Prepared for:
The City of Guelph

Stormwater Management Master Plan

Appendix T: Record of Public Consultation

Prepared by:
Aquafor Beech Ltd.

Guelph, Ontario
55 Regal Road
Guelph, ON, N1K 1B6
T. 519-224-3740 ex 236

Reference #: 66636
March 2023
Final Report

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Public Notice

Notice of study commencement

City of Guelph Municipal Class Environmental Assessment for Stormwater Management Master Plan Update

The City is updating the 2012 Stormwater Management Master Plan to ensure stormwater (rain) is properly managed in a way that helps protect Guelph's water supply and environment in a sustainable way.

The master plan is a long-term plan that looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years. It will take into account technological advances and infrastructure needs, and address issues we face today like flood control, maintaining the quality of our local waterways (rivers, lakes and streams) and drinking water supply (groundwater), the overall environment and maintaining local water balance.

When complete—after the updated master plan is reviewed by the Guelph community and approved by Council—the plan will have identified constraints and opportunities related to managing Guelph's stormwater system. The plan will act as a decision-making guide for prioritizing projects, estimating and addressing future needs of our environment and growing community, and budgeting.

We want to hear from you

How we manage stormwater affects you. It also affects our drinking water supply and our environment. Your feedback is an important part of updating the master plan. The City will look for your feedback throughout the master plan update, both in-person and online. Opportunities to have your say will be posted on the project page, on haveyoursay.guelph.ca, and on our Twitter and Facebook channels.

To get project updates, you can join our mailing list by contacting the project leads listed below, or by registering at haveyoursay.guelph.ca.

The process

This study will be carried out according to the Municipal Engineers Association Municipal Class Environmental Assessment (2011, as amended), which is an approved Class of Environmental Assessment under the Environmental Assessment Act. Results from this study will be documented in an environmental assessment that will be made available for a public review period. At that time, residents, Indigenous communities and other interested persons or groups will be informed of when and where the environmental assessment can be reviewed.

Guelph's master plans assess the infrastructure we have to support today's services and decide what we'll need as our community grows. Master plans build on the goals and policies from the Official Plan to integrate existing and future land use plans and define long-term objectives. Looking at the city as a

whole helps to evaluate options, consider a variety of perspectives, understand different outcomes, and make better decisions for Guelph's future.

For more information

Visit guelph.ca/stormwater for project information and updates.

To provide your comments, request additional information, be added to the project mailing list, or if you require this notice to be provided in an alternative format as per the Accessibility for Ontarians with Disabilities Act (2005), please contact:

Arun Hindupur, M.Sc., P. Eng.
Supervisor, Infrastructure Engineering
Engineering and Transportation Services
519-822-1260 extension 2282
Arun.hindupur@guelph.ca

Mohsin Talpur, M.E., P. Eng.
Development Environmental Engineer
Engineering and Transportation Services
519-822-1260 extension 2651
moshin.talpur@guelph.ca

Chris Denich, M.Sc., P. Eng.
Project Manager
Aquafor Beech Ltd.
647-993-2267
denich.c@aquaforbeech.com

This notice was first issued on March 26, 2020

gingrichregehr.a@aquaforbeech.com

From: Colleen Gammie <Colleen.Gammie@guelph.ca>
Sent: March 21, 2023 8:57 AM
To: denich.c@aquaforbeech.com; gingrichregehr.a@aquaforbeech.com
Subject: FW: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement
Attachments: FINAL_StormwaterMP_NOC_032620.pdf

Hi,

I know you have responses to this but here is the original NoC e-mail that went out to the stakeholder list dated March 26, 2020.

Colleen Gammie, P. Eng, PMP (she/her), Infrastructure Planning Engineer
Design and Construction, **Engineering and Transportation Services**
City of Guelph
519-822-1260 extension 2282
Mobile 226-332-4693
colleen.gammie@guelph.ca

guelph.ca

From: Arun Hindupur <Arun.Hindupur@guelph.ca>
Sent: Thursday, March 26, 2020 8:01 AM
Subject: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement

Hello,

Please see attached Notice of Study Commencement for the City of Guelph's Stormwater Management Master Plan.

Thanks,
Arun

Arun Hindupur, M.Sc., P.Eng. | Supervisor, Infrastructure Engineering
Engineering and Transportation Services
City of Guelph

T 519-822-1260 x 2282 | F 519-822-6194
E arun.hindupur@guelph.ca

guelph.ca

City News

Your weekly source of City information

Clean and Green

Register by **Sunday April 19**

Join us as we spring clean Guelph!

Sponsored by

- **Terra View Homes**
- **Guelph and Wellington Development Association**
- GLAD
- HIV/AIDS Resources and Community Health (ARCH)
- Canadian Tire
  10 Woodlawn Road East
- **Downtown Guelph Business Association**
- **Guelph Museums**
- **River Run Centre**
- Zehrs
  1045 Paisley Road
  297 Eramosa Road
  124 Clair Road East
  160 Kortright Road West

guelph.ca/cleanandgreen

City Council and Committee meetings

City Council and Committee meetings may be cancelled, rescheduled or held in an alternate format in light of COVID-19 closures.

Visit **guelph.ca/council** for the most up to date meeting dates and times.

For more information email **clerks@guelph.ca**

Guelph response to Coronavirus (COVID-19).

All City facilities and offices closed including City hall and all arenas, pools, recreation centres, play structures, libraries, and museums.

guelph.ca/emergency

Stormwater Management Master Plan

Notice of study commencement

City of Guelph Municipal Class Environmental Assessment for Stormwater Management Master Plan Update

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We want to hear from you

How we manage stormwater affects you. It also affects our drinking water supply and our environment. Your feedback is an important part of updating the master plan. The City will look for your feedback throughout the master plan update, both in-person and online. Opportunities to have your say will be posted on **guelph.ca/stormwater**, on haveyoursay.guelph.ca, and on our Twitter and Facebook channels.

To get project updates, you can join our mailing list by contacting the project leads listed below, or by registering at **haveyoursay.guelph.ca.**

This notice was first issued on March 19, 2020

The process

This study will be carried out according to the Municipal Engineers Association Municipal Class Environmental Assessment (2011, as amended), which is an approved Class of Environmental Assessment under the Environmental Assessment Act. Results from this study will be documented in an environmental assessment that will be made available for a public review period. At that time, residents, Indigenous communities and other interested persons or groups will be informed of when and where the environmental assessment can be reviewed.

Guelph's master plans assess the infrastructure we have to support today's services and decide what we'll need as our community grows. Master plans build on the goals and policies from the Official Plan to integrate existing and future land use plans and define long-term objectives. Looking at the city as a whole helps to evaluate options, consider a variety of perspectives, understand different outcomes, and make better decisions for Guelph's future.

For more information

Visit **guelph.ca/stormwater** for project information and updates.

To provide your comments, request additional information, or be added to the project mailing list, please contact:

Arun Hindupur, M.Sc., P. Eng.
Supervisor, Infrastructure Engineering
Engineering and Transportation Services
City of Guelph
519-822-1260 x 2282
arun.hindupur@guelph.ca

Chris Denich, M.Sc., P. Eng.
Project Manager
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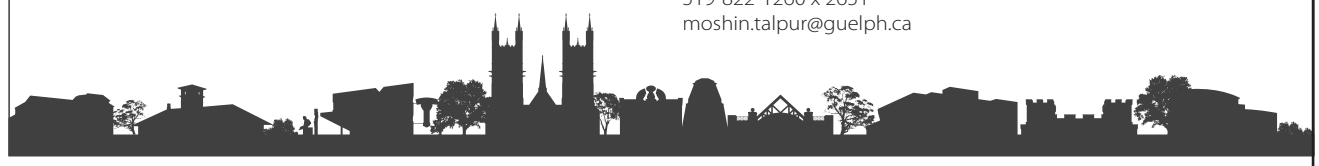
Mohsin Talpur, M.E., P. Eng.
Development Environmental Engineer
Engineering and Transportation Services
City of Guelph
519-822-1260 x 2651
moshin.talpur@guelph.ca



Like us on **facebook.com/cityofguelph**

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

Appendix T.2: Responses to Notice of Commencement

Ministry of the Environment, Conservation and Parks
Drinking Water and Environmental Compliance Division
West Central Region

119 King Street West, 12th Floor
Hamilton, Ontario L8P 4Y7
Tel.: 905 521-7640
Fax: 905 521-7820

Ministère de l'Environnement de la Protection de la nature et des Parcs
Division de la conformité en matière d'eau potable et d'environnement
Direction régionale du Centre-Ouest

119 rue King Ouest, 12e étage
Hamilton (Ontario) L8P 4Y7
Tél.: 905 521-7640
Téléc.: 905 521-7820

March 26, 2020

Mr. Arun Hindupur
City of Guelph

Mr. Chris Dench
Aquafor Beech

Dear Messrs. Hindupur and Dench:

Re: City of Guelph Municipal Class Environmental Assessment
Stormwater Master Plan Update
Response to Notice of Study Commencement

This letter is in response to the Notice of Commencement for the above noted project. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the City of Guelph has indicated that its study is following the master planning process under the MEA Class EA to identify stormwater infrastructure requirements to ensure the City's ability to meet anticipated growth in the community, identify efficiencies and ensure compliance with legislative requirements.

Identification of specific projects should consider whether they have the potential to result in impacts to source protection related features such as highly vulnerable aquifers or significant groundwater recharge areas given the City's reliance on groundwater. It is recognized that a more detailed analysis of source protection implications and any mitigation measures will be assessed in project specific EAs that may be identified through the master planning process.

It is also expected that climate change adaptation and mitigation will be addressed. Climate change should be addressed in the context of mitigation and adaptation. The ministry has released a guidance document to support proponents in including climate change in environmental assessments. The guide can be accessed from this link: https://www.ontario.ca/page/considering-climate-change-environmental-assessment-process The 2015 amended MEA Class EA also speaks to this in Appendix 2, page 2-7.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

Your proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to your proposed project**, the MECP is delegating the procedural aspects of rights-based consultation to you through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information you have provided to date and the Crown`s preliminary assessment you are required to consult with the following communities who have been identified as potentially affected by your proposed project.

First Nation	Contact Information
Six Nations of the Grand River	Six Nations of the Grand River P.O. BOX 5000, Ohsweken, ON., N0A 1M0 (519) 445-2201 Chief Mark Hill markhill@sixnations.ca Other Contact: Lands and Resources Director, Lonny Bomberry lonnybomberry@sixnations.ca 519-753-0665 Consultation Point Person: Matthew Jocko mjocko@sixnations.ca 2498 Chiefswood Road, P.O. Box 5000 Ohsweken, ON N0A 1M0
Haudenosaunee Confederacy Chiefs Council	Haudenosaunee Confederacy Chiefs Council 2634 6th Line Road, RR#2 Ohsweken, ON N0A 1M0 Hohahes Leroy Hill, Secretary jocko@sixnations.com
Mississaugas of the New Credit First Nation	Mississaugas of the New Credit First Nation 2789 Mississauga Road R.R. #6, Hagersville, ON N0A 1H0 519-768-1133 Chief Stacey LaForme Stacey.Laforme@mncfn.ca Other Contact: Fawn Sault, Consultation Coordinator Department of Consultation & Accommodation Fawn.Sault@mncfn.ca 6 First Line Rd., Unit 1 R.R.#6 Hagersville, ON N0A 1H0 905-768-4260

Steps that you may need to take in relation to Aboriginal consultation for your proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process" which can be found at the following link: https://www.ontario.ca/document/consultation-ontarios-environmental-assessment-process
Additional information related to Ontario's Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments

You must contact the Director of Environmental Assessment and Permissions Branch under the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right
- Consultation has reached an impasse
- A Part II Order request or elevation request is expected

The Director can be notified either by email with the subject line “Potential Duty to Consult” to MOECCpermissions@ontario.ca or by mail or fax at the address provided below:

Email:	MOECCpermissions@ontario.ca Subject: Potential Duty to Consult
Fax:	416-314-8452
Address:	Environmental Assessment and Permissions Branch 135 St. Clair Avenue West, 1st Floor Toronto, ON, M4V 1P5

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play in them.

While Master Plans themselves are not subject to Part II Orders, any projects identified and for which the Master Plan completes the EA process would be subject. As of July 1st 2018, a standardized form is to be used by anyone who believes that the environmental assessment process was incomplete, incorrect or that it failed to follow the required process. The required form can be found on the Forms Repository website (http://www.forms.ssb.gov.on.ca/) by searching “Part II Order” or “012-2206E (the form ID number). Once completed, the form is then to be sent to both the Minister and Director of the Environmental Assessment and Permissions Branch. Their addresses are:

Minister
Ministry of the Environment, Conservation and Parks
Minister.mecp@ontario.ca

Director, Environmental Assessment and Permissions Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave. West, 1st Floor
Toronto, ON M4V 1P5
MOECCpermissions@ontario.ca

Should you have questions, please contact me at Barbara.slattery@ontario.ca

With regards,

EA/Planning Coordinator

Encl.

A PROPONENT'S INTRODUCTION TO THE DELEGATION OF PROCEDURAL ASPECTS OF CONSULTATION WITH ABORIGINAL COMMUNITIES

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982*. Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown – the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;

- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;
- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;

- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;
- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant information;
- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigate any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

gingrichregehr.a@aquaforbeech.com

From: Patrick Gilbride <pgilbride@reepgreen.ca>
Sent: March 26, 2020 4:50 PM
To: Arun Hindupur
Cc: Chris Denich
Subject: RE: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement

Thanks Arun,

Please include me in the project mailing list if you haven't added me already. Electronic communication is fine – I don't need anything in the mail.

Hope you're staying healthy, safe and sane,
Patrick Gilbride
Direct Line: 519-744-6583 ext 232, Mobile: 519-574-3025

From: Arun Hindupur <Arun.Hindupur@guelph.ca>
Sent: March 26, 2020 8:01 AM
Subject: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement

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Thanks,
Arun

Arun Hindupur, M.Sc., P.Eng. | Supervisor, Infrastructure Engineering
Engineering and Transportation Services
City of Guelph

T 519-822-1260 x 2282 | F 519-822-6194
E arun.hindupur@guelph.ca

guelph.ca

gingrichregehr.a@aquaforbeech.com

From: Arun Hindupur <Arun.Hindupur@guelph.ca>
Sent: April 30, 2020 11:57 AM
To: denich.c@aquaforbeech.com; 'Peter Hebert'; 'Susan Hall'
Cc: Mohsin Talpur
Subject: FW: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement

FYI

From: EnviroOnt <EnviroOnt@tc.gc.ca>
Sent: Thursday, April 30, 2020 11:58 AM
To: Arun Hindupur <Arun.Hindupur@guelph.ca>
Subject: RE: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement

Hello,

Thank you for your correspondence.Please note Transport Canada **does not** require receipt of all individual or Class EA related notifications. We are requesting project proponents to self-assess if their project:

1. Will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property, available at at www.tbs-sct.gc.ca/dfrp-rbif/; **and**
2. Will require approval and/or authorization under any Acts administered by Transport Canada* available at http://www.tc.gc.ca/eng/acts-regulations/menu.htm.

Projects that will occur on federal property prior to exercising a power, performing a function or duty in relation to that project, will be subject to a determination of the likelihood of significant adverse environmental effects, per Section 82 of the *Impact Assessment Act, 2019*.

If the aforementioned does not apply, the Environmental Assessment program should not be included in any further correspondence and future notifications will not receive a response. If there is a role under the program, correspondence should be forwarded *electronically* to: EnviroOnt@tc.gc.ca with a **brief description of Transport Canada's expected role**.

*Below is a summary of the most common Acts that have applied to projects in an Environmental Assessment context:

- ***Canadian Navigable Waters Act (CNWA)*** – the Act applies primarily to works constructed or placed in, on, over, under, through, or across navigable waters set out under the Act. The Navigation Protection Program administers the CNWA through the review and authorization of works affecting navigable waters. Information about the Program, CNWA and approval process is available at: http://www.tc.gc.ca/eng/programs-621.html. Enquiries can be directed to NPPONT-PPNONT@tc.gc.ca or by calling (519) 383-1863.

- ***Railway Safety Act (RSA)*** – the Act provides the regulatory framework for railway safety, security, and some of the environmental impacts of railway operations in Canada. The Rail Safety Program develops and enforces regulations, rules, standards and procedures governing safe railway operations. Additional information about the Program is available at: https://www.tc.gc.ca/eng/railsafety/menu.htm. Enquiries can be directed to RailSafety@tc.gc.ca or by calling (613) 998-2985.

- ***Transportation of Dangerous Goods Act (TDGA)*** – the transportation of dangerous goods by air, marine, rail and road is regulated under the TDGA. Transport Canada, based on risks, develops safety standards and regulations, provides oversight and gives expert advice on dangerous goods to promote public safety. Additional information about the transportation of dangerous goods is available at: https://www.tc.gc.ca/eng/tdg/safety-menu.htm. Enquiries can be directed to TDG-TMDOntario@tc.gc.ca or by calling (416) 973-1868.

- ***Aeronautics Act*** – Transport Canada has sole jurisdiction over aeronautics, which includes aerodromes and all related buildings or services used for aviation purposes. Aviation safety in Canada is regulated under this Act and the Canadian Aviation Regulations (CARs). Elevated Structures, such as wind turbines and communication towers, would be examples of projects that must be assessed for lighting and marking requirements in accordance with the CARs. Transport Canada also has an interest in projects that have the potential to cause interference between wildlife and aviation activities. One example would be waste facilities, which may attract birds into commercial and recreational flight paths. The *Land Use In The Vicinity of Aerodromes* publication recommends guidelines for and uses in the vicinity of aerodromes, available at: https://www.tc.gc.ca/eng/civilaviation/publications/tp1247-menu-1418.htm. Enquires can be directed to at tc.aviationservicesont-servicesaviationont.tc@tc.gc.ca or by calling 1 (800) 305-2059 / (416) 952-0230.

