

### City of Hamilton GENERAL ISSUES COMMITTEE (SPECIAL) ADDENDUM

Meeting #: 23-021 Date: June 28, 2023 Time: 9:30 a.m. Location: Council Chambers (GIC) Hamilton City Hall 71 Main Street West

Angela McRae, Legislative Coordinator (905) 546-2424 ext. 5987

### 4. COMMUNICATIONS

- 4.1 Correspondence Respecting Item 7.2, Stormwater Funding Review (FCS22043(b)), from the following individuals:
  - \*b. Larissa Fenn, Vice President, Corporate Affairs, Hamilton Oshawa Port Authority
  - \*c. Peter Oddi, P. Eng, McAsphal Industries Limited
  - \*d. Gino Becerra, Vice-president, Ontario, QSL
  - \*e. Steve Hagen, Hamilton Terminal Manager, Agrico Canada
  - \*f. Greg Dunnett, President and CEO, Hamilton Chamber of Commerce
  - \*g. Geoffrey Knapper, General Manager, Hamilton Industrial Environmental Association
  - \*h. Michelle Diplock, Manager of Planning and Government Relations, West End Home Builders' Association

### 5. DELEGATION REQUESTS

5.1 Delegation Requests respecting Item 7.1 City of Hamilton Watershed Action Plan Update (PW19008(u)), from the following individuals:

Members of the public can contact the Clerk's Office to acquire the documents considered at this meeting, in an alternate format.

- \*b. Chris McLaughlin, Bay Area Restoration Council (In-Person)
- \*c. Tys Theijsmeijer, Royal Botanical Gardens (In-Person)
- \*5.2 Delegation Requests respecting Item 7.2 Stormwater Funding Review (FCS22043(b)), from the following individuals:
  - \*a. Gavin Smuk (In-Person)
  - \*b. Ann Marie Reid, Twenty Place Storm Water Management Pond's Chair (In-Person)
  - \*c. Larry Freeman (In-Person)





Attention: Angela McRae, Legislative Coordinator General Issues Committee City of Hamilton

Re: GIC June 28, 2023, Item 7.2 - Stormwater Funding Review - FCS22043(b)

June 26, 2023

Dear Members of General Issues Committee:

We appreciate this opportunity to comment on the proposed Stormwater Rate Review.

As the staff report notes, "The stormwater charge is premised on the impact properties have on the City's stormwater management system," and is intended to be a fair and equitable user-pay system.

The staff report also explains that it is necessary to establish a connection between the amount of the fee and the cost of the service being provided, for the charge not to be considered a tax. As you are aware, in Ontario, a municipal user fee can only be charged in exchange for a specific service offered to the person or entity paying the fee. The fee must be directly related to the cost of providing the service to that user, and the municipality may not charge one user a fee for a service it provides to someone else.

Some Bayfront properties maintain independent stormwater management systems which collect and manage stormwater before discharging to Hamilton Harbour without utilizing the municipal system. These systems provide an equivalent level of service as the municipal systems without any municipal investment. We also note that the bed of the Harbour, where many municipal outfalls discharge, is owned by HOPA, and that sediment discharged from most of these outfalls is dredged at HOPA's expense.

Accordingly, it is not appropriate for this rate structure to apply to properties that have no interface with the municipal stormwater system, and we would recommend the inclusion of an exemption in the rate structure to address these specific cases.

Other municipalities that have adopted a similar approach to stormwater fees have incorporated such exclusions:

### Canadä

605 James Street North. Hamilton, ON L8L 1K1 | hopaports.ca





#### City of Mississauga

"Technical exemptions apply to a property or portion of a property that is not serviced by the City's Stormwater Management System if the Footprint Area or Impervious Area of that property drains: Directly to land outside of the municipal boundary of the City, or Directly to a waterbody outside the City's jurisdiction"

#### Halifax Regional Water Commission

"(5) Properties that are within the Commission's service boundary and do not receive Stormwater Service from the Commission are exempt from the Site Related Flow Charge."

With regard to those industrial/commercial properties that are connected to the municipal system, we are generally supportive of a system of incentives for the installation of Low Impact Development technologies such as permeable pavement or rain gardens; however, it is important to note that on some industrial properties especially in the Bayfront area, permeability may be neither practical nor environmentally desirable.

