2022

Table 1: Overview of the Source Water Protection Consultation Timelines

In spring 2021, staff received an updated technical study on the Freelton drinking water system from the City of Hamilton. The resulting Freelton wellhead protection area (WHPA) size, shape and vulnerability scores have changed. A related threat activities risk assessment conducted through a desktop exercise shows that approximately fifty additional properties may be subject to mandatory source protection plan policies. For example, septic systems could be identified as threat activities on certain properties and may be subject to a mandatory re-inspection program. Risk management plans containing best practices may apply where the application of manure is identified as a significant risk to municipal drinking water sources.

During the public consultation stage, staff will send letters of information to those property owners to describe the proposed updates to the assessment reports and how it relates to them. The letters will also note that source water protection document updates are subject to approval by the MECP; and that field verification by policy implementers (mainly municipalities) would help to confirm activities occurring on the ground that may pose a risk to the municipal drinking water sources.

HHSPR staff will continue to raise awareness about the proposed updates to the source water protection science and policy using various means such as social media and website updates. It is possible that residents may pose questions or have comments about drinking water to the conservation authorities, municipal councillors, and others. Staff will assist as needed and will provide general information about the update process on the website www.protectingwater.ca to help answer questions.

June
2021

REPORT TO: **Conservation Halton Board of Directors**

REPORT NO: # CHBD 05 21 03

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

DATE: June 17, 2021

SUBJECT: **Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2021**

Recommendation

THAT the Conservation Halton Board of Directors **receives for information the Staff report entitled "Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2021"**

And

THAT the Conservation Halton Board of Directors **approves the Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2021.**

Executive Summary

Conservation Halton (CH) staff is seeking approval from CH's Board of Directors for the 'Conservation Halton Guidelines for Landscaping and Rehabilitation Plans, 2021' (Appendix A). These guidelines provide applicants with a clear and transparent understanding of CH's requirements and expectations for technical submissions associated with Ontario Regulation 162/06 permit applications. It is anticipated that the Guidelines will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. Throughout 2019 and 2020, staff engaged with municipal partners, neighbouring conservation authorities, and select BILD-identified consultants, and consulted with the broader public. Valuable feedback was obtained and incorporated into the final version (attached).

Report

Background

CH's 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 Watershed Management team to streamline plan review and permitting processes and to improve service delivery, including updating and developing new technical submission guidelines.

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. It is anticipated that these guidelines will lead to better quality submissions, quicker and more consistent

reviews, fewer resubmissions, and faster approval times. The guidelines are specific to CH and do not replace or supersede federal, provincial, or municipal requirements.

In 2019, staff advanced draft technical submission guidelines for:

- Landscaping and Rehabilitation Plans (update)
- Tree Preservation/Protection Plans (update)
- Stormwater Management Engineering Submissions (new)
- Slope Stability Assessments for Valleys (new)

The purpose of this report is to provide the Board with an update on the first two items listed above and to seek Board approval of the attached '*Conservation Halton Guidelines for Landscaping and Rehabilitation Plans' (Attached A).*

Purpose and Objectives of Guidelines

The purpose of the *Conservation Halton Guidelines for Landscaping and Rehabilitation Plans* is to:

- Identify CH's regulatory and technical requirements for a landscaping and rehabilitation plan submission for a permit within CH's regulated areas; and
- Outline CH's key expectations for landscaping and rehabilitation design.

The document focuses primarily on CH's expectations related to the ecological aspects of landscaping and rehabilitation plans. However, other disciplines may also provide relevant direction for certain aspects of landscaping or rehabilitation plans, such as water resource engineering, hydrogeology, and geotechnical engineering.

The Guidelines will apply to all landscaping and rehabilitation plan submissions associated with Ontario Regulation 162/06 permit applications. These Guidelines have been developed for qualified professionals, such as landscape architects and ecologists tasked with preparing landscaping and rehabilitation plans. They will help CH staff assess the technical merits of a landscaping and rehabilitation plan and facilitate quicker and more consistent reviews.

Complex permit applications for larger scale works may require a landscaping and rehabilitation plan completed by a qualified professional. Single landowner residential development will be encouraged to adopt the principles in these guidelines, where possible, for simple permit applications for smaller scale works.

Key Updates and Overview of Guidelines

CH's first version of the Planting Plan Guideline was developed in 2005. Over the years, updates and edits were made to the document to ensure the approaches contained within were consistent with science and best management practices. As part of this update, the focus was on modernizing the outlined approaches, clarifying CH's regulatory role, updating any policy references, and removing the Tree Preservation Plan direction from the document. The Tree Preservation Plan was removed as it is considered redundant because partner municipalities now have Tree Protection By-laws and direction on individual trees is no longer needed.

The current document is divided into five sections and a supporting appendix and is summarized below. For all projects requiring CH's permission, the General Standards must be followed. In

addition to the General Standards, the Project Specific Standards also apply to those works identified in Section 3.

Section 1 – Introduction – Outlines the purpose of *Conservation Halton Guidelines for Landscaping and Rehabilitation Plans.*

Section 2 – General Standards – Outlines the general requirements for landscaping and rehabilitation plans proposed in CH's regulated areas.

Section 3 – Project Specific Standards – Outlines CH's standards for planting and provides direction for specific landscaping or rehabilitation works, such as:

- Rehabilitation in floodplains and/or along watercourses;
- Stabilizing temporary channels;
- Planting plans for stormwater management facilities; and,
- Planting plans in the setback adjacent to regulated natural areas (e.g., wooded features, wetlands and shoreline).

Section 4 – Wildlife Habitat Features – Summarizes various techniques that can be applied to creating and enhancing wildlife habitat features within CH's regulated area.

Section 5 – Submission and Drawings – Summarizes the key requirements and standards outlined in the guideline and provides a checklist with all information to be included in a submission to CH.

Appendix 1 – Best Practices, Helpful Tips and Other Considerations – Provides tips and considerations that are not required as part of a submission but are encouraged.

Key Stakeholder Engagement and Public Consultations

Throughout 2019 and 2020, staff engaged in focused consultations with municipal partners, conservation authorities within the Greater Golden Horseshoe, and select BILD-identified consultants. Broader public consultation was carried out in summer 2020, including broadcasts via social media, email blasts, and posting a draft of the document on CH's website publicly for a 30-day comment period.

Valuable feedback was obtained through meetings, discussions, and written correspondence. Key feedback included requests for more direction on CH's regulatory role, clarification on some of the described planting and rehabilitation approaches and need for additional definitions. The feedback received was incorporated into the final version (attached).

Recommendation

The *Conservation Halton Guidelines for Landscaping and Rehabilitation Plans* outline CH's expectations and minimum permit requirements when landscaping or rehabilitation of sites is required. It is anticipated that use of these Guidelines will lead to better quality submissions, quicker and more consistent reviews, fewer resubmissions, and faster approval times. Staff recommends that the Board of Directors approve these Guidelines. Once approved, these Guidelines will be publicly accessible on CH's webpage and used by CH staff in the ecological review of permit applications under Ontario Regulation 162/06.

Impact on Strategic Priorities

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

Financial Impact

There is no financial impact to this report.

Signed & respectfully submitted:

Barbara Veale
Director, Planning and Watershed Management

Approved for circulation:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Lesley Matich, Manager, Planning Ecology; 905-336-1158 Ext. 2323; lmatich@hrca.on.ca

Appendix A

Conservation Halton Guidelines for Landscaping and Rehabilitation Plans

DRAFT

June 2021 – DRAFT

Version 3.0

Conservation Halton

CONSERVATION HALTON GUIDELINES

Conservation Halton (CH) strives to protect life and property from natural hazards such as flooding and erosion and to prevent environmental degradation, loss of natural features and their ecological and hydrological functions, and prevent pollution near or within natural features. To do this, CH undertakes a wide range of programs and services. In the planning and development process, CH exercises its roles and responsibilities in accordance with the Province's Policies and Procedures for Conservation Authority Plan Review and Permitting Activities (2010), including:

- A regulatory agency under Section 28 of the *Conservation Authorities Act*;
- A body with delegated authority under Section 3 of the Provincial Policy Statement, to represent the 'Provincial Interest' regarding natural hazards in the review of municipal policy documents and planning applications under the *Planning Act*;
- A public commenting body under the *Planning Act, Clean Water Act* and other Acts and Provincial Plans;
- A service provider for environmental advice and technical clearance to municipalities in accordance with signed Memoranda of Agreement;
- A resource management agency operating on a local watershed basis; and
- A landowner in the watershed.

CH's Planning and Regulations staff (i.e., environmental planners, regulations officers, ecologists, water resource engineers, technologists, and hydrogeologists) work together on interdisciplinary teams to deliver timely and comprehensive reviews and advice to provincial agencies, municipalities, and landowners across CH's jurisdiction.

Section 28 (1) of the Conservation Authorities Act allows conservation authorities to make regulations to protect life and property from natural hazards. CH's regulation is Ontario Regulation 162/06. Under Ontario Regulation 162/06, CH regulates:

- All development in or adjacent to river or stream valleys, wetlands, and surrounding lands where development could interfere with the hydrologic function of the wetland, Lake Ontario shorelines, and hazardous lands such as karst, and any prescribed allowances;
- Alterations to a river, creek, stream, or watercourse; and
- Interference with wetlands.

Permission is required from CH for undertaking any works within regulated areas. Any development, which in the opinion of the CA, does not affect the control of flooding, erosion, pollution, conservation of land, or dynamic beaches may be approved or approved with conditions. Interference to watercourses and wetlands may be approved, approved with conditions, or refused. CH's Board-approved Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document outlines the policies and technical requirements which must be met before permission may be granted. As part of a CH permit application, an applicant must demonstrate that CH's Board-approved policies and technical standards can be met.

CH also provides technical advice to its municipal partners on a range of environmental matters, including stormwater management (SWM) and natural heritage, through service agreements or Memoranda of Understanding/Agreement (MOU/MOA). Technical advice is also provided to municipal partners in CH's capacity as a public commenting body and a resources management agency.

These Guidelines provide clear expectations regarding the criteria and approaches that are acceptable to CH and are used by staff to assess the technical merits of a landscaping and rehabilitation plans for works proposed in CH regulated areas. Applicants proposing landscaping and rehabilitation works should follow these Guidelines when preparing plans to be submitted as part of a CH permit application. By doing so, more efficient, and consistent reviews, fewer resubmissions, and faster approvals are anticipated.

These Guidelines are specific to CH and do not replace or supersede any other federal, provincial, or municipal requirement.

OBJECTIVE	The purpose of the **Guidelines for Landscaping and Rehabilitation Plans** is to: • **Identify CH's** regulatory and technical requirements for a landscaping and rehabilitation plan submission • **Outline CH's** key expectations for landscaping and rehabilitation design
APPLICATION & USE	Applies to all landscaping and rehabilitation plan submissions associated with Ontario Regulation 162/06 permit applications. These Guidelines have been developed for: • **Qualified professionals** such as landscape architects and ecologists tasked with preparing landscaping and rehabilitation plans • **CH** staff to assess the technical merits of a landscaping and rehabilitation plan and to facilitate quicker and more consistent reviews
ADDITIONAL REFERENCE MATERIALS (to be read in conjunction with this document)	• Ontario Regulation 162/06 Halton Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, 2006 • Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning, November 6, 2020 (amended) • Conservation Halton Guidelines for Ecological Studies, 2017 • Conservation Halton Seed Mixes, May 2018 • Conservation Halton Native Species List, August 2018 • Conservation Halton Guidelines for Stormwater Management Engineering Submissions, 2021
VERSION	**Version 3.0** This version of the Guidelines for Landscaping and Rehabilitation Plans was presented to and endorsed by the CH Board of Directors on June 17, 2021. The Guidelines may be updated from time to time. For more information, visit https://www.conservationhalton.ca/policies-and-guidelines or call 905-336-1158.

TABLE OF CONTENTS

Tables

Figures

Abbreviations

The following table lists the various abbreviations used within this document:

TABLE 0-1: LIST OF ABBREVIATIONS

ARL	Approximate Regulation Limit	**CA**	Conservation Authority
CH	Conservation Halton	**DBH**	Diameter at Breast Height
ELC	Ecological Land Classification	**MECP**	Ministry of Environment, Conservation and Parks
NAI	Natural Areas Inventory	**O. Reg 162/06**	Ontario Regulation 162/06
SWM	Stormwater Management		

Section 1 Introduction

The purpose of the Guidelines for Landscaping and Rehabilitation Plans is to:

- Identify CH's regulatory and technical requirements for a landscaping and rehabilitation plan submission for a permit within CH's regulated areas
- Outline CH's key expectations for landscaping and rehabilitation design

This document focuses primarily on CH's expectations related to the ecological aspects of landscaping and rehabilitation plans. Other disciplines may also provide relevant direction such as water resource engineering, hydrogeology and geotechnical engineering.

Complex permit applications for larger scale works may require a landscaping and rehabilitation plan completed by a qualified professional. Single landowner residential development will be encouraged to adopt the principles in these guidelines, where possible, for simple permit applications for smaller scale works. Consultation with CH is advised to ensure the appropriate sections of the guidelines are used.

1.1 Guideline Outline

This document is divided into five sections and a supporting appendix. For all projects requiring CH's permission, the General Standards must be followed. In addition to the General Standards, the Project Specific Standards also apply to those identified in Section 3.

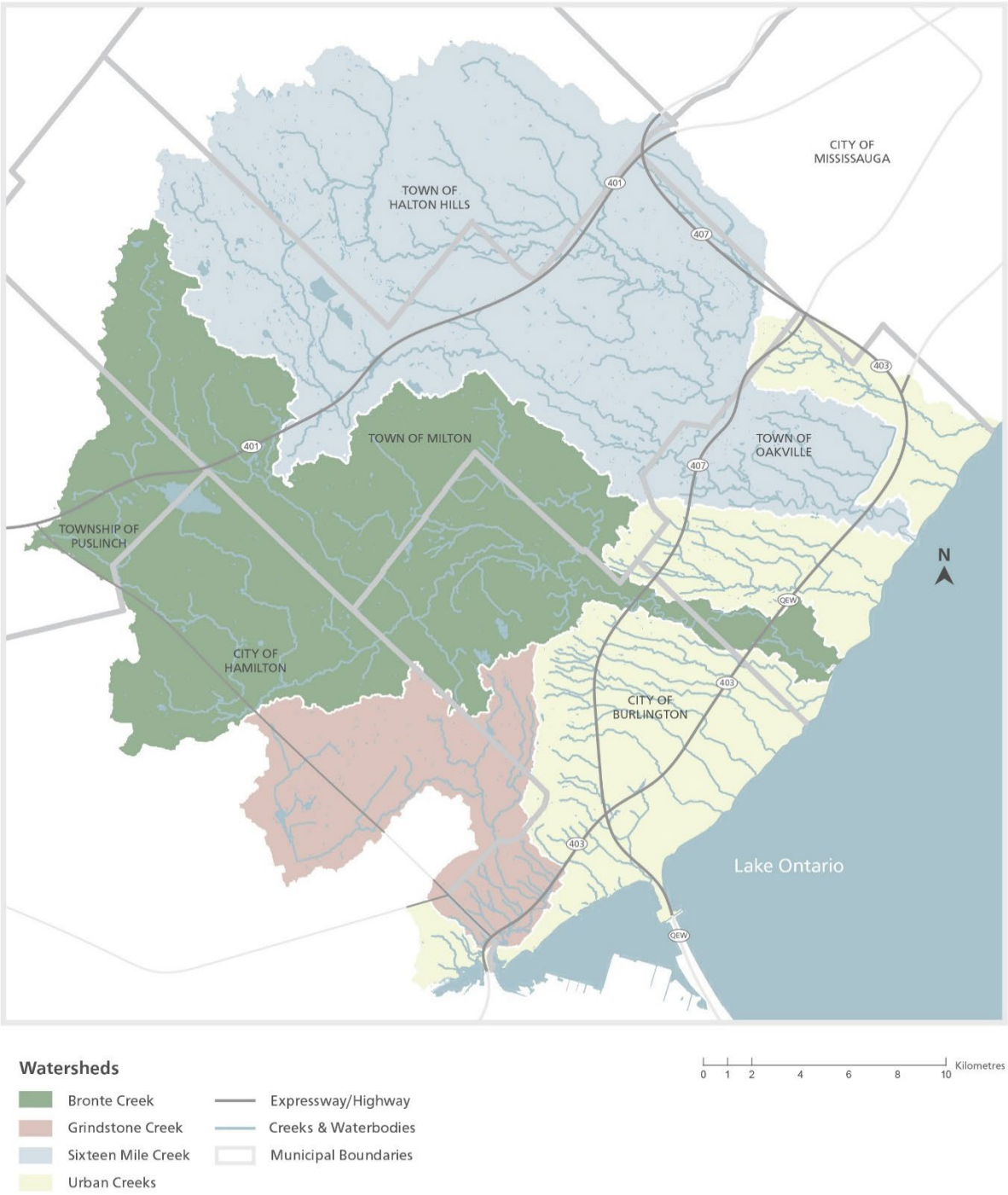
- **Section 1 – Introduction** – Outlines the purpose of CH's Guidelines for Landscaping and Rehabilitation Plans.
- **Section 2 – General Standards** – Outlines the general requirements for landscaping and rehabilitation plans proposed in CH's regulated areas.
- **Section 3 – Project Specific Standards** – Outlines CH's standards for planting and provides direction for specific landscaping or rehabilitation works, such as:
    - Rehabilitation in floodplains and/or along watercourses;
    - Stabilizing temporary channels;
    - Planting plans for stormwater management facilities; and,
    - Planting plans in the setback adjacent to regulated natural areas (e.g., wooded features, wetlands and shoreline).
- **Section 4 – Wildlife Habitat Features** – Summarizes various techniques that can be applied to creating and enhancing wildlife habitat features within CH's regulated area.
- **Section 5 – Submission and Drawings** – Summarizes the key requirements and standards outlined in the guideline and provides a checklist with all information to be included in a submission to CH.
- **Appendix 1 – Best Practices, Helpful Tips and Other Considerations** – Provides tips and considerations that are not required as part of a submission but are encouraged.

These Guidelines are specific to CH and do not replace or supersede any other federal, provincial or municipal requirements.

1.2 Conservation Halton's Role in Reviewing Landscaping and Rehabilitation Plans

CH protects, manages, and enhances the area within its jurisdiction (see Figure 1-1) through a wide variety of programs and services, including the administration of regulations and the provision of planning services.

FIGURE 1-1: CONSERVATION WATERSHED



Under Ontario Regulation 162/06 (O. Reg. 162/06), CH regulates:

- All development in or adjacent to river or stream valleys, wetlands and surrounding lands where development could interfere with the hydrologic function of the wetland, Lake Ontario shorelines, or hazardous lands such as karst and any associated allowances;
- Alterations to a river, creek, stream, or watercourse; and
- Interference with wetlands.

Permission is required from CH for undertaking any development within regulated areas. "Development" means,

a) the construction, reconstruction, erection or placing of a building or structure of any kind,
b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
c) site grading, or
d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

CH's Board-approved *Policies and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document* (2020) outlines the policies and technical requirements which must be met before permission may be granted. As part of a CH permit application, an applicant must demonstrate that CH's Board-approved policies and technical requirements can be met to the satisfaction of CH.

In addition, CH provides plan review services to municipalities for environmental advice and technical clearance.

CH's review of proposed landscaping and rehabilitation plans provides for a streamlined and integrated assessment of the merits of the proposal that is linked to CH's roles and responsibilities.

Section 2 General Standards

This section outlines landscaping and rehabilitation requirements for works proposed in CH's regulated areas, such as floodplains, watercourses, valleys, wetlands, and lands adjacent to wetlands. Additional project specific guidance is provided in Section 3.

Landscaping and rehabilitation are required when alteration or rehabilitation works are proposed within a regulated area. Landscaping and rehabilitation plans may be a component of an overall CH permit. Applicants are encouraged to consult with CH staff prior to submitting a plan.

Drawing or Submission Requirements

When preparing a landscaping or rehabilitation plan, each plan must include and/or show the following:

- ☐ Written and graphic scale on all drawings (e.g., 1:200)
- ☐ North arrow
- ☐ Property boundary
- ☐ Full area of disturbance, including all grading works, (i.e., digital submission, and/or 8.5 x 11 hardcopy)
- ☐ Air photo(s) with proposed works overlaid (digital submission only)
- ☐ Vegetation protection measures and erosion control measures (if not provided on other drawings)
- ☐ Stamp of a qualified professional (if applicable) and drawing date
- ☐ CH's Approximate Regulated Limit (ARL) or confirmed regulated area by CH staff (e.g., CH staff staking)
- ☐ Plantable area in square metres (m^2)
- ☐ Description of the proposed approaches for topsoil, timing of work, species selection, tree and shrub plantings, groundcover and stabilization of soils

Before drawings are drafted, all higher-level plans and policies (e.g., site-specific environmental impact assessments/studies, subwatershed studies, subwatershed impact studies, etc.) that pertain to the proposed development should be reviewed. These high-level policies and plans may identify goals that should be achieved through landscaping or rehabilitation works. They may also provide direction on the expected outcome of landscaping and rehabilitation works.

Understanding existing site context and conditions is a critical consideration for plan preparation. Professionals preparing the plan are encouraged to visit the site early in the planning stage to familiarize themselves with the site. The existing or adjacent natural environment can be used as a reference to identify appropriate species selection and composition for planting.

A suite of factors will influence the survival of the proposed plantings. Species suited to the environmental conditions, the current and anticipated stresses due to development, and the anticipated uses of the site should be selected. Depending on these factors, additional measures may be recommended by staff as part of the landscaping works.

2.1 Site Preparation

There are several steps that can be completed to minimize materials needs and reduce the footprint of disturbance on a given site. Simple notes on plans can provide clear direction on how to clear the site of vegetation and protect features identified for preservation.

When preparing a landscaping or rehabilitation plan, each plan must:

- ☐ Demarcate the limits of construction with erosion and sediment fencing and/or tree protection fencing to avoid encroachment into the natural area. This will minimize disturbance to preserve the quality of the topsoil.
- ☐ Undertake any required tree removals without grubbing the soil, to the extent feasible to minimize disturbance to the soil and subsequent erosion risks.

2.2 Topsoil

Healthy soils are essential for effective vegetation establishment, increasing success rates of restoration projects while minimizing management costs, maintenance, and replanting. Outlined below are CH's requirements related to topsoil application and the stockpiling of materials. These requirements are based on industry best practices and CH's experience with successful landscaping and rehabilitation projects.

When preparing a landscaping or rehabilitation plan, each plan must:

Topsoil

- ☐ Indicate if the existing topsoil is viable and if there is enough depth for anticipated plantings and seeding.
- ☐ Specify aeration and/or adding compost, compost tea, leaf mulch and/or locally sourced mycorrhizal inoculant if the existing soil is compacted or degraded.
- ☐ Ensure a minimum depth of 20 cm of clean topsoil is specified unless the area has been compacted or soil is sterile and a minimum of 45 cm of clean topsoil where soil has been compacted. Confirm the proposed topsoil depths are supported by engineering studies.
- ☐ Specify mixing imported soil with native soil to ensure soil microorganisms are adapted to the site.
- ☐ Specify that clean topsoil is proposed in a consistent depth throughout the area.
- ☐ Phase works during construction to the extent possible to minimize disturbance. Care should be taken so as not to place fill within regulated areas or unnecessarily use heavy equipment.
- ☐ Show how compaction will be minimized and mitigated in instances where encroachment into the natural area cannot be prevented. Consider application of a medium such as woodchips in locations where vehicle movement is proposed in natural areas.

Stockpile

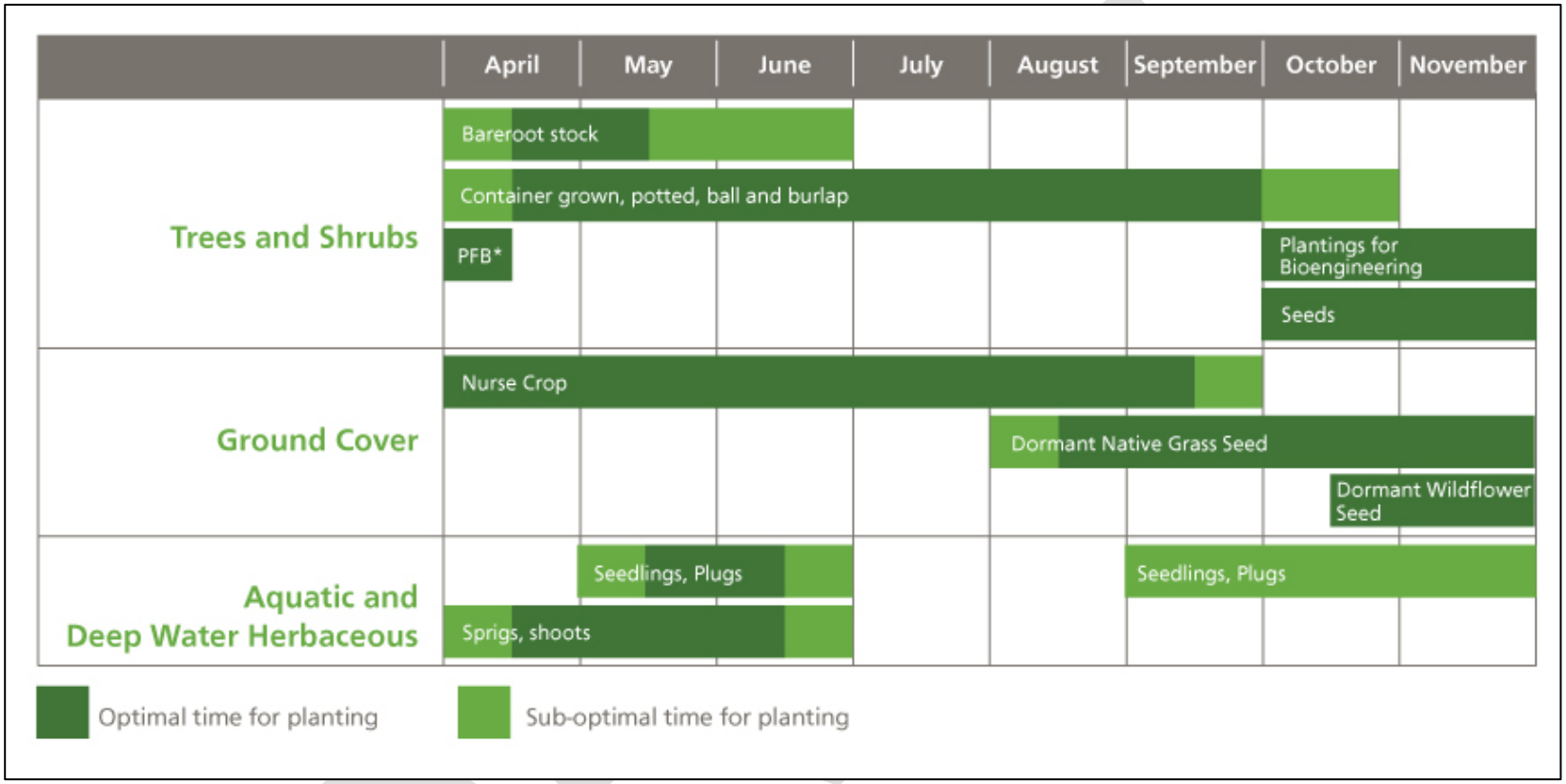
- ☐ Show all topsoil stockpile locations on site, outside of CH's regulated limits, to a recommended maximum specified height limit of 130 cm. Stockpiling to greater heights and remaining for periods longer than six months will generally sterilize the topsoil. Where this cannot be avoided, the addition of compost is recommended at the end of the stockpiling period.
- ☐ Seed stockpiles with nurse crop or alternative winter cover to help retain the quality of the topsoil and minimize erosion.

- ☐ Install appropriate erosion and sediment control measures around the topsoil pile and other exposed areas to prevent sediment-laden runoff from reaching watercourses and other sensitive areas.
- ☐ Keep stockpiled topsoil separate from subsoil.

2.3 Timing

For landscaping and rehabilitation projects to be successful and avoid sensitive timing windows for wildlife, consideration must be given to the best and most appropriate time of year to undertake the proposed works. The timing of works should be included on submitted plans, as this will determine if additional maintenance measures are required. Figure 2-1 below outlines the appropriate time to plant various vegetation types based on best practices.

FIGURE 2-1: WHEN TO PLANT NEW STOCK



*Plantings for Bioengineering (PFB)

When planting trees and shrubs, deciduous plants should be transplanted in the fall after leaves drop or in the spring before the leaves emerge, while conifers should be planted in the spring. Some species such as oaks can only be transplanted in the spring. Bioengineering plantings must be installed when dormant. Caution should be exercised when proposing landscaping during periods when risk of freezing is high.

When preparing a landscaping or rehabilitation plan, each plan must:

- ☐ Indicate a contingency plan for seeding if works cannot be completed immediately after construction.
- ☐ Include notes on maintenance should landscaping be completed during sub-optimal periods.
- ☐ Provide an advisory note indicating that planting of herbaceous material is to be completed outside of frost period with sufficient time for plants to take root.

2.4 Species Selection

A well-designed landscape incorporating native species will function well ecologically and hydrologically with the existing surroundings. CH endeavours to protect and enhance natural features, and hydrologic and ecological functions within the watershed by promoting the use of native *self-sustaining vegetation*.

When preparing a landscaping or rehabilitation plan, each plan must:

- ☐ Illustrate transplanting, planting, or salvaging of only native species.
- ☐ Include locally common and/or uncommon species as per CH's Native Plant List.
- ☐ Ensure that no invasive species or plant associations that support the lifecycle of pests are proposed (e.g., do not plant the hosts of blister rust together: *Ribes* and *Pinus* species).
- ☐ Include a diversity of species with different flowering times.
- ☐ Include a minimum of five species per targeted plant type (e.g., tree, shrub, forbs, graminoid, aquatic, etc.).
- ☐ Avoid species with allelopathic effects to ensure the optimal growth of other species (or ensure tolerance of species planted in association).
- ☐ Incorporate bioengineering measures where appropriate.
- ☐ Include locally native species representative of existing vegetation or edge habitat communities when planting adjacent to vegetation communities or in natural areas.
- ☐ Integrate early successional species.
- ☐ Incorporate companion plantings for shading, where appropriate.
- ☐ Include at least one submergent or floating-leaved plant and one emergent species, in aquatic planting plans.
- ☐ Use CH's Native Species List for a list of suitable species.

2.4.1 **Species at Risk, Provincially or Regionally Rare Species**

CH does not support the planting of any species at risk, provincially rare or regionally rare species unless undertaken specifically under the direction of a recovery initiative. The planting of these species may lead to genetic issues as well as potential future complications for landowners by the creation of habitat for these species. Confirm current species status with federal, provincial, and regional lists prior to submission. Regional rarity can be found in the Halton and Hamilton Natural Areas Inventories (NAI).