Please advise if additional information is needed.

Thank you,

Environmental Assessment Program, Ontario Region
Transport Canada / Government of Canada / 4900 Yonge St., Toronto, ON M2N 6A5
EnviroOnt@tc.gc.ca / Facsimile : (416) 952-0514 / TTY: 1-888-675-6863

Programme d'évaluation environnementale, Région de l'Ontario
Transports Canada / Gouvernement du Canada / 4900, rue Yonge, Toronto, ON, M2N 6A5
EnviroOnt@tc.gc.ca / télécopieur: (416) 952-0514

From: Arun Hindupur [mailto:Arun.Hindupur@guelph.ca]
Sent: Thursday, March 26, 2020 8:02 AM
Subject: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement

Hello,

Please see attached Notice of Study Commencement for the City of Guelph's Stormwater Management Master Plan.

Thanks,
Arun

Arun Hindupur, M.Sc., P.Eng. | Supervisor, Infrastructure Engineering
Engineering and Transportation Services
City of Guelph

T 519-822-1260 x 2282 | F 519-822-6194
E arun.hindupur@guelph.ca

guelph.ca

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Ministry of Heritage, Sport, Tourism, and Culture Industries

Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Tel: 416.314.7643

Ministère des Industries du Patrimoine, du Sport, du Tourisme et de la Culture

Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Tél: 416.314.7643

Ontario

April 15, 2020 EMAIL ONLY

Arun Hindupur, P. Eng.
Supervisor, Infrastructure and Engineering
Arun.hindupur@guelph.ca

MHSTCI File : 0012204
Proponent : The City of Guelph
Subject : Notice of Study Commencement – Municipal Class EA
Project : Stormwater Management Master Plan Update
Location : City of Guelph

Dear Arun Hindupur:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the Notice of Commencement for this project. MHSTCI's interest in this Master Plan project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- archaeological resources (including land and marine)
- built heritage resources (including bridges and monuments)
- cultural heritage landscapes

Under the Municipal Class Environmental Assessment (EA) process, the proponent is required to determine a project's potential impact on cultural heritage resources. A Master Plan project at minimum will address Phases 1 and 2 of the Municipal Class EA process. Developing and reviewing inventories of known and potential cultural heritage resources within the study area can identify specific resources that may play a significant role in guiding the evaluation of alternatives for subsequent project-driven EAs.

Project Summary
The City is updating the 2012 Stormwater Management Master Plan to ensure stormwater (rain) is properly managed in a way that helps protect Guelph's water supply and environment in a sustainable way. This study will be carried out according to the Municipal Engineers Association Municipal Class Environmental Assessment (2011, as amended), which is an approved Class of Environmental Assessment under the Environmental Assessment Act.

Identifying Cultural Heritage Resources

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

Archaeological Resources

This Master Plan project may impact archaeological resources therefore the screening checklists developed by MHSTCI: *Criteria for Evaluating Archaeological Potential* and *Criteria for Evaluating Marine Archaeological Potential* should be completed. A Stage 1 archaeological assessment may need to be completed to determine whether archaeological assessments will be needed for subsequent project-driven Municipal Class EAs.

Built Heritage and Cultural Heritage Landscapes

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the master plan to inform if resources can be avoided and if technical cultural heritage studies will be needed for subsequent project-driven Municipal Class EAs. This report should;

1. Identify existing baseline cultural heritage conditions within the study area. The report will include a historical summary of the development of the study area and will identify all known or potential built heritage resources and cultural heritage landscapes in the study area. MHSTCI has developed screening criteria that may assist with this exercise: *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes*.

2. Identify preliminary project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of anticipated impact to each known or potential built heritage resources or cultural heritage landscape that has been identified.

3. Propose and recommend measures to avoid or mitigate potential negative impacts to known or potential cultural heritage resources. The proposed mitigation measures are to inform the next steps of project planning and design.

Technical cultural heritage studies are to be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed.

The findings of the above-mentioned studies should be summarized as part of the master plan discussion of existing conditions, preliminary impact assessment and future commitments.

Environmental Assessment Reporting

All technical cultural heritage studies and their recommendations are to be addressed and incorporated into Master Plan projects. Please advise MHSTCI whether any technical heritage studies will be completed for this Master Plan project and provide them to MHSTCI before issuing a Notice of Completion.

Thank you for consulting MHSTCI on this project. Please continue to do so through the Master Plan process, and contact the undersigned for any questions or clarification.

Sincerely,

Joseph Harvey
On behalf of

Katherine Kirzati
Heritage Planner
Heritage Planning Unit
Katherine.Kirzati@Ontario.ca

Copied to: Mohsin Talpur, Development Environmental Engineer, City of Guelph
Chris Denich, Project Manager, Aquafor Beech Ltd.

Hydro One Networks Inc
483 Bay St
Toronto, ON

April 08, 2020

Re: Stormwater Management Master Plan Update

Attention:
Chris Denich, M.Sc., P. Eng.
Project Manager
Aquafor Beech Ltd.

In our preliminary assessment, we have confirmed that Hydro One has existing high voltage Transmission facilities within your study area (see map attached). At this point in time we do not have enough information about your project to provide you with meaningful input with respect to the impacts that your project may have on our infrastructure. As such, this response does not constitute any sort of approval for your plans and is being sent to you as a courtesy to inform you that we must be consulted on your project.

In addition to the existing infrastructure mentioned above, the affected transmission corridor may have provisions for future lines or already contain secondary land uses (i.e. pipelines, watermains, parking, etc). Please take this into consideration in your planning.

Also, we would like to bring to your attention that should (Stormwater Management Master Plan Update) result in a Hydro One station expansion or transmission line replacement and/or relocation, an environmental assessment (EA) will be required as described under the Class Environmental Assessment for Minor Transmission Facilities (Hydro One, 2016). This EA process would require a minimum of 6 months to be completed and associated costs will be allocated and recovered in accordance with the Transmission System Code. Furthermore, to complete an EA it can take from 6 months (to complete a Class EA Screening Process) to 18 months (to complete a Full Class EA Process) based on the level of assessment required for the EA. In order to achieve speedy completion of the EA, Hydro One will need to rely on studies and/or reports completed as part of the EA for your project.

Please allow the appropriate lead-time in your project schedule in the event that your proposed development impacts Hydro One infrastructure to the extent that it would require modifications to our infrastructure.

In planning, please note that developments should not reduce line clearances or limit access to our facilities at any time in the study area of your Proposal. Any construction activities must maintain the electrical clearance from the transmission line conductors as specified in the Ontario Health and Safety Act for the respective line voltage.

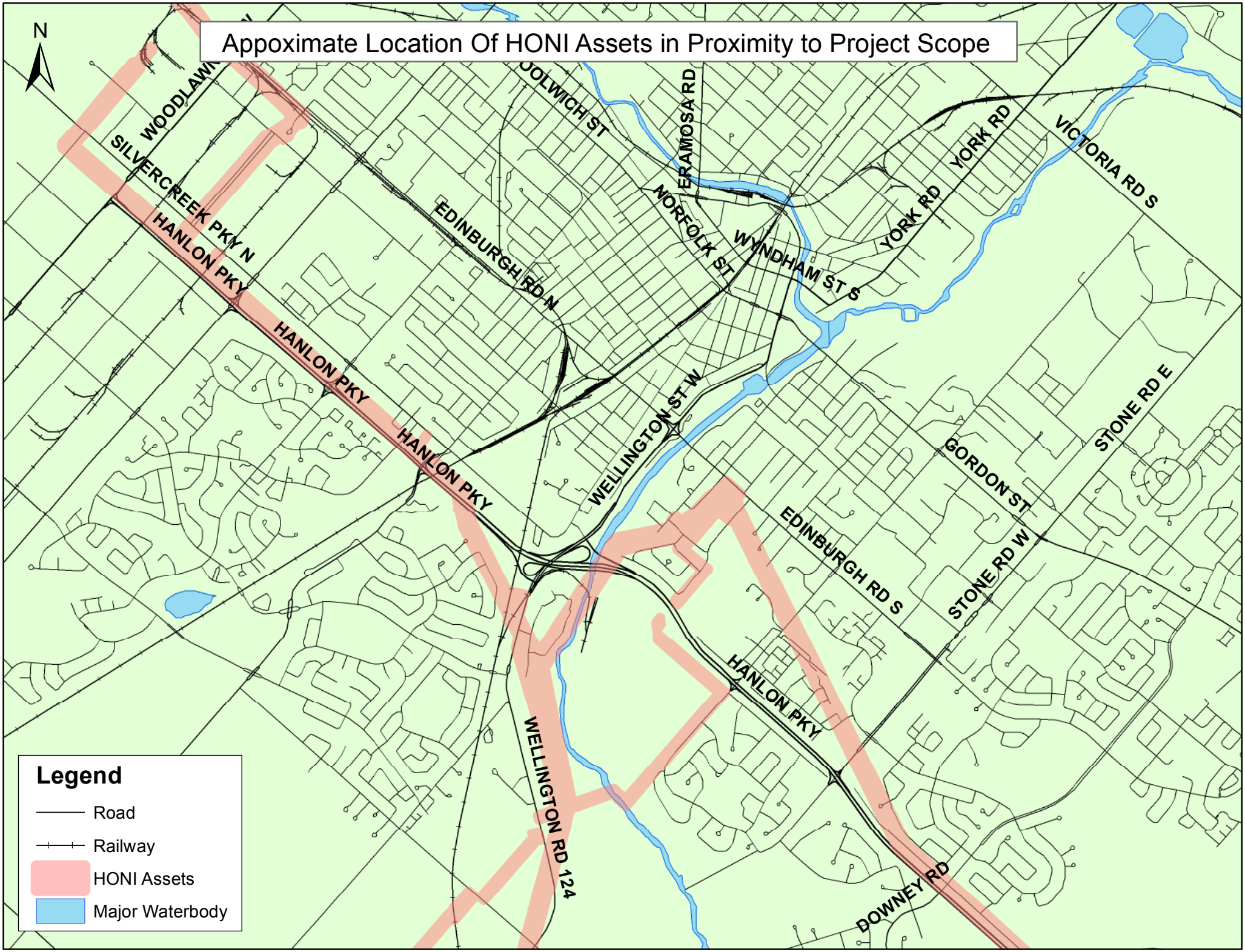
Be advised that any changes to lot grading and/or drainage within or in proximity to Hydro One transmission corridor lands must be controlled and directed away from the transmission corridor.

Please note that the proponent will be held responsible for all costs associated with modification or relocation of Hydro One facilities, as well as any added costs that may be incurred due to increase efforts to maintain our facilities.

We reiterate that this message does not constitute any form of approval for your project. Hydro One must be consulted during all stages of your project. Please ensure that all future communications about your project are sent to us electronically to secondarylanduse@hydroone.com.

Sent on behalf of,

Secondary Land Use
Asset Optimization
Strategy & Integrated Planning
Hydro One Networks Inc.


Appoximate Location Of HONI Assets in Proximity to Project Scope
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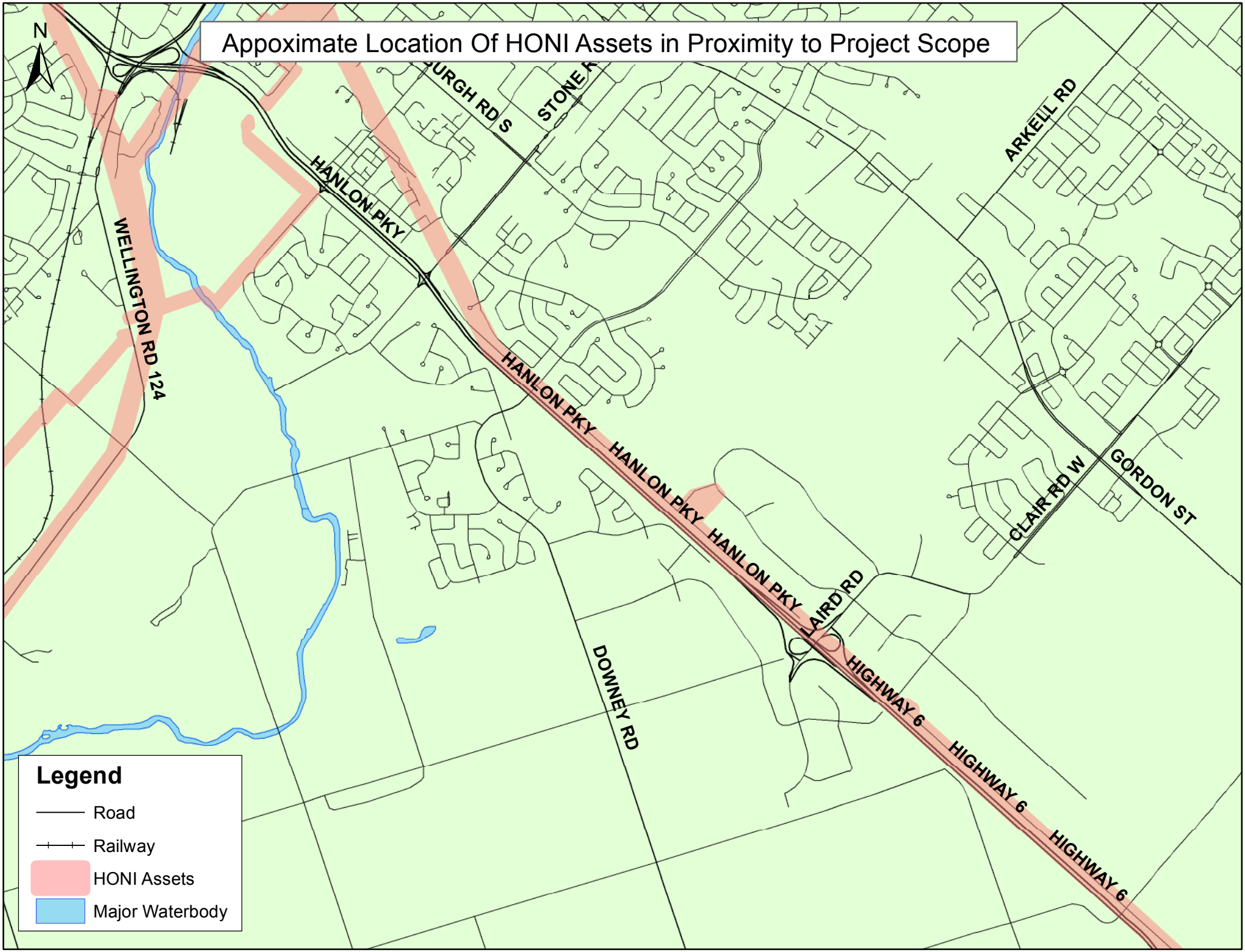
VICTORIA RD S
WELLINGTON ST W
GORDON ST
STONE RD E
STONE RD W
EDINBURGH RD S
WELLINGTON RD 124
DOWNEY RD
Legend
Road
Railway
HONI Assets
Major Waterbody


Appoximate Location Of HONI Assets in Proximity to Project Scope
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STONE R
HANLON PKY
WELLINGTON RD 124
ARKELL RD
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HANLON PKY
CLAIR RD W
GORDON ST
LAIRD RD
DOWNEY RD
HIGHWAY 6
HIGHWAY 6
HIGHWAY 6
Legend
Road
Railway
HONI Assets
Major Waterbody

gingrichregehr.a@aquaforbeech.com

From: Sorochinsky, Tim <tim.sorochinsky@aecom.com>
Sent: April 27, 2020 4:53 PM
To: Arun.hindupur@guelph.ca
Cc: moshin.talpur@guelph.ca; denich.c@aquaforbeech.com; Charles Organ; Kirstie.Houston@ontario.ca
Subject: FW: City of Guelph - Stormwater Management Master Plan - Notice of Study Commencement
Attachments: GWP-14-00-00-HanlonExpressway_MaltbytoSpeedRiver_NoteofCommencement.pdf

Dear Arun,

We received a copy of your recent Notice of Commencement indicating that the City is completing an update to the 2012 Stormwater Management Master Plan. As the City of Guelph is aware, MTO is currently undertaking a Detailed Design and Class Environmental Assessment (G.W.P. 14-00-00) to complete improvements to Highway 6 (Hanlon Expressway) from Maltby Road to the Speed River. For your reference, we provide the attached notice issued in August 2017 which summarizes the works proposed and identifies the key contact at MTO, Mr. Charles Organ. Please note that I am currently the AECOM Project Manager for this project. The notice also identifies the project website where you can obtain additional information.

This undertaking will involve improvements to stormwater management and drainage for Highway 6 within our area of study. We did recently meet with City of Guelph staff on February 13, 2020 to discuss the MTO project and we anticipate further communications as the project design, including drainage and stormwater management, progresses. Minutes of the February 13 meeting have very recently been shared with the City of Guelph attendees (Terry Gayman, Jennifer Juste and Gwen Zhang). If you have any further questions, please let me know. As the proposed improvements may impact municipal infrastructure we would appreciate your consideration and coordination with our project team. We will add you to our Project Contact List to make certain that you will receive all future notifications regarding the MTO project. Please also add Charles Organ (MTO) and me to your Project Contact List.