We note that there was very little consultation with industrial/commercial users in the preparation of this proposal. We would encourage further involvement by the business community to ensure that this policy and the fees charged are consistent with Hamilton's economic development objectives.

Thank you again for the opportunity to share our feedback on the proposed rate structure.

Sincerely,

Larissa Fenn Vice President, Corporate Affairs Hamilton Oshawa Port Authority



From: ODDI, Peter (McAsphalt) <<u>poddi@mcasphalt.com</u>> Sent: June 27, 2023 9:25 AM To: <u>clerk@hamilton.ca</u> Cc: MACDONALD, Mike (McAsphalt) <<u>mmacdonald@mcasphalt.com</u>>; Sara Yonson <<u>syonson@hopaports.ca</u>> Subject: Stormwater Funding Review

Attached is a letter submitted to the General Issues Committee from HOPA regarding "GIC June 28, 2023, Item 7.2 - Stormwater Funding Review - FCS22043(b)". McAsphalt Industries Limited is a tenant on Port land that is affected by this proposed change in Stormwater Charge. We do not have any access to City Storm Water infrastructure on our property and are fully supportive of HOPA's position on this matter.

Thanks



### Peter Oddi, P.Eng. Regional Operations Manager, Central T: +1 (905) 544-5646 x542 M:+1 (905) 979-3740 F: +1 (905) 549-9430



McASPHALT INDUSTRIES LIMITED 180 Pier 24 Gateway, Hamilton, ON L8H 0A3 www.mcasphalt.com



This e-mail message is intended only for the person or entity to which it is addressed. It is confidential and subject to copyright and may be legally privileged. Any unauthorized review, use or disclosure is prohibited. If you have received this in error, please contact the sender and delete all copies of the e-mail together, with any attachments. From: Gino Becerra <<u>gino.becerra@qsl.com</u>> Sent: June 27, 2023 9:29 AM To: <u>clerk@hamilton.ca</u> Subject: GIC June 28, 2023, Item 7.2 - Stormwater Funding Review - FCS22043(b) Importance: High

Attention: Angela McRae, Legislative Coordinator General Issues Committee City of Hamilton

### Good Morning M. McRae

I am writing this email representing QSL Canada, we are tenants at the port of Hamilton involved in cargo handling and logistics. We wanted here to comment on the proposed Stormwater Rate Review.

The stormwater charge is premised on the impact properties have on the City's stormwater management system and it is intended to be an equitable user-pay system. There must be a connection between the fee amount and the cost of the service being provided, for the fee not to be considered a tax.

As you are aware, in Ontario, a municipal user fee can only be charged in exchange for a specific service offered to the entity paying the fee. The fee must be directly related to the cost of providing the service to that user, and the municipality may not charge one user a fee for a service it provides to someone else.

Our leased property, like many others within port grounds, maintains an independent stormwater system which collect and manage stormwater before discharging to Hamilton Harbour without utilizing the municipal system.

These systems around the port of Hamilton provide an equivalent level of service as the municipal systems without any municipal investment. Accordingly, it is not appropriate for this rate structure to apply to properties that have no interface with the municipal stormwater system, and we would recommend the inclusion of an exemption in the rate structure to address these specific cases. Other municipalities that have adopted a similar approach to stormwater fees have incorporated such exclusions.

We would also like to point out, that as far as we know, there was very little consultation with industrial/commercial users in the preparation of this proposal, and we only found out by chance through an informal communication with HOPA.

Thank you again for the opportunity to share our feedback on the proposed rate structure.

Sincerely,

Gino Becerra Vice-président, Ontario T 905 728-9299 C 905 730-8010



PROUD WINNER





From: Hagen Steven <<u>steve.hagen@agricocanada.com</u>> Sent: June 27, 2023 9:58 AM To: <u>clerk@hamilton.ca</u> Subject: Stormwater Funding Structure Review - Concern With Proposal

Hello Hamilton City Council,

My name is Steve Hagen and I'm the Terminal Manager for Agrico Canada. We're located with Hamilton Oshawa Port Authority at 150 and 199 Eastport Blvd. We import fertilizer by vessel and reload to trucks for local farmers.