2.4.2 **Trees and Shrubs**

Trees and shrubs provide important services and critical ecological and hydrological functions in the landscape. Trees and shrubs can reduce the rate of erosion by protecting the soil from rain impacts and holding soil in place with their roots. Trees and shrubs also reduce flooding by increasing infiltration.

When preparing a landscaping or rehabilitation plan, each plan must:

- ☐ Propose no fewer than five tree species and five shrub species in areas currently or intended to be forested.
- ☐ Include a variety of tree sizes and successional species to accelerate establishment of a natural vegetation structure. Specific size variations are provided in the project specific standards subsections.
- ☐ Select species representative of natural plant associations and appropriate successional stage.

- ☐ Use adjacent vegetation communities, where applicable, as examples of vegetation associations.
- ☐ Mimic a naturalistic, rather than geometric layout to the greatest extent possible in the planting plan.
- ☐ Design cover structure and layering (e.g., groundcover, understory canopy, heterogeneous canopy height, etc.) to maximize structural complexity.
- ☐ Install plant species not susceptible to ice/storm damage as well as spreading, suckering vegetation away from structures
- ☐ Transplant/salvage only non-invasive woody vegetation that is under 20 cm diameter at breast height (DBH).
- ☐ Include larger stock and/or fast-growing shrubs and trees near or adjacent to streams and ponds to provide immediate shading (i.e., *Acer saccharinum*, *Salix spp*., *Sambucus canadensis*, *Populus spp*.).
- ☐ Consider contingency measures for animal damage during species selection and post-planting care.
- ☐ Provide a tree planting detail on the drawings showing the stakes, wrap, mulch, soil amendments and size of hole.

Due to factors such as area of disturbance, stock availability, and survivability, CH may support planting of younger and smaller stock on a case-by-case basis. Consultation with staff is recommended.

Whips can be substituted for caliper stock at a 10 to 1 ratio, where appropriate.

- 1 deciduous caliper stock is >4 cm DBH
- 1 conifer is >150 cm in height

2.4.3 **Ground Cover/Stabilization**

Ground cover and stabilization measures are key in preventing immediate erosion and sedimentation, improving the ecological function and significantly contribute to the restoration efforts. When preparing plans, it is key to consider the application, composition and timing of the ground cover/stabilization proposed.

When preparing a landscaping or rehabilitation plan, each plan must:

Application

- ☐ Specify application of ground cover in a nutrient rich medium using Terraseeding, hydroseeding or similar techniques that incorporates both seed mix and growth media during the application process or with weed-free "sod blocks."
- ☐ Limit mulch to a depth of 5 cm and only in planting nodes.
- ☐ Avoid broadcasting the entire watercourse corridor or natural area with mulch.
- ☐ Select plastic-free mulch.

Composition

- ☐ Include plugs or potted stock for immediate results, and plants grown from seed for target community composition, where possible.
- ☐ Plant both native graminoids and wildflowers for structural diversity and blooming periods to capture a larger suite of biological services. Include deep rooting, native perennial grass species for soil stabilization.
- ☐ Provide the seed mix species composition and application rate on plans. CH recommends a seeding rate of 25-30 kg/ha. Verify species-appropriate quantities with a qualified professional.
- ☐ Salvage seed depending on site conditions and existing vegetation. Areas with invasive species or dominated by non-native species are not suitable salvage sites.
- ☐ Use more than one nurse crop to prolong coverage over multiple seasons.
- ☐ Avoid conventional sod in naturalized regulated areas.

Timing

- ☐ Optimize timing of works and germination of nurse crops.
- ☐ Apply a combination of nurse crops to establish quick vegetative cover over various seasons.
- ☐ Avoid seeding during the drought-prone periods, unless additional maintenance measures can be completed (i.e., frequent watering).
- ☐ Stabilize topsoil with approved nurse crop seed mixes for groundcover.
- ☐ Add additional stabilization measures (e.g., hydroseeding in combination with engineered methods such as erosion matting and nurse crops) if required due to seasonal conditions and depending on timing of work. Re-evaluate the depth of the topsoil prior to planting if not stabilized immediately.
- ☐ Delay spreading of topsoil until following spring, if topsoil cannot be stabilized within the current year's growing season.

Additional Considerations

- ☐ Indicate scheduled weeding plan to ensure intended vegetation grows.
- ☐ Use biodegradable erosion matting such as plant fibre blankets for short-term stabilization.
- ☐ Use pit and mound construction as a topographic approach when used with an appropriate planting regime. To minimize erosion and runoff, each pit should not be surrounded on four sides by a mound, and vice versa.
- ☐ Ensure the nurse crop is certified and does not contain any invasive species.

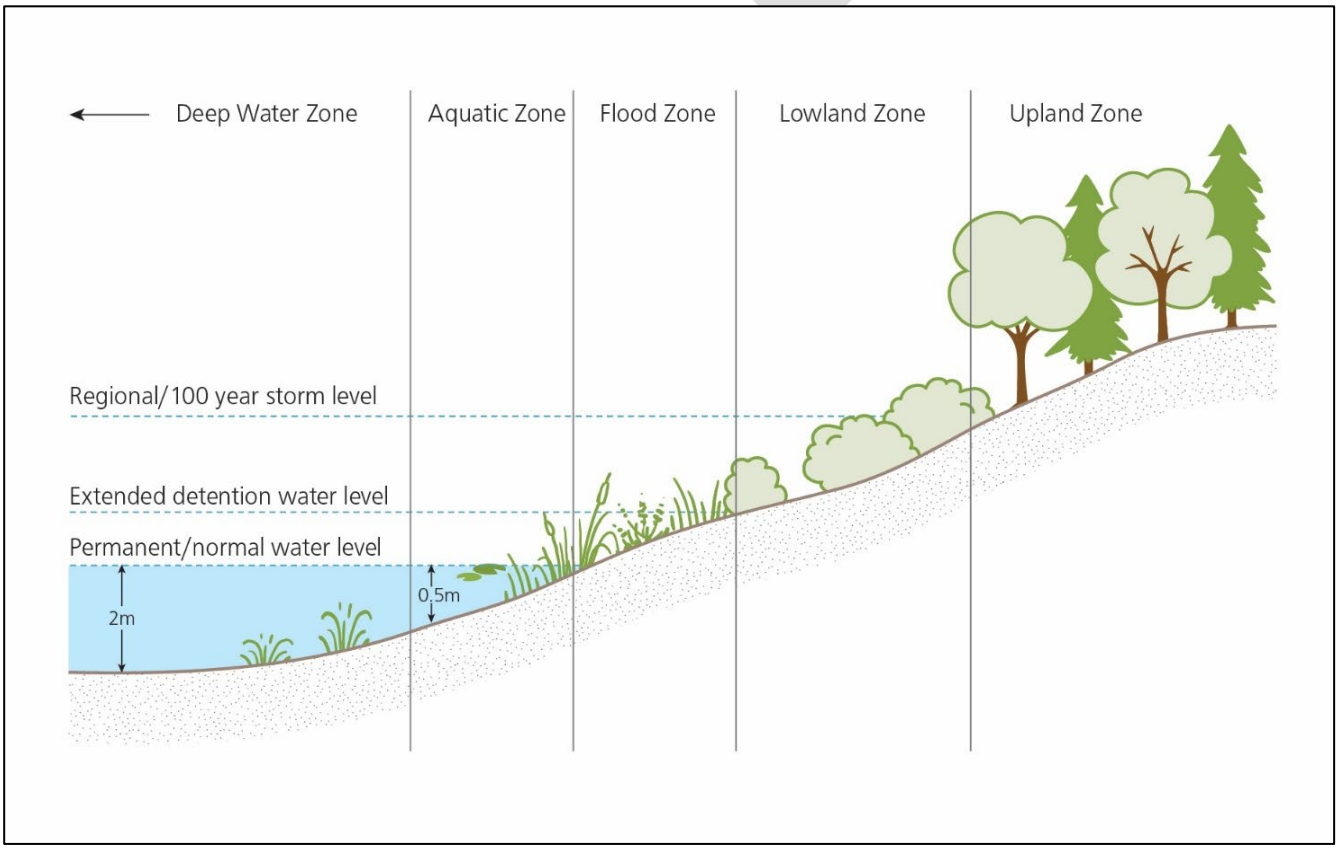
2.5 Planting According to Moisture Regime

To achieve a successful outcome, it is necessary to consider the site's moisture regime when determining what to plant in which location. Many plants have specific needs as it relates to moisture level and will not thrive if these needs are not met. The five zones describe typical conditions encountered. The hydrologic/moisture zones represent the tolerance of plants to differing degrees of water inundation (Figure 2-2).

- **Deep Water Zone:** water depth 0.5 m to 2 m below surface.
- **Aquatic Zone:** depth from 0.5 m to the permanent pool level/normal water level.
- **Flood/Shoreline Zone:** permanent pool to extended detention elevation or 5-year storm.
- **Lowland Zone:** extended detention elevation to the regional storm or based on vegetation community present.
- **Upland Zone:** above the regional storm elevation.

Consider and include moisture zones when developing plans.

FIGURE 2-2: MOISTURE ZONES



The Figure 2-2 is provided for schematic purposes only. Plantings in each zone are subject to the type of rehabilitation project.

CH's Native Species List provides a list of native species suitable for each hydrologic/moisture zone based on the coefficient of wetness is available online at www.conservationhalton.ca.

2.6 Post Planting Care

Post-planting care refers to the maintenance and monitoring required to achieve self-sustaining vegetation. It can ensure survivability of the newly installed material and soil stabilization to prevent sedimentation and erosion. Specifications for frequency and duration of maintenance and monitoring will vary based on the nature of the project. Certain projects may warrant pre-installation meetings between the designer and contractor or ongoing supervision by the qualified professional to address issues as they arise. Prior to installation, a qualified professional must verify that the proper species have been sourced. Drawings must include all details regarding monitoring and maintenance for clear communication between the designer, review agencies and contractors.

Post-planting site visits should be carried out throughout the warranty period to ensure vegetation has reached a free-to-grow state. These visits may involve watering, removal of invasive and non-native species, adding mulch, removing stakes, removing litter and resolving any problems. Sites should be visited after inclement weather, especially during the period of establishment, to confirm that the proposed plantings have not been uprooted, to address erosion or ponding of water, and to determine if the approach is working satisfactorily. CH should be contacted if changes to the approved plan are necessary.

When preparing a landscaping or rehabilitation plan, each plan should:

- ☐ Outline the vegetation monitoring plans in the General Notes. The plan should include how the performance and effectiveness of interim measures (e.g., nurse crops) will be monitored, the duration and frequency of the program, and how plant health will be protected during droughts and other extreme weather (e.g., high rainfall or wind events) until plantings have reached a free-to-grow state
- ☐ Include coir disks around the base of trees and shrubs to retain water.
- ☐ Ensure mulch extends beyond the root ball and does not touch the base of the tree and shrubs.
- ☐ Indicate the removal of plant tags.
- ☐ Include tree protection measures such as rodent guards and stakes.
- ☐ Indicate all temporary stabilization measures such as rodent guards and stakes will be removed at the appropriate time after planting, generally within 2 years.
- ☐ Indicate that pruning of all dead or damaged tree and shrub branches will be done by a qualified professional.
- ☐ Include replacement of dead or dying plantings prior to the end of two years or the end of the warranty period from the nursery/contractor.

Section 3 Project Specific Standards

This section outlines project specific requirements for landscaping and restoration associated with works within regulated areas such as floodplains and watercourses, temporary channels, stormwater management facilities and areas adjacent to natural hazards or features. These requirements are in addition to the general requirements outlined in Section 2.

3.1 Floodplains and Watercourses

Plantings associated with floodplains and watercourse alterations must:

- stabilize the side slopes and floodplain of the creek block;
- prevent erosion on meander bends;
- mitigate pollution (e.g., thermal impacts, sediment and other deleterious materials, etc.);
- enhance fish and wildlife habitat; and,
- protect and enhance the natural heritage system.

3.1.1 **Planting Requirements**

Floodplain and watercourse alteration requirements apply to the entire width of the creek block, including floodplain and, side slopes (excluding trails). Appropriate species selection is essential to ensure long term viability and success of the plantings.

When preparing a landscaping or rehabilitation plan, each plan must:

- ☐ Provide both general and species-specific habitat features.
- ☐ Include a variety of pioneer, successional and late successional species for rehabilitation works. Pioneer flood tolerant species ensure rapid rehabilitation, while mid-successional species provide longer-term structural diversity based on growth rates and shade tolerance.
- ☐ Ensure plantings consist of 5% caliper, balled and burlap and/or wire basket material and 95% whips and/or saplings.
- ☐ Include trees at a density of 10 trees per 100m^2 and a shrub to tree ratio of 5:1, in communities dominated by trees and shrubs.
- ☐ Provide tree and shrub plantings within the first metre adjacent to the creek to maximize the benefit of shading, bank stability and instream habitat. Vegetation should provide shade on 60-80% of the surface of streams.
- ☐ Use bioengineering along banks where possible.
- ☐ Include ground cover throughout the entire area of disturbance within the floodplain and where enhancement will improve the riparian/creek corridor.
- ☐ Vegetate the entire cross-section of intermittent channels and to the approximate bankfull limits of permanent channels.
- ☐ Illustrate the topsoil tapering to a thin layer near the bottom of the bank or low flow limits.

3.1.2 **Bioengineering**

Bioengineering is the rehabilitation technique of using dormant cuttings of hardy native plant material. It is an encouraged approach for watercourse and valley rehabilitation works as a method to stabilize or protect

erodible soils. It can provide immediate mechanical stability while a vigorous root matrix establishes within the soil. As the stabilization is provided by living vegetation, the reinforcement provided grows stronger and more effective over time. Types of Bioengineering can include installing live fascines, brush layering, live crib walls, live staking and brush mattresses. The plant material used for bioengineering is installed in a dormant state.

Two factors should be considered when determining whether bioengineering is an option:

- Shear Stress: determine the shear stress that is anticipated to be enacted on the bioengineering material via precipitation, meltwater, or creek flow to confirm if the approach will work.
- Timing: install bioengineering structures during the required planting timing window to ensure the survival of the planting material and the success of the bioengineering project. The collection of material and installation should occur between October 31 and March 31.

3.2 Temporary Channels

Temporary channels are used to divert flows during construction of stormwater infrastructure or permanent/ultimate watercourse realignments. It is important to quickly stabilize these channels to prevent sediment from entering downstream, or from impairing aquatic species passage.

The following approaches for temporary channels in regulated areas should be considered:

- ☐ Using erosion control blankets depending on construction timing and duration.
- ☐ Lining bed with rocks and/or vegetation.
- ☐ Planting native vegetation to ensure full coverage, especially in cases where works will be completed over a longer timeframe (i.e., greater than one year).
- ☐ Using sod mats for stabilization where appropriate.

Temporary channel lined with rocks

Temporary channel bed lined with vegetation

3.3 Stormwater Management Ponds

Plantings contribute significantly to the proper functioning of Stormwater Management (SWM) Ponds. SWM vegetation benefits and functions include:

- improving water quality by preventing the release of sediment into local creeks and tributaries;
- stabilizing the side slopes of the pond;
- mitigating pollution and nutrient loading of waterways;
- reducing the exchange of sediments and toxins into watercourses;
- minimizing establishment and growth of invasive species;
- reducing water temperatures through shading;

- providing aesthetic benefits; and,
- carbon capturing and cycling.

Municipalities may have additional requirements for stormwater ponds and should be consulted throughout the design process.

3.3.1 **Planting Requirements**

Appropriate species selection for these areas is critical for long-term survivability of the vegetation and function of the facility to achieve the abovementioned benefits and functions.

When preparing a landscaping or rehabilitation plan, each plan must:

- ☐ Provide shade on the southern exposure of pond, inflow, and outflow channels whenever possible to reduce warming. Plant a portion of the required caliper species on the south side of the pond and close to the permanent pool level.
- ☐ Select flood tolerant species adapted to anticipated water flow velocities.
- ☐ Protect planting nodes from waterfowl if required. Dense shrubby vegetation placed close to the permanent waterline will help to discourage loafing and nesting geese.
- ☐ Include nodes of 5 - 30m^2, spaced out no more than 6 m.
- ☐ Show species in randomized patterns to mimic a natural layout. Avoid a grid layout.
- ☐ Locate woody plants in a manner that does not impede the flow of water in or out of SWM pond facilities.
- ☐ Provide the total plantable area per moisture zone.
- ☐ Provide no-maintenance, non-invasive species with a mix of locally native forb and grass species.

It is best practice to increase planting densities, as vegetation will have to be removed during sediment dredging operations.

The planting details provided above are also presented in Table 3-1.

TABLE 3-1: PLANTING CRITERIA PER MOISTURE ZONE

Zone	Water Depth	Planting Criteria
Deep Water Zone	0.5 m to 2 m below surface	☐ Group aquatic plants and space them 0.5m to 1m apart. ☐ Aim for 40% cover (at full growth) of the area as defined by the normal water level to 0.75m depth. ☐ Include a minimum of four aquatic plant species. ☐ Aquatic species should include at least one species of submergent and floating-leaved plant, and at least one species of robust, broadleaved and narrow-leaved emergent. ☐ Provide cattails (*Typha latifolia*) and pioneer rush and bulrush species (e.g., *Juncus effusus*, *Juncus torreyi* and *Scirpus cyperinus*) as interim vegetation in sediment forebay to aid in sediment trapping. Limit the plantings of cattails to areas away from maintenance access areas.
Aquatic Zone	depth of 0.5 m to the permanent pool level/normal water level	
Flood/Shoreline Zone	permanent pool/ normal water level to extended detention elevation	☐ Include a minimum of four aquatic forbs and graminoid plant species should be included as plugs and seeds. ☐ Provide at least five species of shrubs should be planted ☐ Provide at least 25 shrubs per 100 m^2
Lowland Zone	extended detention elevation to the regional storm	☐ Indicate a density of no less than 5 trees per 100 m^2 and 25 shrubs per 100 m^2 in the dry land area of the lowland and upland zone. ☐ Include a variety of tree planting stock sizes and successional species to accelerate establishment of a natural vegetation structure. Use the following percentages to determine the amount of each size to plant: ○ 5% caliper, balled and burlap and/or wire basket material (4 cm caliper for deciduous trees; min. 150 cm for conifers), ○ 95% whips and/or saplings Provide larger caliper sized trees to shade SWM ponds. Place plantings immediately adjacent to pools to maximize the immediate shading and stabilizing benefits. Smaller species can be interspersed in these areas to allow for gradual growth and stabilization. ☐ Include a variety of shrub sizes between 0.4 – 1 m in height. At least five species of shrubs and trees should be planted. ○ 5 trees per 100 m^2 ○ 25 shrubs per 100 m^2 ☐ Include groundcover
Upland Zone	above the regional storm elevation	

3.3.2 **Calculation of Plant Material for Aquatic Species**

The total aquatic plantable area is defined by the normal water line/permanent pool level down to 0.75 m depth. To achieve 40% cover, the quantity of aquatic plants is calculated based on 6 plants per 1 m^2.

Below is a formula to determine aquatic plant numbers to achieve at least 6 plants per 1 m^2 for the Deep Water and Aquatic Fringe Zone:

Plantable area (m^2) X 40% (cover) X 6 plugs per m^2 (plants/m^2) = proposed planting number

Sample calculation for 10,000 m^2 for area between normal water line down to 0.75 m deep:

10,000 m^2 X 40% X 6 plants/m^2 = 24,000 plants/plugs for the area.

Provided below in Table 3-2 is an example of SWM calculations to be included in the submission.

TABLE 3-2: SWM POND PLANTING CALCULATIONS

Zone	Area	Required Densities	Required Quantity of Plantings
Deep Water Zone	*1200 m^2*	• *Aquatic plants should be planted in groupings, spaced 0.5m to 1m apart and cover 40% (at full growth) of the area defined by the normal water level to 0.75m depth* • *(plantable area (m^2) x 40% x 6 plugs per m^2)*	• *2880 plugs*
Aquatic Zone			
Flood/Shoreline Zone	*1100 m^2*	• *25 shrubs per 100 m^2* • *Groundcover*	• *275 shrubs* • *groundcover*
Lowland Zone	*2000 m^2*	• *5 trees per 100 m^2* • *25 shrubs per 100 m^2* • *Groundcover*	• *100 trees* • *500 shrubs* • *groundcover*
Upland Zone			

**Quantity of required plants/m^2 is subject to change based on municipal requirements or ecological requirements of receiving watercourse.*

3.3.3 **Topsoil in SWM Ponds**

The first 2 m below the permanent water level along the edge of the pond receives 0.30 m of clean topsoil in keeping with the MECP SWM Guidelines. All areas above the permanent water level receive 0.45 m to 1.0 m of clean topsoil. The subsoil is to be de-compacted/scarified to ensure proper integration between subsoil and topsoil.

The engineer should confirm the suitability of subsoil and topsoil material, and de-compaction options with the landscape architect.

3.3.4 **SWM Pond Outlet Structures**

SWM pond outlets may be designed as: swales/channels, flow spreaders, infiltration trenches, stonecore wetlands, etc. Regardless of the design, the area around the outlet should be well-vegetated to achieve water quality objectives as well as ecological targets in the receiving watercourse. Establish a continuous band (minimum 3 m in width) of woody riparian vegetation around or along the outlet structure to facilitate shading and stabilization. Plant a combination of fast-growing riparian pioneer species (e.g., poplars, dogwoods, alders, and willows) as well as longer lived, large canopy species (e.g., silver maples). Plant the larger planting material adjacent to the outlet feature to provide a more immediate shading effect.

3.3.5 **Temporary SWM Pond Stabilization**

Temporary SWM ponds may be installed as an interim facility. It is important to quickly stabilize these temporary SWM ponds to prevent sediment from entering downstream.

The following approaches for temporary SWM ponds that outlet to regulated areas should be considered:

- ☐ Use erosion control blankets depending on construction timing and duration.
- ☐ Plant native riparian groundcover vegetation to ensure full coverage, especially in cases where works will be completed over a longer timeframe (i.e., greater than one year).
- ☐ Use sod mats where appropriate.

3.4 Areas Adjacent to Natural Hazards and Wetlands

Plantings in the regulated allowance of natural hazards and other areas adjacent to wetlands are important for preserving the health of the natural area and improving the ecological function of the watershed. The planting area in the regulated allowance and other areas adjacent to wetlands is intended to be established and maintained as natural, self-sustaining vegetation, the area and composition of the plantings can be determined by an ecological impact study, equivalent ecological study or as determined by CH. CH promotes rehabilitating sites using planting densities appropriate to the desired Ecological Land Classification (ELC) vegetation community. Appropriate planting densities should be established through consultation with CH.

It is important to consider any existing naturally occurring vegetation adjacent to a natural area when planting. The density and size requirements for planting may be reduced based on existing vegetation provided the existing areas that are not disturbed during any phase of construction. Requirements will be determined on a site-by-site basis. The planting guidelines in the following subsections are based on the most common vegetated treatments.

When preparing a landscaping or rehabilitation plan, each plan must:

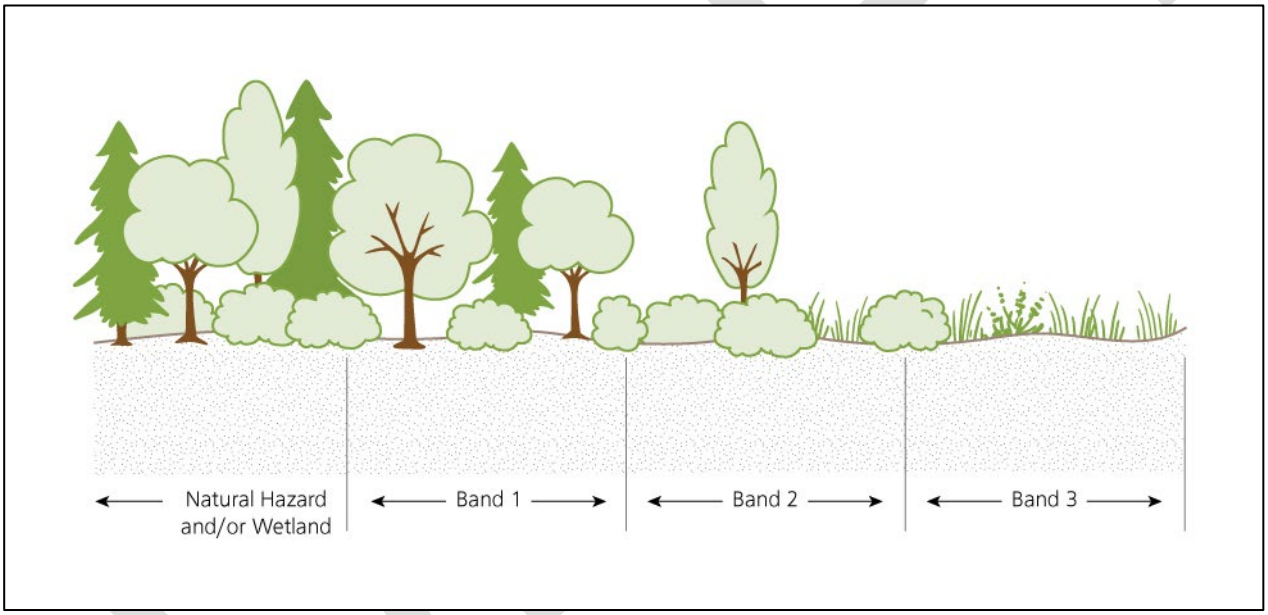
- ☐ Identify if a fence is necessary to deter encroachment into the planting area.
- ☐ Include thorny species, such as raspberries, blackberries and hawthorns, in the perimeter vegetation screen of natural area plantings to help deter encroachment and trampling by people and certain types of wildlife.
- ☐ Plant shrubs which are equal to or larger than 1-gallon pots or equivalent.

- ☐ Include wildlife habitat features, where appropriate.
- ☐ Provide winter cover for wildlife and wind and snow breaks by clumping conifers and using small shade tolerant conifers as understorey among deciduous trees.

Since each site is unique, landscaping plans will be reviewed on a site-by-site basis to determine the most appropriate planting approach.

Regardless of the natural hazard or wetland present, the planting area is made up of three distinct vegetated bands. The purpose of these bands is to create transitions between the natural hazard or wetland, and the proposed development. Band 1 is located closest to the natural feature and tends to be the most densely planted. The width of Band 1 should be a minimum of 5 m for all allowances 15 m wide or less. For all allowances greater than 15 m, the width of Band 1 is half of the total allowance width. Band 2 is made up of sparser woody plantings interplanted with groundcover plantings while Band 3 blends into the surrounding developable envelope consisting only of native herbaceous and graminoid species. The width of Band 2 and 3 will be determined on a site-by-site basis. As illustrated in Figure 3-1, the minimum planting densities are broken down into three bands to create a gradual transition between the natural area and the proposed development.

FIGURE 3-1: VEGETATION BANDS ADJACENT TO NATURAL HAZARD AND/OR WETLAND



There are a variety of ecological community types that might be classified as natural hazards. This section pertains to wetlands, valleys (typically woodlands) and shorelines, as these comprise most natural areas that require adjacent landscaping. Plantings adjacent to all other ecological community types are dealt with on a site-by-site basis. Table 3-3 outlines the planting criteria by vegetation community.

TABLE 3-3 BANDS CRITERIA BY HABITAT

Habitat	Band 1	Band 2	Band 3	Considerations
Woodlands and swamps	☐ Indicate tree density of 5 trees per 100 m^2 ☐ Indicate shrubs density of 5 trees/25 shrubs (for every tree planted, 5 shrubs should be planted) per 100 m^2. ☐ Locate proposed trails, if any, in other bands and/or away from the natural feature.	☐ Indicate tree density of 3 trees per 100m^2. ☐ Indicate shrubs in this band at a shrub to tree ratio of 5:1.	☐ Indicate a ground cover mix as prescribed in the General Standards section of this document.	
Thickets and thicket swamps	☐ Plant at a density of 25 shrubs per 100 m^2. ☐ Plant appropriate groundcover/seed mix around and between shrubs.	☐ Plant Bands 2 and 3 as a gradient to transition from woody vegetation to ground cover species dominated adjacent to the development.		
Shallow marshes, meadow marshes, along wetland pond edges, wet meadows/prairies, or similar shallow aquatic habitats	☐ Plant at a density of 15 shrubs per 100 m^2 in a gradient with most shrubs located adjacent to the remaining natural area. ☐ Plant appropriate groundcover/seed mix around and between shrubs.	☐ Plant a secondary band of herbaceous cover adjacent to the proposed development.		☐ The width of bands 2 and 3 will be determined on a site-by-site basis and will vary depending on the quality of the natural area. ☐ Shrub plantings are recommended closest to herbaceous wetlands as a mitigation measure. In certain instances, planting a reverse vegetation band around an herbaceous wetland (e.g. shrubs in Band 3) may be recommended to prevent encroachment into the critical function zone of the wetland.
Vegetated Shoreline along Lake Ontario and Hamilton Harbour	☐ Plant 5 trees per 100 m^2 and 5 shrubs per 100 m^2 within the band immediately adjacent to the shoreline. ☐ Plant coniferous trees as they provide ideal habitat and foraging areas for birds throughout the year as well a wind and snow break. ☐ Cluster plantings to preserve views to the lake.	❑ Plant native herbaceous species in Band 2 and 3		Shoreline plantings are exposed to extreme conditions along the Lake Ontario and Hamilton Harbour shoreline. Due to this harsh environment, a qualified coastal and geotechnical engineer may need to be consulted. Not all plants are suitable for use in bioengineering and stabilization works along the shoreline and specified species need to be resistant to wind, tolerant to sun and fluctuating water levels. It is essential to consider ground cover in the planting plan. Exposed areas are subject to erosion via wind and rain. Ground cover can protect these areas to prevent topsoil loss and sediment release into the water. A dense tree/shrub zone is beneficial along shorelines as it: • protects against erosion in a harsh environment; • deters geese; • provides habitat for migrating wildlife; and, • provides mutual support against the elements when planted near existing trees and shrubs. It is important to design landscaping that requires minimal to no fertilizer to prevent the runoff from entering the lake and leading to algae blooms.

Provided below in Table 3-4 is an example of band plantings to be included in the submission.

