


INFORMATION REPORT

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| TO: | Mayor and Members General Issues Committee |
| COMMITTEE DATE: | June 28, 2023 |
| SUBJECT/REPORT NO: | City of Hamilton Watershed Action Plan Update (PW19008(u)) (City Wide) |
| WARD(S) AFFECTED: | City Wide |
| PREPARED BY: | Tim Crowley (905) 546-2424 Ext. 5063 |
| SUBMITTED BY: | Cari Vanderperk Director, Watershed Management Public Works Department |
| SIGNATURE: |  |

COUNCIL DIRECTION

On November 27, 2019, and December 11, 2019 Council amended Item 8 of the November 20, 2019, General Issues Committee ([Report 19-024](#)) which outlined items related to the contamination of Chedoke Creek as a result of the discharge from the Main/King Combined Sewer Overflow tank. Motion item (m) states “That the City recommit to the water quality objectives in the Remedial Action Plan process”.

INFORMATION

The City of Hamilton (City) has been a participant in the Hamilton Harbour Remedial Action Plan since its inception in 1985 and has contributed to many projects that address point source contamination to Hamilton Harbour, which are typically from a single identifiable site such as a wastewater treatment plant. Projects that have been or will be implemented to address point source contamination include:

- Sewer lateral cross connection investigations and repairs,
- Decommissioning the Waterdown Wastewater Treatment Plant,
- Real-time control of key wastewater collection system regulators,
- Construction of nine (9) Combined Sewer Overflow tanks over 30 years,
- Implementation of tertiary treatment at the Dundas Wastewater Treatment Plant,
- Construction of tertiary treatment at the Woodward Wastewater Treatment Plant,
- Woodward Wastewater Treatment Plant Primary treatment expansion; and,
- Financial contribution to the Randle Reef Engineered Containment Facility.

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In Ontario, the responsibilities for the Hamilton Harbour Remedial Action Plan progress and Area of Concern remediations are shared by the federal and provincial governments through the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem. The Hamilton Harbour Remedial Action Plan office tracks environmental conditions, activities and outcomes, and reports on the status of each of the 14 Beneficial Use Impairments within the Hamilton Harbour Area of Concern.

The goal is to shift the status of each Beneficial Use Impairments from “Impaired” to “Not Impaired” moving Hamilton Harbour from an “Area of Concern” to an “Area of Concern in Recovery”. Once this happens, Hamilton Harbour will continue to be monitored for many years while “in Recovery” before formal delisting can occur. The status of each Canadian Area of Concern was last published in October 2021 by Environment and Climate Change Canada, titled “Restoring the Great Lakes Areas of Concern”, and is attached as Appendix “A” to Report PW19008(u).

Local departments at all levels of government as well as non-governmental organizations, academia, businesses, industry, and the public continue to monitor the environmental health of Hamilton Harbour. Each agency has oversight and hands-on implementation of various actions identified within the Hamilton Harbour Remedial Action Plan. All data related to action planning is gathered and presented within the Hamilton Harbour Remedial Action Plan community on an annual basis, through various committees and workshops, to understand the actions taken and to identify and target gaps accordingly.

Most of the City’s effort to reduce point source contamination into Hamilton Harbour will be implemented by mid-2023, such as the Woodward Wastewater Treatment Plant upgrades. This shifts the primary harbour impact to non-point source contamination inputs, which generally originate from rural and urban stormwater runoff. Water quality in receiving environments can be adversely impacted by pollutants carried in runoff, such as sediment, hydrocarbons, micro-plastics, heavy metals, litter, and biological pollutants.

The amount of impervious area in a city has a significant impact on the volume of stormwater runoff, the number of pollutants that are carried to receiving waters, flooding risk and increases the risk of wastewater treatment plant bypasses. In the rural settlement area, stormwater runoff and irrigation drain fertilizers and pesticides into adjacent bodies of water.

To continue to meet the expectations for an improved aquatic environment within our watersheds and Hamilton Harbour, and prioritize environmental stewardship, in 2021 the City assembled a Stakeholder Liaison Committee, to develop the City of Hamilton Watershed Action Plan. Working together under the guidance outlined in the Terms of Reference, this group helps to advance City specific non-point watershed actions

having the greatest influence on improving watershed and harbour conditions to support the eventual delisting of Hamilton Harbour as an Area of Concern.

In 2016, a set of recommendations was developed through a collaborative Hamilton Harbour Remedial Action Plan process to identify contributions of contamination into Hamilton Harbour. The recommendations assigned to the City were used as a starting point for the recently assembled Stakeholder Liaison Committee. As such, the Stakeholder Liaison Committee continues to act as a technical working group of the already established Hamilton Harbour Remedial Action Plan Watershed Advisory Group. A graphic representing the reporting structure and how this Stakeholder Liaison Committee fits into the greater Hamilton Harbour Remedial Action Plan Secretariat is attached as Appendix “B” to Report PW19008(u).

Stakeholder Liaison Committee membership is structured to provide a balance of perspectives, knowledge and expertise and includes representation from the following groups:

- City of Hamilton
 - Public Works
 - Hamilton Water
 - Environmental Services
 - Engineering Services
 - Waste Management
 - Transportation
 - Planning & Economic Development
 - Sustainable Communities
 - Heritage and Urban Design
 - Growth Management
 - Climate Change Initiatives
 - Healthy & Safe Communities
 - Recreation
 - Food & Water Safety
- Indigenous Relations
- Conservation Halton
- Royal Botanical Gardens
- Hamilton Conservation Authority
- Grand River Conservation Authority
- Niagara Peninsula Conservation Authority

The Stakeholder Liaison Committee updates the Watershed Advisory Group regarding the development of the City of Hamilton Watershed Action Plan during each Watershed Advisory Group meeting. As a result, member agencies from the Watershed Advisory Group, listed below, provide additional insight, recommendations, guidance, and support to the Stakeholder Liaison Committee.