Thanks,
Tim

Tim Sorochinsky, P. Eng.
Senior Project Manager
Manager, Transportation Planning and Preliminary Design
D 905-418-1475 C 647-273-9556
tim.sorochinsky@aecom.com

AECOM
4th Floor, 30 Leek Crescent, Richmond Hill, ON, L4B 4N4, Canada
www.aecom.com

NOTICE OF STUDY COMMENCEMENT

HIGHWAY 6 (HANLON EXPRESSWAY) INTERCHANGES FROM MALTBY ROAD NORTHERLY TO THE SPEED RIVER (G.W.P. 14-00-00)

DETAILED DESIGN AND CLASS ENVIRONMENTAL ASSESSMENT

THE PROJECT

The Ontario Ministry of Transportation (MTO) is moving forward with a Preliminary Design Review and Detailed Design under the Class Environmental Assessment (EA) for Highway 6 (Hanlon Expressway) interchanges from Maltby Road northerly to the Speed River in the City of Guelph and Guelph/Eramosa Township, in Wellington County.

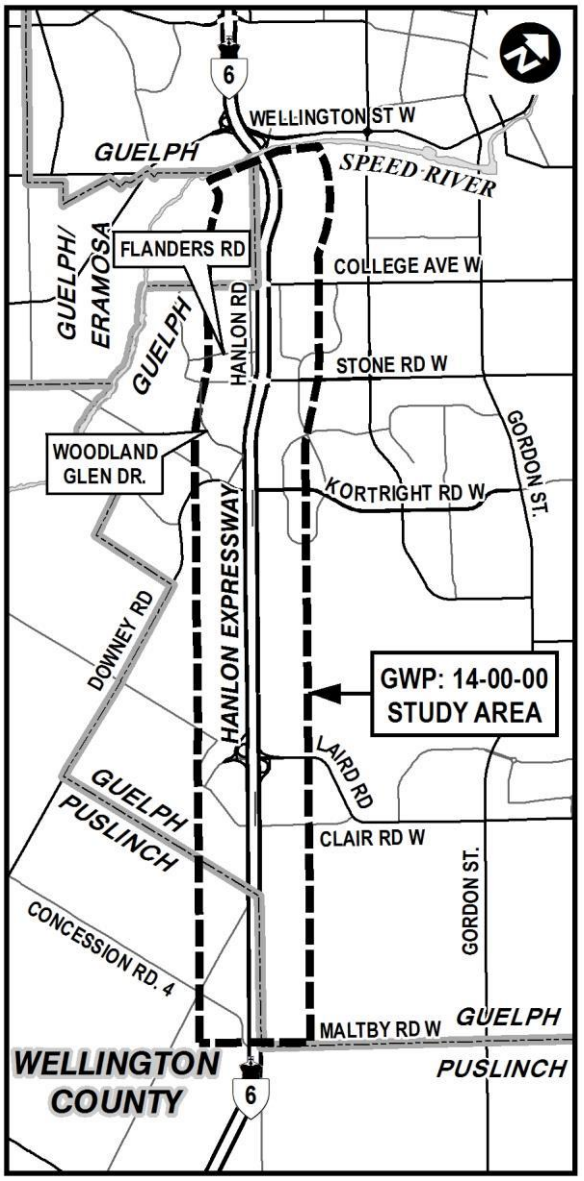
BACKGROUND

A Planning and Preliminary Design Study was completed in June 2009, which documented improvements to the Highway 6 (Hanlon Expressway) corridor from south of Maltby Road to the Speed River (G.W.P. 3002-05-00). The recommended plan from this study was documented in a Transportation Environmental Study Report (TESR) and was approved on November 17, 2009.

Recommendations that were made as part of the 2009 TESR included a new interchange at Laird Road which was constructed in 2011.

The remaining recommendations from the 2009 TESR are the subject of this study. The approved Preliminary Design includes:

- Upgrading Highway 6 within the study limits to a controlled access freeway;
- Replacement of the intersection at Kortright Road / Downey Road with a partial interchange (Highway 6 access to and from the south only);
- Replacement of the intersection at Stone Road with a full interchange;
- Replacement of the intersection at College Avenue with a bridge at Highway 6 (no connection to the highway);
- A new municipal service road west of Highway 6 between Woodland Glen Drive and the new interchange at Stone Road;
- Closure of Hanlon Road south of Flanders Road; and,
- Pavement rehabilitation, illumination improvements, stormwater management, drainage improvements, and utility relocations.



THE PROCESS

This study is subject to the Ontario EA Act and will be completed in accordance with the *MTO Class EA for Provincial Transportation Facilities* (2000) process for a Group B project with the opportunity for public input. A review will be undertaken to determine if significant changes have occurred since the submission of the 2009 TESR. In the event that significant changes are identified, a TESR Addendum will be made available for a 30-day public and agency review period. The Detailed Design phase will be documented in Design and Construction Report(s) (DCRs) that will be made available for public and agency review. The DCR(s) will document the study process, Detailed Design and associated environmental impacts, mitigation measures, and a summary of consultation undertaken.

CONSULTATION AND COMMENTS

Consultation and engagement will take place throughout the study with the public, Indigenous peoples, regulatory agencies and municipalities. A Public Information Centre (PIC) will be held to provide an opportunity to discuss the study with members of the Project Team. Notifications advising of the time and location of the PIC, and of the availability of the TESR Addendum (if required) and DCR(s) will be published in local newspapers, posted on the project website, and mailed to those on the project mailing list.

Interested persons are encouraged to contact the project team members below or visit the project website to obtain additional information, provide comments or to be placed on the project mailing list.

Charles Organ, CET
Senior Project Manager
Ministry of Transportation - West Region
Planning & Design
659 Exeter Road, London, ON N6E 1L3
Tel: 519-873-4591
Toll-free: 1-800-265-6072 extension: 519-873-4591
Fax: 519-873-4600
Email: chuck.organ@ontario.ca

Patrick Puccini, P. Eng
Consultant Senior Project Manager
AECOM Canada Ltd.
4th Floor, 30 Leek Crescent
Richmond Hill, ON L4B 4N4
Tel: 905-882-4401
Fax: 905-882-4399
Email: patrick.puccini@aecom.com

Project website: **http://Highway6-HanlonCityofGuelph.ca**

We are committed to ensuring that government information and services are accessible for all Ontarians. For communication support or to request project material in an alternate format, please contact one of the project team members listed above.

Comments and information will be collected to assist MTO in meeting the requirements of the *Ontario EA Act*. With the exception of personal information, all comments will become part of the public record in accordance with the *Freedom of Information and Protection of Privacy Act.*

Ontario

Appendix T.3: Community Stormwater Management Working Group

City of Guelph Stormwater Management Master Plan

Community Working Group Meeting #1 Summary

February 9th, 2021

Background

The City of Guelph has initiated a Stormwater Management Master Planning process. The purpose of the Stormwater Management Master Plan (SWMMP) is to develop a long-term plan for the safe and effective management of stormwater runoff while maintaining, and where possible, improving, the ecosystem health and ecological sustainability of the City's water resources. The SWMMP will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, thermal mitigation, and water balance/infiltration targets.

Policies contained in the Growth Plan for the Golden Horseshoe require municipalities to undertake Stormwater Management Master Planning. This process includes the requirement for a watershed-based approach and examines environmental impacts from both existing and planned development, assesses climate change impacts, includes Green Infrastructure (GI) and Low Impact Development (LID), incorporates retrofit opportunities, includes full life cycle and a plan for its implementation. The Plan will also be compliant with the Grand River Source Protection Plan and the City of Guelph's Official Plan, Source Water Protection Program, and Natural Heritage Action Plan.

On February 9, 2021, members of the Community Stormwater Management Working Group (CSWMWG) met to discuss the Stormwater Management Master Plan. The purpose of the meeting was the following:

- To introduce the City of Guelph Stormwater Management Master Plan, process and Project Team;
- To review and confirm the Community Stormwater Management Working Group Terms of Reference and role;
- To review background information, including results from the first phase of engagement; and
- To shape a shared vision of outcomes for the study.

The following report provides a high-level summary of the feedback received by participants.

Presentation

Reg Russwurm, Manager Design and Construction, City of Guelph, welcomed participants and thanked them for their time. Susan Hall, LURA, reviewed the meeting objectives and agenda. Chris Denich and Alison Gingrich Regehr, Aquafor Beech, conducted a brief introductory presentation, which included the project's purpose, study background and phases. Chris indicated that the SWMMP would consist of strategies under the following categories:

- Municipal Pollution Prevention, Operations & Maintenance Practices
- Strategies for Private Property (source controls)
- Stormwater for the Capital Roads Program (conveyance controls)
- Stormwater Management Facilities
- Watercourse and Erosion Restoration
- Urban Flood Management & Stormwater Infrastructure

City of Guelph Stormwater Management Master Plan

Community Working Group Meeting #1 Summary

February 9th, 2021

Susan provided an overview of the Terms of Reference and proposed engagement program. SWMMP CWG members indicated their agreement to the Terms of Reference.

Chris and Alison reviewed the current conditions of stormwater infrastructure in the city. This included examining existing stormwater management facilities, watercourse assessment, urban flood management and infrastructure, and subwatershed health.

Following the presentations, participants were encouraged to ask questions of clarification.

Q. Have lessons learned of failures in stormwater management in Southern Ontario been reviewed? In Southern Ontario, urban floods are dominant because stormwater has not historically been managed very well. As we have urbanized our watersheds, the stormwater management planning has been piecemeal. Are there ways to plan stormwater management more holistically in the future, recognizing the impacts to river regimes of urbanization?

A. Aquafor Beech developed the draft guidance for MECP on stormwater management; the focus was to reassert the need for treatment train for all types of development, not just new or greenfield development. It includes infill and redevelopment within the urban fabric. The focus was on the need for source, conveyance and end-of-pipe. As an industry, we have relied on an end-of-pipe system, erosion and volume control have received less attention. Guelph has been at the forefront of innovative technology given Guelph's watershed, soils, and ecology. The Ministry's new guidance on all developments is to have some runoff volume control, which focuses on getting volume out of the system. We are looking at green infrastructure in this master plan to help manage volume control and the function it replicates in the urban system. In combination with pond retrofits and level of service improvements, we can affect the function of the urban system. The MECP's hierarchy of stormwater management starts with retention (e.g., infiltration, evapotranspiration, and reuse), then looks to filtration (e.g., LID) solutions, followed by converntional end-of-pipe controls. The impending policies from the province are being considered. This master plan is primarily focused on existing urban areas; the new development areas in the south end are going through separate processes that will be more specific than the master plan.

Q. Is the main focus of the SWMMP flooding, or is it water quality control?

A. The plan will address all aspects of stormwater management. The stormwater model will look at urban flooding, minor systems, and lack of overland flow in the urban system. In general, we have been fortunate not to have a recent riverine flooding event in Guelph. The existing floodplain mapping for the area has a significant amount of the city within the 100-year floodplain. The city does have known areas of persistent flooding that will be reviewed. The SWMMP is a comprehensive assessment of flooding, water quality control, erosion, and groundwater quality and quantity. The watershed health lens will help us prioritize strategies and actions within the SWMMP.

C. In 1964, a 25-30-year thunderstorm centred over Guelph blew many of the exiting stormwater systems out of the ground. It does not have to be a 100-year storm to have a significant impact. These high-intensity events also have a significant impact.

Q. What do we know about the wetlands in the city? To what extent have the hydrological regimes of these systems changed over time, particularly in the older parts of the city?

A. We have not had a chance to determine if the City has studies or an assessment of the wetlands' conditions. There are a lot of direct outlets to wetland features in the City. There is evidence of over-infiltrating in some areas; the City has noted a change in the Ecological Land Classifications (ELC) in the landform. We have not yet correlated it to where the city has stormwater ponds or infiltration facilities. We will be looking at it with the watershed health assessment. We will be looking at wetland cover and will explore wetland quality if there is data available.

Q. How is the wetland coverage determined?

A. Wetland coverage is a desktop review using inputs from the fluvial geomorphologist who did the watercourse investigations and GRCA and MNRF mapping data.

Q. How are the stream models manipulated?

A. The models will be used in a couple of different ways. We will run IDF curves (2 through 100 years); the model can run continuously. At this point, the model is being used to identify areas of infrastructure risk and flooding. We are trying to establish a minimum service level for the city's stormwater system and pipe networks. By developing the city-wide model, the City will be able to use it as a future tool. We have not included any continuous modelling at this stage.

Q. How will the master plan consider climate change impacts (i.e., more intense rainfall, etc.)? Would it be possible to model more frequent and severe storm events in the future?

A. We are doing a future climate scenario. It will look at the level of service now and if the projections hold. We will be running scenarios where we implement a level of control.

Q. What is the difference is between stream health quality and aquatic health quality metric in the Subwatershed Health Score?

A. The aquatics metric is looking at species richness, the number of species, species intolerance. Stream health is looking at the processes, erosion, physical aquatic habitat.

Q. For the Subwatershed Health Score, there is an assessment of the "Percentage of water quality parameters exceeding guidance." Can you explain what is included here? Could it focus on some particularly problematic parameters (i.e., salt and nutrients)?

A. The table provides a simplified version of the metric. The metric includes gradations on severity (acute, chronic, etc.). The table is an amalgamation of all the metrics to create a single subwatershed health score. We will be identifying areas where data gaps exist. Waterloo and Kitchener SWMMP processes include a similar assessment where CWG members can see the final outputs.

Q. Do thermal conditions fall under the water quality?
A. For other studies, thermal conditions have been assessed in water quality (e.g., cold water stream). It is included in the aquatic assessment.

Q. Will there be another presentation on the subwatershed health characterization in the future? Will it include the details of the subwatershed health and watercourse erosion assessment?
A. A series of documents have been prepared for the City's review. The Environmental Assessment will be the main SWMMP document, and the technical assessments will be appendices. Before the SWMMP report is complete, the intent is to bring these items back to this group.

Q. How are incentives being provided to residents or businesses in support of stormwater management?
A. We have not made any recommendations on those aspects yet to the City for this project. However, many other communities are looking at stormwater credits. There is an opportunity to review incentives, programs and mechanisms, and we will work with the City to define the best solutions for Guelph. There are existing programs that are offered on an application base in Guelph.

Q. What are the outcomes of the project?
A. A series of projects and programs will be identified, including establishing a level of service for the City. This will address how the City addresses existing facilities, upgrades required and programs. Programs include multiple projects over several years. Individual projects would be more granular (e.g., restore a watercourse, complete a LID retrofit). Some programs will consist of monitoring and future studies. The SWMMP will be an overall guiding document for all aspects of stormwater. The implementation plan will identify the resources needed, priority and cost estimates.

Discussion

Following the presentation and clarification questions, Susan Hall, LURA, encouraged discussion on the following questions. The next section provides a summary of the feedback received.

What are the outcomes for Stormwater Management Master Plan that you would like to see?

- Tangible solutions for homeowners. Identify the types of actions homeowners and renters can implement.
    - There is a rain barrel program and a homeowner guide that we can share.
- I would like the plan to be future-proof. It should consider not only the current conditions but consider the future conditions.
- I want the plan to identify prioritize projects and resourcing.
- I would like to see us focus on multifunctional practices that have stormwater and other environmental or social benefits.
- The implementation will need to consider the environmental costs of any solution. Ensuring there is a holistic approach.

- Inclusion of as many metrics as possible, particularly in the subwatershed health score, ensures that the risks and value are assessed as comprehensively as possible.
- I am interested in identifying solutions for businesses and industry. The types of activities that can occur on private property are of interest.
- Interested in enhancing stormwater management is seen as enhancing the natural system, seeing stormwater as an asset that contributes to the natural system.
- I am interested in the details of the watershed characterization and existing conditions assessment.
- I would like to see the plan continue to maintain or enhance the existing subwatershed health.
- I would like to think about the flooding and erosion hazards so that water quality and quantity for both surface and groundwater inputs.
- I am interested in policies and targets for infiltration and surface and groundwater quality and quantity on a subwatershed basis to assist the GRCA in our review of development in Guelph.
- I'm interested in exploring the reuse of water from a volume perspective when getting approvals from a development application.
- Ensure that we are using the most up-to-date hydrologic data and information we have and make sure the plan considers urbanization impacts on stormwater management.
- Explore opportunities to marry stormwater management with other environmental benefits (e.g. forestation planting in greenway areas) and social benefits of outdoor spaces that can be appreciated.

Next Steps

Chris highlighted that Phase 2 activities will begin in Spring 2021, where the team will be focused on filling gaps, developing a long list of alternatives, and evaluating alternative management strategies. This will include developing evaluation criteria for EA eligible programs, which will be shortlisted to select preferred alternatives. The CWG will meet during Phase 2 – Evaluation of stormwater scenarios. Susan thanked all participants for their contributions and encouraged members to send any additional thoughts within one week of the meeting. A summary of the meeting will be shared with participants.

City of Guelph Stormwater Management Master Plan

Community Working Group Meeting #2 Summary

November 15, 2021

Background

The City of Guelph has initiated a Stormwater Management Master Planning process. The purpose of the Stormwater Management Master Plan (SWM-MP) is to develop a long-term plan for the safe and effective management of stormwater runoff while maintaining, and where possible, improving, the ecosystem health and ecological sustainability of the City's water resources. The SWM-MP will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, thermal mitigation, and water balance/infiltration targets.

Policies detailed in the Growth Plan for the Golden Horseshoe require municipalities to undertake Stormwater Management Master Planning. This process includes the requirement for a watershed-based approach, examines environmental impacts from existing and planned development, assesses climate change impacts, includes Green Infrastructure (GI) and Low Impact Development (LID), incorporates retrofit opportunities, and includes a full life cycle and a plan for its implementation. The Plan will also be compliant with the Grand River Source Protection Plan and the City of Guelph's Official Plan, Source Water Protection Program, and Natural Heritage Action Plan.