TABLE 3-4: EXAMPLE BAND PLANTINGS

Band	*Area*	*Requirement Densities*	*Required Quantity of Plantings*
Band 1	*4000 m^2*	*Total Tree (5 Trees/ 100 m^2)*	*200*
		5% Caliper	*10*
		50% whip and/or sapling	*100*
		45% seedling and/or plug	*90*
		Total Shrubs (5 Shrubs per Tree)	*1000*
		Groundcover	*Refer to section or provide seed mix, percentage and application*
Band 2	*2000 m^2*	*Total Tree (3 Trees/ 100 m^2)*	*60*
		5% Caliper	*3*
		50% whip and/or sapling	*30*
		45% seedling and/or plug	*27*
		Total Shrubs (5 Shrubs per Tree)	*300*
		Groundcover	*Refer to section or provide seed mix, percentage and application*
Band 3	*2000 m^2*	*Groundcover*	*Refer to section or provide seed mix, percentage and application*

Section 4 Wildlife Habitat Features

Landscaping and rehabilitation works can help improve the ecological function of the watershed by including the creation or enhancement of a variety of wildlife habitat features. Wildlife habitat features can foster biodiversity by supporting wildlife populations in the local ecosystem, from invertebrates like bees, butterflies, and other pollinators, to amphibians, birds, and many other animals. Among other benefits, a diverse ecosystem with a variety of plants and wildlife habitats can reduce the risks of pest outbreaks, provide natural balance, and improve the resiliency of the ecosystem. A fundamental characteristic of ecosystems is that biological complexity and diversity requires habitat with structural complexity.

When preparing a landscaping or rehabilitation plan, each plan should:

- ☐ Include wildlife habitat features.
- ☐ Demonstrate how structure and diversity are achieved.
- ☐ List maintenance requirements, if any, of the structure (e.g., cleaning of bird and bat boxes, weed turtle nesting sites, etc.).

4.1 Types of Wildlife Habitat Features

The following subsections provide examples of various wildlife habitat feature types which can contribute to the structural complexity. While these are not requirements for all projects, incorporating them is encouraged to provide diversity and a benefit to the overall system.

4.1.1 **Topographic Diversity**

Topographic diversity creates habitat heterogeneity by creating micro-climates with varying levels of shade and moisture. To support topographic diversity:

- ☐ Incorporate small pockets of wet meadow/wetlands/shallow seasonal pools within the newly graded areas to provide greater variety in terrestrial habitat, short term water retention and in some locations, a more natural floodplain form.
- ☐ Design wetland habitat to mimic hummocky features or varied microtopography, including basking mounds, oxbows and pit-and-mound features.

Seeding during construction of pit-and-mound features

Vegetation growth post construction of pit-and-mound features

4.1.2 **Rock Piles**

Rock piles offer structures for loafing, perching basking and refuge to various wildlife. To support habitat diversity:

- ☐ Add rock piles into vegetated areas. Rock piles may vary considerably in size, shape and composition, depending on factors such as the intended purpose, target species, topography and vegetation. Materials may vary, but typically consist of flat rocks, riverstone, cobble and/or small boulders. Riprap is not appropriate for creating wildlife habitat purposes.

4.1.3 **Brush Piles**

Brush piles on the ground are important components of wildlife habitat as they provide cover and protection during various life stages. To support habitat diversity:

- ☐ Stack small piles of brush (1 to 2 m in height, 3 to 5 m in width and 5 to 10 m in length) to create hiding cover and denning sites for small mammals and nest sites and shelter for birds.
- ☐ Seed/plant native groundcover and vines under and around the brush pile to encourage vegetation to grow over and around the structure, enhancing cover for wildlife.
- ☐ Include large wood structures like logs and limbs to provide habitat for small wildlife, such as birds, salamanders, toads, frogs and invertebrates.
- ☐ Reuse native, non-invasive woody material removed on or near the site.

Example of a rock pile in a newly realigned creek corridor

Example of a brush pile

4.1.4 **Hibernacula**

Hibernacula is another important component of creating wildlife habitat. Since the creation or enhancement of hibernacula is a relatively complex project, consultation with CH staff is recommended.

4.1.5 **Nesting Sites**

Several specific criteria must be met when creating a nesting site, depending on the target species. Installing bird boxes is relatively straightforward. Fine woody debris and mulch piles can be used as basking and nesting sites for reptiles when positioned in partially shaded locations. However, for many species such as reptiles, nest site design details are critical. Consultation with CH staff is recommended.

Example of a nesting site made of mulch

Example of a snake hibernacula made of an assortment of rocks and branches built into the ground

4.1.6 **Snags and Perching Trees**

Snags and perching trees for raptor habitat ensures that habitat is available for large avian predators and similar wildlife. These in turn provide important ecosystem services and functions, including small animal control. To support raptor habitat:

- ☐ Retain tall trees for owl and raptor perches. De-limb trees and leave standing as snags for other wildlife habitat features as well (e.g. woodpeckers, owls, warblers, tree frogs).
- ☐ Install snags on tablelands away from floodplain.
- ☐ Maintain a minimum of 10 m separation distance between installed snags from prey habitat (i.e., hibernacula, brush piles and turtle nesting sites).
- ☐ To improve the snag's longevity, include a layer of gravel 15 cm deep in the post-hole, below the post as a drainage layer, reducing decay at the base of the post/tree, and mound the earth slightly around the installed snag at grade to encourage runoff to flow away from the post to reduce moisture retention against the post.
- ☐ Include boulders at grade to provide extra ballast, or support for the snag where appropriate.
- ☐ Locate snags and perching trees away from trails to be consistent with municipal hazard tree guidelines.

Example of a raptor pole made of an ash damaged by Emerald Ash Borer

4.1.7 **Instream Habitat**

Works in or near water should consider opportunities for creating habitat heterogeneity for fish and other aquatic wildlife consistent with what is present in the referenced reach. To support fish and aquatic habitat:

- ☐ Provide cover, lunkers, vegetative overhangs such as large woody objects (e.g., logs, root wads, etc.) or boulders. Streambank vegetation plantings contribute to habitat for aquatic organisms and provide allochthonous materials to the stream.
- ☐ Coordinate design with the fluvial geomorphologist to ensure the features do not negatively affect the form and function of the stream.

Example of instream habitat built into the creek bank

Example of instream habitat anchored into an offline wetland

Section 5 Submission and Drawings

Once the landscaping and rehabilitation plan is complete and ready for submission, a copy of the Landscaping Checklist must be completed and signed by the qualified professional to be considered a complete submission. A copy of this checklist can also be found at www.conservationhalton.ca or available at the Administration Office. While not all the information below is applicable to all projects, applications must include the information in the General Section to ensure a timely review and reduce the number of resubmissions.

TABLE 5-1: DRAWING REQUIREMENTS

	1st Submission
☐	All planting plans are completed, stamped, and signed by a qualified professional if applicable.
☐	Key map, written and graphic scale, north arrow, project name and location, name and contact information for applicant/owner and qualified professional are shown on the plan.
☐	Property boundary and CH regulated areas are shown clearly on all drawings.
☐	A reference to project goals and site condition/context on drawings is included.
☐	All features shown on landscaping drawings are consistent with other works (e.g., location of ESC, tree protection fencing, location of proposed structures, etc.).
☐	All sensitive timing windows are noted where appropriate on drawings.
☐	Areas of retention and/or species to be protected are shown on all drawings (e.g., vegetation protection and/or erosion and sediment control measures)
☐	Extent of disturbance is shown on drawings.
☐	Location of infrastructure (above and underground) that may affect the proposed landscaping plans (e.g., utility lines, snow storage, etc.) is shown on drawings.
☐	Summary table providing the calculations in square metres for the total plantable area for the areas to be vegetated (excluding any infrastructure such as trails), and total number of trees and shrubs and seed mix in each submission.
☐	Details as outlined in the General and Project Specific standards are included.
☐	Digital and if necessary, hardcopy drawings folded to a standard letter size (8 1/2" x11").
	Additional Submissions
☐	A cover letter outlining the changes to the revised landscaping plan and highlighting the changes on the plans directly.
	Upon Completion of Works
☐	A certified letter from the qualified professional confirming that plans have been implemented as per the approved plans.
☐	Discrepancies between the proposed and as-built plans and the rationale for these are included in the certified letter. Remediation may be required where the difference is substantial.
Submission Prepared by:	Date (day/month/year)

References

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Glossary of Terms

Terms	Definitions
Allelopathic	A chemical emitted from certain plants that reduces some plant's ability to grow optimally. Examples of allelopathic plants are: Black Walnut, *Juglans nigra*, Sumac, *Rhus Typhina* and goldenrods *Solidago spp.*
Allochthonous	An input into a system of an organic nature such as woody materials or aquatic invertebrates.
Ball and Burlap	The intact ball of earth containing the roots of nursery stock that has been hand dug, balled, and wrapped in burlap.
Bareroot	The root system of nursery stock without a ball of earth.
Bioengineering	Soil bioengineering is an established method of stabilizing or protecting erodible soils using dormant cuttings of hardy, native plant material. Structures provide immediate mechanical stability while a vigorous root matrix is established within the soil. As the stabilization is provided by living vegetation, reinforcement provided grows stronger and more effective over time.
Caliper	The above ground diameter of a distinct part of a nursery stock stem, measures in accordance with the Canadian Standards for Nursery Stock. CH considers deciduous trees with a diameter of 4 cm or greater and a conifer with a height of 150 cm or greater as caliper stock. Generally supplied in 7 gallon or larger containers.
Coefficient of wetness	A measure of the tolerance of a plant species to soil moisture conditions. It is a value on a scale from -5 to +5 that represents the soil moisture regime for the plant species: These categories are defined as follows: OBL (-5) Obligate Wetland - Occurs almost always in wetlands under natural conditions (estimated > 99% probability). FACW (-2 to -4) Facultative Wetland - Usually occurs in wetlands, but occasionally found in non-wetlands (estimated 67-99% probability). FAC (-1 to +1) Facultative - Equally likely to occur in wetlands or non-wetlands (estimated 34- 66% probability). FACU (+2 to +4) Facultative Upland - Occasionally occurs in wetlands, but usually occurs in non-wetlands (estimated 1-33 % probability). UPL (+5) Obligate Upland - Occurs almost never in wetlands under natural conditions (estimated < 1 % probability).
Companion planting	A nodal planting made up of an assortment of species that mutually benefits each other. The shade intolerant species are located on the outside of the node to maximize on sunlight and provide a barrier to shade intolerant located in the middle of the node.

Terms	Definitions
Crown	Part of the plant directly above where the branching begins.
Cultivar	A variety of a plant developed from a natural species and maintained under cultivation.
Diameter at Breast Height (DBH)	Standard measurement to establish the diameter of a tree. The diameter at breast height (DBH) is measured at 137 cm above the ground.
Dripline	The edge of the tree canopy.
Ecological Land Classification	The Ontario Ministry of Natural Resources and Forestry (MNRF) system that classifies ecological units based on bedrock, climate (temperature, precipitation), physiography (soils, slope, aspect) and corresponding vegetation.
Fascine	A long bundle of overlapping live shrub cuttings held together by twine.
Free-to-Grow	A self-sustaining state of a plant that no longer requires maintenance and is generally free of vegetative competition. To achieve a free-to-grow state, the landscape plans should indicate growth measures such as the target size of caliper, root collar measurement, height of the plant, crown or other targets for determining when maintenance is no longer required.
Forb	A non-woody flowering plant. Also referred to as an herbaceous plant.
Graminoid	A grass like plant often referring to the *Poaceae* (grasses), *Cyperaceae* (sedges) and *Juncacea* (rushes) families.
Herbaceous	An adjective representing herb like plants. More generally, herbaceous plants are non-woody flowering plants. Also referred to as a forb.
Landscaping and Rehabilitation Plan	Proposed planting plan. Throughout this document, the term landscaping and rehabilitation plans refers to all restoration, reforestation and enhancement planting plans.
Live Stake	Cuttings from live, rootable woody species.
Locally Common Species	A plant species observed in over 15 natural areas in the respective NAIs.
Locally Native	A species identified in the Natural Area Inventory as naturally occurring within a specified jurisdiction (e.g., Halton Region).
Locally Rare Species	A species considered rare at a local (e.g., local or regional municipality) level.
Locally Uncommon Species	A plant species observed in 6 - 15 natural areas in the respective NAIs
Native	Indigenous to a region, having evolved there as part of an ecosystem over a long period.

Terms	Definitions
Natural Feature	Features and areas, including wetlands, coastal wetlands, watercourses, valleys, which are important for their biodiversity/biological/ecological, environmental, and social values as a legacy of the natural landscapes of an area.
Naturalized	Non-native species which are established in a region and able to reproduce successfully and live alongside native species in the wild. Naturalized species may be introduced intentionally or unintentionally.
Non-Native	A species that does not originate from a specified jurisdiction (e.g., Halton Region). Sometimes described as 'Introduced'.
Nurse Crops	Fast growing annual groundcover species that establish within one growing season and provide stabilization. Typically, short lived.
Plant Type	Refers to trees, shrubs, forbs, vines, ferns and graminoids.
Plugs	A cylinder of soil in which a plant is grown, generally used for seedlings and rooted cuttings.
Potted	Plants with an intact soil ball and placed in a container, in lieu of burlap.
Regionally Rare	A species known in five or fewer sites in Halton Region/City of Hamilton as identified during the Halton/Hamilton Natural Areas Inventory (NAI).
Provincially Rare Species	A species with a subnational (provincial) rank of S1 to S3.
Qualified Professional	A person with specific qualifications, training, and experience authorized to undertake work in accordance with the policies in accepted arboriculture, forestry, landscape architecture, ecology or scientific principles, provincial standards, criteria and guidelines, and/or to the satisfaction of the Conservation Halton.
Sapling	A young tree without branches; in some species and grades spurs may be present. Also referred to as a whip.
Seedling	A cylinder of soil in which a plant is grown. Also referred to a plug.
Self-Sustaining Vegetation	Vegetation dominated by plants that can grow and persist without direct human management, protection or tending.
Shear Stress	The force applied to the stream bank from the flowing water, which can cause the movement of soil particles.
Shoot	A bud, young leaf, or other new growth on a plant.
Sod Block/Mat	A mat of existing vegetation that is removed from a site prior to works and stored to be used in the rehabilitation of the site post construction.

Terms	Definitions
Species at Risk	A species that has been designated by either the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or the Committee on the Status of Species at Risk in Ontario (COSSARO) and the Ontario Ministry of Natural Resources and Forestry as being Extinct, Extirpated, Endangered, Threatened or Special Concern.
Stormwater Management	The control of rainfall, snowmelt and runoff from activities such as watering lawns, washing cars and draining pools, that seeps into the ground or runs off the land into storm sewers, watercourses and lakes.
Stormwater Management Facility	The entire stormwater management area including the pond, the outlet and accessory areas.
Stormwater Management Pond	Dry pond - A detention basin designed to temporarily store collected stormwater runoff and release it at a controlled rate through an outlet. Dry ponds may have a deep pool of water in the sediment forebay to reduce scour and re-suspension of sediment, but do not have a permanent pool of water in the main basin. This means that there is no opportunity for settling of contaminants between storm events and dilution of stormwater contaminants during storms. Wet pond - A detention basin designed to temporarily store collected stormwater runoff and release it at a controlled rate. It is different from a dry pond in that it maintains a permanent pool of water between storm events which provides quality control.
Submergent	Rooted hydrophytes with leaves entirely under the water surface.
Topsoil	Upper, outermost layer of soil, with the most organic matter and nutrients.
Watershed	All land and water within the confines of a drainage basin.
Whip	A young tree without branches. Also referred to as a sapling.
Woodland	Forested, treed, and woodlot areas, including cultural Vegetation Types as defined by the Ecological Land Classification system or the *Forestry Act.*

Appendix 1: Best Practices, Helpful Tips and Other Considerations

This appendix provides more direction on approaches that can be taken to ensure a project's success and reduce submissions. This advice represents best management practices and evidence-based successful approaches adopted in CH's watershed. The sections are organized by the subsections of the General Standards.

Before drawings are drafted, review all higher-level policies, studies and plans that pertain to the proposed development. These high-level policies, studies and plans may identify goals that should be achieved through landscaping or rehabilitation works. They may also provide direction on the expected outcome of landscaping and rehabilitation works.

When an ecological and/or hydrological study has not been completed, identify and account for the form and function of natural features in the landscaping plans. In all cases, ensure consistency between the landscaping plans and other drawings (e.g., erosion and sediment control, site plan, etc.).

Guideline Outline

This document is divided into five sections:

A. **Design Considerations** – Lists factors to consider when preparing a Landscaping and Rehabilitation Plan.

B. **Edge Management Plan** – Describes a specific landscaping or rehabilitation plan for works along the edge of a regulated area.

C. **Topsoil** – Outlines additional tips for ensuring the quality of topsoil.

D. **Planting Considerations** – Lists several considerations for plant selection and planting approaches.

E. **Wildlife** – Considerations for wildlife in Landscaping and Rehabilitation Plans.

A. Design Considerations

Several factors could affect the landscaping and rehabilitation plans. While these factors do not all need to be provided on a plan, except for the ARL, the list below outlines most factors to be considered during the preparation of plans such as the site context, existing site condition, the timing of the proposed plantings and the planting plan's coordination with the development application. This list is not comprehensive but provides a starting point for typical considerations in plan preparation.

Site Context

- CH's Approximate Regulated Limit and Natural Heritage System - where applicable and as defined by the regional or municipal official plan or higher planning document.
- Existing Challenges - light, noise, particulates, road salt, etc.

Site Condition

- Vegetation - existing and surrounding vegetation, species tolerances, invasive species and plants that host pests, potential for plant salvage and/or seed harvest.
- Wildlife - sensitive timing windows, colonization potential, wildlife exclusion measures, wildlife encounter protocols, etc.

- Soils and Physiography - soil composition, depth, quality, drainage, slope and aspect, wetness/dryness of site, existing erosion.
- Hydrology - fluvial geomorphology, floodplain, meander belt, low water and high-water mark, potential groundwater interactions.
- Elements - prevalent wind patterns, shade/part-shade from adjacent trees or buildings, landforms or structures, micro-climate.
- Structures - existing infrastructure and utilities located above and below ground, historic land uses that may be in or adjacent to proposed works.

Timing

- Season, duration, and phasing of proposed works.
- Native species stock availability.

Design Conditions

- Extent of proposed development and how it may impact site conditions (e.g., soil compaction, stockpiling, road salt, wind tunnels, etc.).
- Stabilization requirements.
- Grading.
- Altered hydrology, potential wetness/dryness of site.
- Post-construction or post-development use.
- Adjacent sites.
- Suitability of project for low impact development (LID).

B. Edge Management Plan

An Edge Management Plan may be recommended as part of a site-specific environmental impact study/assessment where tree, shrub or vegetation clearing/disturbance involves the existing edge of a regulated natural feature (e.g., wetland, valley). This Plan typically consists of plantings to restore functions and protect the feature from adjacent disturbances. Impacts from such disturbance can include changes to light penetration, increased air movement and associated drying effects, loss of trees/shrubs and groundcover, introduction of exotic or invasive species, decreased biodiversity, alterations of habitat form and function, overall loss of resilience, etc.

C. Topsoil

Proper topsoil application and management is key to pollution prevention, sedimentation and reducing the ecological footprint. In many instances, the quality and quantity of topsoil at the site pre and post development is unknown and consequently will affect the survivability of the plants. Determining the appropriate amount and types of amendments by completing a soil test and sourcing amendments from renewable resources are two examples of topsoil best management practices.

Soil Tests

Excessive application of soil amendments may negatively result in nutrient loading and potentially leaching into nearby waterways. Prior to completing any works, determine if the existing topsoil is salvageable and/or requires amendments by completing a soil test. Should soil amendments be deemed necessary, CH recommends sourcing soil amendments from sustainable practices such as incorporating leaf mulch, or

compost from municipal compost systems that meet Category AA or A of the MECP Ontario Compost Standard Quality.

Peat Moss

Avoid using peat moss as it is a non-renewable resource. Its harvest damages the wetlands it is removed from, making its use unsustainable. Where organic content of soil needs to be amended, alternatives can include coir mulch, compost, fine-textured wood mulch or leaf mulch, which may be available from municipal leaf-collection programs.

D. Planting Considerations

Listed below are various considerations for ensuring appropriate naturalization techniques are adopted.

Conservation Halton's Seed Mix and Native Species List

CH developed a variety of seed mixes that are appropriate for use within our watershed and are suitable for rehabilitation purposes and naturalization projects as well as for stormwater management facilities. They are designed for use in a variety of soil and moisture conditions and are available online on CH's Policies and Guidelines webpage (www.conservationhalton.ca).

The Native Species List provides a list of acceptable species for planting plans in regulated areas. The identified species are not exhaustive as other species may be appropriate for the site, and any locally native non-invasive could be added to the seed mixture (www.conservationhalton.ca).

Establishing Long-term Native Cover

When creating a seed mix, consider including seeds that will germinate immediately the following growing season (nurse crop) and in three to five years. Keep in mind that some native seeds are hard to grow and may not bloom within the two-year warranty and monitoring period. For example, *Impatiens* sp. seeds undergo a double dormancy and may not grow until two to three years after seeding.

Ground Cover Seed Distribution

Consider the distribution method for seed application. Some native seeds may get caught or not germinate in the hydroseeding slurry. Pair the size of seed and medium (tackifier and mulch) appropriately or use an alternative method (e.g., drill seeding, Terraseeding, or broadcast spreading). Specify on the plans:

- Equipment will be seed free prior to starting a new project.
- Seeds to be hand-broadcast on the surface and ensure seed to soil contact for a small site.
- Fluffy seeds are sowed separately.
- Seed grasses with complete awns as it increases germination and buries itself.

Naturalization with Local Species

CH promotes naturalization of regulated areas by using locally native and representative vegetation.

Seed and stock collected from within CH's seed zone (Zone 34 and 37) are ideal for use, as they contain genetic traits that have evolved through long-term adaptation by the species to local micro-climates and other conditions.

Pests

Consideration should be given to the increasing threat of pests on our native flora. CH recommends planting a diversity of species when developing a landscaping plan to ensure the site is more resilient to future pests. For more information consult the Canadian Food Inspection Agency and the Tree, Insects and Diseases of Canada from Natural Resources Canada to determine native alternatives that are not host species to various pests.

Seed/Sod Mat/Soil Salvage

Prior to construction, collect any suitable native seeds, sod mats or soil present. When development projects will take several years to complete, harvest and store local seed for post-construction rehabilitation. Depending on the extent of disturbance, the seeds harvested from these areas will likely be suitable for the conditions of the area once works are complete. Exercise care when stratifying the seeds to maintain viability during the storage period.

Timing

Summer plantings are inevitable. Caution should be used when planting during the typical high temperature summer months due to drought conditions. Survivability during non-optimal planting periods include:

- Keeping planting stock out of the sun,
- Planting during prior to or after peak sun periods, and
- Increasing the frequency of watering

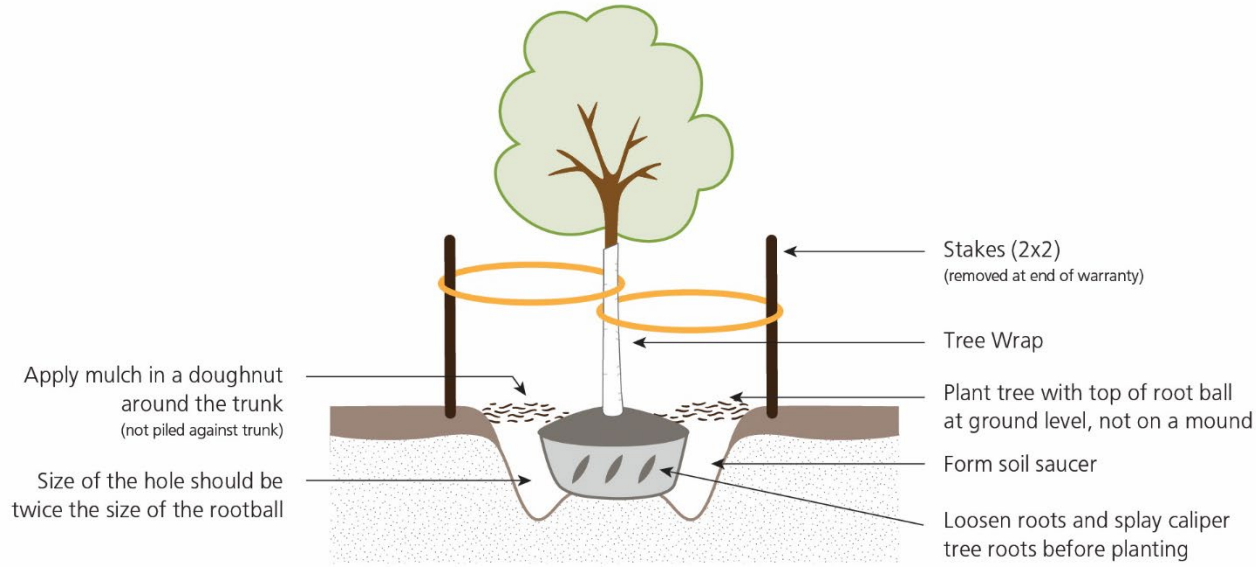
The appropriate time of sowing nurse crop depends on the species and its hardiness to frost. Confirmation of the appropriate nurse crops should be provided once the timing of works has been determined.

Trees and Shrubs Planting Notes

Additional direction in the planting notes or detail as shown on Figure A can help ensure that the plantings get installed correctly and survive. Consider the following advice when composing the landscaping notes:

- Loosen the roots of rootbound individuals and splay immediately before planting for caliper and potted stock. Rootbound plants may need their roots to be pruned. If roots need to be pruned, use only sharp tools to ensure a clean cut. Pruned ends should face obliquely downwards.
- Scarify the sides of the planting hole, when planting in clay or compacted soils, to loosen soil and allow for ease of root growth.
- Plant on firm subsoil, no deeper than the depth of the rootball.
- Plant trees at ground level, not mounded or depressed. Plant shrubs slightly above grade by no more than 2.5 cm.
- Loosen soil within the planting hole to encourage ease of root growth. Remove substantial rocks and large stones. No air pockets should be present during backfill.
- Stake and tie all caliper trees to prevent uprooting in high wind conditions. Ties should consist of tree ties, or galvanized wire in conjunction with protective material at the point of contact with the tree trunk. Ties should hold the tree firmly in place while being loose enough to allow some gentle swaying of the trunk and should not come into contact with branches.
- Specify staking and tie installation and removal.
- Apply mulch in a donut formation around tree trunk at 7.5 -10 cm in depth approximately at the dripline of the tree. Allow soil to be exposed at the base of tree, to prevent moisture from being trapped against the trunk.

FIGURE A: CALIPER TREE PLANTING DETAIL



RECOMMENDED
- Tamp soil firmly to remove air pockets
- Soak backfilled soil with water after planting
- Consider adding mycorrhizal inoculant to soil

Tree and Shrub Planting Approaches

The planting density of woody vegetation is determined based on the project goals. Outlined below and in Figure B are two effective methods of approaching landscaping: nodal planting or scatter planting.

Clustered/Nodal Plantings: Cluster plantings of trees and shrubs.

- Select node size based on site and rehabilitation goals, typically 5-30 m^2
- Space out nodes, typically no more than 6 m apart
- Provide 1.2 - 1.8 m spacing between trees (closer than 2.5 m) to promote early crown closure, shading of competing ground cover and promote vertical growth
- Cluster trees with similar growth rate together to encourage long-term survival
- Surround late successional species with adjacent early successional species
- Sow native ground cover around node plantings
- Mulch the entire bed to prevent weeds from establishing
- Locate nodes based on moisture regime zones

Scatter Plantings: Trees and shrubs are spread out in a random fashion throughout the site

- Plant trees no closer than 2.5 m
- Plant shrubs between 0.75 – 1.5 m
- Plant a diversity of ages
- Individually mulch the tree and shrub pits
- Seed and stabilize the area between the woody plantings with native groundcover

FIGURE B: PLANTING APPROACHES

E. Wildlife

Important Bird Areas

CH's Lake Ontario and Hamilton Harbour shorelines are designated as Important Bird Areas by BirdLife International, which is supported by Bird Studies Canada and Nature Canada. It is also a migratory pathway for wildlife every spring and fall. Planting trees and shrubs along the shoreline provides perching, resting, foraging and nesting locations. Woody vegetation also buffers noise and sound pollution from the lake and the associated wildlife.

Canada Geese

Canada Geese are typically found grazing near shorelines, beaches, lawns and other open grassed areas near water. The best way to reduce the number of Canada Geese entering a landscaping area is to make the site undesirable to them.

Canada Geese use water as an escape route from predators. To create a visual barrier between geese and their escape route:

- Plant a dense swath of vegetation along the waters edge, such as a dense shrub layer and trees.
- Include a screen of cattails or similar robust shoreline vegetation.
- Install a low fence (30 – 60 cm high) located within the shrub plantings to restrict geese access to and from the water.
- Avoid extensive areas of lawn or sod.
- Plant areas of mixed native wildflowers and other ground cover instead, as geese are more likely to move elsewhere to graze on grassy lawns.

The *Migratory Birds Convention Act,* 1994 protects Canada Geese. For more information on controlling Canada Geese, contact Canadian Wildlife Service, Ontario Region (ec.enviroinfo.ec@canada.ca).

June
2021

REPORT TO: Conservation Halton Board of Directors

REPORT NO: # CHBD 05 21 04

FROM: Craig Machan, Director, Parks and Operations

DATE: June 17, 2021

SUBJECT: **Appointment of Provincial Offences Officer under R.R.O. 1990, Regulation 108 pursuant to the *Conservation Authorities Act***

Recommendation

THAT the Conservation Halton Board of Directors **approves the appointment of Trudy Kolpean as an Officer, as set out in the Conservation Authorities Act and R.R.O. 1990, Regulation 108.**

Report

Appointment of Conservation Halton staff as an Officer is concurrent with their employment with Conservation Halton and they are required to successfully complete a Provincial Offences Officer course. Upon leaving the employment of Conservation Halton, the employee would no longer be an Officer under the Regulation.

With the 1998/1999 amendments to the Conservation Authorities Act, the Province has delegated the power to Conservation Authorities for the appointment of Officers to administer and enforce different aspects of the Act.

Staff members in Park and Operations at Conservation Halton are involved in the administration and enforcement of R.R.O. 1990, Regulation 108, passed pursuant to Section 29 of the Conservation Authorities Act and Section 14 of R.R.O. 1990, Regulation 108. This appointment specifically authorizes staff to enforce violations. This appointment applies to Trudy Kolpean in her position as a Risk & Enforcement Ranger.

As a Provincial Offences Officer, Trudy Kolpean will be responsible for the enforcement of R.R.O. 1990, Regulation 108. Trudy has successfully completed Provincial Offences Training and has experience in enforcement. Based upon enforcement training and work experience, Trudy meets the requirements to be designated as a Provincial Offences Officer.

Detection and enforcement of violations under R.R.O. 1990, Regulation 108 allows Officers to deal with violations occurring within our Conservation Areas to ensure that unwanted activities do not persist. An additional Officer means that violations are dealt with more effectively to ensure that larger issues do not occur.

Impact on Strategic Priorities

This report supports the Momentum priority of Nature and Parks.

Financial Impact

Detection and enforcement of violations under R.R.O. 1990, Regulation 108 allows Officers to deal with violations occurring within our Conservation Areas to ensure that unwanted activities do not persist. An additional Officer means that violations are dealt with more effectively to ensure that larger issues do not occur.