Watershed Advisory Group:

- Bay Area Restoration Council
- City of Burlington
- Hamilton Harbour Remedial Action Plan

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**SUBJECT: City of Hamilton Watershed Action Plan Update (PW19008(u))
(City Wide) – Page 4 of 6**

- Conservation Halton
- Environment and Climate Change Canada
- Environment Hamilton
- Hamilton Conservation Authority
- Ministry of the Environment, Conservation and Parks
- Royal Botanical Gardens
- The Regional Municipality of Halton

Additional consultation partners were also identified, as they are not currently members of Watershed Advisory Group. The Stakeholder Liaison Committee has and will continue to engage with these partners throughout the development and implementation of the City of Hamilton Watershed Action Plan:

- Indigenous Nations and First Peoples
 - City of Hamilton Indigenous Advisory Committee
 - City of Hamilton Urban Indigenous Water Walkers
 - Huron-Wendat Nation
 - Mississaugas of the Credit First Nation
 - Six Nations of the Grand River Elected Council
 - Haudenosaunee Confederacy Chiefs Council, as represented by the Haudenosaunee Development Institute
- McMaster University
- Redeemer College University
- Green Venture
- Ontario Ministry of Transportation
- Fisheries and Oceans Canada

Unique to Ontario, Conservation Authorities serve as local watershed management agencies that deliver services and programs to protect and manage impacts on water and other natural resources in partnership with all levels of government, landowners, and many other organizations. Their core mandate is to undertake integrated watershed-based programs to protect people and property from flooding and other natural hazards, and to conserve natural resources for economic, social, and environmental benefit.

The City of Hamilton Watershed Action Plan is not meant to duplicate those efforts, instead it is intended to identify City specific actions to support the Conservation Authorities mandate, while also addressing water quality objectives in the Remedial Action Plan process. The intention of City of Hamilton Watershed Action Plan is to:

- Reduce the pollution of waterways due to rural and urban runoff
- Increase the retention and infiltration of stormwater into the ground
- Increase the connectivity of naturalized areas and green infrastructure
- Minimize system capacity risk due to growth, development, and climate change

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- Maximize the adaptability of investments to manage future uncertainties

Under of the umbrella of the Clean Harbour Program, the Stakeholder Liaison Committee sits quarterly for meetings with the current focus on evaluating existing assessments, reports and programs that contain unique recommendations for improving the health of our watersheds.

To-date, a scoring matrix has been developed and over fifty recommendations have been evaluated for inclusion and implementation as part of the City of Hamilton Watershed Action Plan and are categorized as either a capital project, policy/program, or an operational and maintenance modification. An example of a capital project may include sewer separation activities, while policy or programs include actions such as community stormwater outreach campaigns or a stormwater user rate. Lastly, operational and maintenance may include modifications to the catch basin cleaning or street sweeping programs.

The evaluation framework also involves estimating the implementation timing of each action into three relative time scales:

- Short-term (1-2 years)
- Mid-term (2-5 years)
- Long-term (5+ years)

Short-term projects may involve an educational program that can be implemented quickly, assuming that resources are available. Mid-term projects may involve restoration projects with partner support. Lastly, long-term projects may involve recommendations that include construction, retrofits, or acquisition / easements, as these can require a much longer timeframe to implement and require a larger commitment of upfront staff time and funding.

In addition to implementation timing, the evaluation framework also identifies the appropriate City lead for each action and scores the actions against environmental, economic, and social criteria, developed using stakeholder input. Supporting data, such as the City of Hamilton Surface Water Quality Program, and Conservation Authority Watershed Report Cards are used to validate the inclusion of each action into the City of Hamilton Watershed Action Plan. Workshops with each external stakeholder and City lead are taking place to confirm each action with regards to the scoring, timing, and whether more resources are needed.

The final deliverable of the City of Hamilton Watershed Action Plan is an implementation strategy developed in accordance with City and Provincial guidelines, policies and regulations that outline a 5-10-year capital budget plan and financing strategy targeted for the 2025 Rates Budget Report. At that time discussions will take place in order to

determine if there are future works being planned that would be suitable for the continuation of the Stakeholder Liaison Committee or another committee similar in nature.

The City's Communications and Strategic Initiatives team is continuing to support this initiative with a communications strategy to ensure the community is kept informed. The Engage Hamilton platform will be used to solicit public feedback. Before launching on Engage Hamilton, the list of actions will need to be authenticated by Stakeholder Liaison Committee members and external partners, with all comments addressed. A tentative launch date is planned for September 2023.

A webpage, under the Clean Harbour Program, has also been created to support ongoing communications. The webpage includes an ArcGIS story map to visually describe the current state of each watershed and how the actions from the City of Hamilton Watershed Action Plan will address issues identified within those watersheds. To learn more please visit: www.hamilton.ca/watershedactionplan.

Hamilton Harbour represents one of the largest natural features in the community that should be safe and accessible to all residents. Addressing non-point watershed issues of contamination will further change the status of health, safety, and image within the City of Hamilton. Population growth, greenfield development and urbanization, agricultural production, and a changing climate will continue to exert pressure on the quality and supply of water resources. Addressing existing and emerging water management issues is critical for all who live, work, and recreate in the City of Hamilton.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PW19008(u) – Restoring the Great Lakes Areas of Concern - AOC Status

Appendix "B" to Report PW19008(u) – Hamilton Harbour Remedial Action Plan Secretariat