On November 15, 2021, members of the Community Stormwater Management Working Group (CSWMWG) met to discuss the Stormwater Management Master Plan. The purpose of the meeting was to review and discuss the following based on the key findings of the following technical reports (shared with members in advance of the meeting):

- Subwatershed Health Analysis
- Existing Pond and OGS Assessments
- New End-of-Pipe Opportunities
- Erosion and Geomorphic Assessments
- Infiltration Policy
- Draft SWM Design Criteria
- Rainfall and IDF Analysis

The following provides a high-level summary of the feedback received from participants.

Presentation

Colleen Gammie, Infrastructure Planning Engineer, City of Guelph, welcomed participants and thanked them for their time. Susan Hall, LURA Consulting, reviewed the meeting objectives and agenda. Chris Denich and Alison Gingrich Regehr, Aquafor Beech, presented key findings of the technical reports and engaged participants in a discussion.

Discussion

Participants were encouraged to provide feedback relating to:

- The methodology for:
  - Determining the comparative health of the City's subwatersheds
  - Assessing SWM facilities, catchments, and OGS units
  - Identifying new SWM facilities

  - Assessing erosion and geomorphic issues
- Additional metrics to be considered in the future for assessing subwatershed health (identify areas for the City to collect future data/ information)
- Achieving an adequate balance between the need to protect groundwater while allowing opportunities for recharge to occur in the Infiltration Policy
- Technical considerations for the City to evaluate and focus on to guide the City evaluation of pending modelling results
- Additional feedback on stormwater criteria, including: water balance, water quality, erosion control, water quantity/flood control, volume control (for water quality, erosion, WB and partial flood control)

Participants identified the following questions ('Q') and answers provided by the consulting team ('A'). Additional comments are noted with a 'C.' These are elements for consideration by the Project Team as the project progresses.

C. The logic of combining terrestrial habit quality and aquatic habitat quality with the measures such as damage erosion, etc., is unclear. We need to consider if there is value in combining these into one index. In prioritizing areas with poor habitat quality, we may find that the potential for improvements might be marginal even after making huge investments.

A. We continue to have internal discussions on prioritizing areas and whether or not to make investments, for example, on priority 4 to maintain more pristine conditions. We do not think we need to exclude projects in priority 4 areas. In a scenario where we have two equal projects in priority 1 and priority 4 areas, choosing to invest in a project in priority 1 area does provide some transparency with justifiable reasons as to why one project is preferred over another. We are open to receiving more feedback.

Q. Was there any consideration given to how frequent watershed flows are?

C. Our small natural watersheds primarily flow in the spring and not so frequently during the summer. As we urbanize and pave the watersheds, they run in the spring and respond to every summer storm. This can impact the overall health of the watersheds by causing erosion, affecting the temperatures of the regimes, etc. We need to find out which of these watersheds still function in generating flow from snowmelt and rain closer to a natural situation and which ones have deteriorated to the point where there are running in response to every event. This can give us a good sense of the extent to which the watershed has changed if not deteriorated.

A. We have not looked into the flow regimes specifically. The only metric we have used to understand the trend is the imperviousness within the stormwater performance metric. This is to build on the idea that at 10% imperviousness, we start to see degradation in the watershed. We believe all of these are well beyond 10%.

Q. How was the prioritization criteria, as indicated by, for example, the top five worst ones in the sub-catchments under priority 1, determined?

A. We considered the natural breaks as we worked through prioritizing the areas. We can still amend the sub-catchments under each priority based on how the subwatershed conditions

score. This may shift the number of sub-catchments under each priority. We remain open to more feedback.

C. As we work on the ponds cleanouts, we need to keep in mind the overwintering turtle and frog habitat. It will be wise to engage a biologist or an ecologist and factor in the associated costs to ensure safe cleanouts. There is a need to consider the Chinese mystery snails and phragmites invading many stormwater ponds. As part of invasive species management, managing the materials taken out of the pond will be needed. This work could involve either rebuilding and recontouring some of the ponds or scraping some of the collected material. This additional cost will need to be factored in.

C. While the maps have been included in all reports, what is missing is the location information of the stormwater ponds. It was pointed out that there is a spreadsheet with over 100 ponds numerically ordered in one of the documents, but their addresses are not mentioned. Over the last 20 to 30 years, it was noted that the ponds have overgrown, with less work being done to ensure their proper maintenance.

Q. What will be the frequency of cleaning out the catch basins upstream of the OGS? Is there a plan to strategically clean some of the catch basins? Is there a way for City staff to rate the catch basin from a sediment point of view?

C. The City's operations team has limited funds, and it takes six or seven years to clean out all the catch basins on a geographic basis quadrant-by-quadrant. If there could be a way to figure out which catch basins need to be cleaned out once every three or four years and which ones need to be cleaned out annually, it could save a lot of problems and address the sediment issues before it gets into the OGS.

A. With the Kitchener Stormwater Master Plan, we completed a two-year study on catch basins in a variety of different neighbourhoods for explicitly that purpose. It will be discussed with the City about how that fits into the municipal operations and maintenance. Kitchener noted the need to target the catchments without a stormwater pond for priority cleanout (as it is the primary control) and for any catch basin treatment. We will consider prioritizing cleanouts in areas without control as this could be a low-cost option. This has been done in a few municipalities but not in Guelph. The frequency of both cleanouts of ponds and OGS still needs to be fully costed and spread out through the implementation program. We will keep you posted on any progress.

Q. If most of the priority ponds are infiltration ponds with standing water, have you assessed whether it is a groundwater issue, imperviousness, or any other reason why they are not functioning as intended?

A. No, we have not done any study yet. The two assessments we completed were conducted separately. We tried to compare the results of the inspection reports, which found the high-risk facilities such as the infiltration ponds, with the results of the pond and catchments analysis. Through that work, we did find that it was a little bit difficult to make full comparisons because of data gaps in pond design . We would be recommending some additional studies to determine why some ponds are failing and if some maintenance work would help. These are old ponds and

might be clogged, but we do not have enough details. With the infiltration policy, we will look into whether these ponds should continue to function as infiltration facilities or be converted to other facilities, like a wet pond.

Q. Did you assess whether there was any correlation between the stream health and the erosion control measures present or functioning in the ponds?

A. We have not done that correlation. It would be an easy GIS assessment to complete.

C. Since we are looking to assess the effectiveness of the ponds in controlling the stormwater volume, it will be helpful to assess how much stormwater volume is coming out of the watershed managed or controlled by the pond. This can also include watersheds that do not have any ponds.

Q. Has any thought been given to a downspout disconnection program or something similar to take some of the flow away at the source point?

A. We have not yet fully developed the private property or source conveyance control program as part of the Master Plan. It is still under consideration. As part of our retrofit implementation strategy, one of the approaches we will consider includes implementing low-impact development source and conveyance controls through the catchment and/or retrofitting SWM facilities. We have not yet settled with the City what could be required, as far as neighbourhoods infills and redevelopments are concerned. This might address some of the flow or volume issues. It is a long-term strategy with a sizeable cost involved but may help provide the right solution.

C. The cost for retrofits is enormous. While we may not know how much volume or flow would be generated from rooftops and what could be saved or directed to grass or vegetated areas, it still seems like a reasonable investment.

Q. Are the parks and open spaces included in the slides also being prioritized?

A. These are just identified as possible opportunities. Prioritization will occur later in the master plan process.

C. We appreciate that the Natural Heritage Action Plan and Urban Forest Management Plan are being considered in addition to the work on the ponds.

C. The question we need to keep asking ourselves is what is causing the erosion. The range of causes can be different in urban and rural areas, and there could be a variety of causes to the issue of erosion. What remains paramount is that we continue targeting the right reasons to develop the appropriate solutions.

A. We believe that the tablelands need to be addressed first. We need controls on the surface before we can direct the watercourse. In Guelph, it is not the typical stream bank erosion because many of the watercourses in Guelph are brick-lined or concrete-lined. Many of these sites are infrastructure-at-risk (sanitary sewers, maintenance holes, bridges, etc.) where the watercourse is migrating into them. We will need to develop a preferred solution for each of

those sites, and then we will prepare conceptual designs to address erosion. The preferred solutions will be evaluated in subsequent parts of the study, including a do-nothing alternative.

C. We would support stormwater volume control; however, volume control with a blanket 28 or 29 mm infiltration target may not suit all areas. A fairly large portion of Guelph is a high groundwater recharge area, but some areas have lower recharge potential. That might not be possible if we have a fixed 28 or 29 mm number with those sites.

A. The volume control would be a control target; it is not necessarily a full infiltration.

C. Thank you for the clarification; this should be fine.

Q. How does it work with the Environmental Compliance Approval (ECA) for areas within the Wellhead Protection Areas (WHPA) with a 8 to 10 vulnerability score - or within the nitrate issue area where infiltration measures may be a challenge?

A. That is where volume control and infiltration need to be looked at considering the three priority levels. With priority level one being infiltration, if we are within a Wellhead Protection Area with an 8 to 10 vulnerability score and infiltration is forbidden, we can move directly to the second priority. In this case, we would look to see if we can achieve the full 27 mm through filtration. If filtration is not possible, then we would be looking for the third priority options for the remainder that could not be managed through the filtration.

Q. How do you measure intensification? Is the 4.9% mentioned based on units being developed or on the amount of hard surface?

A. At this stage, we are just looking at where site applications have been approved. It is just a metric of a change. We are not saying that it is the 4.9% conversion of the lot area submitted versus the catchment area. It is not an indication of a 5% or 50% increase. We do not have that level of data at this stage, but we are trying to track the rates of a partial change in those catchments. Typically, we do not have the numbers, but we know that it is very rare that a site plan or conversion in an area would decrease. It is almost always an increase, but we are not assigning a percentage yet.

C. We have several developers interested in installing water reuse systems like collecting rainwater and using greywater for flushing toilets or watering the lawn. Currently, no credit is being given as part of the volume reduction strategy for municipal permits, whether Guelph or other jurisdictions. When we ask for the reasons, we are told that if it rains and the tanks get filled up, the next time it rains, there is no volume to be captured because the tanks are full. In addition to that, there does not seem to be a lot of scientific studies done on this yet. This is something that we hope that the study can capture.

C. We need to question whether the peak runoff or peak runoff volume is causing flooding? A lot of our design is aimed at peak runoff. There is a need to take a hard look at that when, at the same time, we are talking a lot about controlling the volume of runoff to control flooding downstream. How we run the models, and the criteria can be quite different.

C. As the City continues to infill sites, we could help City Council see some examples like Cooksville Creek and Don River and what over urbanization and paving have done to those places. For

instance, with Don River, it is so urbanized that there are virtually no options for controlling stormwater. We can learn from other municipalities in southern Ontario.

C. For the watershed sizes we are considering and the kind of storms we may expect, we should be looking at 30 minutes or one-hour storm durations and not five or ten-minute rainfalls. One criterion we used several years ago to ascertain what kind of storm we should look at for design purposes was to look at the watershed and the so-called time of concentration for the watershed. In other words, we need to get an idea of how long it is for water to run from the extreme part of the watershed to the point where we get the pond or the outlet we are considering. This will give us both the peak runoff and peak-volume situation.

Next Steps

Aquafor Beech will be working on the following:

- Hydrologic and Hydraulic Modeling
- Class EA evaluation of EA Eligible projects
- Watercourse Erosion and Management Issues: Identification of restoration alternatives and conceptual design and cost estimate for preferred options.
- Existing SWM facilities: Preliminary design of preferred options
- Develop a preferred stormwater management strategy
- Identify capital infrastructure funding, risk analysis and resource needs
- Finalize SWM design criteria
- Finalize guidance document for LID implementation

Participants were encouraged to send any additional feedback and relevant documents within two weeks of the meeting. The next working group meeting will be planned for spring 2022, focusing on the preferred alternatives, criteria, and the final draft SWM-MP.

Community Working Group Meeting #3 Summary

November 22, 2022

Background

The City of Guelph has initiated a Stormwater Management Master Planning process. The purpose of the Stormwater Management Master Plan (SWM-MP) is to develop a long-term plan for the safe and effective management of stormwater runoff while maintaining and, where possible, improving the ecosystem health and ecological sustainability of the City's water resources. The SWM-MP will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, thermal mitigation, and water balance/infiltration targets.

Policies detailed in the Growth Plan for the Golden Horseshoe require municipalities to undertake Stormwater Management Master Planning. This process includes the requirement for a watershed-based approach, examines environmental impacts from existing and planned development, assesses climate change impacts, includes Green Infrastructure (GI) and Low Impact Development (LID), incorporates retrofit opportunities, and includes a full life cycle and a plan for its implementation. The Plan will also comply with the Grand River Source Protection Plan and the City of Guelph's Official Plan, Source Water Protection Program, and Natural Heritage Action Plan.

On November 22, 2022, Community Stormwater Management Working Group (CSWMWG) met to discuss the Stormwater Management Master Plan. The purpose of the third meeting was to review and discuss work to date and seek feedback on the preferred alternatives based on the following reports shared with members in advance of the meeting:

New Reports:

1. Pop-up Engagement Summary
2. Restoration Alternatives and Conceptual Design

Finalized reports presented in draft at last meeting:

1. Subwatershed Health Analysis
2. Pond Recommendations

Other reports with revisions since the last meeting:

1. New End of Pipe Opportunities
2. Infiltration Policy

The following report provides a high-level summary of the feedback received.

Presentation

Colleen Gammie, City of Guelph, welcomed participants and thanked them for their time. Susan Hall, LURA Consulting, facilitated a round of introductions and reviewed the meeting objectives and agenda. Alison Gingrich Regehr and Chris Denich, Aquafor Beech, provided a recap of the work and presented an overview of the technical report findings and draft recommendations.

Throughout the presentation, Susan Hall engaged participants in a discussion. Participants were encouraged to provide feedback and ask questions relating to the following presentation topics:

- Erosion Restoration Alternatives and Conceptual Designs
- Subwatershed Health Analysis
- Stormwater Pond Recommendations
- New End-of-Pipe Opportunities
- Infiltration Policy
- Stormwater Management Criteria
- Draft Recommendations

Discussion

The summary of questions, participants' comments, and the project team's responses are provided below, organized by topic. Questions are marked by a 'Q', comments are marked by a 'C', and responses are marked by an 'A'.

Erosion Restoration Alternatives and Conceptual Designs

The project team reviewed the process to assess erosion and identified the four alternatives: do nothing, local works, reach based works, and risk removal. They provided an overview of the evaluation criteria and recommended alternatives for the twenty-five sites.

Q: Do the evaluation criteria include constraints relating to what must be accomplished at a site or technical feasibility?

A: Yes. For example, between the identified erosion sites #18 and #24, a sanitary sewer crosses water courses and drains a large portion of the city. This presents significant constraints because the sanitary sewer cannot be completely removed, making it more challenging to identify alternatives. This case required consideration of the Water and Wastewater Servicing Master Plan to determine the technical feasibility of potential alternatives.

Q: Are the identified erosion sites #18 and #24 near Wellington Street? Is the challenge here related to backing up water into the Speed River?

A: Yes, the sites are near Wellington Street - #18 is west of Edinburgh Road, and #24 is east of Edinburgh Road. In both locations, the pipes acted as a dam and were concrete encased, so the lateral pressure was a significant risk. Although the potential for a spill here was low to medium, the impact would be catastrophic if a spill were to occur.

C: The process for the evaluation of alternatives seems reasonable.

C: Any progress these alternatives make that reconnects the natural process to stormwater management is appreciated. Sensitivity to wildlife and native plants should all be included in the restoration work.

A: Absolutely. Most of our alternatives focused on being as natural as possible, for example, through natural channel design, limiting the use of concrete, and using more natural stones.

Subwatershed Health Analysis

The project team provided a recap of the subwatershed health analysis that assessed subwatersheds based on terrestrial ecology, aquatic ecology, stormwater management, and erosion condition. They noted no substantial changes since the draft report, which was previously shared with the Working Group.

Q: Is there going to be a monitoring plan to assess whether the prioritization of subwatersheds is helping to improve their health?

A: We will recommend a monitoring plan similar to the monitoring component for the new Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) process. The first step will be establishing a baseline within the subwatersheds, so that improvements can be tracked as the SWM-MP is implemented. The monitoring plan would also help address the data gaps that have been identified, which may result in adjustments to the subwatershed health scores.

Q: On the map depicting the subwatershed health score, why is the southeast section of the map (Clair Road East) scored as 'fair,' whereas the southwest section (Clair Road West) scored 'good'? Can you explain the differences in their scores?

A: This difference is largely due to the southwest section being less developed and performing better in the aquatic ecology scoring.

Stormwater Pond Recommendations

The project team provided a recap of the stormwater pond recommendations. They noted the conclusions were substantially the same as those in the draft. The main revisions related to clarifications to text and revisions to recommendations for OGS clean-out frequency.

Q: Can you elaborate on what is meant by 'dry to wet retrofit' concerning infiltration facilities?

A: A number of old facilities were originally constructed as infiltration facilities but were classified as either dry or wet facilities in the City's infrastructure database over the years. As a result, several of these facilities are currently holding water and are not acting in their infiltration capacity. However, particularly for those facilities within the Hanlon Creek subwatershed where infiltration is critical for maintaining water balance and thermal mitigation for the watershed's ecological needs, it will be important to investigate these facilities to determine what type of restoration to infiltration capacity is possible.

Q: Would an infiltration facility be designed with no outlet at the base instead of a dry facility that would have been designed to drain?

A: Some infiltration facilities have an outlet approximately one metre above the facility's base and are designed to hold water up to that outlet. As a result, it looks like these facilities have a permanent pool and perform as a wet pond even though they are meant to be infiltration facilities and should not be holding water longer than they were designed for. This has contributed to the misclassification of infiltration systems as wet facilities, which leads to

improper maintenance and clogging. These misclassifications need to be corrected, and we have added sub-classifications so that infiltration facilities' management is better understood.