Signed & respectfully submitted:

Craig Machan
Director, Parks and Operations

Approved for circulation:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT:

Casey Forbes, Coordinator, Risk & Enforcement, # 905-693-2010, **cforbes@hrca.on.ca**

June
2021

REPORT TO: **Conservation Halton Board of Directors**

REPORT NO: CHBD 05 21 05

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

DATE: June 17, 2021

SUBJECT: **Appointment of Provincial Offences Officer under Ontario Regulation 162/06 pursuant to the *Conservation Authorities Act***

THAT the Conservation Halton Board of Directors **approves the appointment of Justin Vetro as an Officer, as set out in the Conservation Authorities Act and Ontario Regulation 162/06.**

Report

With the 1998/1999 amendments to the *Conservation Authorities Act*, the Province has delegated power to Conservation Authorities to appoint Officers to administer and enforce different aspects of the Act.

Regulations Program staff within the Department of Planning and Watershed Management at Conservation Halton (CH), pursuant to Section 28 of the *Conservation Authorities Act* and Section 10 of *Ontario Regulation 162/06*, administer and enforce Ontario Regulation*162/06*. The appointment of Officers specifically authorizes them to gather evidence for permit compliance and potential violations.

Justin Vetra has been hired to fill a two-year contract as a Compliance Inspector in the Regulations Program. Justin will start his employment with CH on July 5, 2021. He will be responsible for inspections, investigations, and enforcement of *Ontario Regulation 162/06*. In his previous position as a Revenue Protection Officer at Metrolinx,

Justin obtained his Provincial Offences Officer designation. Justin also has a College Diploma in Police Foundations. Given his credentials, Justin meets the requirements for designation as a Provincial Offences Officer with CH. It is recommended that the CH Board of Directors appoint Justin Vetra as an Officer for CH. Upon leaving the employment of CH, Justin will no longer be an Officer under *Ontario Regulation 162/06.*

Impact on Strategic Priorities

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

Financial Impact

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

June
2021

Signed & respectfully submitted:

Barbara Veale
Director, Planning and Watershed Management

Approved for circulation:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Charles Priddle, Manager, Regulations Program; 905-336-1158x2276; cpriddle@hrca.on.ca

June
2021

REPORT TO: **Conservation Halton Board of Directors**

REPORT NO: # CHBD 05 21 06

FROM: Marnie Piggot, Director Finance

DATE: June 17, 2021

SUBJECT: **Budget Variance Report for the Period Ended April 30, 2021 and 2021 Projected Year End Amounts**

Recommendation

THAT the Conservation Halton Board of Directors **approves a transfer of $820,487 to the Property Management Reserve for a donation received as part of an estate settlement that Conservation Halton was named as one of the beneficiaries;**

And

THAT the closing of and changes to the Dams and Channels capital project amounts noted on the Capital Project Summary Financial Appendix **be approved based on provincial Water and Erosion Control Infrastructure (WECI) funding submissions noted in the staff report dated June 17, 2021;**

And

THAT capital budget amounts in the 2020 and 2021 budgets allocated to Clappison & Waterdown Woods totaling $50,000 and municipally funded **be approved to be reclassified as Property Management capital projects within non-revenue generating areas to provide for the protection and preservation from damage of the property of Conservation Halton consistent with Section 29 of the Conservation Authorities Act;**

And

That the Conservation Halton Board of Directors **receives for information the staff report dated June 17, 2021 on the Budget Variance Report for the period ended April 30, 2021 and 2021 Projected Year End Amounts.**

Executive Summary

An operating deficit for 2021 of almost ($830,000) is projected in the attached Budget Variance Report (Appendix B) for the period ended April 30, 2021. Projected year end amounts are based on conservative estimates by staff for the remainder of the year. The projected deficit is an improvement from the earlier $1.1 million deficit projected solely for the Parks in the February 18, 2021 memo to the Board regarding the Glen Eden closure during the previous provincial shutdown order.

Operating revenues and expenses will continue to be monitored for the remainder of the year to ensure a potential deficit is mitigated to the extent possible. Transfers from Stabilization Reserves will be recommended later in the year if required to offset operating fund deficits. A Reserve Continuity schedule (Appendix C) with reserve balances projected to the end of year is also provided for information.

The projected operating deficit is summarized in the table below that provides a comparison to the 2021 budget amounts for Watershed Management and Support Services (WMSS) and the Conservation Areas. Operating deficits are projected in both the WMSS program of ($254,807) and ($574,868) in the Conservation Areas for a combined total of ($829,675).

Program	YTD ACTUAL APR. 30, 2021	2021 PROJECTED	2021 BUDGET	PROJECTED $ VARIANCE OVER (UNDER) BUDGET	ACTUAL December 31 2020
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS)					
Revenue	$8,630,245	$18,371,751	$18,069,470	$302,281	$15,398,620
Expenses	5,003,600	18,626,558	18,069,470	557,089	14,267,614
Operating Surplus (Deficit)	**3,626,645**	**(254,807)**	**0**	**(254,808)**	**1,131,006**
CONSERVATION AREAS					
Revenue	5,786,822	9,600,598	13,843,514	(4,242,916)	11,816,693
Expenses	3,577,529	10,175,466	13,592,230	(3,416,764)	10,744,663
Operating Surplus (Deficit)	**2,209,294**	**(574,868)**	**251,284**	**(826,152)**	**1,072,029**
Total Operating Surplus (Deficit)	**$5,835,939**	**($829,675)**	**$251,284**	**($1,080,960)**	**$2,203,035**

The projected WMSS operating deficit is primarily the result of legal expenses that are estimated to exceed the budget amount by $322,000 in the Planning and Regulation program related to regulation violations, Local Planning Appeal Tribunal (LPAT) and other claim matters.

The Conservation Areas projected operating deficit can be attributed to the projected revenue loss of over $4.2 million with Kelso Glen Eden ski operation closed for most of the season and the potential continued impacts of COVID on Park operations. Staff and other expenses continue to be closely managed to lower costs in light of the revenue shortfall.

Report

Operating Program

COVID continues to impact Conservation Areas operations more significantly than Watershed Management & Support Service (WMSS) programs that are able to carry on services remotely and complete planned projects.

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

Canadian Emergency Wage Subsidy (CEWS) claims received in early 2021 of approximately $4.7 million related to 2020 expenses continue to be excluded from operating results until Conservation Halton staff confirm eligibility requirements with more certainty.

Watershed Management & Support Services

Total WMSS revenue is projected to exceed the budget target by $302,281. Significant variances of note contributing to the overall revenue increase include:

- Donation from an estate settlement received in May of $820,487;
- Planning and permit fees projected to exceed the budget amount by $97,161; and
- Reduction in Partnership Projects from those estimated in the 2021 budget resulting in reduced associated funding of $617,531.

Projected WMSS expenses exceed the budget by $557,089 and include:

- Recommended transfer to the Property Management Reserve of $820,487 for the donation received;
- Planning & Regulation legal expenses projected to be $322,000 over the budget amount; and
- Partnership Projects cost reduction of $617,531 that matches the decrease in project funding.

Conservation Areas

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

Parks Operating Summary by Revenue and Expense Category					
	YTD Actual April 30, 2021	2021 Projection	2021 Budget	Projected $ Variance Over (Under) Budget	2020 Actual
Revenue					
Ski (Passes, Lifts, Lessons, Rentals, Retail, Race)	$ 2,211,844	$ 2,336,844	$ 6,649,000	($4,312,156)	$ 6,248,788
Entry Fees	946,751	3,996,654	1,819,000	2,177,654	3,110,821
Program & Other	279,090	1,675,156	4,150,235	(2,475,079)	1,262,664
Annual park memberships	502,245	1,237,000	870,000	367,000	841,027
Municipal funding - Education & Outreach	118,428	354,943	355,279	(336)	353,393
	$ 4,058,358	**$ 9,600,598**	**$ 13,843,514**	**($4,242,916)**	**$ 11,816,693**
Expenses					
Staff Salaries & Benefits - Full time	993,849	3,104,744	3,706,800	(602,056)	3,183,310
Staff Salaries & Benefits - Part time	1,060,257	2,826,357	4,397,408	(1,571,051)	3,217,503
Materials & Supplies & Purchased Services	1,059,026	3,007,764	4,094,822	(1,087,058)	3,416,951
Chargeback -WMSS Support Services	464,396	1,236,600	1,393,200	(156,600)	926,900
	$ 3,577,529	**$ 10,175,466**	**$ 13,592,230**	**($3,416,764)**	**$ 10,744,663**
Parks Net operating surplus (deficit)	**$480,830**	**($574,868)**	**$ 251,284**	**($826,152)**	**$ 1,072,029**

Park revenues are estimated to be lower than the budget amount by $4.2 million overall with the closure of Kelso Glen Eden ski programs until mid February required by a provincial shutdown order and the inability to provide traditional larger park programs such as Education and Maple Town / Sugarbush Season as a result of COVID. Park expenses continue to include the Chargeback from Support Service programs projected at $1,236,600. Staff and other Park operating expenses have been reduced where possible as a result of the revenue shortfall.

Glen Eden program revenues fell short of the budget by almost $4.3 million with an approximate 30 day season compared to an average 90 day season. All group ski lesson programs were cancelled. The majority of Glen Eden passholders were provided with a refund or deferred their season pass until the following 2021-2022 season.

The implementation of Park annual membership and entry fee increases approved by the Board in February have been delayed with the provincial shutdown in early spring and are planned for mid June in line with the phased provincial reopening plan.

Park program revenues are conservatively estimated for the remainder of this year as COVID impacts are still uncertain at this time. On a positive note, Ways of the Woods summer camp program sales are currently very strong. The lower park program revenue is being closely monitored and mitigated through reductions in staffing and discretionary expenses. Staff continue to consider ways to generate further revenue through new park programs, membership packages and entry fees.

Capital Program

The Capital Project Summary (Appendix D) attached includes current capital projects, the respective approved project budget, life to date costs and the budget remaining to be spent. As of April 30, 2021 life to date capital expenses are $3,731,955 or approximately 37% of the total capital budget.

New capital projects confirmed include a Flood Plain Mapping Update project for East Burlington that will commence shortly with additional staff resources now in place, a pending consultant award and National Disaster Mitigation Program funding recently approved for up to $475,000 in addition to matching municipal funding.

Dams and channels capital projects are funded 50% provincially and 50% funded municipally through the Water Management Capital Reserve. Six dams and channels capital projects completed by March 31st to meet the provincial MNRF Water and Erosion Control Infrastructure (WECI) funding period are recommended to be closed as noted on the Capital Project Summary Financial Appendix. Costs for these projects overall were less than the total budget amounts by $38,020.

Based on the WECI projects funding application submitted for the period April 2021 to March 2022, dams and channels capital projects budget amounts to be increased or decreased are also noted on the Capital Project Summary (Appendix C). Projects being closed for the most part have been moved out to a later year in the 2022 preliminary budget.

The contract for the Hilton Falls Dam Diversion Structure Upgrade Construction Phase 2 project was awarded in May after a tender process. The Environmental Assessment (EA) for this project was completed five years ago requiring construction to be completed this year to be within the EA window. This project has been completed in multi-year phases to meet permit requirements. As of early June,

Provincial WECI funding is still to be formally announced though funding is anticipated to be approved for this project based on WECI scoring and the priority nature of the project. In the event, WECI approval is not confirmed for the 50% provincial funding portion a further reserve transfer from the Watershed Management Capital Reserve may be required.

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, 2021 and the 2021 projected year end amounts.

Signed & respectfully submitted:

Marnie Piggot
Director, Finance

Approved for circulation:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Marnie Piggot; Director Finance
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Appendix B

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS)						
CORPORATE SERVICES						
Expenditures						
Salaries and Benefits	1	957,808	3,093,293	3,515,016	(421,723)	(12.0%)
Total Materials & Supplies and Purchased Services	2	315,825	1,013,119	917,528	95,591	10.4%
Debt Financing Charges		16,444	619,245	619,245	-	0.0%
Transfer to Reserves - State of Good Repair Levy		-	503,500	503,500	-	0.0%
Total Expenditures		**1,290,077**	**5,229,157**	**5,555,289**	**(326,132)**	**(5.9%)**
Revenue						
Program & Other Revenue	3	3,100,697	155,739	109,000	46,739	42.9%
Municipal Funding		3,272,864	9,818,936	9,818,600	336	0.0%
Internal Chargeback Recoveries	1	306,314	784,649	922,149	(137,500)	(14.9%)
Reserve Funding	2	-	27,000	10,000	17,000	170.0%
Total Revenues		**6,679,875**	**10,786,324**	**10,859,749**	**(73,425)**	**(0.7%)**
TOTAL CORPORATE SERVICES		**5,389,798**	**5,557,167**	**5,304,460**	**252,707**	**4.8%**

Notes:

1. Salaries and benefits are projected to be lower than the budget amount due to staff vacancies in Corporate Service departments. The staff recovery internal chargeback to the Conservation Areas will be reduced as a result of the staffing changes.

2. Materials & Purchased Services are projected to be higher than the 2021 budget amount by $95,591 for costs not included in the budget such as for the financial review of funding claims and COO & Digital Transformation costs offset by salary savings. Also included in this cateogory are staff professional development program costs of $27,000 continued on from the 2020 year budget and approved to be funded by a transfer from the WMSS Stabilization Reserve.

3. Program & Other Revenue increase of $46,739 is related to revenue not included in the 2021 budget for 1) staff employment grants of $30,000 and 2) additional recovery of $15,000 from the Conservation Halton Foundation for staff time spent on Foundation programs.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
CORPORATE COMPLIANCE						
Expenditures						
Salaries and Benefits		172,014	529,530	570,777	(41,247)	(7.2%)
Total Materials & Supplies and Purchased Services	4	50,055	258,555	204,000	54,555	26.7%
Transfer to Reserves - Property Management	5	-	820,487	820,487	-	0.0%
Total Expenditures		**222,070**	**1,608,573**	**1,595,264**	**13,309**	**0.8%**
Revenue						
Program & Other Revenue - Donation	5	-	820,487	-	820,487	0.0%
Internal Chargeback Recoveries		62,568	169,000	187,700	(18,700)	(10.0%)
Total Revenues		**62,568**	**989,487**	**187,700**	**801,787**	**427.2%**
TOTAL CORPORATE COMPLIANCE		**(159,502)**	**(619,086)**	**(1,407,564)**	**788,478**	**(56.0%)**

Notes:

4. Insurance costs are projected to exceed the budget amount by approximately $50,000 as a result of COVID impacts on 2021 insurance premiums.

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

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
FLOOD FORECASTING & OPERATIONS						
Expenditures						
Salaries and Benefits	6	123,050	434,527	363,284	71,243	19.6%
Total Materials & Supplies and Purchased Services		40,145	140,098	145,000	(4,902)	(3.4%)
Total Expenditures		**163,196**	**574,625**	**508,284**	**66,341**	**13.1%**
Revenue						
Program & Other Revenue		-	14,710	-	14,710	0.0%
Provincial Funding		-	155,034	155,034	-	0.0%
Internal Chargeback Recoveries		10,462	21,712	30,950	(9,238)	(29.8%)
Total Revenues		**10,462**	**191,456**	**185,984**	**5,472**	**2.9%**
TOTAL FLOOD FORECASTING & OPERATIONS		**(152,734)**	**(383,169)**	**(322,300)**	**(60,869)**	**18.9%**

Notes:

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

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PLANNING & WATERSHED MANAGEMENT						
Expenditures						
Salaries and Benefits		1,502,912	4,608,346	4,426,754	181,592	4.1%
Total Materials & Supplies and Purchased Services	7	326,930	779,865	466,914	312,951	67.0%
Total Expenditures		**1,829,841**	**5,388,211**	**4,893,668**	**494,543**	**10.1%**
Revenue						
Program & Other Revenue		1,150,794	2,477,264	2,383,000	94,264	4.0%
Provincial Funding		86,484	265,771	273,464	(7,693)	(2.8%)
Other Municipal Funding		110,684	496,823	507,533	(10,710)	(2.1%)
Internal Chargeback Recoveries		4,870	37,440	37,440	-	0.0%
Total Revenues		**1,352,832**	**3,277,298**	**3,201,437**	**75,861**	**2.4%**
TOTAL PLANNING & WATERSHED MANAGEMENT		**(477,010)**	**(2,110,913)**	**(1,692,231)**	**(418,682)**	**24.7%**

Notes:

7. Purchased Services are anticipated to exceed the budget amount for legal expenses estimated to be $322,000 over the budget related to Planning & Regulations violation and other cases.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
SCIENCE & PARTNERSHIPS (S & P)						
Expenditures						
Salaries and Benefits		453,899	1,472,568	1,391,075	81,493	5.9%
Total Materials & Supplies and Purchased Services	8	18,479	194,479	159,257	35,222	22.1%
Total Expenditures		**472,377**	**1,667,047**	**1,550,332**	**116,715**	**7.5%**
Revenue						
Program & Other Revenue		2,448	123,463	135,426	(11,963)	(8.8%)
Provincial Grant Funding		75,000	75,000	65,000	10,000	15.4%
Other Municipal Funding	8	-	157,704	117,704	40,000	34.0%
Federal Funding		-	163,750	163,750	-	0.0%
Internal Chargeback Recoveries	9	27,626	226,413	148,720	77,693	52.2%
Reserve Funding		-	17,500	17,500	-	0.0%
Total Revenues		**105,074**	**763,830**	**648,100**	**115,730**	**17.9%**
TOTAL SCIENCE & PARTNERSHIPS		**(367,303)**	**(903,217)**	**(902,232)**	**(985)**	**0.1%**

Notes:

8. Purchased Services include expenses not in the 2021 budget related to water quality analysis services for the Hamilton Harbour Remedial Action Plan (HHRAP) estimated to cost $40,000 that are fully funded by other municipal program funding carried over from a prior year.

9. Internal Chargeback Recoveries from Partnership Projects are estimated to be higher than the budget amount based on further confirmation of project funding and costs.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PROJECT MANAGEMENT OFFICE						
Expenditures						
Salaries and Benefits		361,237	1,080,765	1,036,531	44,234	4.3%
Total Materials & Supplies and Purchased Services		55,894	201,640	223,465	(21,825)	(9.8%)
Transfer to Reserves		-	-	-	-	0.0%
Total Expenditures		**417,131**	**1,282,405**	**1,259,996**	**22,409**	**1.8%**
Revenue						
Program & Other Revenue	**10**	24,086	68,154	102,318	(34,164)	(33.4%)
Internal Chargeback Recoveries		65,425	386,699	380,835	5,864	1.5%
Total Revenues		**89,511**	**454,853**	**483,153**	**(28,300)**	**(5.9%)**
TOTAL PROJECT MANAGEMENT OFFICE		**(327,620)**	**(827,552)**	**(776,843)**	**(50,708)**	**6.5%**

Notes:

10. Program & Other Revenue is estimated to be less than the budget amount in this department and is offset by the allocation of confirmed grants to other programs such as Partnership and Capital projects.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
OPERATIONS						
Expenditures						
Salaries and Benefits		367,179	1,164,485	1,187,947	(23,462)	(2.0%)
Chargeback - Parks staff support		21,096	67,520	63,290	4,230	6.7%
Total Materials & Supplies and Purchased Services		81,119	358,419	372,239	(13,820)	(3.7%)
Total Expenditures		**469,394**	**1,590,424**	**1,623,476**	**(33,052)**	**(2.0%)**
Revenue						
Program & Other Revenue	11	45,950	171,312	136,000	35,312	26.0%
Provincial Grants		62,500	125,000	125,000	-	0.0%
Other Municipal Funding		4,204	42,204	42,000	204	0.5%
Internal Chargeback Recoveries		77,741	283,869	296,700	(12,831)	(4.3%)
Total Revenues		**190,396**	**622,386**	**599,700**	**22,686**	**3.8%**
TOTAL OPERATIONS		**(278,998)**	**(968,038)**	**(1,023,776)**	**55,738**	**(5.4%)**

Notes:

11. Forest management program revenue is anticipated to exceed the revenue budget due to increased planting projects partially the result of planting projects paused in the prior year due to COVID.

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
PARTNERSHIP PROJECTS - SCIENCE & PARTNERSHIPS AND PROJECT MANAGEMENT OFFICE						
Expenditures						
Salaries and Benefits		42,698	510,593	457,433	53,160	11.6%
Total Materials & Supplies and Purchased Services		96,816	775,523	1,446,214	(670,691)	(46.4%)
Total Expenditures	12	**139,514**	**1,286,117**	**1,903,647**	**(617,531)**	**(32.4%)**
Revenue						
Program Revenue		61,603	666,173	1,178,498	(512,325)	(43.5%)
Provincial Grants		25,810	502,828	478,015	24,813	5.2%
Other Municipal Funding		-	-	-	-	0.0%
Federal Funding		52,115	117,115	247,134	(130,019)	(52.6%)
Total Revenues	12	**139,527**	**1,286,116**	**1,903,647**	**(617,531)**	**(32.4%)**
		14	**(0)**	**-**	**(0)**	**0.0%**

Notes:

12. Partnership project costs are fully funded by related project grants and other funding. Reduced Partnership Projects costs and funding are estimated based on confirmed project work.

TOTAL WMSS REVENUE		**8,630,245**	**18,371,751**	**18,069,470**	**302,281**	**1.7%**
TOTAL WMSS EXPENDITURES		**5,003,600**	**18,626,558**	**18,889,957**	**(263,398)**	**(1.4%)**
TOTAL		**3,626,645**	**(254,807)**	**(820,487)**	**565,679**	**(68.9%)**

Conservation Halton
Budget Variance Report Financial Appendix

	NOTES	ACTUAL YTD APRIL 30, 2021	PROJECTED 2021	2021 BUDGET	$ VARIANCE OVER / (UNDER) BUDGET	% VARIANCE OVER / (UNDER) BUDGET
CONSERVATION AREAS						
Expenditures						
Salaries and Benefits		2,054,107	5,931,102	8,104,208	(2,173,106)	(26.8%)
Total Materials & Supplies and Purchased Services		1,059,026	3,007,764	4,094,822	(1,087,058)	(26.5%)
Chargeback - WMSS Support Services to Parks		464,396	1,236,600	1,393,200	(156,600)	(11.2%)
Total Expenditures	**13**	**3,577,529**	**10,175,466**	**13,592,230**	**(3,416,764)**	**(25.1%)**
Revenue						
Program Revenue		3,918,834	9,113,135	13,301,330	(4,188,195)	(31.5%)
Other Revenue		-	65,000	115,000	(50,000)	(43.5%)
Municipal Funding		118,428	354,943	355,279	(336)	(0.1%)
Reserve Funding (Outreach)		-	-	8,615	(8,615)	(100.0%)
Chargeback - Parks to WMSS		21,096	67,520	63,290	4,230	6.7%
Total Revenues	**13**	**4,058,358**	**9,600,598**	**13,843,514**	**(4,242,916)**	**(30.6%)**
TOTAL - TRANSFER TO (FROM) CONSERVATION AREA RESERVES		**480,830**	**(574,868)**	**251,284**	**(826,152)**	**(328.8%)**

Notes:

13. Park program costs and revenue are estimated to be significantly lower with the closure of Kelso Glen Eden ski programs until mid February during the provinicial shutdown order as well as anticipated continued impacts of COVID on park programs. Glen Eden program revenues were lower than the budget by almost $4.3 million with the reduced operating season. Group ski lesson programs were cancelled and considerably fewer private lessons were offered. The majority of Glen Eden passholders were provided with a refund or deferred their pass until the following 2021-2022 season. Park program revenues are conservatively estimated for the remainder of this year as COVID impacts are still uncertain at this time. The lower park program revenue is being closely monitored and mitigated through reductions in staffing and other program expenses. The Outreach program other funding is projected to be lower with the in person Halton Water Festival deferred for this year.

Appendix C

CONSERVATION HALTON
Reserve Continuity
April 30, 2021

Name of Reserve	Reserve Balances Jan.1, 2021	2021 Budget & Previously Approved Reserve Transfers	Reserve Balances Prior to Transfers to be Approved	Reserve Transfers to be Approved June 17, 2021	Projected Reserve Balances Dec. 31, 2021
Watershed Management & Support Services					
Vehicle and equipment	723,967	(98,000)	625,967		**625,967**
Building - State of Good Repair	315,611	(117,854) 102,000	299,757		**299,757**
Building	373,137	(219,667)	153,470		**153,470**
Watershed Management Capital - Municipal Funds	783,983	(622,828) 376,500	537,655		**537,655**
Watershed Management Capital - Self Generated Funds	416,909		416,909		**416,909**
Watershed Management & Support Services Stabilization	1,789,212		1,789,212		**1,789,212**
Debt Financing Charges	425,564		425,564		**425,564**
Digital Transformation	254,900		254,900		**254,900**
Legal - Planning & Watershed Management	258,891		258,891		**258,891**
Legal - Corporate	200,000		200,000		**200,000**
Water Festival	188,911	(18,615)	170,296		**170,296**
Land Securement	60,437	25,000	85,437		**85,437**
Property Management	145,629	(65,000)	80,629	820,487	**901,116**
Stewardship and restoration	420,511	(161,500)	259,011		**259,011**
Conservation Areas					
Capital	3,294,219	(892,128)	2,402,091		**2,402,091**
Revenue Stabilization	1,000,568		1,000,568		**1,000,568**
Total Reserves	**$10,652,449**	**$ (1,692,092)**	**$ 8,960,357**	**$ 820,487**	**$ 9,780,844**

Appendix D

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

Capital Project Description	Budget - Prior Years ** Carryfwd bal.	2021 Budget	Budget Increase (Decrease)	Total Capital Budget	Prior Years Capital Costs	2021 YTD Capital Costs	Life to Date Capital Costs	Budget Unspent	Project to be Closed	Capital Project Funding
Watershed Management & Support Services (WMSS)										
Milton Channel Main & Millside Slab Repair	$255,927			255,927	$0	12,663	12,663	243,264		50% MNRF; 50% Debt Financing
Hilton Falls Dam Diversion Structure Upgrade Construction Phase 1	$220,000			220,000	$168,360	26,251	194,611	25,389	**CLOSE**	50% MNRF; 50% Reserve
Hilton Falls Dam Safety Repairs & Electrical Upgrades	$150,000			150,000	$46,491	108,827	155,318	(5,318)	**CLOSE**	50% MNRF; 50% Reserve
Morrison Wedgewood Channel Spill Study	$100,000			100,000	$78,057	51,092	129,149	(29,149)	**CLOSE**	50% MNRF; 50% Debt Financing
Scotch Block Dam Safety Repairs	$300,000			300,000	$72,142	191,062	263,204	36,796	**CLOSE**	50% MNRF; 50% Debt Financing
Kelso Dam Safety Repairs	$110,000			110,000	$55,069	44,714	99,784	10,217	**CLOSE**	50% MNRF; 50% Reserve
Channel Replacement Design Study	$50,000			50,000	$16,052	33,862	49,914	86	**CLOSE**	50% MNRF; 50% Reserve
Kelso Dam Lift Gates and Hoists Refurbishment - West Gate	$120,000		173,000	293,000	$17,031	27,933	44,964	248,036		50% MNRF; 50% Reserve
Hilton Falls 96" sluice gate	$0	15,000	(15,000)	-	$0		-	-		50% MNRF; 50% Reserve
Hilton Falls Dam Diversion Structure Upgrade Construction Phase 2	$0	740,000	(131,000)	609,000	$0	6,885	6,885	602,115		50% MNRF; 50% Reserve
Freeman Pond Maintenance	$0	135,000	(135,000)	-	$0		-	-		50% MNRF; 50% Reserve
Mountsberg Dam Safety Review update	$0	90,000	(90,000)	-	$0		-	-		50% MNRF; 50% Reserve
Mountsberg Dam 4' sluice gate	$0	65,000	(65,000)	-	$0		-	-		50% MNRF; 50% Reserve
Hager-Rambo triple pond sediment removal	$0	105,000	(105,000)	-	$0		-	-		50% MNRF; 50% Reserve
Morrison Wedgewood Channel Spill design	$0	53,000	(53,000)	-	$0		-	-		50% MNRF; 50% Debt Financing
Emerald Ash Borer **	$9,889	820,000		829,889	$0	524,578	524,578	305,311		Municipal - EAB; Lumber sales
Flood Forecasting & Warning **	$81,525	70,000		151,525	$0		-	151,525		Municipal
Floodplain Mapping - Urban Milton; Morrison-Wedgewood	$466,626			466,626	$464,179	1,252	465,430	1,196		50% Federal NDMP; 50% Municipal
Floodplain Mapping - 2020	$330,000			330,000	$0		-	330,000		Other Municipal - Halton Region
Floodplain Mapping - 2021 (East Burlington)	$0	500,000		500,000	$0	1,515	1,515	498,485		50% Federal NDMP; 50% Halton Region
Watershed Planning	$0	25,000		25,000	$0		-	25,000		Municipal
Watershed Database Management System	$75,000			75,000	$31,731		31,731	43,269		Municipal
WMSS Facility/Administration Office Renovations - non SOGR	$279,000	500,000		779,000	$159,333	4,871	164,204	614,796		Reserve - Building
WMSS Facility/Admin. Office - State of Good Repair (SOGR)	$102,000	70,136		172,136	$54,282	4,038	58,320	113,816		Reserve - Building SOGR
Operations Centre Study and Design	$100,000			100,000	$0		-	100,000		Reserves
Information Technology - WMSS **	$49,078	122,000		171,078	$0	10,101	10,101	160,977		Municipal
Digital Transformation - WMSS **	$201,047			201,047	$0		-	201,047		Municipal
Financial system upgrades	$75,000			75,000	$0		-	75,000		Municipal
Website Upgrade	$100,000			100,000	$0	7,534	7,534	92,466		Municipal; Reserves
Payroll System Upgrade - Phase 2 (Phase 1 completed)	$89,500			89,500	$69,736		69,736	19,764		Reserves - WMSS Stab. & Parks Capital
GIS Imagery Acquisition (Lidar and Ortho)	$100,000	15,000		115,000	$10,446		10,446	104,554		Municipal
Vehicle and Equipment Replacements- WMSS	$0	167,562		167,562	$0	6,044	6,044	161,518		Reserve; Vehicle Sales
Forest Management**	$13,000		65,000	78,000	$0		-	78,000		Municipal
Land Securement	$0			-	$0	(885)	(885)	885		Reserve;
Giant's Rib Geopark	$200,000			200,000	$0		-	200,000		Other funding
Property Management (prev. Clappison & Waterdown Woods)	$25,000	25,000		50,000	$0		-	50,000		Municipal
Speyside Weir Removal	$32,000	144,000		176,000	$0		-	176,000		Reserve
Conservation Areas Facility & Infrastructure:										
Kelso/Glen Eden - Water/Wastewater Servicing (Dev.Contr. Project)	$704,035			704,035	$627,593		627,593	76,442		Reserve; Dev. Contribution funds
Kelso & Crawford Lake Visitor Centres (Dev. Contr'n Project)	$625,000			625,000	$162,521		162,521	462,479		Dev. Contribution funds
Kelso/Glen Eden Ski Capital Expenditures	$0	500,000		500,000	$0		-	500,000		Reserve
Facility and Infrastructure Major Maintenance**	$82,288	495,000		577,288	$402,712	23,850	426,562	150,726		Reserve
Foundation Funded Capital Projects	$0	100,000		100,000	$0		-	100,000		CH Foundation
Information Technology Infrastructure - Conservation Areas**	$128,000			128,000	$0	8,285	8,285	119,715		Reserve
PCI Compliance	$235,000			235,000	$175,007		175,007	59,993		Reserve 95%; Municipal 5%
Vehicle and Equipment replacements - Conservation Areas	$0	148,412		148,412	$0	26,742	26,742	121,670		Reserve; Vehicle Sales
Total Capital Projects	**$5,408,915**	**$4,905,110**	**($356,000)**	**$9,958,025**	**$2,610,741**	**$1,121,214**	**$3,731,955**	**$6,226,070**		

June
2021

REPORT TO: **Conservation Halton Board of Directors**

REPORT NO: # CHBD 05 21 07

FROM: Marnie Piggot, Director Finance

DATE: June 17, 2021

SUBJECT: **2022 Preliminary Budget and Forecasts**

Recommendation

THAT the Conservation Halton Board of Directors **approves the attached 2022 preliminary budget for budget discussion purposes with funding watershed municipalities;**

And

THAT preliminary design, engineering, and consultation costs included in the 2022 budget that may be incurred in 2021 for the Crawford Lake Boardwalk capital project **be approved and funded by the Conservation Areas Capital Reserve if required until formal funding agreements are confirmed.**

Executive Summary

The Finance and Audit Committee recommended that the 2022 preliminary budget be presented to the Conservation Halton Board of Directors for approval for budget discussion purposes with funding municipalities at their meeting on June 3.