We're <u>against</u> any storm water charges for the Port of Hamilton. Our area doesn't create any storm water into the City of Hamilton sewage system. All storm water at our 199 Eastport facility goes directly into the Bay. As for 150 Eastport Blvd we recapture all storm water to use in our facility. We have 2 holding ponds and a catch basin to capture the storm water. The water we capture, we pump into our tanks to use in our blending of the liquid fertilizer.

The proposed fee of \$2600/acre/year is very extreme for a company that doesn't add to the storm water situation. This fee could be detrimental to our operations.

City Council could you please consider this before proposing any charges to our area.

HOPA and their tenants should be exempt from any storm sewer charges.

If you require any more information, please feel free to contact me.

Thank you for your time today.

Regards, **Steve Hagen** Hamilton Terminal Manager Agrico Canada Office: 905-544-4971 Mobile: 905-536-1583 <u>steve.hagen@agricocanada.com</u> <u>www.agricocanada.com</u>





June 27, 2023

### Re: Item 7.2 – Stormwater Funding Review

Dear Members of the General Issues Committee,

As President & CEO of the Hamilton Chamber of Commerce, Hamilton's oldest institution at 177 years old, I have the privilege of speaking for our 1,000+ members that employ over 75,000 people in our community. Following consultation with several of Hamilton's largest employers that will be significantly impacted by the forthcoming changes, the Chamber would like to take this opportunity to provide feedback on the Stormwater Funding Review as well as the proposed Stormwater Rate Structure.

Our organization is committed to advancing a net zero carbon future because the economic and social prosperity of our community is directly linked to our ability to preserve and sustain our ecological diversity. This includes acknowledging the critical importance of managing our local water resources in a progressive and environmentally sensitive manner. The Chamber believes that implementing a dedicated user fee for storm services is a progressive approach to addressing the environmental impacts of impervious services on waterway and stormwater management while simultaneously generating additional financial resources to invest in other environmental initiatives as proposed.

While the Chamber and its membership acknowledges that residential rate payers have been historically subsidizing some of the financial impacts of stormwater management on institutional, commercial, and industrial stakeholders, there will be a significant financial impact to several key stakeholders under the proposed changes. These may be justifiable, but the Chamber would like to take this opportunity to raise a few points of consideration brought to our attention by our members.

Firstly, several of our members, and the Hamilton Chamber of Commerce itself, were not included in any of the formal consultations or stakeholder engagement opportunities executed to inform this policy. We were surprised when another community organization shared their concerns with the Chamber about proposed stormwater funding changes. In ensuing conversations with our large institutional, commercial, and industrial members, nearly all of them indicated no formal participation during the consulting period, along with no engagement from the City to understand the potential impacts to our business community.

The Chamber would like to ensure that this is avoided in the future and offers its resources and convening power to help inform future public consultations on changes to municipal policy that will significantly impact our community stakeholders. We would

### hamilton chamber of commerce

your voice in business

welcome any opportunity to host an information session in partnership with the City to educate affected institutional, commercial, and industrial ratepayers on the forthcoming changes to stormwater funding in Hamilton.

With that said, we would like to highlight a few key considerations our members shared with us that may have been missed during the formal consultation period for Committee's consideration.

Members expressed concerns about the applicability of adopting a generic average billing unit defined as an impervious surface, particularly without any concessions or acknowledgement for on-site features that serve to counteract the impacts of runoff. The City ought to consult with the largest institutional, commercial, and industrial rate payers in Hamilton to explore opportunities to tailor some of the stormwater rate changes to reflect the realities of a given property. For example, many of our members utilize a private stormwater management system rather than the municipal system – how will this be accounted for in their stormwater bill? Additionally, how will the City account for investments to create various "sinks" on institutional, commercial, and industrial properties to reduce their impervious surfaces?

Related to this, providing clarity on how, or if, the City plans to create specific concessions for some of our community's largest rate payers is critical to the long-term capital and operating budgets of these organizations. Clarity is required to inform short-and long-term financial planning for community stakeholders who are actively seeking ways to green their operations, reduce their energy costs, and minimize their environmental footprint.

Hamilton businesses are committed to advancing the environmental prosperity of our community and want to be seen as partners and allies to the cause. This begins with a mutual understanding about what actions are being taken to incentivize our community to become greener, and to empower those taking strong climate action. Our members need certainty about the investments they are making locally to reduce operational footprint and ideally drive down operational costs.