Q: Does the City have a good program for cleaning out catch basins?

A: We are putting together a list of recommendations that includes catch basin cleanouts and oil and grit separators (OGS) cleanouts.

New End-of-Pipe Opportunities

The project team reviewed the process to assess new end-of-pipe opportunities and provided an overview of the recommended facilities for sixteen sites.

C: Surface facilities are preferable to subsurface facilities because they provide open water features and connections for wildlife.

Q: Can you elaborate on the new pond being considered at the natural heritage site near York Road and Industrial Street?

A: This natural heritage site is newly being considered. The City just recently got notice that the land transfer will go through, and as a result, the site has been identified as a possible location to investigate. The City of Kitchener recently constructed a new pond in a similar context. These types of ponds, if designed properly, can have high functionality from an ecological perspective.

C: It seems there is a great opportunity at this natural heritage site for a large pond due to the other activities relating to naturalization and fish stocking in the watercourse in that area. It is great to hear that Kitchener has done something similar that we can refer to and learn from.

Q: For new end-of-pipe opportunities, is the goal to get as much water quality treatment as possible within a constrained space?

A: Water quality is the driver, but we will also get some water quantity and erosion control benefits through water quality retrofits.

Q: The number of recommended subsurface facilities is surprising, given that the cost is very expensive while the ecological function is much lower than surface facilities. How did this decision happen?

A: More subsurface facilities were recommended because of concerns about removing park space to build surface facilities. However, the trend in the industry is moving towards surface facilities that are ponds within parks because ponds can be designed as a park feature that contributes to park rehabilitation.

Q: If an OGS is connected to a subsurface facility to address water quality, would the purpose of the subsurface facility be primarily to hold and manage water quantity?

A: The function of an OGS in a subsurface facility is to capture the heaviest fraction of debris, but the subsurface facility would still be recommended to have an isolator row where additional material like clay particles not captured by the OGS can be deposited and then later removed. The subsurface facilities function like ponds in that water retention leads to the settlement of

suspended particles. However, it is critical to have an appropriately sized and designed OGS unit to capture and hold the bulk of grit coming in.

Infiltration Policy

The project team provided an overview of the infiltration policy.

Q: In Kitchener-Waterloo, some infiltration is allowed on larger roads during the summer months as long as there is a shutoff or bypass in the winter. Was there any consideration around permitting infiltration along roadways in summer months and requesting shutoff or bypass for the winter?

A: Without having tried this approach before, the City is uncomfortable including it in the SWMMP from a source water protection perspective. Guelph's underlying source water risks are very different from those in Kitchener and Waterloo. Guelph has much more coverage of high source water risk areas and much higher standards for maintaining water infiltration rates. There is concern about gate valves not being closed when required, and in some cases, the risk associated was determined to be too high to allow this approach. However, the City would consider granting permission to facilities with flexible liners or hard-bottomed structures to implement infiltration at the City's discretion on a case-by-case basis. There is also interest in doing a pilot study to test the approach and gather learnings so that greater permissiveness can be considered in a future SWMMP update.

Q: I'm uncomfortable with the prioritization of managing human risk over ecological risk at the moment. Are there areas where infiltration is allowed based on what is needed?

A: Yes, there are pathways for infiltration to be more permissible in areas where it would otherwise be prohibited when there is an ecological function and requirement for infiltration. To permit infiltration in these cases, it would have to be demonstrated that the water is not going to groundwater. This requires detailed studies that identify and quantify the water going into permissible areas, such as a surface water feature.

Stormwater Management Criteria

C: At our last meeting, there was talk about 15 mm city-wide infiltration, which is now down to 5 mm. From a Conservation Authority perspective, the preference would be for new development to balance pre and post groundwater infiltration where permissible to maintain base flows and wetland recharge.

A: This policy (Policy Area 13) is not intended to replace the land use planning process. New developments would still be required to conduct watershed studies that determine targets for infiltration that supersede this policy. However, a huge portion of the city does not have watershed studies and does not have targets. The intention with Policy Area 13 is to provide some volume control in those areas through a city-wide minimum. The City still requires maintenance of the pre-development recharge rate, volume, and hydro periods at the post-development conditions, in addition to the 5 mm of volume control.

Q: Is there a new or updated report with the modelling information?

A: The modelling report has not been circulated yet, as we are still completing an additional modelling scenario. The model will only look at infrastructure at this stage.

Q: Was the Major System model results based on simulating a 100-year event?

A: Yes, the model simulated a 100-year event on the surface.

Q: What was simulated in the Minor System Storm Sewer and Minor System Nodes model results?

A: Both of these model results were based on a 5-year event. The Minor System Nodes looked at the nodes in the system and where the hydraulic grade line is within the nodes.

Q: How does that influence the Major System for the Grey Only scenarios?

A: The Grey Only scenario has very little impact on the Major System flow depth because those receive flows from storm sewers for the most part. However, in the Minor System Storm Sewer results, we do see a substantial decrease in surcharging between Grey Only and other scenarios, as there is some level of control that those facilities provide.

Q: For Scenarios #5, #6, and #7, is it modelling just for the different levels of volume control or is it additive with the end-of-pipe scenario?

A: It is just modelling for volume control. Each scenario is a synthetic event to guide the evaluation of benefits from different volume control targets.

Draft Recommendations

The project team provided an overview of the draft recommended projects and programs.

Q: Is the Cash-in-Lieu Study (Recommended Projects) common in other municipalities?

A: Other municipalities have done this, including both Kitchener and Waterloo. It is common where you have stringent requirements for stormwater control, particularly when there are multi-faceted criteria that would make it difficult to achieve all of them and policy constraints like the infiltration policy. This enables the municipality to accept an appropriate cash equivalent to apply towards a different project in the city that achieves the same benefit instead of rejecting the project.

Q: Are the quoted costs referring to the total cost for each recommended program over 25 years, and is developing the program part of the cost or do the programs already exist?

A: Some of the programs would be completely new and need to be developed, whereas others are existing programs that we recommend continuing or expanding. All the costs are totals for the 25 years, except for the SWM Monitoring Program, for which an approximate annual cost is provided.

Q: Are the 'Rural to Urban ROW – Nicklin Road' and the 'Urban Boulevard Conversion – ICIP' projects already approved?

A: The projects are part of the City's capital plan for road works, but they have not yet incorporated Low Impact Developments (LIDs). Given that they already have funding allocated in the capital budget, they represent good opportunities for demonstration projects and can help the City identify learnings for LID implementation.

Q: Is there a recommendation for which department at the City dedicated stormwater staff should be allocated?

A: We are not making recommendations on the internal structure of how new staff should be organized, but we are recommending what kind of staff would be needed for implementation.

Q: Has there been any calculation on how the $486 million cost estimate for the recommendations will be paid for?

A: Yes, we will allocate these costs to existing funding that is available as much as we can. A study is also underway looking at stormwater fees and how they can contribute to building a sustainable funding model over time. This study will be completed in 2023.

C: The cost of $14.3 million for the Capital Watercourse Remediation may seem scary, but it can be teased into smaller projects. There will be lots of worthwhile benefits that come from these projects.

Q: Was there any discussion about the disconnection of roof leaders?

A: There is no formal policy on this. One of our gaps is that there is no good mapping of where roof leaders are and where they may be disconnected. This can be part of data gap filling, but we are not recommending anything.

C: There was some mention of salt management plans contributing to infiltration. I would argue that salt management plans are ineffective because commercial facilities are primarily motivated by avoiding slip-and-fall liabilities.

A: We have to engage building owners and operators on the idea that they can mitigate lawsuits by documenting their process for following a salt management plan. Education and outreach regarding this are key.

C: The salt management plans can perhaps include a clean-up plan for salt in the spring.

A: We have worked with a land management company that will start cleaning their salt in the spring because we quantified the damage from salt to their buildings for them. They are motivated to follow their salt management plan, not for environmental reasons but because they are attributing costs to concrete degradation from the salt.

Next Steps

Following this meeting, Aquafor Beech will be working on the following:

- Finalize guidance document for LID implementation
- Complete Capital Infrastructure Funding, Risk Analysis and Resource Needs
- Complete the SWMMP Project File Report
- Finalize the Innovation Strategy.

Participants were encouraged to send any additional feedback within two weeks of the meeting and to attend the Public Open House on November 29, 2022. The project team will review all feedback from the CSWMWG and the public to inform the development of the preferred stormwater management strategy and implementation plan.

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From: gingrichregehr.a@aquaforbeech.com
Sent: January 16, 2023 9:58 AM
To: 'Andrea Bradford'; 'Susan Hall'; 'Colleen Gammie'; 'Denich, Chris (denich.c@aquaforbeech.com)'
Subject: RE: Additional Comments Re 3rd CSWMWG Meeting

Hi Andrea,

Many thanks for your participation in the CSWMWG and for your comments from the latest meeting. We have provided the following responses in an effort to ensure transparency and accuracy:

- The material presented in the CSWMWG#3 meeting was not intended to present the full and final recommended solution as part of the Master Plan. Rather the CSWMWG#3 was intended to present the technical assessments. We apologise for any miscommunication in this regard. For clarity, the final SWM Master Plan does include source and conveyance control requirements for private and public property and new developments.

- The subsurface end-of-pipe facilities were subject to an extensive discussion with City staff, which included representatives from Parks. Since most of the identified locations for new facilities were located in parks, input from Parks was therefore critical. Direction from Parks was that surface facilities would limit their ability to provide services to the public at these locations (e.g., removal of a winter ice rink, soccer field, playground, etc.). Wherever possible, surface facilities were proposed. By meeting with Parks at this stage and determining implementable options, it is more likely that these projects will actually move forward, unlike many of the new EOP opportunities proposed during the 2012 SWM-MP (which identified fewer opportunities, most of which were subsequently deemed not feasible). The final EA report will include the evaluation of alternatives for the EOP facilities, but this has not been circulated at this point.

- The full Implementation Plan report is still in development. As noted above, the presentation to the CSWMWG largely focused on the outcomes of the various technical investigations, to obtain inputs for recommendations that would emerge from these investigations. The project team next steps will include developing the comprehensive list of recommendations, not just those from the technical investigations. These recommendations will generally fall into the six “baskets” of the SWM-MP, including:
    - Municipal Pollution Prevention, Operations and Maintenance Practices
    - Source Control Measures
    - Conveyance Control Measures
    - End-of-Pipe Measures
    - Watercourse and Erosion Restoration
    - Urban Flood Management and Stormwater Infrastructure

  The recommendations within the first basket will include the type of preventive, ongoing tasks that you refer to, while the other baskets have a mix of preventive and reactive recommendations to bring the City’s level of service back up to the desired level over the coming years.

- To clarify the role of Subwatershed Studies (SWS) vs. Municipal Master Plans – SWS delve more deeply into an area than is possible in a broader Master Plan. In general, if a SWS was completed, the SWM-MP defers to the SWS results as the SWS is more detailed and site-specific. However, if the SWS is older and there have been significant changes since then (e.g., policy, development, etc.) then the SWM-MP may supersede the SWS results. For example, several SWS in the City of Guelph were completed prior to Source Water Protection Planning, so the Infiltration Policy includes language to allow consideration for the infiltration restrictions from

the Infiltration Policy. Another example is the additional criteria that were added for some subwatersheds in the Stormwater Design Criteria and Targets report, as most SWS did not include erosion criteria, or only specified limited water quality treatment. The revised criteria include Enhanced water quality treatment and control 90th percentile event or extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours.

- The LID Implementation Report is still under development. In its current draft form, this report includes recommendations for the City to implement pilot projects for several streets already scheduled for reconstruction in 2024. These pilot projects, in addition to the Lowes and Dawn neighbourhood project, are intended to help the City develop the appropriate approvals processes, assumption protocols, tracking system, operations and maintenance requirements, etc. in preparation for broad implementation of volume control on all City reconstruction projects. Based on new Provincial requirements and the SWM MP criteria, all road projects will be subject to more water quality requirements in the future. Additional recommendations likely to come out of this report include: revisiting the 5mm volume control requirement during the next SWM-MP to determine whether 5mm is still deemed adequate, or whether it should be increased; and completion of a study to recommend market-based strategies to increase uptake of LID on already-developed private property.

- Regarding the infiltration policy:
    - It is important to note that through the Infiltration Policy development, a more permissive framework for the infiltration of rainwater has been established overall. In addition, through discussions with City Environmental Planners, provisions have been developed in consultation with Source Protection Staff to permit infiltration, in otherwise restricted areas, that contribute to sensitive hydrologic feature to ensure the maintenance of pre-development water balance and ensure form and function are maintained through the completion of site specific studies. This provision was included for conditions where the infiltration of runoff is require to sustain wetlands, watercourses and aquatic habitats regardless of their location within the WHPA.
    - Control of Deicers is a recommendation arising from the Municipal Pollution Prevention, Operations and Maintenance Practices, as we recognize that high concentrations of road salt are toxic. Unfortunately, due to minimum salt application rate requirements, the City is unlikely to be able to substantially reduce its salt use. The bigger opportunity is with commercial application of salt, so the SWM-MP is recommending the development and use of Salt Management Plans and applicator training through such programs as the Region of Waterloo's smart about salt™ program.

If you have any additional comments of questions, please let us know.

Thanks again,

Alison Gingrich Regehr (she/her), MASc, EIT, CAN-CISEC
Aquafor Beech Ltd.
55 Regal Road, Unit 3
Guelph, ON, N1K 1B6

Ph: 519-778-0257
www.aquaforbeech.com

From: Andrea Bradford <abradfor@uoguelph.ca>
Sent: November 24, 2022 7:03 PM
To: Susan Hall <shall@lura.ca>; Colleen Gammie <Colleen.Gammie@guelph.ca>; Alison Gingrich Regehr <gingrichregehr.a@aquaforbeech.com>; Denich, Chris (denich.c@aquaforbeech.com) <denich.c@aquaforbeech.com>
Subject: Additional Comments Re 3rd CSWMWG Meeting

Hello,

Thanks for all of the information presented Tues night and apologies if I took up too much space and contributed to running over time. If it is appropriate, you are welcome to share these comments with the other attendees at the 3rd working group meeting.

Also, lots of caveats for my comments below. I may not recall things that were explained clearly at the early working group meetings, although I did go back to review the TOR. And, I know I do not understand the Guelph context to the extent that you all do.

I feel like I understand the work done by Aquafor Beech. Identification of preferred alternatives is always more robust if the same alternative is preferred when the emphasis on various criteria is adjusted, but I could follow the arguments and evidence for the most part. The subsurface "end of pipe" designs have few environmental and social co-benefits (other than perhaps regulating thermal regimes) and have significant costs ($ and environmental life cycle costs). In my view, what was lacking was a comparison of the end of pipe alternative to other (prevention, source, conveyance) alternatives. The need for the end of pipe options would be more convincing if it were demonstrated that no alternatives exist to achieve at least the same benefits (and that significantly better results could not be achieved if combined with other alternatives). Maybe your judgment tells you this, but I am left with doubts.

I'm struggling more with what the broader Master Plan includes (or is missing). I understand that certain aspects were emphasized for the project, but I expected the "Master Plan" to be inclusive of everything needed to achieve the purpose "to develop a long-term plan for the safe and effective management of stormwater runoff while maintaining, and where possible improving, the ecosystem health and ecological sustainability of the City's water resources. The SWMMP will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, thermal mitigation as well as water balance/infiltration targets." You are definitely more enthusiastic about the extent to which this is being achieved than I am.

For the pieces that were not addressed by Aquafor, maybe there just needs to be clarification about what existing work is in place and who is responsible for implementing. I feel like this links to the budget and recommendations for staff (yeah!) presented but I didn't see everything that I would have expected in the lists. I'm thinking of the first (I think) slide in Tuesday's presentation, where better site design and pollution prevention appear in the first branch of flowchart. Other than maintenance recommendations which can be considered P2, I understood that this was outside the scope of work for Aquafor but expected it to be within a Master Plan. What am I missing here? These are hugely important (and much less costly) than all of the reactive work that is now necessary. Without focus here, all of the costly reactive work will continue to be needed (and/or ecosystem health will continue to decline). I confess that I do not understand how a municipal master plan and subwatershed plans connect. Which informs the other? I know there was mention that subwatershed plans could specify more specific design criteria. I understand that more detailed modelling and analysis would be possible within the scope of a subwatershed plan but is there no role to articulate what the City wants to achieve? Can the big picture, and how all the pieces come together, be more clearly articulated for the overall Master Plan?

With the emphasis on areas for infill and intensification, landing on 5 mm of volume control was hugely disappointing. I may not fully understand the range of projects that would be included (and the barriers to achieving more control for some) but for others this seems like an unacceptable lost opportunity. Where does SWM on private properties fit in? Community members have expressed some interest but I haven't seen any recommendations for support/incentives. Do I understand correctly that there was virtually no interest in discussing ROW projects (other than perhaps a single pilot)? When I agreed to serve as a member of the working group, I certainly did not foresee that the plan would include only one LID opportunity. What can I say other than as a participant in this process and a resident of the City of Guelph, this is EMBARASSING. I expected an equal effort on identifying (non) end of pipe opportunities.

For me, "safe and effective management of stormwater" means protective of ecosystem and human health. What I have seen is an extremely human-centric plan. (The "Infiltration Policy" should be renamed as it is a drinking water protection policy, although I did hear that there was some movement in the details that make it slightly better in other regards). I understand the importance of source protection *for drinking water* and I know that City staff are under extreme pressure in this regard. But, there seems to be a dearth of voices speaking for the rivers, wetlands, and aquatic organisms in this process (or generally in the Province) so I'm stepping up. Roadsalt that ends up in drinking water is a

hazard. Prevention is the ideal (but not the only way) to manage risk. The fish have no adaptive capacity to implement treatment or other measures if excess flows continue to erode their streams, lost baseflow contributes to increasing stream temperatures, and excessive roadsalt and other contaminants poison their environment. Surely there is at least a moral imperative to weigh this risk.