The development of the 2022 preliminary budget was based on Conservation Halton's current budget practices. The preliminary budget balances the delivery of core programs and services, with strategic priorities, inflationary and growth-related pressures and potential COVID impacts on Conservation Areas Park programs.

The 2022 preliminary budget financial amounts are contained in the financial attachment (Appendix E). This report provides an overview of the 2022 preliminary budget, major drivers of the budget increase and details on proposed capital projects.

Budget impacts of the Conservation Authority Act regulation revisions will be considered in the coming months when Ministry of the Environment, Conservation and Parks (MECP) staff and the CA Act Working Group are closer to confirming the provisions related to municipal levies and requirements for non-mandatory programs and services.

The 2022 preliminary budget totals almost $40.2 million and is outlined in the chart below. The budget amounts are segregated according to Conservation Halton's primary budget categories Watershed Management & Support Services (WMSS) totalling $22 million and the Conservation Areas of $18.2 million. The combined operating budget totals approximately $33.4 million and the capital budget totals $6.8 million.

Programs	2022 Preliminary Budget	2021 Budget	Increase / Decrease
Watershed Management & Support Services (WMSS)			
Operating	$ 18,557,966	$ 17,590,970	$ 964,996
State of Good Repair (SOGR Levies)	$ 480,500	$ 478,500	$ 2,000
	$ 19,038,466	$ 18,069,470	$ 966,996
Capital	$ 2,931,970	$ 3,761,698	$ (829,728)
Subtotal WMSS Budget	**$ 21,970,436**	**$ 21,831,168**	**$ 137,268**
Conservation Areas			
Operating	$ 14,385,263	$ 13,843,514	$ 541,749
Capital	$ 3,812,903	$ 1,143,412	$ 2,669,491
Subtotal Conservation Areas Budget	**$ 18,198,166**	**$ 14,986,926**	**$ 3,211,240**
Total Budget	**$ 40,168,602**	**$ 36,818,094**	**$ 3,348,508**

Highlights of the 2022 preliminary budget include:

- The 2022 preliminary budget has increased by $3.3 million over the 2021 budget of $36.8 million. Major drivers of the budget increase include:
  - $663,985 in staff salary and benefits costs based on a 1.75% inflation increase. Total overall staff full-time equivalents (FTE) have not changed from the 2021 budget;
  - $100,000 in legal expenses related to Planning & Regulation activities;
  - $150,000 in insurance expenses based on 2021 insurance premiums increases; and
  - $2,280,000 for the Crawford Lake Boardwalk capital project with the recent announcement of the successful Investing in Canada Infrastructure Program (ICIP) grant.

- The Conservation Areas operating surplus in the 2022 preliminary budget of $372,118 is higher than the 2021 budget surplus of $251,284 and assumes a conservative recovery from the COVID impacts on park programs.

- Municipal funding in the 2022 preliminary budget is $10,792,456. The proposed municipal funding increase of 3.5% or $361,577 is within Region of Halton guidelines established for the 2021 budget. Operating and capital forecasts have been prepared with annual municipal funding increases ranging from 3.1% to 4.5%. There is no new debt financing required in the 2022 preliminary budget.

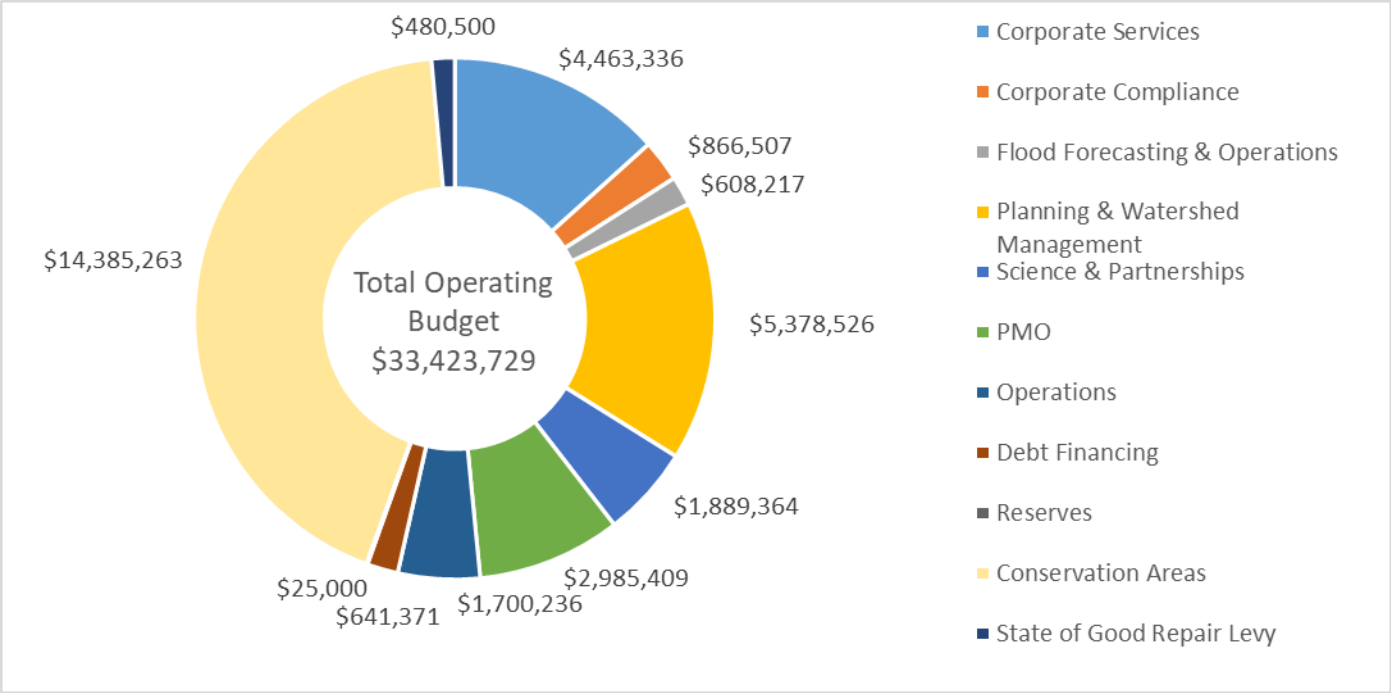
- Municipal State of Good Repair (SOGR) levies are proposed to increase by $2,000 in line with previous budget forecasts. A reallocation of $60,000 from the Dams & Channels SOGR levy to the Facilities SOGR levy is recommended in the 2022 budget consistent with the reserve funding level in the Facilities Asset Management Plan.

Conservation Halton staff will be submitting the 2022 preliminary budget to Regional staff in the summer for their review and consideration. A comprehensive Budget & Business Plan document will be prepared for final budget approval in October.

Report

2022 Preliminary Operating Budget

The operating budget of $33.4 million provides for an investment of $19 million in Watershed Management and Support Services (WMSS) programs and an investment of $14.4 million in the Conservation Areas. The following graph shows the distribution of the operating budget by department.



Inflation has been assumed generally at a rate of 1.5-2.0% for 2022. The Bank of Canada aims to keep inflation at the 2 per cent midpoint of an inflation-control target range of 1 to 3 per cent.

Investing in Watershed Management & Support Services

The WMSS 2022 preliminary operating budget totals slightly over $19 million. WMSS Operating Expense and Funding amounts are detailed in the chart below. The budget increase of $968,966 is largely funded by program revenue, grants, reserves and internal chargebacks. Municipal operating funding for WMSS programs is proposed to increase by $348,393 for programs and services and by $2,000 to fund increases to the State of Good Repair Levies for dams, channels and facilities.

Watershed Management & Support Services (WMSS)	2022 Preliminary Budget	2021 Budget	Increase / Decrease
Operating Expenses:			
Staff Salary & Benefits	$ 13,191,614	$ 12,481,385	$ 710,229
Materials & Supplies	$ 1,119,146	$ 713,842	$ 405,304
Purchased Services	$ 2,841,184	$ 3,124,481	$ (283,297)
Financial	$ 79,000	$ 74,045	$ 4,955
Internal Chargebacks	$ 660,651	$ 552,972	$ 107,679
Debt Financing Charges	$ 641,371	$ 619,245	$ 22,126
Transfer to Reserves - Land Securement	$ 25,000	$ 25,000	$ -
Transfer to Reserves - SOGR Levy Dams & Channels	$ 316,500	$ 376,500	$ (60,000)
Transfer to Reserves - SOGR Levy Buildings	$ 164,000	$ 102,000	$ 62,000
Total Operating Expenses - WMSS	**$ 19,038,466**	**$ 18,069,470**	**$ 968,996**
Funding of Operating Expenses:			
Program Revenue	$ 3,192,120	$ 2,691,458	$ 500,662
Ministry of Natural Resources & Forestry - Operating Grant	$ 155,034	$ 155,034	$ -
Municipal Funding	$ 9,688,493	$ 9,340,100	$ 348,393
Municipal Funding - State of Good Repair Levies Dams & Channels and Buildings	$ 480,500	$ 478,500	$ 2,000
Other Grants & Program Funding	$ 3,142,438	$ 3,231,098	$ (88,660)
Internal Chargeback Recoveries	$ 2,206,381	$ 2,145,780	$ 60,601
Transfers from Reserves - WMSS Stabilization, Water Festival, Stewardship and Restoration	$ 173,500	$ 27,500	$ 146,000
Total Operating Funding - WMSS	**$ 19,038,466**	**$ 18,069,470**	**$ 968,996**

Staff Salary & Benefits increases include:

- 2.75 FTE staff changes costing $275,542 funded primarily by program revenue and other grants;
- Increased staff compensation of $296,652 based on a 1.75% inflationary increase to the staff salary bands. Salaries are based on 96% of the top of the salary bands that approximate actual salary levels; and
- Benefit expense increases estimated to cost $138,035.

Materials & Supplies and Purchased Services

A large part of the changes in these categories are the result of shifts between supplies and services for the Partnership Projects planned for 2022 that are fully funded by project grants and internal chargebacks to the projects.

Purchased Services also includes increased WMSS insurance costs of $50,000 and a $100,000 increase in the Planning & Regulation legal budget based on current increased activities. Staff are

recommending that the $100,000 increase in legal budget for 2022 be funded by a transfer from the WMSS Stabilization Reserve to assess whether a long-term legal budget increase is needed.

Debt Financing Charges

Debt Financing Charges in the 2022 preliminary operating budget of 641,371 includes $591,371 municipal debt financing charges and $50,000 for principal and interest payments on the property acquisition loan from the Hamilton Community Foundation (HCF). The original property loan received in 2015 was $858,000. After the loan renewal in December 2020 the HCF loan balance at December 31, 2020 was $212,369 was and is anticipated to be repaid by July 2025.

Municipal debt financing charges are based on the amounts in the 2021 budget forecast for 2022 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, 2020 was $4,879,328.

State of Good Repair (SOGR) Levy

An increase of $2,000 in the SOGR Levy is included in the 2022 preliminary budget for Facilities consistent with the 2022 forecast amount included in the 2021 budget. A reallocation of $60,000 from the Dams & Channels SOGR levy to the Facilities SOGR levy is recommended in the 2022 budget to meet annual reserve level funding target in the Facilities Asset Management Plan.

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 significantly increased activity in 2020 and projected trends related to the Halton Region allocation program.

Investing in our Parks

The Conservation Areas 2022 preliminary operating budget provides for an investment of $14,385,263 into the Conservation Areas. Operating expenses have increased by $541,749 as detailed in the chart below.

Conservation Areas	2022 Preliminary Budget	2021 Budget	Increase / Decrease
Operating Expenses:			
Staff Salary & Benefits	$ 8,057,964	$ 8,104,208	$ (46,244)
Materials & Supplies	$ 1,874,353	$ 1,844,639	$ 29,714
Purchased Services	$ 2,245,528	$ 1,953,983	$ 291,545
Financial	$ 471,200	$ 296,200	$ 175,000
Internal Chargebacks	$ 1,364,100	$ 1,393,200	$ (29,100)
Transfer to Reserve - Operating Surplus	$ 372,118	$ 251,284	$ 120,834
Total Operating Expenses - Conservation Areas	**$ 14,385,263**	**$ 13,843,514**	**$ 541,749**
Funding of Operating Expenses:			
Program Fees	$ 13,946,430	$ 13,416,330	$ 530,100
Municipal Funding - Park Education programs & Outreach	$ 361,463	$ 355,279	$ 6,184
Internal Chargeback Recoveries	$ 77,370	$ 63,290	$ 14,080
Transfer from Reserves	$ -	$ 8,615	$ (8,615)
Total Operating Funding - Conservation Areas	**$ 14,385,263**	**$ 13,843,514**	**$ 541,749**

Staff Salary & Benefits are decreasing by ($46,244) as a result of a reduction in 3.0 FTE positions offset by increased seasonal salaries and benefits.

Internal Chargebacks to the Conservation Areas for support services have decreased in the 2022 preliminary operating budget by ($29,100) related to support staffing changes and estimated allocation of time spent on park programs.

Purchased Services increase of $291,545 includes estimated insurance costs increases of $100,000 based on 2021 premiums. Also included in the category is $105,000 in services related to Digital Transformation initiatives.

Financial expense increase of $175,000 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 conservatively increased by $530,100 with the impacts of COVID on park programs unknown at this time. This revenue increase is based on assumed continued growth in park visitation and the implementation of fee increases approved for spring 2021 that have been delayed until after the current provincial shutdown.

2022 Preliminary Capital Budget

The 2022 preliminary capital budget represents an investment of $6.7 million into infrastructure and studies allocated to WMSS programs of $2.9 million and Conservation Areas of $3.8 million.

The capital budget provides funding for the rehabilitation of flood control infrastructure, updating of flood plain mapping, investments in digital transformation and technology upgrades, vehicle and

equipment replacements, development of studies and plans, managing the impacts of Emerald Ash Borer, land management initiatives and infrastructure improvements at the Conservation Areas.

Capital Budget	2022 Preliminary Budget	2021 Budget	Increase / Decrease
Capital Expenses:			
Dams & Channels SOGR Maintenance	$ 700,970	$ 1,203,000	$ (502,030)
Flood Forecasting & Warning Program	$ 90,000	$ 70,000	$ 20,000
Flood Plain Mapping	$ 525,000	$ 500,000	$ 25,000
Emerald Ash Borer	$ 820,000	$ 820,000	$ -
Digital Transformation			
-IT Infrastructure	$ 52,000	$ 122,000	$ (70,000)
-Document Digitization	$ 200,000	$ -	$ 200,000
PMO Facilities			
-Administration Office SOGR & Renovations	$ 200,000	$ 570,136	$ (370,136)
Other Projects			
-Compensation Review, Asset Management Plan Update, GIS Data, Property Management, Watershed Planning, WMSS Vehicles	$ 344,000	$ 476,562	$ (132,562)
Subtotal Capital Expenses - WMSS	**$ 2,931,970**	**$ 3,761,698**	**$ (829,728)**
Conservation Areas			
-Facility, Infrastructure & Ski Hill	$ 1,432,903	$ 1,018,412	$ 414,491
-Crawford Lake Boardwalk	$ 2,280,000	$ -	$ 2,280,000
-Kelso Quarry Park / Area 8	$ 100,000	$ 125,000	$ (25,000)
Subtotal - Conservation Areas	**$ 3,812,903**	**$ 1,143,412**	**$ 2,669,491**
Total Capital Projects	**$ 6,744,873**	**$ 4,905,110**	**$ 1,839,763**

Watershed Management & Support Services Capital Investments:

Dams & Channels SOGR Maintenance costs of $700,970 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 2022 preliminary budget and forecast has been reduced compared to prior budget capital forecasts as a result of estimates in updated Dam Safety Reviews and Channels Study.

Asset Management Plan - Dams & Channels is scheduled to be updated in 2022. Asset Management (AM) Plans have been completed for all Conservation Halton assets and are planned to be updated every five years.

Digital Transformation initiatives of $200,000 in 2022 are associated with the implementation of a digital file management system. Project expenses for 2022 are proposed to be funded by a transfer from the Digital Transformation Reserve.

PMO Facilities Administration Office capital work of $200,000 will fund state of good repair maintenance and office space renovations. Office renovations work will consider the impact of the virtual office continuing in some form after COVID. The Operations Centre proposed in the 2021 budget forecast for 2022 is being deferred in the forecast to revisit staff space needs post COVID.

Conservation Area Capital Investments:

Facility, Infrastructure & Ski Hill costs of $1,432,903 include $213,000 in state of good repair work and IT infrastructure, $950,000 for improvements in snowmaking and facilities as well as rental fleet and snow groomer replacements, and $269,903 in vehicle and equipment replacements.

Crawford Lake Boardwalk project with an estimated cost of $2,280,000 was announced in April 2021 as a successful grant through the Investing in Canada Infrastructure Program (ICIP) and is being added to the 2022 capital budget. ICIP will provide Federal and Provincial funding totalling $1,671,924 with the balance of $608,076 to be funded by Conservation Halton. The Board approved in October 2019 the grant application submission and the use of Developer Contributions collected by Halton Region to fund Conservation Halton's portion of the project. The funding agreement with ICIP is still to be received. Preliminary engineering design work will commence later this year. This project will include improvements to extend the boardwalk's lifespan, meet accessibility requirements and is expected to be completed by late 2024.

Kelso Quarry Park / Area 8 - Capital work has been included in the 2022 preliminary budget and 2021 budget to begin to gradually open this area to the public through a reservation system. Increased public demand for park space as a result of COVID and area growth has been a driver in advancing the Kelso Quarry Park enhancements. The Kelso Master Plan, first presented to the Board in June 2018 and approved in fall 2020 contains improvements at Kelso Quarry Park of approximately $7 million including trails, boardwalk, seasonal activities and visitor centre. The Conservation Halton Foundation is in the process of developing a capital fundraising campaign to support funding needs with the remainder of project funding proposed to come from Developer Contributions collected by Halton Region. The 2022 budget capital forecast includes estimated capital outlays for this area that are subject to revision as the capital campaign and capital priorities are further refined.

Sources of Capital Budget Funding

A summary of the 2022 proposed capital funding sources is provided in the chart below:

Capital Budget Funding	2022 Preliminary Budget	2021 Budget	Increase / Decrease
WMSS:			
Provincial Funding - Dams & Channels	$ 350,485	$ 601,500	$ (251,015)
Municipal Funding	$ 262,000	$ 257,000	$ 5,000
Municipal Funding Other - EAB	$ 804,000	$ 804,000	$ -
Municipal Funding Other - Flood Plain Mapping	$ 525,000	$ 500,000	$ 25,000
Municipal Debt Financing	$ -	$ 526,500	$ (526,500)
Other Funding Grants and Program Funding	$ 146,000	$ 116,000	$ 30,000
Transfer from Reserves	$ 844,485	$ 956,698	$ (112,213)
Conservation Areas:			
Transfer from Reserves	$ 1,532,903	$ 1,143,412	$ 389,491
Other Funding Grants and Program Funding	$ 1,671,924	$ -	$ 1,671,924
Developer Contributions	$ 608,076	$ -	$ 608,076
Total Capital Funding	**$ 6,744,873**	**$ 4,905,110**	**$ 1,839,763**

Other Municipal Funding for Emerald Ash Borer (EAB) treatment and Flood Plain Mapping are consistent with the business plans submitted to Halton Region Council for these projects. There is no debt financing requested in the 2022 preliminary capital budget based on proposed capital projects.

Reserve Transfers

The summary below provides the recommended transfers to and from reserves in the 2022 preliminary budget and the resulting projected reserve balances on December 31, 2022. A reserve continuity schedule with reserve balances to 2031 is also provided in the financial attachment.

Conservation Halton Reserves	Reserves Projected Balance Dec. 31, 2021	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, 2022
Watershed Management & Support Services							
Vehicle and Equipment	625,967				(94,000)		531,967
Building	153,470				(100,000)		53,470
Building - State of Good Repair	299,757			164,000	(100,000)		363,757
Watershed Management Capital - Municipal Funds and Self Generated Funds	954,564			316,500	(350,485)		920,579
Watershed Management & Support Services Stabilization	1,789,212					(100,000)	1,689,212
Capital Projects - Debt Financing Charges	425,564						425,564
Digital Transformation	254,900				(200,000)		54,900
Legal - Planning & Watershed Management	258,891						258,891
Legal - Corporate	200,000						200,000
Water Festival	170,296				-	(10,000)	160,296
Land Securement	85,437	25,000					110,437
Property Management	80,629						80,629
Stewardship and Restoration	259,011				-	(63,500)	195,511
Conservation Areas							
Capital	2,402,091		372,118		(1,532,903)		1,241,306
Stabilization	1,000,568						1,000,568
Total Reserves	**8,960,357**	**25,000**	**372,118**	**480,500**	**(2,377,388)**	**(173,500)**	**7,287,087**

Municipal Funding

Municipal funding in the 2022 preliminary budget totals almost $10.8 million. The $361,577 increase in municipal funding is 3.5% more than was requested in 2021. The increase requested is within the Region of Halton budget guideline established for the 2021 budget. The guideline for the 2022 budget is anticipated to be received in July 2021.

Total Municipal Funding:	Preliminary Budget 2022	Budget 2021	$ Increase (Decrease)	% Increase
Operating	$10,049,956	$9,695,379	$354,577	3.7%
Capital	262,000	257,000	5,000	1.9%
	10,311,956	9,952,379	359,577	3.6%
State of Good Repair (SOGR) Levy - Dams & Channels; Buildings	480,500	478,500	2,000	0.4%
Municipal Funding total	**$10,792,456**	**$10,430,879**	**$361,577**	**3.5%**

Municipal funding continues to be less than 30% of funding sources in the budget. The municipal funding increase included in the 2021 budget forecast for 2022 was 4.1%. A municipal funding forecast is provided in the financial attachment with annual municipal funding increases ranging from 3.1% to 4.5%.

2022 Preliminary Budget and Operating Forecast 2023-2031

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%.
- Program revenues for Watershed Management and Support Services program are assumed to increase annually by inflation and increase 2% to 5% in the Conservation Areas.

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 Region of Halton staff for the 2021 budget forecast and are subject to revision.

2022 Preliminary Budget and Capital Forecast 2023-2031

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 Conservation Halton's infrastructure while ensuring long-term fiscal sustainability.

The largest portion of the Watershed Management and Support Services capital budget are related to dams and channels rehabilitation and replacement projects. The dams and channels capital projects are based on information prepared by Conservation Halton's Capital Project 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 Areas capital projects in the capital forecast continue to include three projects totalling approximately $24 million based on business cases previously provided to the Board. The capital projects are related to recreation centres and water distribution and sewer collection systems. These projects will be reassessed over the next year when vacant staff resources are in place and with a new lens in light of COVID impacts on park operations and changing visitor demands. This reassessment will ensure Conservation Halton is making wise capital investments that are financially sustainable and leverages available infrastructure grant funding.

The Strategic Plan initiatives included in the capital forecast will enable Conservation Halton 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

Conservation Halton staff have developed a preliminary budget for 2022 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 2022 preliminary budget addresses increased costs through operational efficiencies and continuous improvements and includes an increase of 3.5% in municipal funding. The proposed 2022 preliminary budget continues to provide for investments in programs to enhance service delivery, supports digital transformation initiatives, watershed planning work, greenspace and property management initiatives, floodplain mapping, flood forecasting, and enhances 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
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Appendix E

CONSERVATION HALTON

2022 PRELIMINARY BUDGET

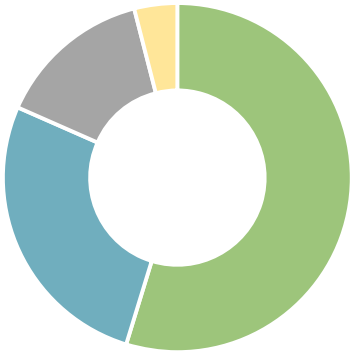
JUNE 2021

Conservation Halton

TABLE OF CONTENTS

2022 PRELIMINARY BUDGET SUMMARY

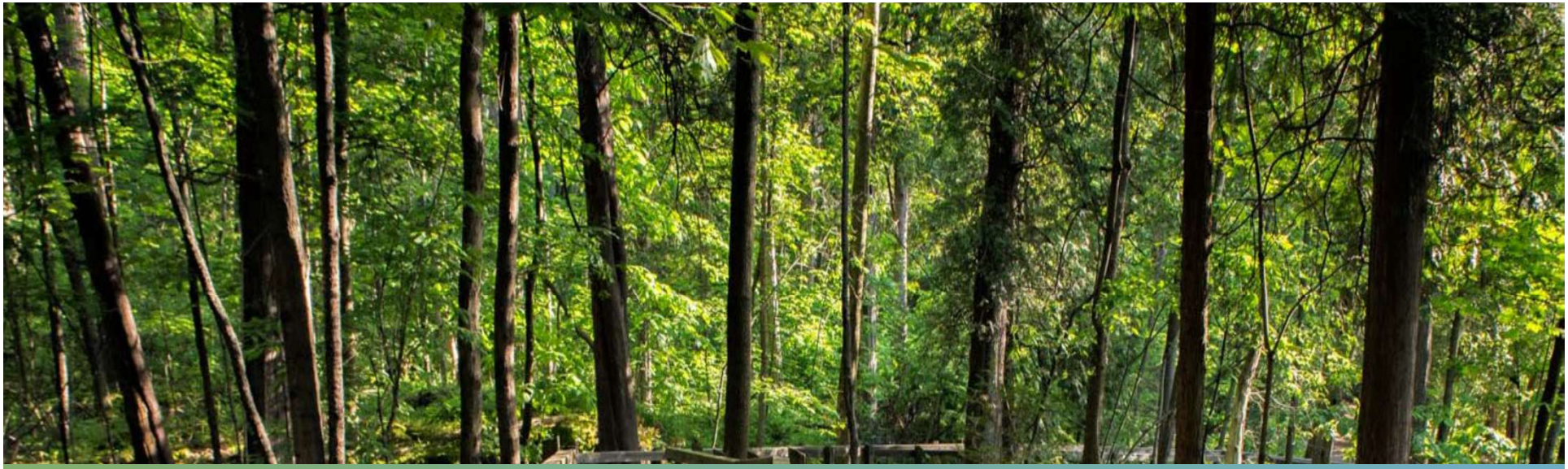
Total Budget Funding Sources
$40,168,602



- Program Revenue, Chargebacks & Reserves 55%
- Municipal Funding 27%
- Other Funding 14%
- Provincial Funding 4%

Operating Budget	**2022 Budget**	**2021 Budget**
Corporate Services	4,463,336	4,432,544
Corporate Compliance	866,507	774,777
Flood Forecasting & Operations	608,217	508,284
Planning & Watershed Management	5,378,526	4,893,668
Science & Partnerships	1,889,364	1,992,466
Project Management Office	2,985,409	2,721,509
WMSS Operations	1,700,236	1,623,476
Debt Financing	641,371	619,245
Reserves	25,000	25,000
Conservation Areas	14,385,263	13,843,514
State of Good Repair Levy	480,500	478,500
	33,423,729	31,912,984

Capital Budget	**2022 Budget**	**2021 Budget**
Corporate Services	70,000	15,000
Other Foundation Funded Projects	100,000	100,000
Corporate Compliance	25,000	-
Flood Forecasting & Operations	790,970	1,273,000
Planning & Watershed Management	580,000	550,000
Science & Partnerships	-	-
Project Management Office	200,000	714,136
Emerald Ash Borer	820,000	820,000
IT Infrastructure & Digital Transformation	252,000	122,000
Vehicle & Equipment Replacement	94,000	167,562
Conservation Areas	3,812,903	1,143,412
	6,744,873	4,905,110
Total Operating & Capital Budget	**$ 40,168,602**	**$ 36,818,094**