Our members are interested in robust communications detailing the timing of the proposed changes and how the new tax revenues will be utilized and invested. Transparency will be critical to avoid confusion and frustration when the new rates are rolled out, and moreover, rate payers will be interested to learn how the City is utilizing these potential reserves to improve Hamilton's existing water and stormwater infrastructure. This information will be key in incentivizing stakeholders to make investments into their own operations to reduce impacts on the municipal stormwater system.

### hamilton chamber of commerce

your voice in business

In closing, the Hamilton Chamber of Commerce strongly encourages members of the General Issues Committee to ensure that all affected stakeholders are informed of the proposed changes to stormwater funding. These organizations believe in the importance of protecting our community's environment, but need more clarity about the short-term and long-term impacts of the policy change as well as a better understanding of how they can work together with the municipality to reduce impervious surfaces and make strategic infrastructure investments.

The Hamilton Chamber of Commerce looks forward to providing ongoing support to our members impacted by these changes and to continue our enduring relationship with the City of Hamilton to facilitate as smooth of a transition as possible to any new stormwater funding policy. There are numerous instances of successful partnerships with the City in the past, and we are eager to participate together in educating our community stakeholders together.

Sincerely,

200

Greg Dunnett President & CEO



June 27, 2023

Chair and Members General Issues Committee City of Hamilton

### RE: June 28 General Issues Committee: Item 7.2 Stormwater Funding Review

The Hamilton Industrial Environmental Association (HIEA) is a non-profit association representing 14 industrial and manufacturing companies in the City of Hamilton. HIEA's mandate is to improve the local environment through partnerships with government, educational institutions, individual residents, and environmental groups. We also collaborate with our stakeholders to help understand environmental issues and to develop and implement sustainable programs and policies. HIEA members believe their organizations are not only a key contributor to both Hamilton and Ontario's economy, but also an essential part of the fabric of the community.

HIEA member companies provide employment for over 7,300 direct industrial and manufacturing positions as well as an estimated 56,000 indirect jobs in Hamilton and surrounding municipalities. Since its inception in 1998, HIEA and its membership has invested over \$1.1 billion in environmental capital projects, contributed more than \$720 million in municipal property taxes, and donated over \$1 million in community and educational activities in Hamilton.

HIEA and its members had an opportunity in May to meet with the City of Hamilton and AECOM to review a draft of the Stormwater Funding Review presentation, discuss the proposed recommendations and next steps. It was a productive meeting, and through our discussion a number of policy and operational issues were brought up in the application of the stormwater funding model and rate model to the industrial and commercial sectors.

For the sake of transparency HIEA and its members want the General Issues Committee to be aware of these policy and operational issues, and to express our commitment to working with the City of Hamilton to address these issues within the context of the stormwater funding model.

The issues are as follows:

• The development and analysis of the stormwater funding model and stormwater rate structure as currently presented has focused primarily on residential application. The



industrial/commercial sector makes up over 50% of forecasted revenues. The model needs to fully evaluate the proposed financial impact on the industrial/commercial sector. The design of stormwater rate structure may need to be adjusted for industrial/commercial application.

- Several HIEA members have private sewage works and stormwater infrastructure on site. These sewage works are independent from the City of Hamilton infrastructure, and some discharge directly into the natural environment. The model does not account for this, but rather assumes all stormwater is handled by the City's stormwater infrastructure.
- Due to the recommended design of the stormwater rate structure, companies with large impermeable surfaces and relatively small city water usage are going to see dramatic increases in their assessed stormwater fees. Prior to implementation of the new rate structure the City needs to ensure that these companies are aware of the changes, understand the impact of the changes and what resources are available to review their fees.
- The City of Hamilton where possible needs to maintain a similar distribution of stormwater revenues between the industrial/commercial sector and the residential sector, subject to expansion or contraction of either sector over time.

In closing, I would like to reiterate that HIEA and its members are appreciative for the opportunity to meet with the City of Hamilton and AECOM to discuss the stormwater funding model. We also commit to working with the City of Hamilton to design, refine and implement the new stormwater funding model and rate model.