Thanks for considering these additional comments.

Kind regards,

Andrea

****

Andrea Bradford, Ph.D., P.Eng.

School of Engineering

University of Guelph

Guelph, ON

N1G 2W1

519-824-4120 x52485

From: Susan Hall <shall@lura.ca>
Sent: Friday, November 11, 2022 3:38 PM
To: Alison Gingrich Regehr <gingrichregehr.a@aquaforbeech.com>; Chris Denich <denich.c@aquaforbeech.com>; Colleen Gammie <Colleen.Gammie@guelph.ca>; Sayan Sivanesan <ssivanesan@lura.ca>
Cc: 'abradfor@uoguelph.ca' <'abradfor@uoguelph.ca'>; 'gali@uoguelph.ca' <'gali@uoguelph.ca'>; 'Brendan.Bumbaco@sleemanbreweries.ca' <'Brendan.Bumbaco@sleemanbreweries.ca'>; 'Steve.Conway@gmblueplan.ca' <'Steve.Conway@gmblueplan.ca'>; 'jmille30@uoguelph.ca' <'jmille30@uoguelph.ca'>; 'kevin_butt@hotmail.com' <'kevin_butt@hotmail.com'>; 'stansfieldjonathan@gmail.com' <'stansfieldjonathan@gmail.com'>; 'Anindita Datta' <adatta@grandriver.ca>; Arlene Slocombe <arlene.slocombe@gmail.com>
Subject: CSWMWG Agenda and Guelph Infiltration Policy

Good afternoon CSWMWG members

Attached, please find the meeting agenda and the last report for your review – the revised Infiltration Policy. This has been updated based on the release of a risk assessment to municipal drinking water systems due to road salt application, which resulted in the refinement of Tables 5.2 and 6.2. The Nitrate ICA was also removed as a constraint. The meeting will be held on **Zoom on November 22, 6:00-8:00**; please see the link in the agenda.

If you have any questions or concerns, please feel free to reach out.

Sincerely,
Susan

Susan Hall, MES | Partner
LURA Consulting | lura.ca
shall@lura.ca | t: 416.886.8205
Follow us on Twitter: @LuraConsulting

Please consider the environment before printing this email.

Appendix T.4: Public Open House #1

gingrichregehr.a@aquaforbeech.com

From: Have Your Say Guelph <notifications@engagementhq.com>
Sent: October 16, 2020 3:03 PM
To: denich.c@aquaforbeech.com
Subject: October 2020 online engagement opportunities

Categories: Green Category

Online engagement opportunities in October

Slow Streets

What did you think of the slow streets pilot?

We've been trying out slow streets on six roads since September 1

How have these slow streets worked for you? Did you walk, bike, rollerblade or drive on any of these streets in the last month? Do you live on one of these slow streets? Whatever your experience using them, we want to hear from you.

Share your thoughts about Guelph's slow streets in our online survey.

The survey ends November 1.

Water master plans:

Have your say on how the City manages all things water in Guelph

Guelph is a growing community and how the City manages water, in all its forms, is changing to adapt to our growing community. The City is updating four water-related

master plans and invites Guelph residents to have their say through virtual community open houses and surveys starting October 28 until November 30.

The City's master plans assess the infrastructure we have to support today's services and decide what we'll need as our community grows. Our master plans build on the goals and policies from the Official Plan to integrate existing and future land use plans, and define long-term objectives. Looking at the city as a whole helps to evaluate options, consider a variety of perspectives, understand different outcomes, and make better decisions for a future ready Guelph.

Stormwater Management Master Plan

Is about how the City manages stormwater run off (rain and melted snow) from your roofs and driveways, and from roads and sidewalks, to help prevent flooding and protect people and the environment. Starting October 28 check out the virtual open house, ask us anything or provide comments by November 30.

Wastewater and Biosolids Master Plan

The City manages wastewater (everything you flush down your sinks, drains and toilets) so it's sustainable, protects our waterways and the environment. We want to hear from you October 28 to November 30. Attend our virtual open house, take the survey to help us understand which criteria is most important to you as we build our master plan and ask us any questions you might have about the project.

Water and Wastewater Servicing Master Plan

This master plan is about how we build and take care of all the pipes that deliver your drinking water and take away what you flush. Starting October 28 attend the virtual open house, ask us anything and provide comments by November 30.

Water Supply Master Plan

The Water Supply Master Plan received community feedback at an open house and through a community survey which took place in November of 2019. Survey results and a master planning progress update will be available on the project page October 28.

Public Notice

Have your say on how the City manages all things water in Guelph

Join the conversation to help guide Guelph's four water-related master plans

October 28, 2020 – Guelph is a growing community and how the City manages water, in all its forms, is changing to adapt to our growing community. The City is updating four water-related master plans and invites Guelph residents to have their say through virtual community open houses, asking their questions, taking surveys and more starting today until November 30.

The water-related master plans cover:

- **Wastewater treatment and biosolids management**: how the City manages wastewater (what you flush down your sinks, drains and toilets) so it's sustainable, protects our waterways and the environment.
- **Stormwater management:** how the City manages stormwater run off (rain and melted snow) from your roofs and driveways, and from roads and sidewalks, to help prevent flooding and protect people and the environment.
- **Water and wastewater servicing:** how we build and take care of all the pipes that deliver your drinking water and take away what you flush.
- **Water supply:** where we get our drinking water. The Water Supply Master Plan received community feedback at an open house and survey which took place in February of 2020. Survey results and a master planning progress update is now available on the project page. A second virtual open house will be held in 2021.

Get involved

Have your say and help shape long-term plans for your community by:

- **Visiting the virtual open houses:** attend each master plan's virtual open house to learn what each master plan aims to do, what challenges the City is facing and how it impacts you and the rest of our community.
- **Taking online surveys, asking questions and more:** you can answer survey questions, ask your own questions and share your ideas about the master plans by November 30.
- **Staying up to date on the City's master planning work:** master planning updates are shared through our project pages at haveyoursay.guelph.ca and guelph.ca/plans-and-strategies. You can also get updates and hear about future opportunities to get involved by joining the mailing list for the master plans that interest you.
- **Following the conversation on Twitter and Facebook.**

The process

The Master Plans will be carried out according to the Municipal Engineers Association Municipal Class Environmental Assessment (2015, as amended), which is an approved Class of Environmental Assessment under the Environmental Assessment Act. Results from this Master Plan will be documented in an environmental assessment that will be made available for public review. At that time, residents, businesses, Indigenous communities and other interested persons or groups will be informed of when and where the environmental assessment can be reviewed.

About the City's different master plans

The City's master plans assess the infrastructure we have to support today's services and decide what we'll need as our community grows. Our master plans build on the goals and policies from the Official Plan to integrate existing and future land use plans, and define long-term objectives. Looking at the city as a whole helps to evaluate options, consider a variety of perspectives, understand different outcomes, and make better decisions for a future ready Guelph.

For more information

Wastewater Treatment and Biosolids Management Master Plan

Mari MacNeil, Manager of Technical Services
Wastewater Services, Environmental Services
519-822-1260 extension 2284
mari.macneil@guelph.ca

Stormwater Management Master Plan and the Water and Wastewater Servicing Master Plan

Reg Russwurm, Manager Design and Construction
Engineering and Transportation Services
519-822-1260 extension 2765
reg.russwrum@guelph.ca

Water Supply Master Plan

Dave Belanger, Water Supply Program Manager
Water Services, Environmental Services
519-822-1260 extension 2186
Dave.Belanger@guelph.ca

CITY OF Guelph

City News

Your weekly source of City information

It's budget time. **Join the conversation!**

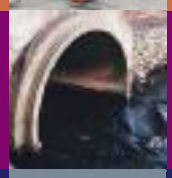
Listen to all things budget on the new City of Guelph podcast, **Big G in Conversation**.
Available weekly on **guelph.ca/budget**, Spotify and Apple Podcasts.

IN CONVERSATION

Have your say on how the City manages all things water in Guelph:

Water supply: where we get our drinking water.

Water and wastewater servicing: how we build and take care of all the pipes that deliver your drinking water and take away what you flush.



Wastewater treatment and biosolids management: how the City manages wastewater (what you flush down your sinks, drains and toilets).

Stormwater management: how the City manages stormwater run off (rain and melted snow).

Join us through virtual open houses and surveys to help guide Guelph's four water-related master plans.

Surveys close November 30.

haveyoursay.guelph.ca

COVID-19 City services during COVID-19

This information is up to date as of 10 a.m. Friday, October 16. For updates about City programs and services visit guelph.ca/covid19 or follow us on Facebook or Twitter for updates **#COVID19Guelph**

Protect yourself and others

- stay at home, especially if you feel sick
- wash your hands frequently, or use hand sanitizer
- if you must go out, avoid crowded places and stay two metres (6.5 feet) away from people you don't live with
- wear a mask or face covering indoors; in stores, businesses, City buildings buses or anywhere you can't stay two metres away from people you don't live with

COVID-19 testing

Call 519-763-3431 to make an appointment at Shopper's Drug Mart 7 Clair Road if:

- you do not have COVID-19 symptoms
- you live, visit or work at a long-term care home, homeless shelter, or other congregate living facility
- you are a farm worker
- you are an international student that has passed your 14-day self-quarantine period
- you require a test for international travel
- you are Indigenous

Call 226-773-1922 to make an appointment at the assessment centre, 400 Southgate Drive if:

- you have COVID-19 symptoms (cough, shortness of breath, fever etc.), or
- you have had contact with someone with a confirmed case of COVID-19, or
- Wellington-Dufferin-Guelph Public Health tells you to get tested for COVID-19

Do not call 911 unless it is an emergency.

Stay informed. Stay safe.

Get accurate reliable information about COVID-19 from Wellington-Dufferin-Guelph Public health **wdgpublichealth.ca.**

City services

City Hall and Provincial Offences Court

Please consider using the drop box outside the front doors at City Hall or online services at **guelph.ca**.

Service counters open Monday to Friday from 8:30 a.m.–4:30 p.m.

If you received a ticket on or before March 16, 2020 you have until December 1, 2020 to exercise the options on the back of your ticket. If you have a court matter scheduled between March 16 to January 25, 2021, do not attend court. Remote judicial pre-trials and some remote audio non-trial proceedings will proceed, and if your matter is proceeding, you will be notified. Visit **guelph.ca/court** for details.

Garbage and recyclables

If anyone in your home is self-isolating due to COVID-19 symptoms, has tested positive for COVID-19, or is isolating due to travel outside Canada, please put recyclables and garbage in bags in your grey cart. Keep using your green cart as usual.

Visit **guelph.ca/waste** for public waste drop-off hours, fees and guidelines.

Guelph Transit

You must wear a mask or face covering on the bus.
Visit **guelph.ca/transit** for schedules and fares.

Recreation centres

Visit **guelph.ca/recreation** for hours and fall recreation programs.

Report a concern

Visit **covid-19.ontario.ca** for provincial restrictions, gathering limits and updates.

To report concern about a large gathering or business not following COVID-19 guidelines visit **guelph.ca/covid19**, email **bylaw@guelph.ca** or call **519-837-2529**.

Like us on **facebook.com/cityofguelph**

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

CITY OF Guelph

@cityofguelph

City News

Proposed changes to building permit fees

Guelph City Council will consider amendments to the Schedule of Building Permit and Administration Fees in accordance with section 7 of the Building Code Act, S.O. 1992, c.23 (as amended) on **Tuesday, December 1, 2020** as part of the City's budget. Building permit fees are proposed to increase by two (2) per cent. The proposed fee increases will be presented to City Council at the November 17 Council meeting, details will be available at **guelph.ca/agendas** beginning November 5.

Delegate about this topic

Wednesday, November 25
6 p.m.

This is a remote City Council meeting that can be watched online at **guelph.ca/live**. Delegates participate by phone.

Register to delegate or submit written comments

Any person may attend the virtual meeting and/or provide written or verbal comments about the proposed fee increases. If you wish to address City Council about this proposal or provide written comments, please contact the City Clerk's Office at **519-837-5603**, visit **guelph.ca/delegate** or email **clerks@guelph.ca** no later than 10 a.m. on Friday, November 20.

For more information

Jeremy Laur, Chief Building Official
Building Services
519-822-1260 extension 2379
jeremy.laur@guelph.ca

Help name three Guelph parks and a trail

The City of Guelph is looking for your suggestions to name three new parks and one trail:

- 104 Oliver Street by Huron Street, east of downtown
- 51 Skinner Drive near Starwood Drive and Watson Parkway North in the northeast part of the city
- 158 Poppy Drive East by Dallan Drive in the south end of the city
- Trail within the Dallan Drive subdivision in the south end of the city

Visit **guelph.ca/parks** to learn about each park and the trail, the naming requirements and how you can submit a name. Name suggestions are due **by Friday, November 20**.

For more information

Rory Templeton, Landscape Planner
Planning and Building Services
519-822-1260 extension 2436
rory.templeton@guelph.ca

guelph.ca/parks

Meeting notice

City of Guelph Official Plan Update

Special Meeting of Council
Guelph City Council will hold a special meeting to consider your comments and ideas about potential revisions to Guelph's Official Plan. Provincial legislation requires that we revise our Official Plan every five years. This meeting will take place:

Monday, November 9
6:30 p.m.

This is a remote City Council meeting that can be watched online at **guelph.ca/live**

Revisions to the Official Plan will ensure Guelph conforms and is consistent with:

- Recent amendments to the Planning Act,
- Recent amendments to the Clean Water Act,
- The Provincial Policy Statement (2020), and
- A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019).

Guelph's Official Plan sets the goals, objectives and policies that aim to promote public interest in the future development of our city. The current Official Plan is available online at **guelph.ca/officialplan**. Alternate document formats are available upon request.

The planner to contact for the Official Plan update is:
Stacey Laughlin, Senior Policy Planner
519-822-1260 extension 2327
stacey.laughlin@guelph.ca

Speak at the meeting or provide written comments
If you wish to speak to City Council about what staff should consider as part of the Official Plan update you may register as a delegation at **guelph.ca/delegations** or by contacting the City Clerk's Office at 519-837-5603 or email **clerks@guelph.ca no later than Friday, November 6, 2020 at 10 a.m.** When your registration is received, a confirmation message and instructions for participating in the remote special meeting will be provided. Instructions will also be provided during the meeting to ensure that those watching will be given the opportunity to speak.

If you prefer to comment in writing, please send your written comments to the City Clerk's Office **no later than Friday, November 6, 2020 at 10 a.m.**

For more information
The Staff Report will be available on **Friday, October 30, 2020** after 12 p.m. at **guelph.ca/agendas**.

Contact the City Clerk's Office

If you would like to be notified of City Council's decision with respect to the Official Plan update, you must make a written request to:

Stephen O'Brien, City Clerk
City of Guelph, 1 Carden Street, Guelph ON N1H 3A1
519-837-5603 or TTY 519-826-9771
clerks@guelph.ca

For accessible formats call **519-822-1260** or **TTY 519-826-9771**

Torstar file photo

COVID-19 testing is now available for some non-symptomatic individuals at the Shoppers Drug Mart at 7 Clair Rd. W.

DRUG STORE ROLLS OUT CORONAVIRUS TESTING

Those seeking to get tested for COVID-19 in Guelph now have another option.

According to its website, the Shoppers Drug Mart at 7 Clair Rd. W. is now offering COVID-19 testing.

Testing at this location is available for those who do not have symptoms, and meet any of the following criteria:

• Residents or workers in a long-term care home
• Visitors to a long-term care home
• Residents or workers in a homeless shelter
• International students who have passed their 14-day quarantine period
• Farm workers
• Individuals who require a COVID-19 test for international travel clearance
• Self-identified Indigenous
• Resident or worker in other congregate living settings and institutions

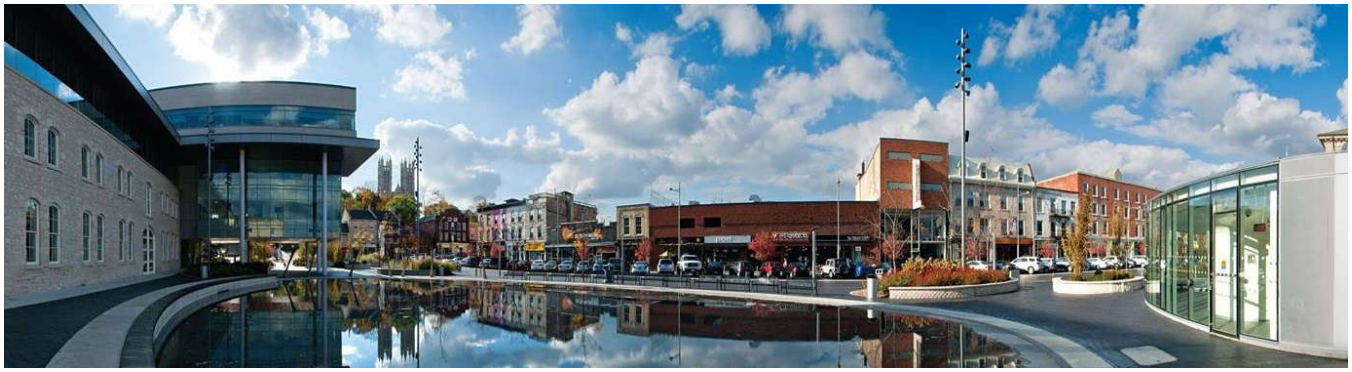
Testing is available via appointment only, with the drug store available by calling 519-763-3431.