2022 PRELIMINARY OPERATING BUDGET

WATERSHED MANAGEMENT & SUPPORT SERVICES
2022 PRELIMINARY OPERATING BUDGET

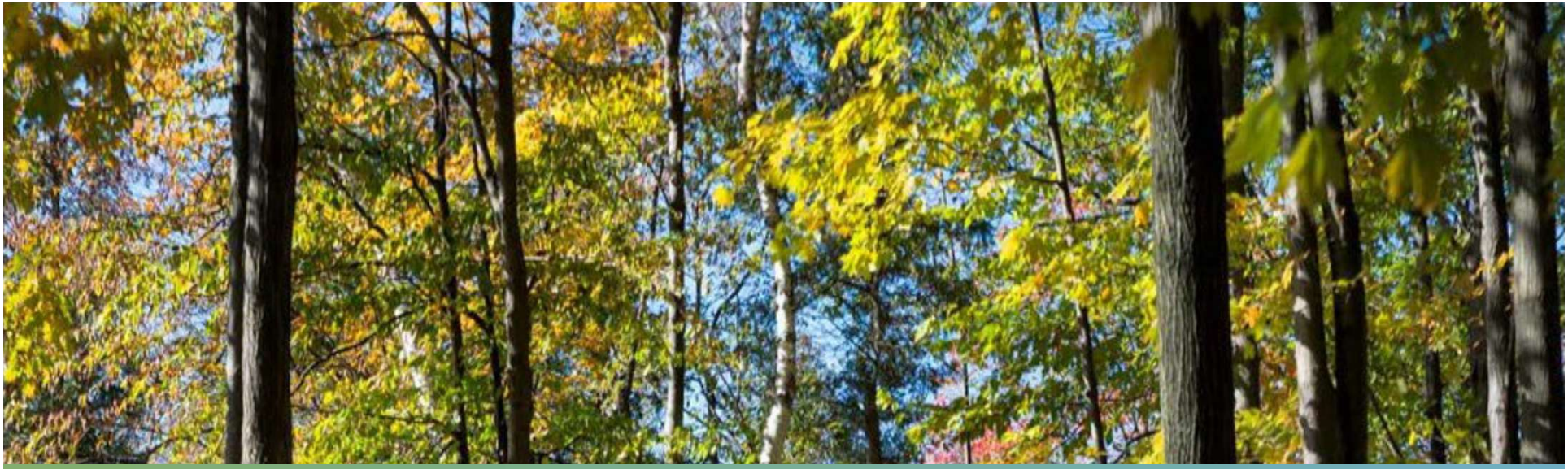
	Description	% Increase (decrease) over 2021 Budget	2020 Actual	2021 Budget Expenses	2022 Preliminary Budget Expenses	2022 Preliminary Budget Funding Sources					
						Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Chargeback Recoveries (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
	WATERSHED MANAGEMENT & SUPPORT SERVICES (WMSS) PROGRAMS										
1	**CORPORATE SERVICES**										
	Office of the President & CEO		681,369	665,847	711,907				22,500		689,407
	Conservation Halton Foundation Administration		151,555	148,504	153,015				30,000		123,015
	Finance		810,766	809,270	779,944	80,500			238,300		461,144
	General Corporate Services		25,109	-	-						-
	Information Technology		641,375	500,021	477,979				61,000		416,979
	Geographical Information Systems (GIS)		439,150	496,844	526,918	6,500					520,418
	Chief Operating Officer / Digital Transformation		178,650	355,507	299,847				58,400		241,447
	Human Resources		497,007	677,743	703,866				206,700		497,166
	Marketing		496,262	427,019	438,225				168,200	10,000	260,025
	Communications		138,512	351,789	371,635				136,800		234,835
		0.7%	4,059,755	4,432,544	4,463,336	87,000	-	-	921,900	10,000	3,444,436
2	**CORPORATE COMPLIANCE**										
	Corporate Compliance		716,109	774,777	866,507				197,300		669,207
	Risk & Lands		-	-	-				-		-
		11.8%	716,109	774,777	866,507	-	-	-	197,300	-	669,207
3	**FLOOD FORECASTING & OPERATIONS**										
	Flood Forecasting		471,778	508,284	608,217		155,034	-	36,000		417,183
		19.7%	471,778	508,284	608,217	-	155,034	-	36,000	-	417,183
4	**PLANNING & WATERSHED MANAGEMENT**										
	Planning & Regulations		3,300,433	3,885,613	4,410,991	2,890,600			39,500	100,000	1,380,891
	Floodplain Mapping (prev. Engineering)		324,632	239,437	246,492	-			-		246,492
	Regional Infrastructure Team		441,752	495,154	509,902			522,650			(12,748)
	Source Protection		238,272	273,464	211,141		211,141		-		-
		9.9%	4,305,089	4,893,668	5,378,526	2,890,600	211,141	522,650	39,500	100,000	1,614,635

WATERSHED MANAGEMENT & SUPPORT SERVICES
2022 PRELIMINARY OPERATING BUDGET

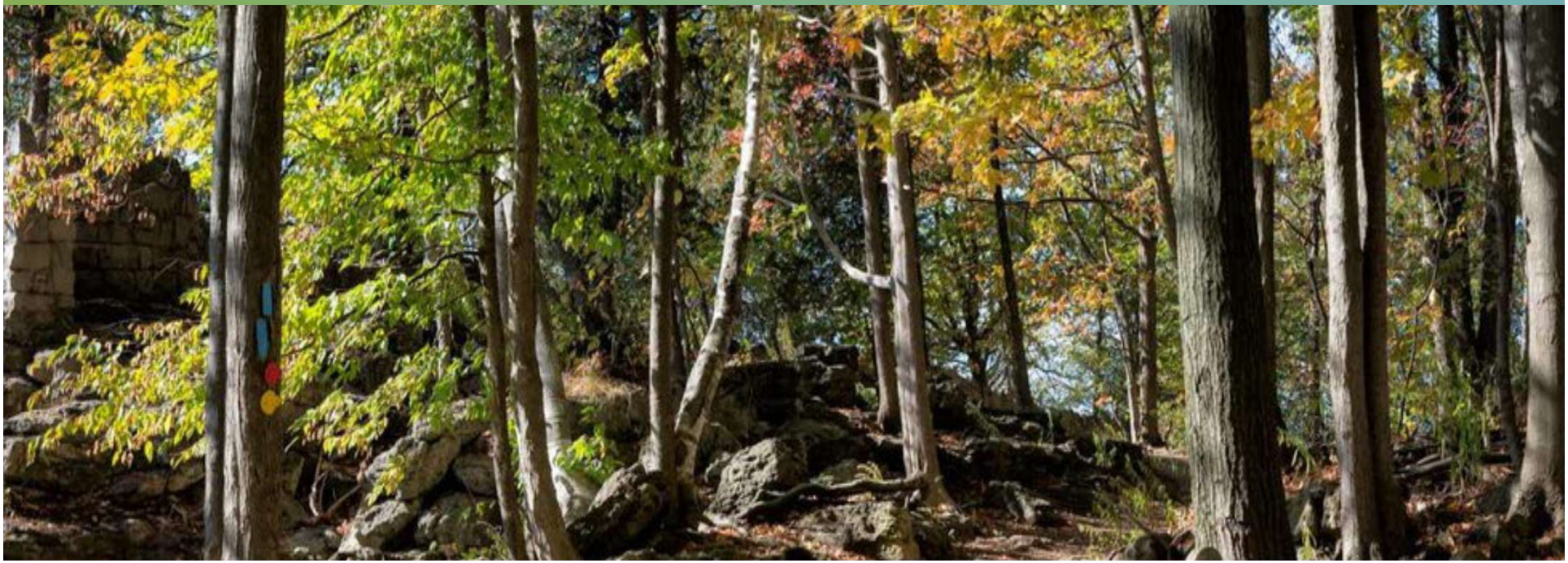
	Description	% Increase (decrease) over 2021 Budget	2020 Actual	2021 Budget Expenses	2022 Preliminary Budget Expenses	2022 Preliminary Budget Funding Sources: Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Chargeback Recoveries (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
5	**SCIENCE & PARTNERSHIPS**										
	Ecology		452,293	636,555	630,848	7,840			21,670		601,338
	Stewardship		452,111	575,773	619,394	70,680			170,177	22,500	356,037
	HHRAP		262,249	338,004	289,092			300,000			(10,908)
	Partnership Projects		237,350	442,134	350,030			350,030			-
											-
		(5.2%)	1,404,003	1,992,466	1,889,364	78,520	-	650,030	191,847	22,500	946,467
6	**PROJECT MANAGEMENT OFFICE**										
	Administration Office Facility		176,052	197,468	199,840						199,840
	Project Management		356,503	456,415	434,469			50,000	129,200		255,269
	Restoration		252,181	356,569	486,395	-			356,934		129,461
	Construction		241,663	249,544	282,088				51,300		230,788
	Partnership Projects		461,997	1,461,513	1,582,617			1,541,617		41,000	-
		9.7%	1,488,397	2,721,509	2,985,409	-	-	1,591,617	537,434	41,000	815,358
7	**OPERATIONS**										
	Vehicles and Equipment		147,007	160,589	160,589						160,589
	Property Management		41,179	91,770	118,890	36,000	125,000				(42,110)
	Security		409,947	445,307	449,070				172,400		276,670
	Forestry Operations		379,398	548,347	585,421	-		42,000	10,000		533,421
	Forestry Tech. Team		283,195	377,463	386,266	100,000			100,000		186,266
		4.7%	1,260,726	1,623,476	1,700,236	136,000	125,000	42,000	282,400	-	1,114,836
8	**DEBT FINANCING CHARGES**	3.6%	744,009	619,245	641,371						641,371
9a	**TRANSFER TO RESERVE - VEHICLE & EQUIPMENT**		-	-	-						-
9	**STABILIZATION, PROPERTY MANAGEMENT, STEWARDSHIP AND RESTORATION; ALLOCATED SURPLUS**		1,183,900	-	-						-
10a	**TRANSFER TO RESERVES - STATE OF GOOD REPAIR (SOGR) LEVY**	0.4%	439,200	478,500	480,500						480,500
10b	**TRANSFER TO RESERVE - LAND SECUREMENT**	0.0%	25,000	25,000	25,000						25,000
	TOTAL OPERATING WATERSHED MGMT & SUPPORT SERVICES (WMSS)	5.4%	**16,097,967**	**18,069,470**	**19,038,466**	**3,192,120**	**491,175**	**2,806,297**	**2,206,381**	**173,500**	**10,168,993**

CONSERVATION AREAS
2022 PRELIMINARY OPERATING BUDGET

	Description	% Increase (decrease) over 2021 Budget	2020 Actual	2021 Budget Expenses	2022 Preliminary Budget Expenses	2022 Preliminary Budget Funding Sources					
						Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Chargeback Recoveries (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
	CONSERVATION AREAS										
11	**Conservation Areas**										
	Conservation Areas Administration		1,198,921	1,094,102	1,466,508	1,165,000			71,770		
	Vehicle and Equipment Operations - Parks		108,850	105,090	117,090						
	Kelso/Glen Eden		6,096,461	8,011,909	8,153,133	9,589,250					
	Crawford Lake/Mountsberg/Robert Edmondson		1,739,503	2,039,720	2,026,675	1,793,000		-			240,000
	Rattlesnake Point/Hilton Falls/Mount Nemo		547,519	630,735	559,896	1,200,500					
	Outreach		126,510	317,474	325,743	198,680			5,600	-	121,463
	Transfer Surplus to Conservation Area reserves		1,072,029	251,284	372,118						
	SUBTOTAL CONSERVATION AREAS - OPERATING BEFORE SUPPORT SERVICES CHARGEBACK	4.6%	10,889,793	12,450,314	13,021,163	13,946,430	-	-	77,370	-	361,463
	Support Services Chargeback	(2.1%)	926,900	1,393,200	1,364,100						
	TOTAL OPERATING CONSERVATION AREAS	3.9%	**11,816,693**	**13,843,514**	**14,385,263**	**13,946,430**	**-**	**-**	**77,370**	**-**	**361,463**
	TOTAL OPERATING PROGRAMS	4.7%	**27,914,660**	**31,912,984**	**33,423,729**	**17,138,550**	**491,175**	**2,806,297**	**2,283,751**	**173,500**	**10,530,456**



2022 PRELIMINARY CAPITAL BUDGET



2022 PRELIMINARY CAPITAL BUDGET SUMMARY

	Description	% Increase (decrease) over 2021 Budget	2020 Actual	2021 Budget Expenses	2022 Preliminary Budget Expenses	2022 Preliminary Budget Funding Sources: Program Revenue	Provincial Funding	Other (Grants, Sp. Project, Debt financing)	Chargeback Recoveries (CHF, SPP, CAP, Cons. Areas)	Reserve Funding	Municipal Levy & Funding
	CAPITAL										
12a	**Capital - Watershed Management & Support Services (WMSS)**										
	Corporate Services										
	Asset Management Plan		39,987	-	40,000						40,000
	Compensation review		-	-	30,000						30,000
	Ortho Imagery		-	15,000	-						-
	IT Infrastructure		89,883	122,000	52,000						52,000
	Digital Transformation		23,953	-	200,000					200,000	-
	Corporate Compliance										
	Property Management Projects		-	-	25,000						25,000
	Clappison & Waterdown Woods		-	25,000	-						-
	Land Acquisition		488,411	-	-						-
	Flood Forecasting & Operations										
	Dams & Channels SOGR Maintenance		956,221	1,203,000	700,970		350,485	-		350,485	-
	Flood Forecasting & Warning Program		157,969	70,000	90,000						90,000
	Planning & Watershed Management										-
	Watershed Planning		31,500	25,000	55,000			30,000			25,000
	Flood Plain Mapping Update		220,118	500,000	525,000			525,000			-
	Project Management Office										-
	Administration Office Renovations		-	500,000	100,000			-		100,000	-
	Facilities - State of Good Repair		169,573	70,136	100,000					100,000	-
	Operations Centre		-	-	-			-			-
	Speyside Weir Removal		-	144,000	-					-	-
	Emerald Ash Borer		928,231	820,000	820,000	16,000		804,000			-
	Vehicle and Equipment Replacement		242,475	167,562	94,000					94,000	-
	Other Foundation Funded Projects		-	100,000	100,000			100,000			-
	TOTAL CAPITAL WMSS	(22.1%)	3,348,322	3,761,698	2,931,970	16,000	350,485	1,459,000	-	844,485	262,000
12b	**Capital - Conservation Areas**										
	Skihill Improvements		-	500,000	950,000					950,000	-
	Facility Major Maintenance & IT Infrastructure		47,000	370,000	213,000					213,000	-
	Vehicle and Equipment Replacement		588,291	148,412	269,903					269,903	-
	Developer Contribution Projects		116,082								-
	-Crawford Lake Boardwalk		-	-	2,280,000		759,924	1,520,076		-	-
	-Kelso Quarry Park / Site 8		-	125,000	100,000					100,000	-
	TOTAL CAPITAL CONSERVATION AREAS	233.5%	751,372	1,143,412	3,812,903	-	759,924	1,520,076	-	1,532,903	-
	TOTAL CAPITAL PROJECTS	37.5%	**4,099,694**	**4,905,110**	**6,744,873**	**16,000**	**1,110,409**	**2,979,076**	**-**	**2,377,388**	**262,000**

2022 PRELIMINARY OPERATING BUDGET & FORECAST 2023-2031

2022 PRELIMINARY OPERATING BUDGET & FORECAST 2023-2031

Ten Year Operating Expenditures and Funding Budget & Forecast - Watershed Management & Support Services (WMSS)

Conservation Halton WMSS Operating Expenditures	2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
Salaries & Benefits										
Balance, beginning of year	12,481,385	13,191,614	13,629,614	14,079,614	14,542,614	15,018,614	15,507,614	16,009,614	16,525,614	17,055,614
Staffing changes (2022 2.75 FTE increase; 2 FTE 2023-2031)	275,542	153,000	156,000	159,000	162,000	165,000	168,000	171,000	174,000	177,000
Compensation Increases (2022 1.75%, 2022-30 2% inflation; 96% of range)	296,652	209,000	216,000	223,000	230,000	238,000	245,000	253,000	261,000	270,000
Increase in benefits (2022 5%; 2023-2031 2% inflation)	138,036	76,000	78,000	81,000	84,000	86,000	89,000	92,000	95,000	98,000
Balance, end of year	**13,191,614**	**13,629,614**	**14,079,614**	**14,542,614**	**15,018,614**	**15,507,614**	**16,009,614**	**16,525,614**	**17,055,614**	**17,600,614**
Materials & Supplies										
Balance, beginning of year	713,842	1,119,146	1,130,346	1,152,946	1,176,046	1,199,546	1,223,546	1,248,046	1,273,046	1,298,546
Science & Partnerships program materials	(31,330)									
Project Management Office (PMO) program materials	450,284									
General decrease and increases (Assumed 2022-2031 2% inflation)	(13,650)	11,200	22,600	23,100	23,500	24,000	24,500	25,000	25,500	26,000
Balance, end of year	**1,119,146**	**1,130,346**	**1,152,946**	**1,176,046**	**1,199,546**	**1,223,546**	**1,248,046**	**1,273,046**	**1,298,546**	**1,324,546**
Purchased Services										
Balance, beginning of year	3,124,481	2,841,184	2,884,184	2,927,184	2,971,184	3,016,184	3,069,184	3,130,184	3,193,184	3,257,184
Corporate Compliance - Insurance and Legal cost increases	65,000									
COO / Digital Transformation program services	105,000									
Planning & Watershed Management - Legal and consulting increase	97,000									
Science & Partnerships - HHRAP and Partnership Projects services	(142,633)									
Project Management Office (PMO) - Restoration Partnership Projects	(436,501)									
WMSS Operations program services	24,000									
General increases (Assumed 2022-2031 2% inflation)	4,837	43,000	43,000	44,000	45,000	53,000	61,000	63,000	64,000	65,000
Balance, end of year	**2,841,184**	**2,884,184**	**2,927,184**	**2,971,184**	**3,016,184**	**3,069,184**	**3,130,184**	**3,193,184**	**3,257,184**	**3,322,184**
Financial										
Balance, beginning of year	74,045	79,000	80,600	82,200	83,800	85,500	87,200	88,900	90,700	92,500
General increases (2022-2031 Assumed 2.0% inflation)	4,955	1,600	1,600	1,600	1,700	1,700	1,700	1,800	1,800	1,900
	79,000	**80,600**	**82,200**	**83,800**	**85,500**	**87,200**	**88,900**	**90,700**	**92,500**	**94,400**
Internal Chargebacks										
Beginning of year	552,972	660,651	673,864	687,341	701,088	715,110	729,412	744,000	758,880	774,058
General increases	107,679	13,213	13,477	13,747	14,022	14,302	14,588	14,880	15,178	15,481
Balance, end of year	**660,651**	**673,864**	**687,341**	**701,088**	**715,110**	**729,412**	**744,000**	**758,880**	**774,058**	**789,539**
Debt Financing Charges (Hamilton Community Fdn & Halton Region)										
Balance, beginning of year	619,245	641,371	677,183	774,879	683,369	580,608	564,490	552,965	545,959	534,879
Decrease in debt financing charges - Ham. Comm. Foundation	-	-	-	(25,000)	(25,000)	-	-	-	-	-
Increase/(decrease) in debt financing charges - Halton Region	22,126	35,812	97,696	(66,510)	(77,761)	(16,118)	(11,525)	(7,005)	(11,080)	
Total Debt Financing Charges	**641,371**	**677,183**	**774,879**	**683,369**	**580,608**	**564,490**	**552,965**	**545,959**	**534,879**	**534,879**

2022 PRELIMINARY OPERATING BUDGET & FORECAST 2023-2031

Ten Year Operating Expenditures and Funding Budget & Forecast - Watershed Management & Support Services (WMSS)

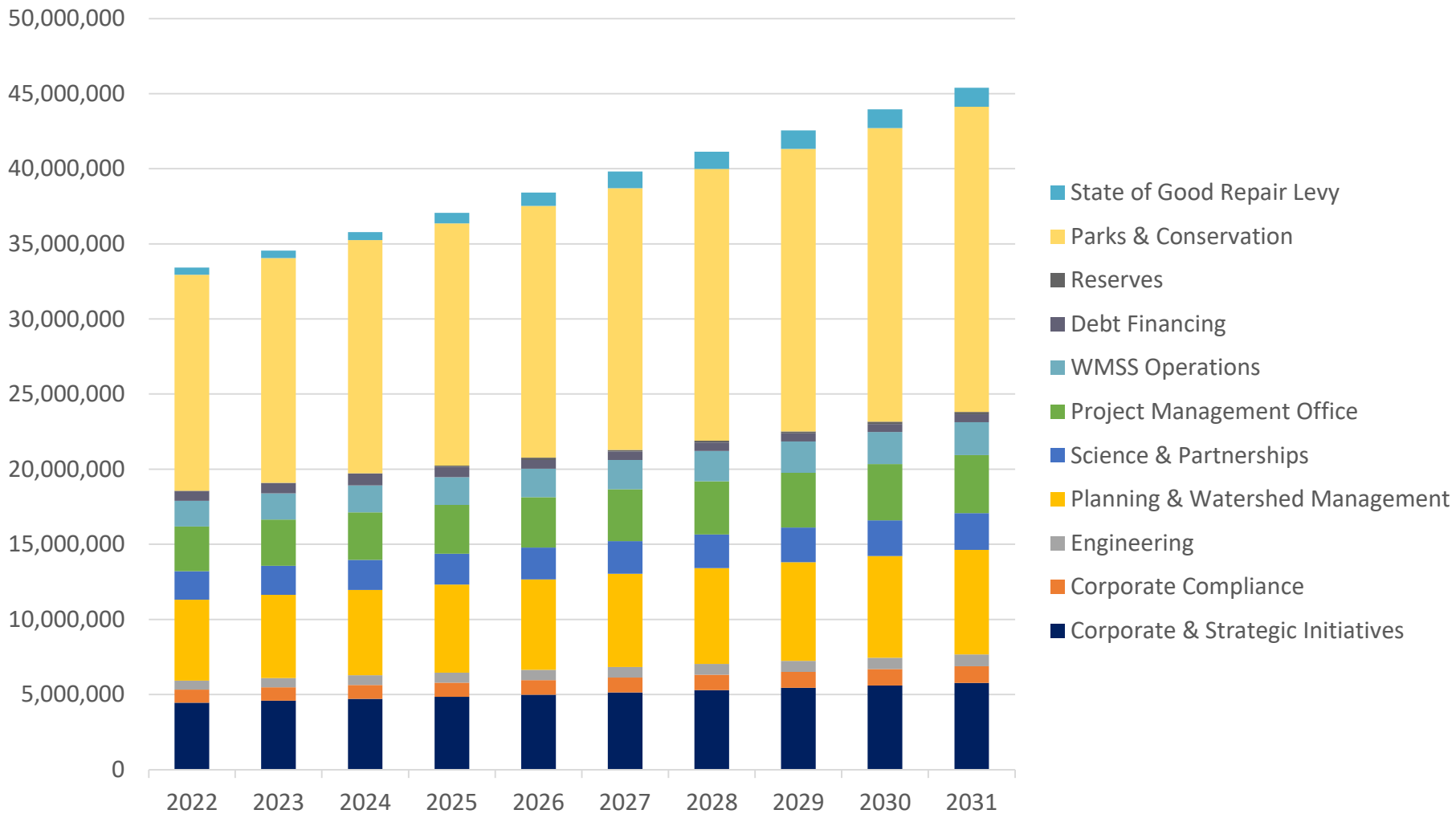
Conservation Halton WMSS Operating Expenditures	2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
Transfer to Reserves - State of Good Repair Levy (Dams and Channels)	316,500	327,100	350,600	521,800	700,900	931,500	950,200	1,056,000	1,054,600	1,075,000
Transfer to Reserves - State of Good Repair Levy (Buildings)	164,000	167,300	170,600	174,000	177,500	181,100	184,700	188,400	192,200	196,000
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	-	-	-	50,000	125,000	75,000	100,000	100,000	125,000	125,000
Total Operating Expenses - WMSS	**19,038,466**	**19,595,191**	**20,250,364**	**20,928,901**	**21,643,962**	**22,394,046**	**23,033,609**	**23,756,783**	**24,409,581**	**25,087,162**
Funding of Operating Expenditures										
Program Revenue	3,192,120	3,351,700	3,519,300	3,589,700	3,661,500	3,844,600	3,921,500	3,999,900	4,079,900	4,161,500
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)	10,049,956	10,464,349	10,825,596	11,187,454	11,544,487	11,771,696	12,204,341	12,753,657	13,214,459	13,674,310
Municipal State of Good Repair Levies - Dams & Channels and Buildings	480,500	494,400	521,200	695,800	878,400	1,112,600	1,134,900	1,244,400	1,246,800	1,271,000
Other Grants & Program Funding	3,142,438	3,202,800	3,264,400	3,327,300	3,391,400	3,456,800	3,523,500	3,591,500	3,660,900	3,731,600
Internal Chargeback Recoveries	1,844,918	1,896,908	1,934,834	1,973,613	2,013,141	2,053,316	2,094,334	2,012,293	2,052,488	2,093,718
Transfers from Reserves - WMSS Stabilization, Water Festival, Stewardship and Restoration	173,500	30,000	30,000	-	-	-	-	-	-	-
Total Operating Funding - WMSS	**19,038,466**	**19,595,191**	**20,250,364**	**20,928,901**	**21,643,962**	**22,394,046**	**23,033,609**	**23,756,783**	**24,409,581**	**25,087,162**

2022 PRELIMINARY OPERATING BUDGET & FORECAST 2023-2031

Ten Year Operating Expenditures and Funding Budget & Forecast - Conservation Areas

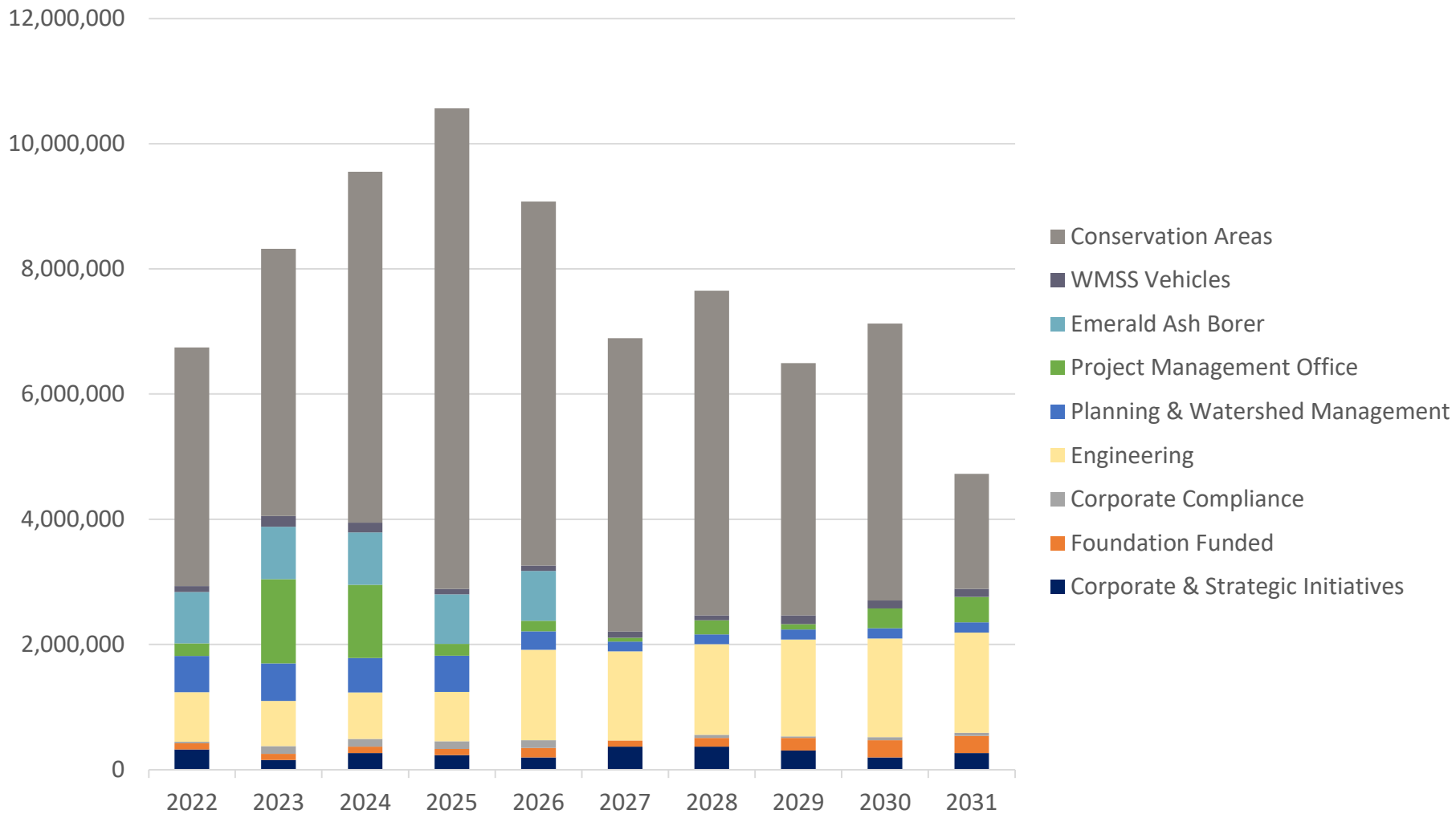
Conservation Halton Conservation Areas Operating Expenditures	**2022 Preliminary**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Salaries & Benefits	8,057,964	8,219,123	8,383,506	8,551,176	8,722,199	9,027,476	9,343,438	9,670,458	10,008,924	10,359,237
Materials & Supplies	1,874,353	1,911,840	1,950,077	1,989,078	2,028,860	2,099,870	2,173,366	2,249,433	2,328,163	2,409,649
Purchased Services	2,245,528	2,290,439	2,336,247	2,382,972	2,430,632	2,515,704	2,603,753	2,694,885	2,789,206	2,886,828
Financial	471,200	480,624	490,236	500,041	510,042	527,894	546,370	565,493	585,285	605,770
Internal Chargebacks	1,364,100	1,391,400	1,419,200	1,447,600	1,476,600	1,506,100	1,536,200	1,566,900	1,598,200	1,630,200
Transfer to Reserve - Operating Surplus	372,118	651,180	946,859	1,259,848	1,590,973	1,735,818	1,889,264	2,051,772	2,223,824	2,405,827
Total Operating Expenses - Conservation Areas	**14,385,263**	**14,944,606**	**15,526,126**	**16,130,716**	**16,759,306**	**17,412,862**	**18,092,391**	**18,798,941**	**19,533,602**	**20,297,510**
Operating Funding - Conservation Areas										
Program Fees	13,946,430	14,496,996	15,069,564	15,665,023	16,284,299	16,928,355	17,598,194	18,294,860	19,019,439	19,773,064
Municipal Funding - Parks education programs & Outreach	361,463	368,692	376,066	383,587	391,259	399,084	407,066	415,207	423,512	431,982
Internal Chargeback Recoveries	77,370	78,917	80,496	82,106	83,748	85,423	87,131	88,874	90,651	92,464
Total Operating Funding - Conservation Areas	**14,385,263**	**14,944,606**	**15,526,126**	**16,130,716**	**16,759,306**	**17,412,862**	**18,092,391**	**18,798,941**	**19,533,602**	**20,297,510**