Sincerely,

Geoffrey Knapper, General Manager Hamilton Industrial Environmental Association

PO Box 47504 Hamilton RPO Center Mall Hamilton Ontario, L8H 7S7



West End Home Builders' Association

1112 Rymal Road East, Hamilton Serving members in Hamilton and Halton Region

June 27, 2023

To: Members of City Council **City of Hamilton** 71 Main Street West

#### WE HBA Letter: Stormwater Funding Review

The West End Home Builders' Association (WE HBA) is the voice of the land development, new housing and professional renovation industries in Hamilton and Burlington. The WE HBA represents 300 member companies made up of all disciplines involved in land development and residential construction. In 2022, the residential construction industry employed 23,000 people, paying \$1.6 billion in wages, and contributed over \$3.4 billion in investment value within the City of Hamilton.

WE HBA would like to thank the City of Hamilton for providing an update on the Stormwater Funding Review that will inform a new Stormwater Rate Structure to be implemented by September 1, 2025. WE HBA understands that under the current model, stormwater management is primarily funded through water and wastewater utility revenues. We acknowledge that the proposed Stormwater Rate Structure will shift towards a user fee model and use a Single Family Unit (SFU) stormwater fee structure based on one billing unit per 291 square metres of impervious surfaces, or a calculated average of single detached homes. Additionally, WE HBA recognizes that low-to-medium density residential billing will be based on the calculated average area of impervious surface by category; all single detached dwellings will fall into same category, being assigned one SFU, while fractional billing units are to be used for other low-to-medium density residential billing will be based off a measurement of impervious surface using recent aerial imagery, and land classified as undeveloped would be excluded. It is critical that costs and impacts be carefully evaluated and monitored throughout the implementation period as well for potential consequences.

Finally, we appreciate that the new structure will include a legal mechanism for appeals or review of a property's stormwater charge. It is important to recognize that site specifics may differ vastly from property to property. We request to be involved in the development of the financial incentive and credit programs to provide industrial, commercial, institutional, mixed use, and high density residential with incentive to reduce pressure on the stormwater management system. Our members will have input with respect to best management practices, innovative low impact development opportunities as well as the costs and feasibility of implementing different options.

WE HBA is requesting further engagement and consultation as the City of Hamilton works out the implementation of these programs.

Sincerely, Michelle Diplock, RPP, MCIP, MPI Manager of Planning and Government Relations West End Home Builders' Association



WEST END HOME BUILDERS' ASSOCIATION Submitted on Wed, 06/21/2023 - 00:10

Submitted by: Anonymous

Submitted values are:

### **Committee Requested**

Committee General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video? No

### **Requestor Information**

Requestor Information Chris McLaughlin Bay Area Restoration Council 47 Discovery Drive Hamilton, Ontario. L8L 8K4 chris@bayarearestoration.ca

Preferred Pronoun he/him

Reason(s) for delegation request

I am representing the Bay Area Restoration Council as its Executive Director. BARC has been a partner organization of the City of Hamilton in the Hamilton Harbour Remedial Action Plan since 1991. My presentation will support the staff reports on the watershed action plan and the stormwater rate initiatives.

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? Yes

Submitted on Fri, 06/23/2023 - 17:02

Submitted by: Anonymous

Submitted values are:

### **Committee Requested**

Committee General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video? No

### **Requestor Information**

Requestor Information Tys Theijsmeijer Royal Botanical Gardens 680 Plains Rd West Burlington, ONTARIO. L7T 4H4 ttheysmeyer@rbg.ca

Preferred Pronoun he/him

Reason(s) for delegation request Information in support of the Watershed Action and Stormwater discussions

Committee Meeting of Wednesday June 28th

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? Yes

## Urban Stormwater Impacts at Royal Botanical Gardens Water Quality & Quantity Challenges

Environmental context support for staff report Watershed Action and Stormwater (PW19008u)

About **50%** of City of Hamilton's **surface runoff** flows through RBG managed coastal marsh environmental protection areas (Cootes Paradise and Grindstone Marshes)