This new testing option is in addition to the assessment centre at 400 Southgate Dr. To make an appointment at that location, call 226-773-1922.

According to Wellington-Dufferin-Guelph Public Health, 44,531 COVID-19 assessments were done in Guelph between March 17 and Oct. 13, with 43-725 tests conducted.

gingrichregehr.a@aquaforbeech.com

From: Have Your Say Guelph <notifications@engagementhq.com>
Sent: November 9, 2020 10:03 AM
To: denich.c@aquaforbeech.com
Subject: November 2020 online engagement opportunities



Online engagement opportunities in November

There are so many ways to have your say in exciting projects this November! In this issue:

Have your say today:

- Water master plans
- Speed limit reductions
- Help us name new Guelph trail and park
- Voting methods

Coming later this month:

- 2021 playground replacement
- Guelph Trails Master Plan
- Moving Guelph Forward: Transportation Master Plan
- Temporary patios

Water master plans

Have your say on how the City manages all things water in Guelph

Guelph is a growing community and how the City manages water, in all its forms, is changing. We're updating four water-related master plans and invite you to ask questions and have your say through virtual community open houses until November 30 on:

- Wastewater treatment and biosolids management: how the City manages wastewater (what you flush down your sinks, drains and toilets) so it's sustainable, protects our waterways and the environment.
- Stormwater management: how the City manages stormwater run off (rain and melted snow) from your roofs and driveways, and from roads and sidewalks, to help prevent flooding and protect people and the environment.
- Water and wastewater servicing: how we build and take care of all the pipes that deliver your drinking water and take away what you flush.
- Water supply: where we get our drinking water. Survey results from February 2020 and a master planning progress update is now available and a second virtual open house will be held in 2021.

Speed limit reductions

The City is reviewing speed limits in Guelph. The goal of Guelph's Community Road Safety Strategy (CRSS) is to improve road safety for everyone's benefit whether you walk, bike, ride a bus, use a mobility device or drive. One potential strategy is lowering speed limits. Take our quiz to test your road safety knowledge and give us your feedback about speed limits and other ways we can get people to slow down in Guelph.

Check out our story map and share your feedback by December 4. We'll share a summary of our findings early in the new year, and gather final feedback on our proposed master plan.

Help us name new Guelph trail and parks

Can you think of an exceptional Guelphite or something with historical significance that a park or trail can be named after? Maybe you just have a great name in mind for one of these exciting future sites. Share your suggestion using our online form by Friday, November 20.

Voting methods

We're reviewing the ways you can cast your ballot in Guelph's municipal elections. As a part of this review, we'll explore traditional, in-person and remote voting methods including mail, telephone and internet voting. Take our survey between November 9 and December 4.

Visit haveyoursay.guelph.ca later this month for more great projects

2021 playground replacement

Get your voting finger hovering over your mouse! The second phase of engagement for the playground replacement at W.E. Hamilton Park is coming this month.

We've collected the things you said you'd like to see in the new playground from the first phase of engagement. Now we're creating two playground designs for you to

vote on starting November 16. The design with the most votes will be selected with planned construction for spring 2021!

Guelph Trails Master Plan

The Guelph Trails Master Plan (GTMP) guides how we plan, design, build and maintain Guelph's trail system. We're holding the third round of engagement for the GTMP from November 24 to December 15 to collect your feedback on:

- draft Trans Canada Trail Route Investigation findings
- draft trail classification system and trail network maps
- how we prioritize the construction of future trails

Your input will help us create the draft master plan which we'll present to Council next spring.

Moving Guelph Forward: Transportation Master Plan

However you get around, we need your feedback to help shape our Transportation Master Plan. Starting November 12, we're sharing background information about key issues affecting Guelph's transportation system and collecting your feedback on options to address the transportation challenges facing our community.

Temporary patios

Guelph's 2020 Temporary Patio Program was an emergency response measure to help re-open restaurants, bars and cafes during the COVID-19 pandemic closures. Whether you visited a patio this year, or simply walked by one, we want to hear from you! We're also looking to hear from businesses that had a patio or were next door to one, and from people that worked on them. Take the online survey starting Friday 13.

Guelph's Stormwater Management Master Plan

If you require this information in an alternative format, please contact us at engineering@guelph.ca.

Introduction

Stormwater management in Guelph is evolving to meet the needs of the growing city. We are updating the City's 2012 Stormwater Management Master Plan to ensure we manage stormwater (rain and snow melt) to help protect Guelph's water supply and the environment in a sustainable way.

The master plan is a long-term plan that looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years.

This update will take into account government legislation, technological advances and infrastructure needs, and address issues faced today like flood control, maintaining the quality of our local waterways (rivers, lakes and streams) and drinking water supply (groundwater), the overall environment and maintaining local water balance.

This master plan will help us assess the infrastructure we have to support City services today, and determine what is needed in Guelph's future.

Project Process

The study and update to the 2012 Stormwater Management Plan will occur in three stages:

Stage 1 – Problem and Opportunity (WE ARE HERE)

- Review background information & identify data gaps
- Define existing conditions
- Identify the problem and opportunity
- Identify study goals and objectives
- Develop long list of alternatives

Stage 2 – Alternatives and Preferred Alternatives (2021)

- Field work to fill data gaps
- Complete marketing transformation research
- Develop and evaluate alternative management strategies
- Develop a short list of alternatives
- Selection of preferred alternatives

Stage 3 – Study Completion (2021/2022)

- Describe preferred stormwater management strategy
- Develop an implementation plan

Study Goals

The main goal of the study is to provide the City with a preferred Stormwater Management strategy to identify, protect and enhance natural features, ecological functions and biophysical integrity. The plan will establish Stormwater Management

policy and guidelines, address stormwater infrastructure, and identify and prioritize future work to be completed.

Current System

Our whole water system starts with a single drop of water. These drops accumulate and become rain or freeze and become snow. Stormwater originates from rain and snowmelt which accumulates on and flows across the land surface before entering storm sewers or creeks. This water either seeps back into the ground or runs off into storm sewers, streams, rivers, or lakes. Less water soaks into the ground and more water flows into local creeks, rivers and wetlands. As cities have grown, the development has created less porous surfaces through that make it difficult for water to seep back into the ground, creating more stormwater runoff. As hard surfaces such as roads, driveways and buildings increase, the amount of natural landscapes decreases. As stormwater moves along its path to sewers or bodies of water, it collects pollutants such as sediment, oil products, bacteria, nutrients and road salts. The pollutants from stormwater can end up in fish habitats, where we recreate, in groundwater which is part of drinking water. Increased stormwater flows can also cause flooding and erosion in our creeks and rivers.

The City of Guelph manages stormwater through a system that includes ditches, catch basins, and storm sewers. The City's stormwater management system also includes stormwater management ponds, treatment devices and infiltration facilities which improve water quality before releasing stormwater to local waterways or shallow groundwater systems. The City's natural heritage system and greenspaces – the forests, wetlands, meadows also have an important role to play in reducing flooding and filtering stormwater bef ore it reaches groundwater systems.

Did you know?

Stormwater drains and pipes do not lead to the City's wastewater treatment facilities. Storm sewers carry the rain and melt water and may directly go into nearby lakes and rivers.

Why is stormwater management important?

Watch the video here.

Guelph's Stormwater Management System

In 2020, the City of Guelph's existing stormwater management infrastructure includes:

- 83 active stormwater management facilities (municipal)
- 89 km of watercourses
- 467 km of active storm sewerss
- 136 City-owned Oil and Grit Separator (OGS) units in service

Did you know?

In the City of Guelph, approximately 89 km of stream systems flow through 9 distinct subwatersheds or catchment areas, all of which drain into the Speed River watershed.

An Interconnected System

Guelph's stormwater management system is one piece of a much larger interconnected system.

Watercourses

Watercourses such as rivers streams and creeks are essential for water to flow into and out of the city. They are home to a number of diverse aquatic ecosystems which can be significantly affected by stormwater runoff.

Valleylands

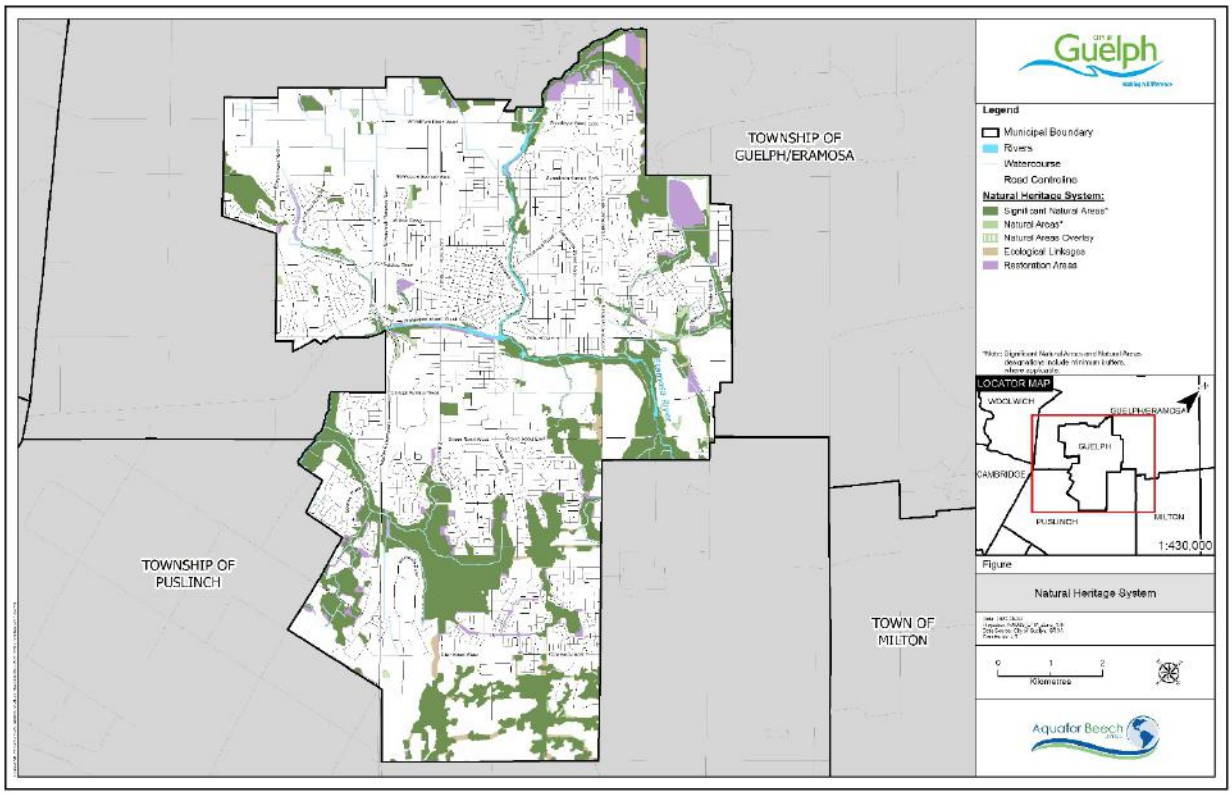
The Speed River and Eramosa River Valleylands are natural heritage features with water flowing through that connects to the larger river system.

Wetlands

Wetlands play a large role in maintaining a healthy Heritage System, including controlling the flow of water, contributing to groundwater recharge, improving water and air quality, storing carbon, and providing habitat for a broad range of species.

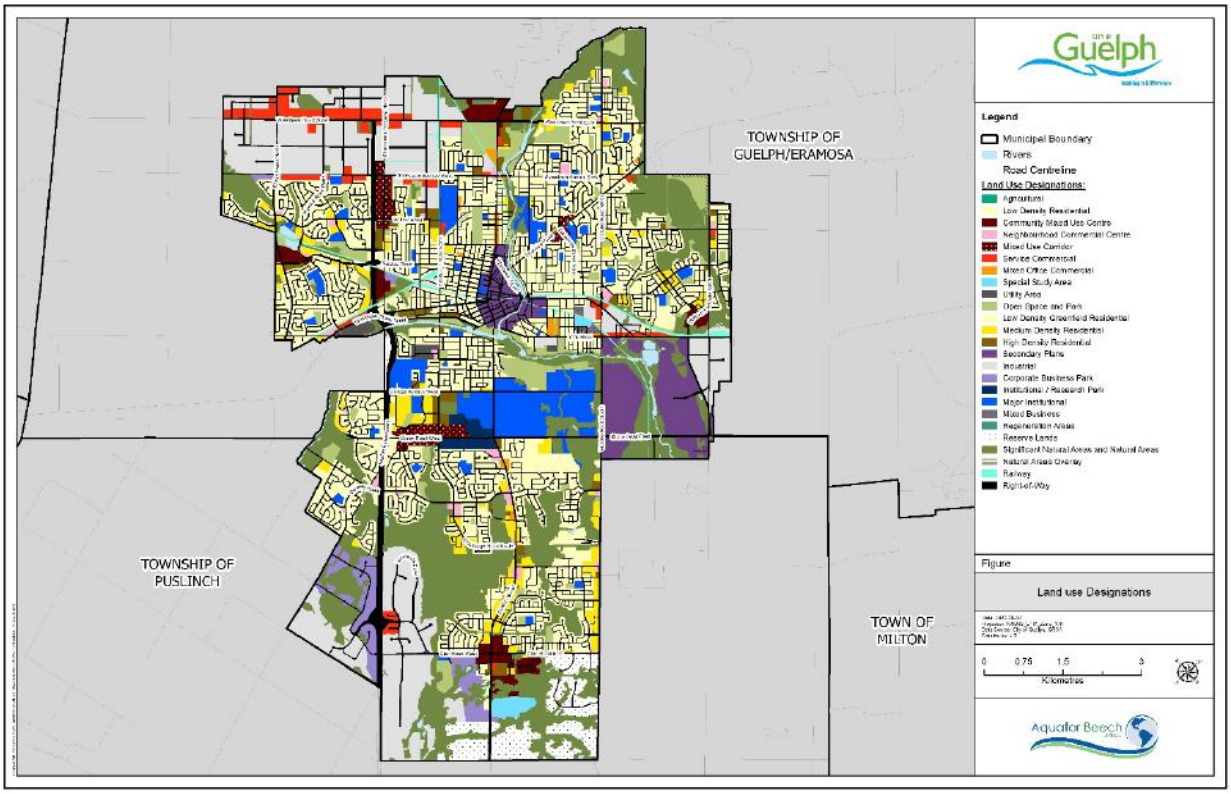
Woodlands

Woodlands and Significant Woodlands are essential to limiting the negative impacts of stormwater runoff. They filter pollutants, control erosion, moderate temperatures and provide habitat for wildlife.



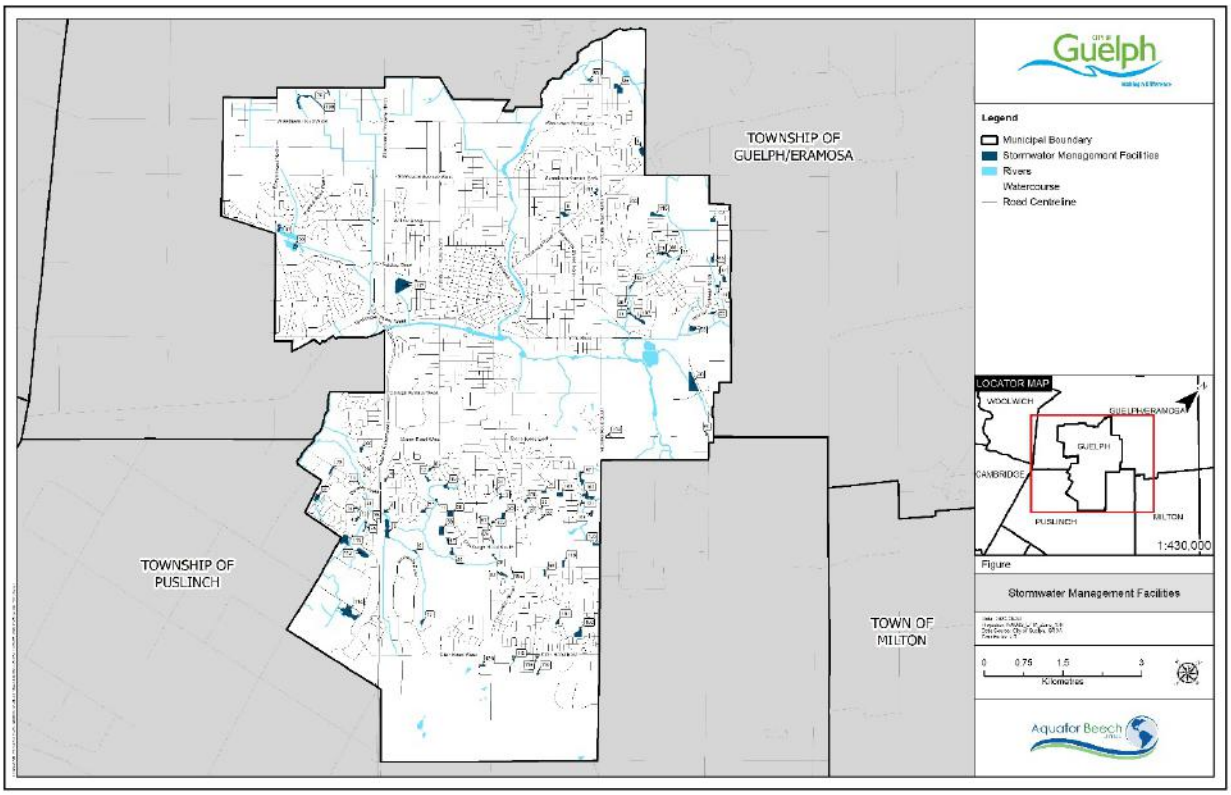
Land use

Land use designations in the City of Guelph tells us where we can build new housing, business, parks and schools. This has a large impact on the City's stormwater management, as land use designations can determine where stormwater management facilities are needed and where they can go.