2022 PRELIMINARY OPERATING BUDGET & FORECAST 2023-2031



2022 PRELIMINARY CAPITAL BUDGET & FORECAST 2023-2031

2022 PRELIMINARY OPERATING BUDGET & FORECAST 2023-2031



2022 PRELIMINARY CAPITAL BUDGET & FORECAST 2023-2031

Conservation Halton WMSS Capital Expenditures	2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Ten Year Capital Expenditures and Funding Budget & Forecast - Watershed Management & Support Services									
Flood Forecasting & Operations										
Flood Forecasting	90,000	80,000	75,000	70,000	70,000	40,000	40,000	40,000	40,000	32,500
Scotch Block Major Maintenance	25,000	53,000	169,000	91,000	-	-	115,000	-	-	-
Hilton Falls Major Maintenance	130,000	-	228,000	-	-	-	-	118,000	-	-
Morrison-Wedgewood major maintenance	-	-	-	51,000	668,000	400,000	587,000	599,000	477,000	623,000
Kelso Dam Major Maintenance	275,970	240,000	-	-	-	-	-	118,000	-	-
Mountsberg Major Maintenance	80,000	112,000	-	-	-	-	-	-	-	-
Dams and Channels Maintenance Projects	190,000	234,000	270,000	530,000	705,000	927,000	704,000	671,000	1,056,000	941,000
Dam Public Safety Projects	-	-	-	43,000	-	58,000	-	-	-	-
	790,970	719,000	742,000	785,000	1,443,000	1,425,000	1,446,000	1,546,000	1,573,000	1,596,500
Corporate Services										
Asset Management Plan Consulting	40,000	25,000	25,000	-	-	-	75,000	25,000	-	-
Program Rates & Fees Review	-	-	30,000	30,000	-	-	-	60,000	-	-
Engagement Survey	-	31,000	-	15,000	-	-	35,000	-	-	-
Compensation Review	30,000	-	-	-	-	35,000	-	-	-	-
GID Data Acquisition	-	-	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Website Upgrade	-	-	-	-	-	100,000	-	-	-	-
Digitizing of paper files	200,000	-	-	-	-	-	-	-	-	-
IT Infrastructure - Digital Transformation	-	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
IT Infrastructure - upgrades - WMSS	52,000	98,000	97,000	72,000	82,000	117,000	144,000	107,000	82,000	152,000
	322,000	154,000	267,000	232,000	197,000	367,000	369,000	307,000	197,000	267,000
Corporate Compliance										
Giant's Rib GeoPark	-	100,000	100,000	100,000	100,000	-	-	-	-	-
Property Management Projects	25,000	25,000	25,000	25,000	25,000	-	50,000	25,000	50,000	50,000
	25,000	125,000	125,000	125,000	125,000	-	50,000	25,000	50,000	50,000
Planning & Watershed Management										
Watershed Planning	55,000	51,000	52,000	53,000	54,000	55,000	56,000	57,000	58,000	59,000
Flood Plain Mapping	525,000	550,000	500,000	525,000	240,000	100,000	102,000	104,000	106,000	108,000
	580,000	601,000	552,000	578,000	294,000	155,000	158,000	161,000	164,000	167,000

2022 PRELIMINARY CAPITAL BUDGET & FORECAST 2023-2031

	Ten Year Capital Expenditures and Funding Budget & Forecast - Watershed Management & Support Services									
Conservation Halton WMSS Capital Expenditures	**2022 Preliminary**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Science & Partnerships										
Watershed Implementation Plan	-	-	-	-	50,000	-	40,000	100,000	175,000	175,000
Emerald Ash Borer (EAB) Management	820,000	834,000	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
	920,000	934,000	934,000	894,000	944,000	100,000	140,000	200,000	275,000	275,000
Project Management Office										
Administration Office & Other Facility Renovations	200,000	316,505	157,011	184,468	170,595	60,633	225,179	84,936	316,413	406,574
Speyside Weir Removal	-	30,000	12,000	5,000	-	-	-	-	-	-
Operations Centre	-	1,000,000	1,000,000	-	-	-	-	-	-	-
	200,000	1,346,505	1,169,011	189,468	170,595	60,633	225,179	84,936	316,413	406,574
WMSS Operations										
Vehicle & Equipment Replacement	94,000	174,500	158,500	82,500	87,500	98,000	78,000	143,000	126,000	125,000
	94,000	174,500	158,500	82,500	87,500	98,000	78,000	143,000	126,000	125,000
Total Capital Expenditures - WMSS	**2,931,970**	**4,054,005**	**3,947,511**	**2,885,968**	**3,261,095**	**2,205,633**	**2,466,179**	**2,466,936**	**2,701,413**	**2,887,074**
	-									
Capital - Funding										
Provincial Grants	350,485	319,500	333,500	357,500	686,500	692,500	703,000	753,000	766,500	782,000
Municipal Funding	262,000	284,000	392,000	352,000	367,000	482,000	626,000	601,000	593,000	657,500
Municipal Funding Other - EAB	804,000	834,000	834,000	794,000	794,000	-	-	-	-	-
Municipal Funding Other - Flood Plain Mapping	525,000	550,000	500,000	525,000	240,000	-	-	-	-	-
Other Funding Grants and Program Funding	146,000	226,000	227,000	228,000	229,000	130,000	131,000	132,000	133,000	134,000
Transfer from Reserves	844,485	640,505	561,011	629,468	944,595	901,133	1,006,179	980,936	1,208,913	1,313,574
Municipal Debt Financing	-	1,200,000	1,100,000	-	-	-	-	-	-	-
Total Capital Funding - WMSS	**2,931,970**	**4,054,005**	**3,947,511**	**2,885,968**	**3,261,095**	**2,205,633**	**2,466,179**	**2,466,936**	**2,701,413**	**2,887,074**

2022 PRELIMINARY CAPITAL BUDGET & FORECAST 2023-2031

Conservation Halton Conservation Areas Capital Expenditures	Ten Year Capital Expenditures and Funding Budget & Forecast - Conservation Areas									
	2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
Capital Expenditures Conservation Areas										
Expenditures funded by Capital Reserve:										
Vehicle and equipment replacement	269,903	122,000	46,500	95,000	53,000	75,553	147,500	150,500	176,000	125,000
Facility and Infrastructure Major Maintenance	175,000	250,000	175,000	250,000	180,000	470,000		800,000	250,000	300,000
Ski/Snowboarding Capital Expenditures	950,000	400,000	900,000	800,000		775,000	2,000,000		2,950,000	600,000
Park Master Plans	-	50,000	50,000	50,000	50,000	50,000	-	-		
Information Technology Infrastructure	38,000	38,000	78,000	48,000	53,000	38,000	38,000	78,000	48,000	48,000
Subtotal Capital Expenditures Conservation Areas	**1,432,903**	**860,000**	**1,249,500**	**1,243,000**	**336,000**	**1,408,553**	**2,185,500**	**1,028,500**	**3,424,000**	**1,073,000**
Conservation Area - Developer Contribution Projects										
Projects partly funded by Development Contributions collected by Region of Halton:										
Kelso/Glen Eden Water Distribution and Collection	-	2,754,475	2,754,475	2,754,475						
Kelso Recreation and Trail Centre	-		500,000	2,259,900	3,259,900	1,159,900				
Crawford Lake Visitor Centre and Education Facility	-					500,000	3,000,000	3,000,000	1,000,000	767,050
Crawford Lake Boardwalk	2,280,000									
Kelso Quarry Park / Site 8	100,000	650,000	1,100,000	1,420,000	2,220,000	1,620,000				
Subtotal Costs - Developer Contribution Projects	**2,380,000**	**3,404,475**	**4,354,475**	**6,434,375**	**5,479,900**	**3,279,900**	**3,000,000**	**3,000,000**	**1,000,000**	**767,050**
Total Conservation Areas Capital Expenditures	**3,812,903**	**4,264,475**	**5,603,975**	**7,677,375**	**5,815,900**	**4,688,453**	**5,185,500**	**4,028,500**	**4,424,000**	**1,840,050**

2022 PRELIMINARY BUDGET - MUNICIPAL FUNDING

2022 PRELIMINARY MUNICIPAL FUNDING

Total Municipal Funding:	**Preliminary Budget 2022**	**Budget 2021**	**$ Increase (Decrease)**	**% Increase**
Operating	$10,049,956	$9,695,379	$354,577	3.7%
Capital	262,000	257,000	5,000	1.9%
	10,311,956	9,952,379	359,577	3.6%
State of Good Repair (SOGR) Levy - Dams & Channels; Buildings	480,500	478,500	2,000	0.4%
Municipal Funding total	**$10,792,456**	**$10,430,879**	**$361,577**	**3.5%**

2022 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.

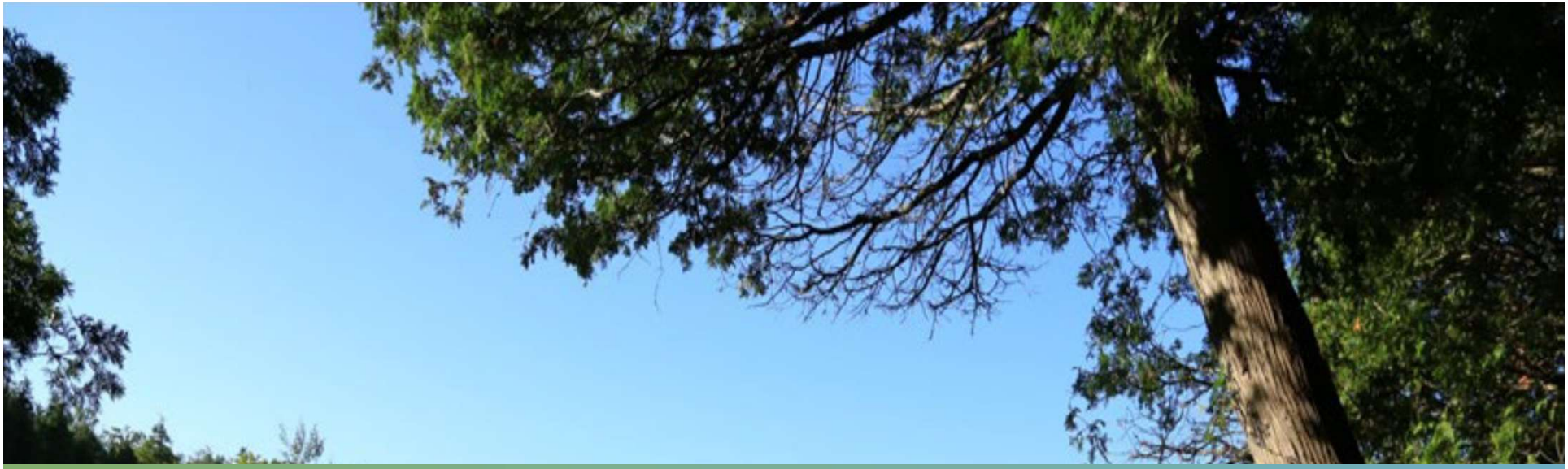
The 2022 preliminary apportionment is based on 2021 apportionment percentages. Updated current value assessment data and apportionment will be received from the province in September 2021.

Municipality:	**Apportionment Estimate % 2022**	**Municipal Funding 2022**	**Apportion - ment % 2021**	**Municipal Funding 2020**	**% Increase**
Region of Halton	87.8421%	$9,480,320	87.8421%	$9,162,704	3.5%
Region of Peel	4.7534%	513,008	4.7534%	495,821	3.5%
City of Hamilton	7.1875%	775,708	7.1875%	749,719	3.5%
Township of Puslinch	0.2170%	23,420	0.2170%	22,635	3.5%
	100.0000%	**$10,792,456**	**100.0000%**	**$10,430,879**	

2022 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			
Municipal Funding	**2022 Preliminary**	**2023**	**2024**	**2025**	**2026**
Operating	$ 10,049,956	$ 10,464,349	$ 10,825,596	$ 11,187,454	$ 11,544,487
Capital	$ 262,000	$ 284,000	$ 392,000	$ 352,000	$ 367,000
Municipal Funding - Total excluding SOGR Levy	**$ 10,311,956**	**$ 10,748,349**	**$ 11,217,596**	**$ 11,539,454**	**$ 11,911,487**
State of Good Repair (SOGR) Levy	$ 480,500	$ 494,400	$ 521,200	$ 695,800	$ 878,400
Muncipal Funding - Total including SOGR Levy	**$ 10,792,456**	**$ 11,242,749**	**$ 11,738,796**	**$ 12,235,254**	**$ 12,789,887**
% Change	**3.5%**	**4.2%**	**4.4%**	**4.2%**	**4.5%**



2022 PRELIMINARY BUDGET - RESERVES

RESERVES

Conservation Halton Reserves	Reserves Projected Balance Dec. 31, 2021	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, 2022
Watershed Management & Support Services							
Vehicle and Equipment	625,967				(94,000)		531,967
Building	153,470				(100,000)		53,470
Building - State of Good Repair	299,757			164,000	(100,000)		363,757
Watershed Management Capital - Municipal Funds and Self Generated Funds	954,564			316,500	(350,485)		920,579
Watershed Management & Support Services Stabilization	1,789,212					(100,000)	1,689,212
Capital Projects - Debt Financing Charges	425,564						425,564
Digital Transformation	254,900				(200,000)		54,900
Legal - Planning & Watershed Management	258,891						258,891
Legal - Corporate	200,000						200,000
Water Festival	170,296				-	(10,000)	160,296
Land Securement	85,437	25,000					110,437
Property Management	80,629						80,629
Stewardship and Restoration	259,011				-	(63,500)	195,511
Conservation Areas							
Capital	2,402,091		372,118		(1,532,903)		1,241,306
Stabilization	1,000,568						1,000,568
Total Reserves	**8,960,357**	**25,000**	**372,118**	**480,500**	**(2,377,388)**	**(173,500)**	**7,287,087**

RESERVE CONTINUITY

Conservation Halton	Projected 2021	2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
		RESERVE CONTINUITY									
Watershed Management & Support Services Reserves											
Vehicle and Equipment, beginning	$ 723,967	$ 625,967	$ 531,967	$ 357,467	$ 198,967	$ 166,467	$ 203,967	$ 180,967	$ 202,967	$ 159,967	$ 158,967
Transfer to Reserve - Reserve funding (municipal)	-	-	-	-	50,000	125,000	75,000	100,000	100,000	125,000	125,000
Transfer from Reserve - Capital expenditures	(98,000)	(94,000)	(174,500)	(158,500)	(82,500)	(87,500)	(98,000)	(78,000)	(143,000)	(126,000)	(125,000)
Vehicle and Equipment	**$ 625,967**	**$ 531,967**	**$ 357,467**	**$ 198,967**	**$ 166,467**	**$ 203,967**	**$ 180,967**	**$ 202,967**	**$ 159,967**	**$ 158,967**	**$ 158,967**
Building, beg. of year	$ 373,137	$ 153,470	$ 53,470	$ 53,470	$ 53,470	$ 53,470	$ 53,470	$ 53,470	$ 53,470	$ 53,470	$ 53,470
Transfer from Reserve - Capital expenditures	(219,667)	(100,000)	-	-	-	-	-	-	-	-	-
Building	**$ 153,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**	**$ 53,470**
Building - State of Good Repair, beginning of year	$ 315,611	$ 299,757	$ 363,757	$ 414,552	$ 528,141	$ 517,673	$ 524,578	$ 645,045	$ 604,566	$ 708,030	$ 583,817
Transfer to Reserve - SOGR Levy	102,000	164,000	167,300	170,600	174,000	177,500	181,100	184,700	188,400	192,200	196,000
Transfer from Reserve - Capital expenditures	(117,854)	(100,000)	(116,505)	(57,011)	(184,468)	(170,595)	(60,633)	(225,179)	(84,936)	(316,413)	(406,574)
Building - State of Good Repair	**$ 299,757**	**$ 363,757**	**$ 414,552**	**$ 528,141**	**$ 517,673**	**$ 524,578**	**$ 645,045**	**$ 604,566**	**$ 708,030**	**$ 583,817**	**$ 373,243**
Watershed Mgmt Cap.-Municipal & Self Generated	1,200,892	$ 954,564	$ 920,579	$ 928,179	$ 945,279	$ 1,109,579	$ 1,123,979	$ 1,362,979	$ 1,610,179	$ 1,913,179	$ 2,201,279
Transfer to Reserves - SOGR Levy	376,500	316,500	327,100	350,600	521,800	700,900	931,500	950,200	1,056,000	1,054,600	1,075,000
Transfer from Reserves - Capital expenditures	(622,828)	(350,485)	(319,500)	(333,500)	(357,500)	(686,500)	(692,500)	(703,000)	(753,000)	(766,500)	(782,000)
Watershed Management Capital - Municipal	**$ 954,564**	**$ 920,579**	**$ 928,179**	**$ 945,279**	**$ 1,109,579**	**$ 1,123,979**	**$ 1,362,979**	**$ 1,610,179**	**$ 1,913,179**	**$ 2,201,279**	**$ 2,494,279**
Watershed Mgmt & Support Services Stabilization	1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212	$ 1,789,212
Transfer from Reserve	-	(100,000)	-	-	-	-	-	-	-	-	-
Watershed Mgmt & Support Serv.	**$ 1,789,212**	**$ 1,689,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**	**$ 1,789,212**
Capital Projects - Debt Financing Charges	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**	**$ 425,564**

RESERVE CONTINUITY

Conservation Halton	Projected 2021	RESERVE CONTINUITY 2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
Digital Transformation, beginning of year	254,900	$ 254,900	$ 54,900	$ 54,900	$ 54,900	$ 54,900	$ 54,900	$ 54,900	$ 54,900	$ 54,900	$ 54,900
Transfer from Reserve	-	(200,000)	-	-	-	-	-	-	-	-	-
Digital Transformation	**$ 254,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**	**$ 54,900**
Legal - Planning & Watershed Management	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**	**$ 258,891**
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	$ 170,296	$ 160,296	$ 145,296	$ 130,296	$ 130,296	$ 130,296	$ 130,296	$ 130,296	$ 130,296	$ 130,296
Transfer from Reserve	(18,615)	(10,000)	(15,000)	(15,000)	-	-	-	-	-	-	-
Water Festival	**$ 170,296**	**$ 160,296**	**$ 145,296**	**$ 130,296**	**$ 130,296**	**$ 130,296**	**$ 130,296**	**$ 130,296**	**$ 130,296**	**$ 130,296**	**$ 130,296**
Land Securement	60,437	$ 85,437	$ 110,437	$ 135,437	$ 160,437	$ 185,437	$ 210,437	$ 235,437	$ 260,437	$ 285,437	$ 310,437
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	**$ 85,437**	**$ 110,437**	**$ 135,437**	**$ 160,437**	**$ 185,437**	**$ 210,437**	**$ 235,437**	**$ 260,437**	**$ 285,437**	**$ 310,437**	**$ 335,437**
Property Management	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**	**$ 80,629**
Stewardship & Restoration	420,511	$ 259,011	$ 195,511	$ 180,511	$ 165,511	$ 165,511	$ 165,511	$ 165,511	$ 165,511	$ 165,511	$ 165,511
Transfer to (from) Reserve	(161,500)	(63,500)	(15,000)	(15,000)	-	-	-	-	-	-	-
Stewardship and Restoration	**$ 259,011**	**$ 195,511**	**$ 180,511**	**$ 165,511**	**$ 165,511**	**$ 165,511**	**$ 165,511**	**$ 165,511**	**$ 165,511**	**$ 165,511**	**$ 165,511**

RESERVE CONTINUITY

Conservation Halton	Projected 2021	2022 Preliminary	2023	2024	2025	2026	2027	2028	2029	2030	2031
		RESERVE CONTINUITY									
Conservation Areas Stabilization	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**	**$ 1,000,568**
Capital	3,294,219	2,402,091	1,241,306	1,032,486	729,845	746,694	2,001,666	2,328,931	2,032,695	3,055,967	1,855,790
Transfer to Reserve - Operating Surplus	251,284	372,118	651,180	946,859	1,259,848	1,590,973	1,735,818	1,889,264	2,051,772	2,223,824	2,405,827
Transfer from Reserve - Capital expenditures	(1,143,412)	(1,532,903)	(860,000)	(1,249,500)	(1,243,000)	(336,000)	(1,408,553)	(2,185,500)	(1,028,500)	(3,424,000)	(1,073,000)
Capital	**$ 2,402,091**	**$ 1,241,306**	**$ 1,032,486**	**$ 729,845**	**$ 746,694**	**$ 2,001,666**	**$ 2,328,931**	**$ 2,032,695**	**$ 3,055,967**	**$ 1,855,790**	**$ 3,188,617**
TOTAL RESERVES	**$ 8,960,357**	**$ 7,287,087**	**$ 7,057,161**	**$ 6,721,710**	**$ 6,884,890**	**$ 8,223,668**	**$ 8,912,400**	**$ 8,869,885**	**$ 10,281,620**	**$ 9,269,331**	**$ 10,709,583**

momentum

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THANK YOU

June
2021

TO:	**Conservation Halton Board of Directors**
REPORT: #	CHBD 05 21 08
FROM:	Hassaan Basit, President & CEO
DATE:	June 17, 2021
SUBJECT:	**Conservation Halton Governance Accountability and Transparency Initiative**

Recommendation

THAT the Conservation Halton Board of Directors **endorses the Governance Accountability and Transparency Initiative and that the report be sent to the Minister of Environment, Conservation and Parks.**

Summary

Recent amendments to the Conservation Authorities Act (CA Act) include a number of amendments related to governance (see Appendix F) as part of the Province's commitment to modernizing accountability and transparency at Conservation Authorities (CAs). Conservation Halton (CH) has been demonstrating and communicating our commitment to accountability and transparency over the past several years and will continue to do so. We are committed to continuous improvement across the organization and are fully supportive of the Province's renewed commitment in these areas.

A CH Governance Accountability and Transparency Initiative is outlined for endorsement and includes the following three actions:

a) Updates to CH Administrative By-law,
b) **Administrative actions related to Governance, Accountability and Transparency**,
c) Annual reporting on strategic priorities and other key performance indicators.

The continuous demonstration of our commitment to Governance Accountability and Transparency enables CH to counter the narrative that has been attributed to conservation authorities in general for the past several years. We heard it expressed as a 'problem' in the CA Act review undertaken in 2015-2018 and again in the more recent review.

It is proposed that the governance accountability and transparency initiative activities continue to be led by the President & CEO with support from the Director of Corporate Compliance and Manager, CEO Office to continue to ensure effective implementation.

Background

CH is committed to Governance Accountability and Transparency and will demonstrate that it will continue to meet the requirements established through legislative amendments to the CA Act, including a number of governance-related sections which were proclaimed on February 2, 2021.

Through *Report CHBD 01 21 10 Update on Proclamation of Various Provisions of Conservation Authorities Act* the President & CEO informed the CH Board of Directors of the provisions proclaimed, at the February 18, 2021 Board meeting.

CH Governance Accountability and Transparency Initiative

Working with Conservation Ontario, CH has identified 3 key actions that demonstrate the commitment to governance accountability and transparency:

1. Updates to CA Administrative By-Laws

Ensure CH Administrative By-Law is updated in a timely manner as future regulations and legislative amendments to the CA Act are proclaimed. CH approved the new Administrative By-Law in November 2018 (October 22, 2020 revision) in compliance with the December 2017 amendments to the CA Act.

2. Administrative actions related to Governance, Accountability and Transparency

Continue to ensure proactive reporting on governance-related clauses in the CA Act that were proclaimed on February 2, 2021. CH always has, and will continue to post the following documents on the CH website to ensure transparency as required by the CA Act:

1. Updated list of General Membership (CH Board of Directors)
2. Administrative By-Law
3. Annual Meeting Schedule of CH Board meetings with information on how to participate
4. Agendas – full package
5. Minutes (to be posted within 30 days of meeting)
6. Audited financial statements and Budget & Business Plan
7. Annual Fee schedule
8. Other corporate documentation as available/necessary, including Strategic Plan, annual reports, Watershed Report Cards, community consultation guides, purchasing-related documents, etc.

3. Annual reporting on strategic priorities and other key performance indicators

1. Continuing to measure and report on KPIs for mandatory programs and services
2. Performance reporting to CH Board of Directors at the Annual General Meeting
3. Cumulative progress reports against strategic targets established in Metamorphosis and Momentum strategic plans to inform customer-centric continuous improvement across all CH business units
4. Preparation of financial budget variance reports on a periodic basis throughout the current fiscal year to ensure financial accountability and sustainability.

5. Continue to produce and submit annual Budget & Business Plan book to funding municipalities which clearly shows revenue and expenditures for each program and service
6. Proactive communication and outreach with relevant stakeholders, including local Municipal Councils.

Impact on Strategic Goals

This report supports the Momentum priority of Organizational Sustainability.

Financial Impact

There is no financial impact associated with this report.

Signed & respectfully submitted:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Adriana Birza, Manager, CEO Office
905-336-1158, ext. 2295; abirza@hrca.on.ca

(Appendix F) Governance Accountability and Transparency Initiative Current Priorities: Governance-related Clauses of the *Conservation Authorities Act* Proclaimed February 2, 2021, with Actions Required and Draft BMP Actions

Area of Impact	Section	Change to Act	Interpretation, Required Actions and DRAFT BMP Actions Recommended for Conservation Halton (CH)
Municipal Appointments	14(1.1), 14(1.2)	At least 70% of a municipality's appointees must be municipal councillors. Municipality can apply to Minister to have percentage reduced; the decision is at the Minister's direction (including adding any conditions or restrictions).	Current members may complete the remaining duration of their appointment. As new members are appointed, participating municipalities must appoint them in accordance with the new requirements. Exceptions can be requested from the Minister **Required Action:** letters to municipalities notifying them of changes and exception process; the CH Administrative By-Law re: Section 1. Member a) Appointments already states that "Participating Municipalities within the jurisdiction of the General Membership may appoint Members in accordance with Section 14 of the Act". **BMP Action:** CH will send a letter to all municipal clerks this fall to proactively highlight the new requirements for allocation of members on the CH Board as well as a reminder that the municipality needs to appoint members before the expiry of the current terms, at the end of December 2022 or earlier if a municipality chooses to fill any unexpected vacancies.
Municipal Agreements	14(2.2) & 14(2.3)	The Minister is to be provided with a copy of any agreement amongst participating municipalities affecting the number of members. Must be available to the public (on website or by any other means)	The number of members is established through the population formula under the CAA (s.2(2)) or under a past Order in Council unless there is an agreement confirmed by municipal resolutions (s.14(2.1)) **Required Action:** Existing agreements sent to Minister by April 3, 2021, and made available to the public (s14(2.2) & 14(2.3)) **BMP Action:** CH follows the CA Act to determine members per municipality and has not deviated from it, therefore CH does not have a formal agreement with any of the municipalities. 2018 was the last time CH adjusted for population increases. Municipalities are circulated a copy of our Board report detailing the formula and the resulting number of board seats allocated to each municipality and are requested to fill vacancies accordingly. **BMP Action:** Member status documentation is posted on the CH website as part of CH Board of Directors package for May 2018
Agricultural Appointee	14(4),	The Minister has the authority to appoint an additional member to a conservation authority to represent the agricultural sector.	**No Action at this time**. If the Minister appoints an agricultural representative staff will provide an orientation briefing to the new member.

(Appendix F) Governance Accountability and Transparency Initiative Current Priorities: Governance-related Clauses of the *Conservation Authorities Act* Proclaimed February 2, 2021, with Actions Required and Draft BMP Actions

Area of Impact	Section	Change to Act	Interpretation, Required Actions and DRAFT BMP Actions Recommended for Conservation Halton (CH)
	14(4.0.1), 14(4.1)	The voting powers of such a representative are limited (i.e. can't vote on a decision to enlarge, amalgamate or dissolve an authority or on budgetary matters presented at a meeting). Term up to 4 years, as determined by Minister	**BMP Action:** Possibility to include a reference in the *CH Administrative By-Law* document and an update to the Administrative By-law re: 'Governance: Member appointments' e.g., voting powers
Agenda/ Minutes	15(2.1), 15(2.2)	Authority and executive committee meeting agendas to be available to the public before a meeting takes place and the minutes are to be available to the public within 30 days following a meeting. Both to be available by posting on website or by any other means the authority considers appropriate.	**Required Action:** CH ensures Agendas are available to the public 5 business days in advance of meetings and minutes are available to the public within 30 days after the meeting as already stated in the updated Administrative By-law Section D. Meeting Procedures. **BMP Action:** Agendas and minutes are available to the public on the CH website
Chair/Vice Chair Term	17(1.1), 17(1.2), 17(1.3)	A chair or vice-chair shall hold office for a term of one year and shall serve for no more than two consecutive terms. Appointments must rotate amongst participating municipalities, a member from a specific municipality cannot be appointed to succeed an outgoing chair or vice-chair appointed by the same municipality. The Minister may grant permission to appoint a chair or vice-chair for a term of more than one year or to hold office for more than two consecutive years or waive the rotating provision	From Feb 2, 2021, an individual is not eligible for appointment if they have just finished serving in the position for two years or if they are from the same municipality as the previous incumbent. Any appointments made under the old rules prior to Feb 2nd are valid until the next election. Exceptions can be requested from the Minister. **Required Action**: CH has reviewed the Chair/Vice-Chair history; has adjusted the 2021 Inaugural / elections accordingly to request an exception; the updated CH Administrative By-law (Section 5. Election of Chair and Vice-Chair) states that the election of the Chair and one or more Vice-Chairs shall be held in accordance with the Act: at the Annual/Inaugural meeting of the General Membership held prior to May 31 of each year in accordance with the General Membership's Procedures for Election of Officers **BMP Action**: CH requested and received MECP approval to the exception request received on March 15, 2021 (CHBD# 357-2-21-691). The CEO sent a letter on February 19 and March 2, 2021, on behalf of the Halton Region Conservation Authority requesting the Minister's exceptions under the Conservation Authorities Act related to recently proclaimed legislative amendments regarding term limits for the chair and vice-chair appointments.

(Appendix F) Governance Accountability and Transparency Initiative Current Priorities: Governance-related Clauses of the *Conservation Authorities Act* Proclaimed February 2, 2021, with Actions Required and Draft BMP Actions

Area of Impact	Section	Change to Act	Interpretation, Required Actions and DRAFT BMP Actions Recommended for Conservation Halton (CH)
			An exception to subsections 17 (1.1) and (1.2) of the Conservation Authorities Act was granted pursuant to the Minister's authority under clauses 17(1.3) (a) and (b), subject to a restriction: - until the 2023 annual general meeting, which allows the current chair and vice-chair to be appointed for a total of two more years, and to therefore hold office for more than two consecutive terms. - an exception to allow the HRCA to re-appoint as chair and vice-chair members who were appointed by the same participating municipality
Powers of authorities	21(1)	Amendments were made to sub-clauses (a), (b), (c) and, (p).	**Required Action:**
Appointment of an Investigator and Appointment of an Administrator	23.1 (1)-(10), 23.2 (1)-(3),	Minister can appoint one or more investigators to conduct an investigation of an authority's operations, including the programs and services it provides. Investigator powers: • Inquire into any or all of the authority's affairs, financial or otherwise • Require production of records • Inspect, examine, audit and copy anything • Conduct financial audit • Require any member of the authority and any other person to appear before the investigator and give evidence under oath. Investigator shall provide copy of report to Minister, who shall promptly transmit a copy to the authority. Minister may require CA to pay all or part of cost of investigation. **Investigators have immunity (if done in good faith).** After Minister's review of report, and CA has failed or is likely to fail to comply with a provision of this Act, the Minister can: • Order Authority to do or refrain from doing anything • Recommend to LGIC that an administrator be appointed to take over control and operation of authority • CAs must comply with any issued orders by a specified date	**No Action at this time**. If the Minister appoints an investigator, then CH Members and staff may be required to appear before investigator and give evidence under oath. There may be unplanned expenses in a given year, if required to pay for the investigation. CH must comply with all resultant orders.