### Watersheds

- 1. Spencer Creek (Dundas/Ancaster/West Flamborough)
- 2. Borers Creek (Waterdown/Dundas/ E&W Flamborough)
- 3. Ancaster Creek (Dundas/Ancaster/West Hamilton)
- 4. Chedoke Creek (West Hamilton/Ancaster)
- 5. Westdale Creek (Dundas/Ancaster/West Flamborough)
- 6. Maclanding Creek (West Hamilton)
- 7. Delsey Creek (Dundas/W. Flamborough)
- 8. Grindstone Creek (Waterdown/E&W Flamborough)
- 9. ....and more





# Water Quantity Impacts

- Urban runoff is a very high proportion of Water flowing in the summer dry conditions for Cootes Paradise Marsh
- Urban stormwater is the cause of CSO events
- RBG Management response to stormwater challenges
  - O Grindstone Creek Delta Project
  - Spencer Creek Delta Project
  - Chedoke Delta Project Chedoke Water Quality Framework.
  - Operating multiple carp barriers
  - HHRAP Cootes Paradise Fishway/carp barrier

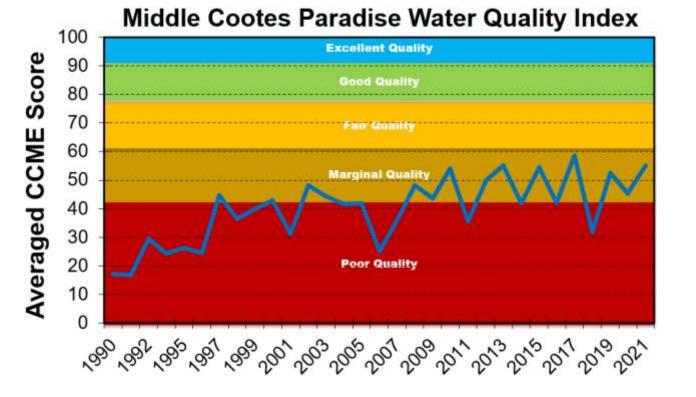






## Water Quality Status Cootes Paradise

Water Quality Index - CCME (Canadian Council of Ministers of the Environment)





Water Quality Index Trend

- Variable clarity
- Extreme algae blooms

Overall the area remains on the Great Lakes Area of Concern most damaged places of the Great Lakes

A focus for the 3 levels of government to restore



# Why Does it Matter?

- 1. <u>Dominant</u> source to surface water during summer dry periods
- 2. Can be very poor water
- 3. Is the cause of CSO events
- Recovery of the Hamilton Great Lakes Area of Concern hinges on it

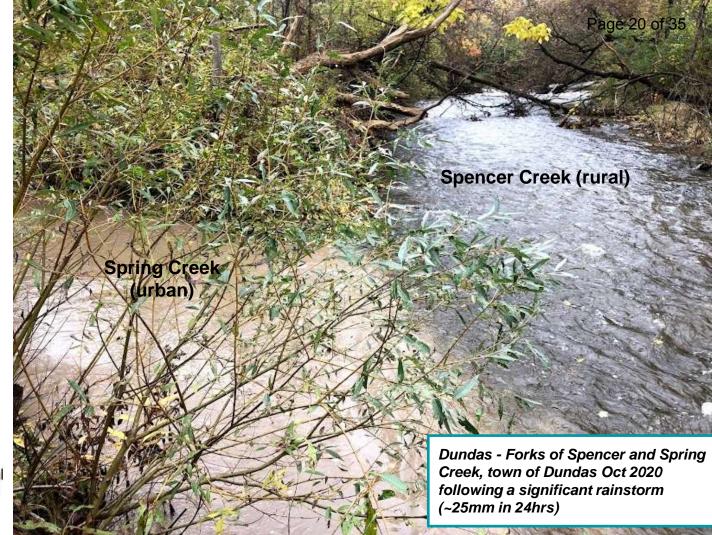




## Impacts

- Escarpment Erosion & infilling of Lake Ontario rivermouth marshes
- 2. Aquatic life/Lake Ontario ecosystem function
- 3. Water Aesthetics
- 4. Water Quality
- 5. Combined Sewage Overflows
- 6. Climate Change exacerbated





### Provincial Surface Water Objectives vs Stormwater

https://www.ontario.ca/document/stormwater-management-planning-and-design-manual-0#section-3





Table 1.2: Comparison of Urban StormWage Ruhoff 35 Concentrations with Provincial Water Quality Objectives **Observed Concentrations** Parameter PWQO Units 10.000 - 16E6 Fecal coliforms CNT/dL 55 mg/L 87 - 188 0.03 0.3 - 0.7TP mg/L TKN 1.9-3 mg/L Phenolics 0.014 - 0.019 0.001 mg/L 1.2 - 2.5 AI mg/L 2.7 - 7.2 Fe mg/L Pb 0.038 - 0.055 0.025 mg/L 0.0001 0.002 - 0.005 Ag mg/L 0.045 - 0.46 Cu 0.005 mg/L 0.009 - 0.016 Ni mg/L 0.025 Zn 0.14 - 0.26 0.030 mg/L 0.001 - 0.024 Cd mg/L 0.0002

## **Escarpment Erosion**

Page 22 of 35

### Cootes to Escarpment EcoPark System Vision Map





Our Vision for the Cootes to Escarpment EcoPark System is that it becomes a permanently protected natural lands sanctuary linking Cootes Paradise Marshlands with Hamilton Harbour and the Niagara Escarpment, Our Mission as partners is to collaborate to preserve and enhance the natural lands we own and steward by using sustainable approaches to protect biodiversity, highlight ecosystem services, and enable responsible human connection to nature.





# Escarpment Erosion

Example: Scour and forested slope collapse from increased quantity





Hopkins Brook - August 2017 - comparable to Spring Creek in watershed size

and the second second

# Escarpment Erosion Ancaster Creek

Example: Scour and forested slope collapse from increased quantity





Ancaster Creek- April 2023 - comparable to Spring Creek in watershed size

## Escarpment Erosion

Example: Infrastructure Failures





## Escarpment Erosion Buried Creek Sections







## Escarpment Creeks

CANADA

Example: Channel Erosion



## Escarpment Erosion

**RBG Outcome**: Marsh sedimentation and infilling of Lake Ontario river mouth marsh habitat

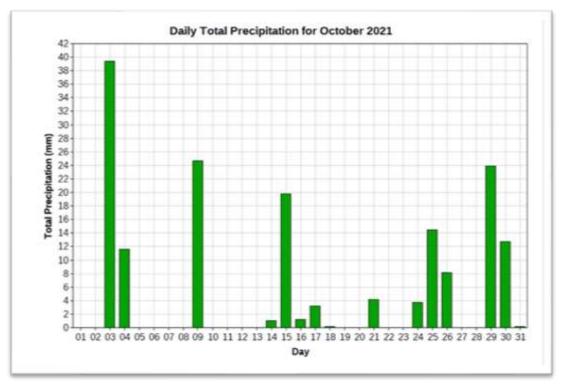
Page 28 of 35 Cootes Paradise Marsh April 2020 Spencer Creek Delta Area



## **Rainfall Events & Climate Change**

RBG Arboretum Weather Station - Environment and Climate Change Canada

- 2021 10 rain events > 20mm rain in 24hrs
- For the Wastewater Masterplan EA (2006) 1 rainevent over 20mm over two years was modelled for impacts (based on existing weather data to end of 1980s)



Map: Arboretum Weather Station location



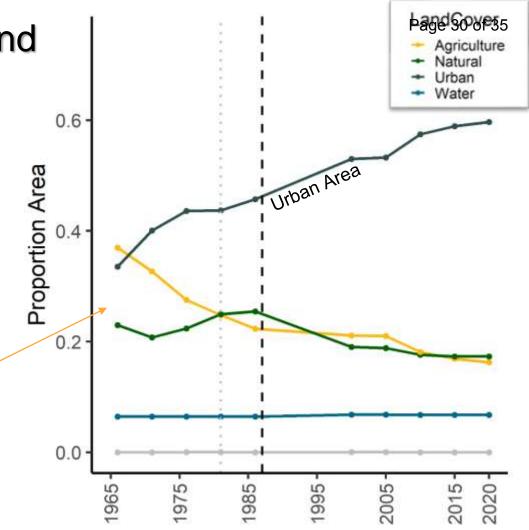


## Land Use Hamilton Trend

Trends in general land cover types in the Hamilton Harbour watershed. Prior to 1990, land cover information were collected by the Canada Land Use Monitoring Program. These data were available solely within the boundaries of the City of Hamilton (delineated by the orange line in the inset map) and so all future land cover maps were clipped to this orange boundary instead of the entire Hamilton Harbour watershed (red line in inset map). After 1996, data were from the Ontario Land Cover Database. All land cover data were accessed via the Ontario GEoHub (https://geohub.lic.gov.on.ca/).