(Appendix F) Governance Accountability and Transparency Initiative Current Priorities: Governance-related Clauses of the *Conservation Authorities Act* Proclaimed February 2, 2021, with Actions Required and Draft BMP Actions

Area of Impact	Section	Change to Act	Interpretation, Required Actions and DRAFT BMP Actions Recommended for Conservation Halton (CH)
	23.3 (1)-(6)	• Orders to be made public. Administrator has power to: • May exercise all the powers and shall perform all the duties of the administrator and of its members subject to such terms and conditions as outlined by Minister • Minister shall notify Authority and member municipalities • Minister may issue directions to the administrator • **Administrator has immunity (if done in good faith)**	
Annual Audit	38 (1), 38(4)	Annual audits are still required by a person licensed under the *Public Accounting Act*, 2004 and it is additionally specified that it be prepared in accordance with generally accepted accounting principles for local governments recommended by the Public Section Accounting Board of the Chartered Professional Accountants of Canada, as they exist from time to time. **Within 60 days** of receiving the audit report, must make available to the public on its website and any other means the authority considers appropriate.	**Required Action:** Review current audit practices and make any required adjustments to align with legislative requirements e.g., advise Audit firm when contracted. Ensure audit report is available to the public within 60 days of receipt by the authority; possible update to the Administrative By-law re: 'Governance: audited financial statements'. **BMP Action: CH** has always made the board approved audit report available to the public on the CA website

June
2021

REPORT TO: **Conservation Halton Board of Directors**

REPORT NO: # CHBD 05 21 09

FROM: Hassaan Basit, President & Chief Executive Officer

DATE: June 17, 2021

SUBJECT: **Regulatory proposals (Phase 1) under the Conservation Authorities Act ERO number 019-2986**
CH File No.: PPO 048

Recommendation

THAT the Conservation Halton Board of Directors **receives the report entitled 'Regulatory proposals (Phase 1) under the Conservation Authorities Act ERO number 019-2986';**

And

THAT the Conservation Halton Board of Directors **directs staff to submit report CHBD 05 21 09 to the Ministry of Environment, Conservation and Parks as Conservation Halton's formal comments and recommendations on the content of ERO number 019-2986.**

Executive Summary

The Ministry of the Environment, Conservation and Parks (MECP) is proposing to move forward with the first of two phases of regulatory amendments to implement the legislative changes previously made to the *Conservation Authorities Act*. A Consultation Guide was posted on the Environmental Registry (ERO number 019-2986) to provide a description of the proposed regulations and to obtain public feedback by June 27, 2021. These proposed regulations, as part of the first phase, would set out: 1) the mandatory programs and services to be delivered by conservation authorities, 2) the proposed agreements that may be required with participating municipalities to fund non-mandatory programs and services through a municipal levy, 3) the transition period to establish those agreements, 4) the requirement to establish 'community' advisory boards, and 5) the Minister's section 29 regulation relating to conservation authority operation and management of authority-owned lands. This staff report summarises the implications of these regulatory proposals to Conservation Halton and offers specific recommendations to the Province for consideration.

In summary, Conservation Halton staff supports many approaches outlined in the Consultation Guide, specifically the addition of Core Watershed-based Resource Management Strategies and the Provincial Water Quality and Quantity Monitoring program. Both programs are integral to the Conservation Authorities' ability to deliver programs to manage natural hazards and natural resources within Ontario's watersheds and meet the purpose of the Conservation Authorities Act. However, there is a need for more clarity and flexibility in some approaches described in the Consultation Guide as outlined in Conservation Halton recommendations.

Report

On December 8, 2020, Bill 229, the *Protect, Support and Recover from COVID-19 Act* (Budget Measures), 2020, which made changes to the *Conservation Authorities Act* (*CA Act*) and the *Planning Act*, received Royal Assent.

The Ministry of the Environment, Conservation and Parks (MECP) is now proposing to move forward with the first of two phases of regulatory amendments to implement the legislative changes previously made to the *CA Act* and those recently made through the *Protect, Support and Recover from COVID-19 Act* (Budget Measures), 2020.

The regulations the government proposes to introduce as part of the first phase would set out the following:

1. Mandatory programs and services that CAs would be required to provide, including core watershed-based resource management strategies.
2. A requirement for agreements between CAs and their participating municipalities for the use of municipal levies to fund non-mandatory programs and services an authority determines are advisable in its jurisdiction.
3. The proposed regulation may set out a specific time in which the agreements must be reviewed and to determine whether the agreements will be renewed.
4. Details of the transition plan CAs must prepare, including an inventory of the authority's programs and services, the consultation process with participating municipalities on the inventory, and steps taken to enter into these agreement(s) with participating municipalities for the use of municipal levies for non-mandatory programs and services the authority determines are advisable in its jurisdiction.
5. The consolidation of each of the current individual conservation authority 'Conservation Areas' regulations made under Section 29 of the *CA Act* into one Minister's regulation. This would set out, for example, prohibited activities and activities requiring permits on conservation authority owned lands.
6. Requirements for each conservation authority to establish a community advisory board to include members of the public, and providing that conservation authority by-laws may govern the operation of these and other advisory boards that may be established by the authority.

In the coming months, MECP will be consulting on Phase II of proposed regulations under the *CA Act*, including:

- Municipal levies governing the apportionment of conservation authority capital and operating expenses for mandatory programs and services and for non-mandatory programs and services under municipal agreement. This would also set out provisions pertaining to municipal appeals of conservation authority municipal levy apportionments, including who would hear those appeals.
- Standards and requirements for the delivery of non-mandatory programs and services.

The following provides a summary of the scope of regulatory changes currently proposed in the Consultation Guide. More details are available on the Environmental Registry (ERO number 019-2986). The ERO commenting period ends on June 27, 2021.

1. Mandatory CA Programs and Services Regulation

In June 2019, the *More Homes, More Choice Act, 2019* amended the *CA Act* to identify the categories of mandatory programs and services which CAs are required to provide where applicable in their specific jurisdictions. The *Protect, Support and Recover from COVID-19 Act* (Budget Measures), 2020 re-enacted this provision.

These categories of programs and services include:

A. Risk of natural hazards.
B. Conservation and management of lands owned or controlled by a conservation authority, including any interests in land registered on title.
C. Conservation authority duties, functions, and responsibilities as a source protection authority under the *Clean Water Act, 2006*.
D. Lake Simcoe Region Conservation Authority duties, functions, and responsibilities under the *Lake Simcoe Protection Act, 2008*.
E. Conservation authority duties, functions and responsibilities under other legislation prescribed by regulation.
F. Other programs or services prescribed by the regulation within a year of the end of the transition period. Proposed to be:
   (a) Core Watershed-based Resource Management Strategy
   (b) Provincial Water Quality and Quantity Monitoring

Mandated by the Province (mandatory) and may be funded by provincial grants and/or conservation authority self-generated revenue (e.g., user fees). Where such revenue sources cannot finance the entire costs of those programs, the costs must be raised through the municipal levy.

A. Mandatory Programs and Services related to the Risk of Natural Hazards

Overview of proposal
It is proposed by the Ministry of Natural Resources and Forestry (MNRF) that each conservation authority would be required to implement a program or service to help manage the risks posed by the natural hazards within their jurisdiction, including flooding, erosion, dynamic beaches, hazardous sites as defined in the Provincial Policy Statement (PPS), 2020 and low water/drought as part of Ontario's Low Water response. This program is to be designed to:

- identify natural hazards
- assess risks associated with natural hazards including impacts of climate change
- manage risks associated with natural hazards
- promote public awareness of natural hazards

Managing risks associated with natural hazards may include prevention, protection, mitigation, preparedness, and response.

Implications for CH
- The scope of mandatory programs and services related to the risk of natural hazards generally aligns with current CH programs and services for this category including the administration of permits and associated enforcement activities and involvement of CAs as a commenting agency under other provincial legislation (e.g., *Environmental Assessment Act, Drainage Act, Aggregate Resources Act, Niagara Escarpment Planning and Development*

Act, etc.).

- Some statements in the Consultation Guide related to the role that CAs play in land use planning are misleading or ambiguous. Clarification on when and what types of applications CAs can provide input on behalf of the MNRF in accordance with Provincial One Window Planning Service protocols, as well as when a CA can appeal an application to the Local Planning Appeal Tribunal (LPAT), is needed.
- The Consultation Guide highlights a range of physical operations and services related to hazard management (e.g., water and erosion control infrastructure, ice management), that are considered mandatory. However, the cost of hiring personnel and leasing/purchasing and maintaining equipment is not addressed.

Recommendations to the Province:

- *Ensure that CAs retain the ability to comment on any planning or development application as it relates to natural hazards, and to independently appeal decisions related to natural hazards to the LPAT, not just at the request of MMAH to ensure that the provincial interest related to natural hazards is met.*
- *Update / develop Provincial technical guidelines/standards specifically for development within CA regulated hazard lands, including guidance for incorporating climate change considerations into natural hazard management and identifying policy approaches for flood hazard spill areas, in addition to two zone and special policy areas, to provide clarity and ensure consistency among CAs.*
- *Ensure that the cost of hiring personnel and leasing/purchasing and maintaining equipment is listed as necessary resources to carry out select hazard management programs/services.*

B. Mandatory Programs and Services related to the Management of Land Owned by CAs

Overview of proposal

The mandatory programs and services related to the conservation and management of lands owned or controlled by a conservation authority, including any interests in land registered on title, relate to the conservation authority as the owner of its land and also to land owned by others where the conservation authority has an 'interest' or right related to that other person's property, as granted by the property owner (e.g., 'conservation easements' that may protect a natural heritage feature or 'access easements' that may enable a conservation authority to develop trails that cross another landowner's property).

Each conservation authority would be required to implement the mandatory programs and services, as set out related to the conservation and management oflands owned or controlled by the authority, including any interests in land registered on title, within their jurisdiction.

Implications for CH

- The scope of mandatory programs and services related to the conservation and management of conservation authority land identified in the Consultation Guide generally aligns with current CH programs and services for this category.
- Further discussion and coordination among the Province, CAs, and municipalities is needed to find long-term solutions related to monitoring and enforcement actions to address illegal or unsafe activities occurring on CA-owned properties, including possible additional legislative changes.
- The Consultation Guide suggests that the revenue generated from CA owned lands (e.g., fees

for park access) may be used to offset other CA programs and services, reducing reliance on municipal levy. It is important to acknowledge that any offsets to the municipal levy should only be considered after all direct and indirect costs for lands operations, as well as long term asset management costs, have been covered.

Recommendations to the Province

- *Convene a working group with staff from the Province, CAs, and municipalities to identify a long-term, sustainable strategy that will enable CAs to fulfill their obligations related to monitoring and enforcement actions on CA-owned lands, as established under S. 29 of the CA Act.*
- *Clarify that any offsets to the municipal levy from revenue generated from CA-owned lands are to be applied only after all direct and indirect eligible land management costs have been covered.*
- *Review and update the current Provincial policy regarding the disposition of CA properties to ensure that the CA disposition of natural heritage lands is not precluded where another appropriate steward can be identified (e.g., municipality or a land trust).*

C. Mandatory Programs and Services Related to Source Protection Authority responsibilities under the Clean Water Act, 2006

Overview of proposal

Under the *Clean Water Act, 2006* CAs are required to exercise and perform the powers and duties of a drinking water source protection authority. Each conservation authority therefore would be required to implement programs and services related to those responsibilities as source protection authorities under the *Clean Water Act,2006.*

Implications for CH

- The scope of mandatory programs and services related to source protectionappears to be consistent with the current responsibilities of CH as part of the Halton-Hamilton Source Protection Region.

Recommendations to the Province

- *Ensure sustained and adequate funding is provided to enable CAs and municipalities to carry out the legislated duties. Sustainable funding is required to ensure that CAs can competently carry out technical (scientific) work, develop appropriate plan policies, review proposals, and identify the effects of a project on source water. The retention of subject matter experts, including professional hydrogeologists for groundwater-based protection areas, is fundamental to ensuring that this program is successful.*

D. Lake Simcoe Region Conservation Authority duties, functions, and responsibilities under the Lake Simcoe Protection Act, 2008 – Not applicable to CH

E. Mandatory Programs and Services Related to Conservation Authority Responsibilities Under an Act Prescribed by Regulation – Not currently applicable to CH.

F. Mandatory Programs and Services Prescribed in Regulation (Within the Year after the Transition Period for Municipal Funding Agreements for Non-Mandatory Programs and Services)

Overview of proposal
The *CA Act* also allows for the prescribing of 'other' programs and services not listed in previous mandatory categories. These 'other' programs and services must be prescribed within a year after the end of the transition period for municipal funding agreements for non-mandatory programs and services.

The ministry is proposing to prescribe the following as mandatory programs and services:
1. Core Watershed-based Resource Management Strategies
2. Provincial Water Quality and Quantity Monitoring

Core Watershed-based Resource Management Strategies – To capture the value of the broader watershed and resource management perspective that CAs have, MECP is proposing that each CA be required to develop a core watershed-based resource management strategy that documents the current state of the relevant resources within their jurisdictions in the context of the mandatory programs and services described in the Consultation Guide. Examples of how mandatory programs and services could be incorporated in the strategy, as well how non-mandatory programs and services could be incorporated, subject to an MOU/agreement, are also described in the Guide. A watershed-based resource management strategy can provide a means to develop an improved integrated process for the delivery of the mandatory programs and services. The strategy may inform an adaptive management approach to address the issues or threats in a CAs jurisdiction such as mitigating the risk from the impacts of natural hazards. A successful strategy is intended to help ensure effective and efficient use of funding, particularly the municipal levy.

Provincial Water Quality and Quantity Monitoring - MECP is proposing mandatory programs and services for CAs related to water quality and groundwater quantity monitoring to be prescribed in this category with the possibility of additional programs and services prescribed later within the timeframe enabled by the *CA Act*. All 36 CAs currently support the Provincial Water Quality Monitoring Network (stream water quality) and ProvincialGroundwater Monitoring Network (groundwater levels and chemistry) by installing and maintaining equipment, collecting samples/data, and sending samples to the ministry laboratory for chemical analysis.

Implications for CH
- The addition of Core Watershed-based Resource Management as a prescribed mandatory program and services is a very positive and welcome aspect of the Ministry's proposal. This proposal will support: 1) a more strategic and cohesive approach for addressing natural hazards and watershed-wide resource management programs, 2) updated watershed plans and development of a watershed-wide climate change strategy, and 3) the objectives of CH's new strategic plan "Momentum".
- The addition of the provincial stream monitoring program and provincial groundwater monitoring program as a prescribed mandatory program recognizes the importance of monitoring to inform resource management decision making and provides a foundation from which CAs can build a more robust watershed-wide monitoring strategy.

Recommendations to the Province

- *Clarify that the three tables provided in the Consultation Guide (pages 18-20) are examples of programs and/or activities and potential funding mechanisms. Otherwise, the lists are not complete, nor do they recognize all potential funding arrangements.*
- *Revise the text in the table (page 18) to state that Natural Hazard mapping is to be prepared primarily to support the administration of Section 28 regulation and the natural hazards mandatory responsibility of the CAs with CAs as the lead. CAs regulatory or natural hazard mapping can then be used to support land use planning. In addition, the Source Protection Program should be added to the table, along with example activities of source water monitoring, watershed characterization, and climate change vulnerability assessment. The CA is the lead for these activities and the funding mechanism includes MECP grant.*
- *Clarify how programs and activities listed under "on CA owned land" as mandatory will be funded; many of these programs and activities have been identified as non-mandatory in the table (page 20).*

2. NON-MANDATORY CONSERVATION AUTHORITY PROGRAMS AND SERVICES

Overview of proposal

MECP is proposing to require CAs to have mutually agreed upon Memorandums of Understanding (MOUs) or other such agreements with their participating municipalities for the funding of non-mandatory programs and services to be delivered on behalf of, and at the request, of a municipality, through a funding mechanism chosen by the municipality.

MECP is also proposing to develop one Minister's regulation that would establish standards and requirements for entering into such agreements for municipal funding of non-mandatory programs and services under section 21.1.1 (funded by revenue that is not from a municipal levy) and section 21.1.2 (funded through a municipal levy).

The regulation would govern the matters to be addressed in each authority's transition plan. CAs would be required to submit copies of their transition plan to the MECP for information purposes (not approval) by a date set out in the proposed regulation, and to its participating municipalities and to make the plans publicly available online (e.g., on a conservation authority's website).

MECP is proposing January 1, 2023, as the prescribed date by which municipal agreements must be in place for non-mandatory programs and services. However, there is accommodation for the granting of extensions forcompleting municipal agreements where an authority, with the support of one or more participating municipality in the authority, submits a written request at least 90 days before the end date in the transition period regulation.

Implications for CH

- CH is establishing a complete inventory of the program and servicing it offers on behalf of member municipalities and developing a transition plan which outlines a workplan and timeline for developing and entering into/renewing agreements with its member municipalities to be completed before the end of 2021. To meet the budgeting timelines for 2023, especially given the scheduling of municipal elections in October 2022, CH will need to engage with its municipal partners late 2021/early 2022 to advance the completion of this work and to transition to the new funding model.

- The phase 1 regulations do not address regulations for the charging of fees, which will be considered in the next phase. Regulations which outlined how fees will be allotted to mandatory programs will be required to inform discussions and complete negotiations on MOUs for non-mandatory programs and services.

Recommendations to the Province

- *Craft the regulation to contain high-level direction and principles for developing MOUs which provide CAs and municipalities with flexibility and latitude to negotiate mutually beneficial agreements, rather than being prescriptive.*
- *Proclaim this regulation in a timely fashion to allow CAs and municipalities to begin discussions for updating existing MOUs or developing new MOUs as soon as possible to meet the prescribed timelines.*
- *Recognize that the time required for negotiating non-mandatory programs and services between CAs and municipalities will rely heavily on the funding arrangements available for mandatory services. These arrangements should be clarified as soon as possible to allow negotiations on non-mandatory MOUs to proceed in a timely fashion.*

3. REGULATION TO REQUIRE "COMMUNITY" ADVISORY BOARDS

Overview of proposal

The Province is proposing to proclaim regulations that would enable a Lieutenant Governor in Council (LGIC) regulation governing the establishment of advisory boards, including the ability to require CAs to establish one or more advisory boards and prescribing related requirements with respect to composition, functions, powers, duties, activities, and procedures.

Implications for CH

- The establishment of Community Advisory Boards for project or program-specific matters is supported by CH staff, recognizing that the Conservation Authority membership has fiduciary and decision-making responsibility.
- The administration of a Community Advisory Board will require staff time and resources to support the group.

Recommendations to the Province

- *Minimize prescribed requirements for Community Advisory Boards to recognize circumstances of individual CAs, curtail any administrative burden on CAs, recognize existing advisory groups already engaged by CAs, and allow for local flexibility regarding the purpose, composition, meeting and governance requirements, and breadth and depth of advisory services being sought.*
- *The regulations should not preclude a Conservation Authority's ability and right to establish ad hoc advisory groups to provide advice on specific matters, as needed.*

4. SECTION 29 MINISTER'S REGULATION (CA LANDHOLDINGS)

Once the new section 29 of the *CA Act* is proclaimed, a Minister's regulation is proposed to consolidate the current individual authority section 29 'Conservation Areas' regulations regarding activities on lands owned by CAs into one regulation. MECP is intending for the Minister's regulation to be broadly consistent with the policy principles and provincial content that has been used in the past. The current regulations will continue until such time as the new Minister's regulation replaces them.

Current section 29 regulations manage activities on all authority owned land including the useby the public of the lands and services available; the prohibition of certain activities; setting fees for access and use of lands including recreational facilities; administrating permits forcertain land uses; and protecting against property damage and for public safety.

Implications for CH

- The administration of the section 29 is included as a mandatory program and service related to the management of land owned by CAs. Concern was raised by many CAs throughout the review of the *CA Act*, that enhancements were needed to the regulatory enforcement and compliance provisions of section 29 to adequately protect CA landholdings. As urbanization pressuresincrease and the population expands within our communities, municipalities and police forces are strained resulting in a growing responsibility on CAs to preserve and protect valuable greenspaces and regulated areas. Further, it is challenging to effectively deter undesirable activities and behaviours on CA owned land without stronger enforcement powers. These pressures occurred prior to but have increased during the COVID-19 pandemic. There is no indication in the Consultation Guide that any substantial changes to the section 29 regulation to provide Conservation Authorities with more than token compliance and enforcement powers are being proposed.

Recommendations to the Province

- *Convene a working group with staff from the Province, CAs, and municipalities to identify a long term, sustainable strategy that will enable CAs to fulfill their obligations related to monitoring and enforcement actions on CA owned lands, as established under S. 29 of the CA Act. Better compliance and enforcement tools must be available to Conservation Authorities to protect and manage CA-owned lands, safeguard the health and safety of the public, and reduce/avoid the potential for a tragic occurrence that would cause harm to life and property.*

Summary

Conservation Halton staff supports many approaches outlined in the MECP Consultation Guide, specifically the addition of Core Watershed-based Resource Management Strategies and the Provincial Water Quality and Quantity Monitoring program. Both programs are integral to the Conservation Authorities' ability to deliver programs to manage natural hazards and natural resources within Ontario's watersheds and meet the purpose of the *Conservation Authorities Act.* More clarity and flexibility are recommended to the Province for some approaches described in the Consultation Guide.

Impact on Strategic Priorities

This report supports the full spectrum of Momentum priorities and objectives.

Financial Impact

To date, the financial impact of the proposed regulations for funding programs that require municipal funding, in full or in part, is uncertain. The classes and services for which CAs may charge fees will be addressed in Phase 2 regulatory proposals.

Signed & respectfully submitted:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Hassaan Basit, President and CEO, hbasit@hrca.on.ca, 905-336-1158 x 2270

Conservation Halton

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Protecting the Natural Environment from Lake to Escarpment

June 18, 2021

BY EMAIL: ca.office@ontario.ca

Ms. Liz Mikel
Ministry of the Environment, Conservation and Parks
Conservation and Source Protection Branch
40 St Clair Avenue West, Floor 10
Toronto ON M4V 1M2

Dear Ms. Mikel:

Re: **Regulatory proposals (Phase 1) under the Conservation Authorities Act**
ERO number 019-2986
CH File No.: PPO 048

Conservation Halton (CH) has reviewed the above-referenced Environmental Registry posting and offers the following comments on Phase 1 regulatory proposals under the *Conservation Authorities Act,* approved by the Conservation Halton Board of Directors on June 17, 2021, in report CHBD 05 21 09.

Conservation Halton supports many of the approaches outlined in the Consultation Guide, specifically the addition of Core Watershed-based Resource Management Strategies and the Provincial Water Quality and Quantity Monitoring program. Both programs are integral to the Conservation Authorities' ability to deliver programs to manage natural hazards and natural resources within Ontario's watersheds and meet the purpose of the *Conservation Authorities Act.*

To ensure that the new regulations proposed under the *Conservation Authorities Act* provide for transparent, streamlined, and fluent implementation, Conservation Halton recommends the following under each category of programs and services as described in the Consultation Guide:

1. MANDATORY CA PROGRAMS AND SERVICES REGULATION

Mandatory Programs and Services related to the Risk of Natural Hazards

- Ensure that CAs retain the ability to comment on <u>any</u> planning or development application as it relates to natural hazards, and to independently appeal decisions related to natural hazards to the LPAT, not just at the request of MMAH to ensure that the provincial interest related to natural hazards is met.
- Update / develop Provincial technical guidelines/standards specifically for development within CA regulated hazard lands, including guidance for incorporating climate change

considerations into natural hazard management and identifying policy approaches for flood hazard spill areas, in addition to two zone and special policy areas, to provide clarity and ensure consistency among CAs.

- Ensure that the cost of hiring personnel and leasing/purchasing and maintaining equipment is listed as necessary resources to carry out select hazard management programs/services.

Mandatory Programs and Services related to the Management of Land Owned by CAs

- Convene a working group with staff from the Province, CAs, and municipalities to identify a long term, sustainable strategy that will enable CAs to fulfill their obligations related to monitoring and enforcement actions on CA-owned lands, as established under S. 29 of the CA Act.
- Clarify that any offsets to the municipal levy from revenue generated from CA owned lands are to be applied only after all direct and indirect eligible land management costs have been covered.
- Review and update the current Provincial policy regarding the disposition of CA properties to ensure that the CA disposition of natural heritage lands is not precluded where another appropriate steward can be identified (e.g., municipality or a land trust).

Mandatory Programs and Services Related to Source Protection Authority responsibilities under the Clean Water Act, 2006

- Ensure sustained and adequate funding is provided to enable CAs and municipalities to carry out the legislated duties. Sustainable funding is required to ensure that CAs can competently carry out technical (scientific) work, develop appropriate plan policies, review proposals, and identify the effects of a project on source water. The retention of subject matter experts, including professional hydrogeologists for groundwater-based protection areas, is fundamental to ensuring that this program is successful.

Mandatory Programs and Services Prescribed in Regulation (Within the Year after the Transition Period for Municipal Funding Agreements for Non-Mandatory Programs and Services)

- Clarify that the three tables provided in the Consultation Guide (pages 18-20) are examples of programs and/or activities and potential funding mechanisms. Otherwise, the lists are not complete, nor do they recognize all potential funding arrangements.
- Revise the text in the table (page 18) to state that Natural Hazard mapping is to be prepared primarily to support the administration of Section 28 regulation and the natural hazards mandatory responsibility of the CAs with CAs as the lead. CAs regulatory or natural hazard mapping can then be used to support land use planning. In addition, the Source Protection Program should be added to the table, along with example activities of source water monitoring, watershed characterization, and climate change vulnerability assessment. The CA is the lead for these activities and the funding mechanism includes MECP grant.
- Clarify how programs and activities listed under "on CA owned land" as mandatory will be funded; many of these programs and activities have been identified as non-mandatory in the table (page 20).

2. **NON-MANDATORY CONSERVATION AUTHORITY PROGRAMS AND SERVICES**

- Craft the regulation to contain high-level direction and principles for developing MOUs which provide CAs and municipalities with flexibility and latitude to negotiate mutually beneficial agreements, rather than being prescriptive.
- Proclaim this regulation in a timely fashion to allow CAs and municipalities to begin discussions for updating existing MOUs or developing new MOUs as soon as possible to meet the prescribed timelines.
- Recognize that the time required for negotiating non-mandatory programs and services between CAs and municipalities will rely heavily on the funding arrangements available for mandatory services. These arrangements should be clarified as soon as possible to allow negotiations on non-mandatory MOUs to proceed in a timely fashion.

3. **REGULATION TO REQUIRE "COMMUNITY" ADVISORY BOARDS**

- Minimize prescribed requirements for Community Advisory Boards to recognize circumstances of individual CAs, curtail any administrative burden on CAs, recognize existing advisory groups already engaged by CAs, and allow for local flexibility regarding the purpose, composition, meeting and governance requirements, and breadth and depth of advisory services being sought.
- The regulations should not preclude a Conservation Authority's ability and right to establish ad hoc advisory groups to provide advice on specific matters, as needed.

4. **SECTION 29 MINISTER'S REGULATION (CA LANDHOLDINGS)**

- Convene a working group with staff from the Province, CAs, and municipalities to identify a long-term, sustainable strategy that will enable CAs to fulfill their obligations related to monitoring and enforcement actions on CA-owned lands, as established under S. 29 of the CA Act. Better compliance and enforcement tools must be available to Conservation Authorities to protect and manage CA-owned lands, safeguard the health and safety of the public, and reduce/avoid the potential for a tragic occurrence that would cause harm to life and property.

CHBD 05 21 09 is attached and provides further details and rationale for these recommendations. Should you require additional clarification or discussion, please feel free to contact me.

Sincerely,

Hassaan Basit,
President and CEO

Encl. 1 **CHBD 05 21 09**

June
2021

REPORT TO: **Conservation Halton Board of Directors**

REPORT NO: # CHBD 05 21 10

FROM: Jill Ramseyer, Director, Corporate Compliance

DATE: June 17, 2021

SUBJECT: **Authorization Request for Award Approval Contract: Snowmaking Tracking, Control and Equipment Upgrade RFP # CH-042321**

Recommendation

THAT the Conservation Halton Board of Directors **approves the award recommendation of the Snowmaking Tracking, Control and Equipment Upgrade contract to HKD Snowmakers on the basis of "Only Compliant Bid Received" in alignment with the Conservation Halton Purchasing Policy Section 2.3.2 b) requiring RFP award recommendations that exceed $100,000.00 to require Board approval.**

Report

The snowmaking facility at Glen Eden is one of the most important pieces of infrastructure. With Climate Change, the ability to make snow is becoming more important each year. Our current snowmaking plant is over 30 years old. Over that time, no investment has been made to allow the system to operate with modern equipment. Only repair investments have been made. Over the next 4 years, a significant investment to modernize our facilities is projected.

On April 23, 2021, Conservation Halton issued the subject RFP publicly on Bids &Tenders.ca (public bidding portal) in order to secure a suitable vendor to provide needed snowmaking equipment and associated snowmaking system upgrade. The RFP closed on May 21, 2021, with one submission received from HKD Snowmakers. The final configurated price of the System Upgrade Solution and Equipment is **$187,757.83** (excluding applicable taxes). Due to the urgency of the project schedule and lead-time required to secure the necessary equipment, it is imperative that vendor be awarded as soon as possible in order to ensure a smooth system upgrade transition prior to the start of the 2021 ski season.

The investments this year include the purchase of software technology that will allow operators to view, in real time, the status of every gun on the system. The system will allow the operators to control the snowmaking facility and track the performance of each gun. The upgraded technology in the snow guns will allow operators to make more snow at peak temperatures (-8 to 10 degrees). The new guns will use less power to create better snow at marginal temperatures (-2 to -4 degrees). Our current snow guns use 20-year-old technology.

Impact on Strategic Priorities

This report supports the Momentum priority of Nature and Parks.
And is related to the strategic objective of implementing new tools to enhance customer experience and streamline internal operations.

Financial Impact

The total cost of this award is $187,757.83 which will be paid for from the 2021 Kelso / GE Ski Capital Budget.

Signed & respectfully submitted:

Jill Ramseyer
Director, Corporate Compliance

Approved for circulation:

Hassaan Basit
President & CEO/Secretary-Treasurer

FOR QUESTIONS ON CONTENT: Pavan Seth, Procurement Manager,
pseth@hrca.on.ca, 905.336.1158 x2249