Information from Hamilton Harbour RAP Fish Population Status Assessment Document (Draft 2023)

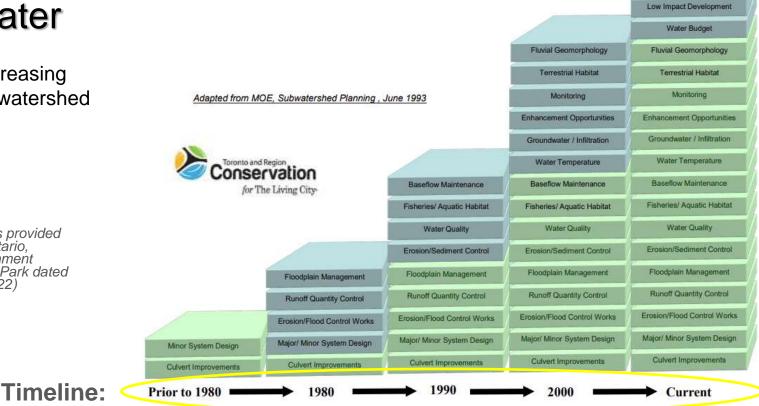




## Complexity of urban stormwater

A result of increasing proportion of watershed

Page 31 of 35 Evolution of stormwater management in Ontario



Current Guidelines provided by Province of Ontario, Ministry of Environment Conservation and Park dated 2003 (Draft vs 2022) Submitted on Mon, 06/26/2023 - 10:01

Submitted by: Anonymous

Submitted values are:

### **Committee Requested**

Committee General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video? No

#### **Requestor Information**

### Requestor Information Gavin Smuk

Preferred Pronoun he/him

Reason(s) for delegation request

I would like to speak to the General Issues Committee on June 28, 2023 regarding the item, Stormwater Funding Review. I am a farmer from Flamborough and would like to address several issues about this proposal.

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? No

Submitted on Mon, 06/26/2023 - 20:53

Submitted by: Anonymous

Submitted values are:

### **Committee Requested**

Committee General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video? No

#### **Requestor Information**

Requestor Information Ann Marie Reid <u>Twenty Place - Sto</u>rm Water Management Pond's Chair

Preferred Pronoun she/her

Reason(s) for delegation request

Explanation and Questioning of Proposed new City Wide Storm Water Funding Model on current Private Storm Water Managed Properties.

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? No

Submitted on Mon, 06/26/2023 - 23:13

Submitted by: Anonymous

Submitted values are:

#### **Committee Requested**

Committee General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video? No

#### **Requestor Information**

Requestor Information Larry Freeman Glanbrook/Hamilton Farmer

Preferred Pronoun he/him

Reason(s) for delegation request Unjust taxation of farmland where NO STORM WATER GOES THROUGH THE HAMILTON WATER SYSTEM

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? No

### STORMWATER MANAGEMENT

### **STORMWATER FUNDING REVIEW**

Stormwater is water that comes from rain and melted snow that flows over land and into storm drains, ditches, creeks and lakes. In natural landscapes, stormwater is soaked up like a sponge, which then nourishes plants and slowly replenishes creeks, lakes, wetlands and aquifers.

In more urban areas, impervious (or hard) surfaces such as asphalt, concrete and rooftops prevent stormwater from naturally soaking into the ground. Instead, the water runs quickly into storm drains and sewer systems, and then to our creeks and lakes. These hard surface areas create more stormwater runoff, and carry more pollutants, such as oil, grit and garbage into creeks and lakes.

### STORMWATER MANAGEMENT PROGRAM

The City's stormwater management program helps protect the public, private property, infrastructure and the environment from flooding, erosion and poor water quality from the stormwater runoff. The program includes infrastructure such as sewers, pipes, and stormwater ponds.

Currently, the City primarily funds its stormwater management program through its water and wastewater utility revenues. That means that properties contribute to stormwater management and the required infrastructure based on the amount of drinking water that is consumed.