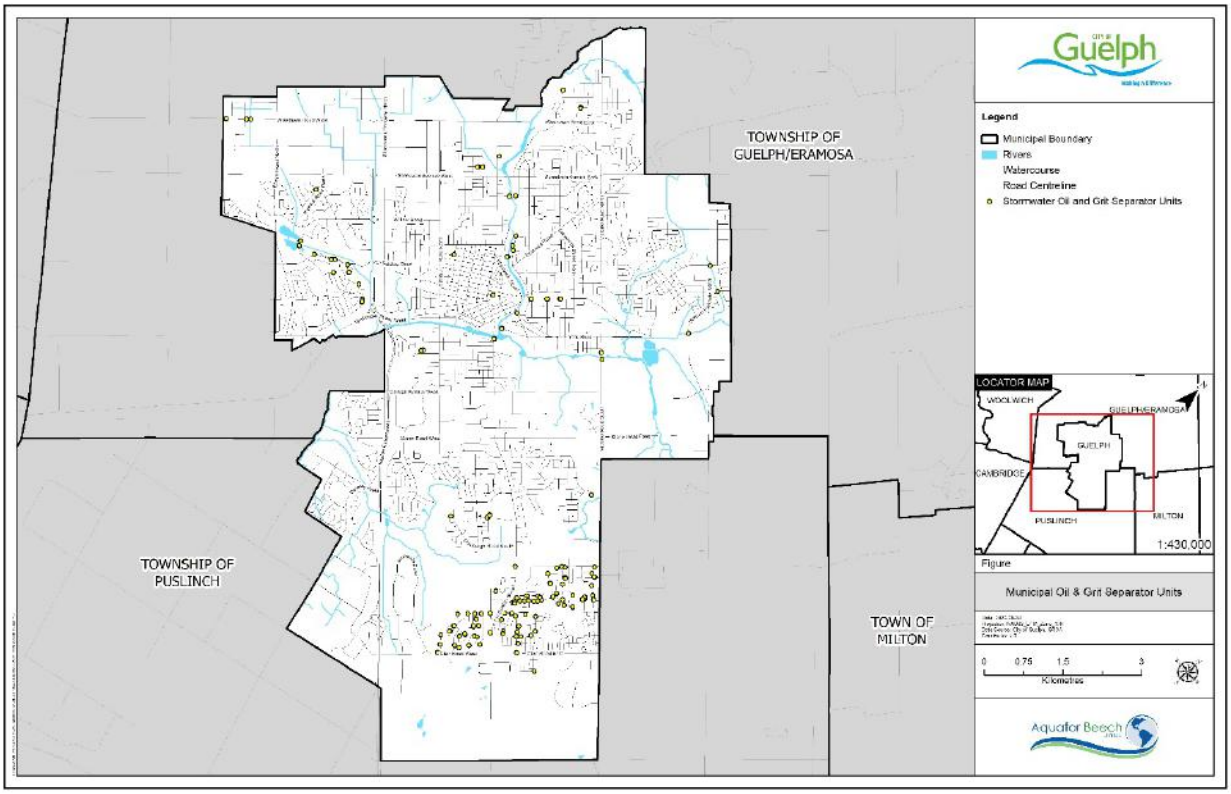
Stormwater Management Facilities

The City of Guelph has implemented several stormwater management projects and programs to help protect the local creeks, rivers, and wetlands from the impacts of runoff.



Oil grit separators (OGS units)

Oil grit separators (OGS units) are underground stormwater treatment devices that are attached to storm sewer pipes. They remove sediment, screen debris, and separate floatables like gasoline, oil, grease, and light petroleum from stormwater. OGS units are well suited for small highly urbanized areas such as parking lots and roads.



Future Needs

Guelph must plan to accommodate a population of 203,000 and 116,000 jobs by 2051. The forecasted growth to 2041 is unchanged.

The City is in the process of planning for growth, through Growth Management Strategy. Through the Growth Plan, the province has set an target of 50 percent of new residential development to occur in the built up areas (areas that were developed before 2006) on an annual basis. This growth will place additional demand on the City's stormwater management infrastructure and the natural environment.

Stormwater Management Practices to Be Considered

The stormwater management master plan aims to provide safe and effective management of stormwater runoff while maintaining, and where possible improving, the ecosystem health and ecological sustainability of the City's Water Resources. The 2019 SWMMP will identify practices for flood control, erosion control, protect groundwater and surface water quality and quantity, and protect the natural environment. These objectives can be achieved through a number of stormwater management practices. The City will explore these options to identify a suite of solutions for consideration in the Stormwater Management Master Plan Update.

Source control measures

Source controls are physical measures that hold runoff and encourage the water to seep into the ground. Source control measures can include green roofs, permeable pavement, soakaway pits, rain gardens, rainwater harvesting and downspout disconnection.

Conveyance control measures

Conveyance controls are stormwater systems that are generally located adjacent to roadways. They move water along the roadway and encourage infiltration of water into the ground, improve water quality and reduce runoff. Examples can include traditional curbs and gutters, bioswales (vegetated ditches which allow for water collection and conveyance), grassed channels and underground perforated pipe systems.

End-of pipe measures

End of pipe measures are stormwater facilities at the end of the storm sewer system. They are used to control erosion, water quality and water quantity. They can include wet ponds, dry ponds, wetlands and underground storage tanks and super-pipes.

Environmental Restoration

Environmental restoration of streams includes drain pipe restoration, riverbank planting, and open space replanting. It improves water quality, slows runoff, controls stream temperatures, reduces erosion and improves land and stream habitats.

Pollution prevention measures

Pollution prevention measures improve the operation and maintenance of land, buildings, and infrastructure to reduce pollution. Municipal programs such as road salt management, street sweeping and parks maintenance activities (use of herbicides and pesticides) are known to improve water quality.

Operation and Maintenance

Operation and Maintenance includes actions to improve how the existing infrastructure functions. Actions include storm sewer flushing, catch basin cleaning, street cleaning, leaf clearing and removal, erosion and sediment controls for construction, and education and awareness.

What does it mean to me?

How we manage stormwater affects you.

It also affects our drinking water supply and our environment. Managing stormwater runoff is essential in protecting the water quality of our rivers and waterways, reducing the risk of flooding which can damage your property and the environment and mitigating the impacts from severe storms intensified by climate change.

This long-term plan will ensure the safe and effective management of stormwater runoff.

Did you know?

Businesses are assessed by the City of Guelph and pay a monthly fee that reflects the hard surfaces on their property such as rooftops, parking lots and concrete surfaces.

Have your Say

Do you have any information about your local streams, including areas of erosion and flooding?

Are you concerned about the environmental quality of the streams and rivers located within the City of Guelph?

Are you a property owner who has experienced the impacts of extreme weather and/or flooding?

We want to hear from you! Visit Have Your Say Guelph to complete the survey or to contact the project team.

Click here to Have Your Say

Stormwater Management
Master Plan

Guelph Stormwater Management Master Plan – Phase 1

Online Survey Summary, December 2020

Prepared by LURA Consulting and Aquafor Beech Ltd.

Master Planning

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Introduction

Stormwater management in Guelph is evolving to meet the needs of the growing city. The City of Guelph is updating the 2012 Stormwater Management Master Plan to ensure it manages stormwater (rain and snow melt) to help protect Guelph's water supply and the environment in a sustainable way. The Stormwater Management Master Plan Update follows the Municipal Class Environmental Assessment (MCEA) process requirements. This process requires notification of study commencement and completion as well as public consultation, especially regarding the selection of alternatives.

In October 2020, the City initiated community information sharing and engagement to ensure that the Guelph community has an opportunity to learn about the stormwater management system in the city and contribute early to the study. This initial information sharing and early engagement occurred virtually given COVID-19 restrictions.

An online Story Map was created to provide an overview of stormwater management in the City of Guelph, the current system, future needs, and how stormwater management affects them. The City of Guelph's Have Your Say page provides information to participants about the study process and how they can get involved.

From October 28 to November 30, 2020, the City invited community members to complete a survey and mapping exercise to provide early inputs about stormwater management in the city. Further opportunities to participate in the Stormwater Management Master Plan Update will be held as the project progresses. This summary provides an overview of the online survey highlights.

Participation

Eighteen (18) individuals completed the online survey. Complete participation numbers are listed below.

- 20 participants were "engaged"—completed the survey or contributed to the map
- 69 participants were "informed"—visited multiple pages or downloaded a document
- 134 participants were "aware"—visited at least one page

Highlights

- Participants indicated that stormwater runoff is a serious concern in the City. On a scale of 10, the average rating was 7.5, however, most participants rated the seriousness at 8 or higher.
- Participants indicated a high level of concern about the environmental quality of the streams and rivers located within the City. Most participants rated their level of concern as eight or above, with 8.7 being the average rating.
- The majority of participants (88%) indicated support for municipal roadway changes/retrofits with 'green' stormwater features such as updated stormwater management ponds, new curb and gutter systems, bioswales, grassed channels, and underground pipe systems.
- Participants indicated a willingness to implement the majority of the proposed measures, except installing a green roof. Participants were most willing to implement:
    - Roof downspout connections
    - Rain barrels or cisterns
    - Tree planting
    - Rain gardens

Survey Results

On a scale of 1 to 10, where 1 is low, and 10 is high, how serious a concern do you believe stormwater runoff is in the City of Guelph?

Participants indicated that stormwater runoff is a serious concern in the City. The average rating was 7.5, however, most participants rated the seriousness at 8 or higher.

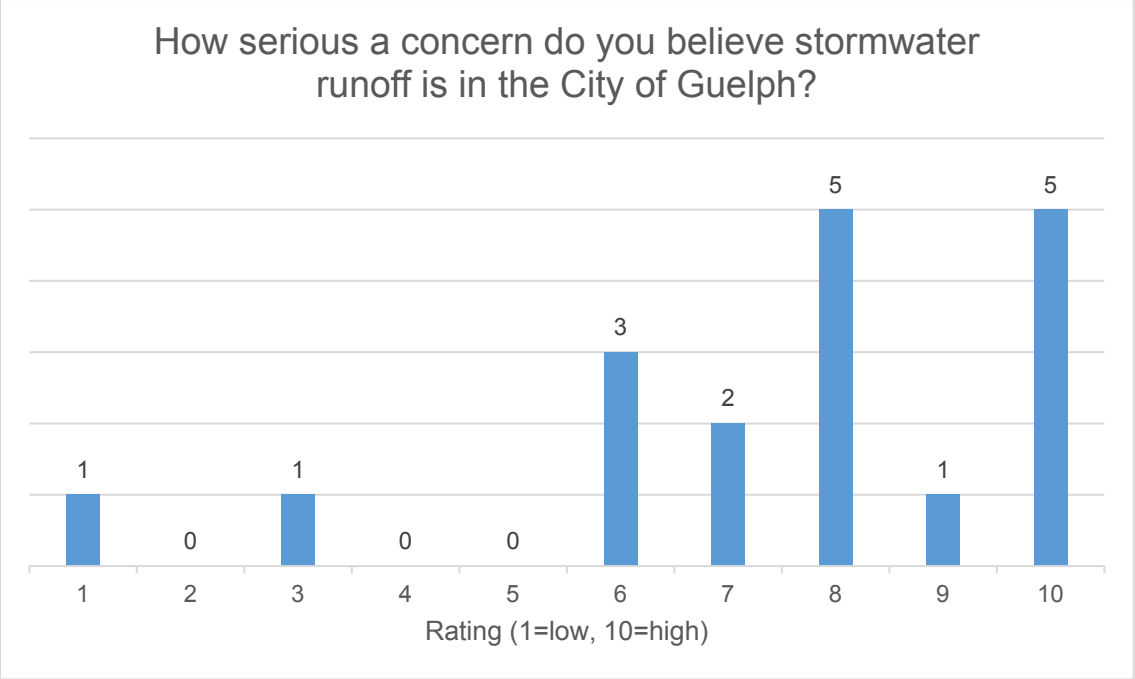


Figure 1: Level of concern about stormwater runoff (n=18)

In particular, participants identified the following reasons for identifying stormwater run off as a concern:

- Flooding and erosion caused by stormwater runoff;
- Road salt and other contaminants entering runoff and stressing the aquatic system;
- The potential for climate change to increase the amount of stormwater runoff through increased storm events and snowmelt; and
- A lack of stormwater controls in the older parts of the City.

On a scale of 1 to 10, where 1 is low, and 10 is high, how concerned are you about the environmental quality of the streams and rivers located within the City of Guelph?

Participants indicated a high level of concern about the environmental quality of the streams and rivers located within the City. Most participants rated their level of concern as eight or above, with 8.7 being the average rating.

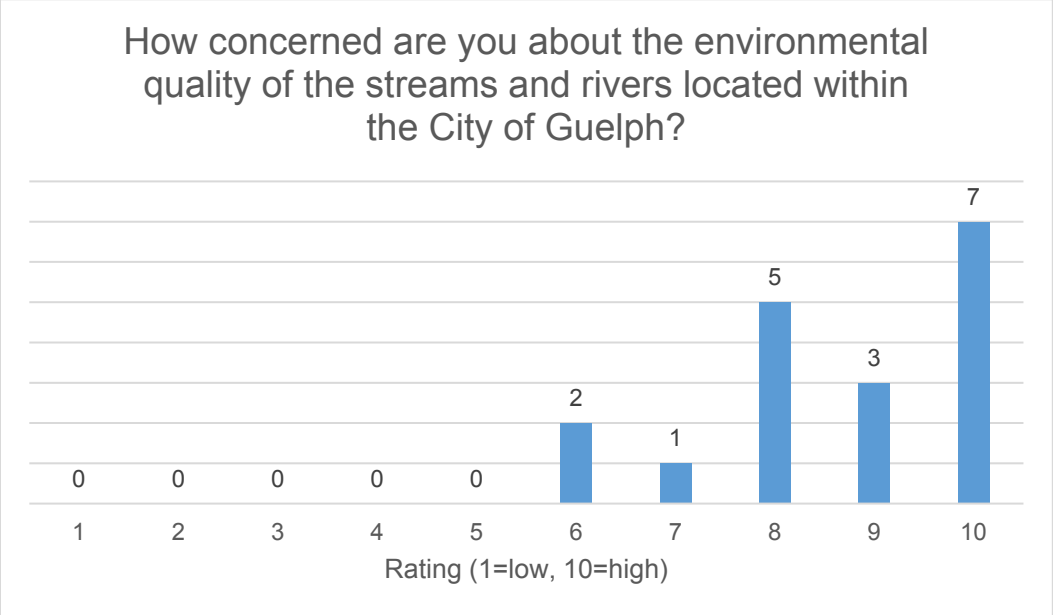


Figure 2: Concern about the environmental quality of streams and rivers (n=18)

In particular, participants were concerned about:

- The interconnections between stormwater, rivers and streams, and groundwater – the City's source for drinking water; and
- Garbage and other contaminants entering rivers and streams.

Would you support municipal roadway changes/retrofits with 'green' stormwater features such as updated stormwater management ponds, new curb and gutter systems, bioswales, grassed channels, and underground pipe systems?

Potential proposed solutions may include changes and retrofits within older neighbourhoods, municipal roadways, public lands, and existing stormwater ponds. The majority of participants (88%) indicated support for such municipal roadway changes/retrofits. One participant responded, "other". They suggested they would consider changes/retrofits when other repairs or maintenance are required to minimize disruption.

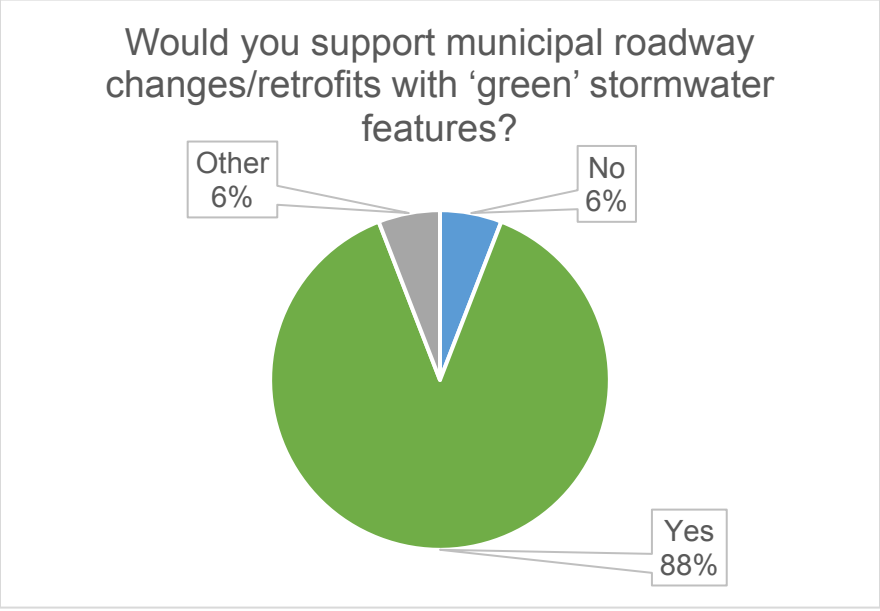


Figure 3: Support for municipal roadway changes/retrofits (n=17)

If green infrastructure changes like the above were proposed on your street, and you and your neighbours were involved in the design process with the City, would you be willing to contribute your time to this environmental effort?

The majority of participants (88%) indicated that they would be willing to contribute time to this environmental effort.

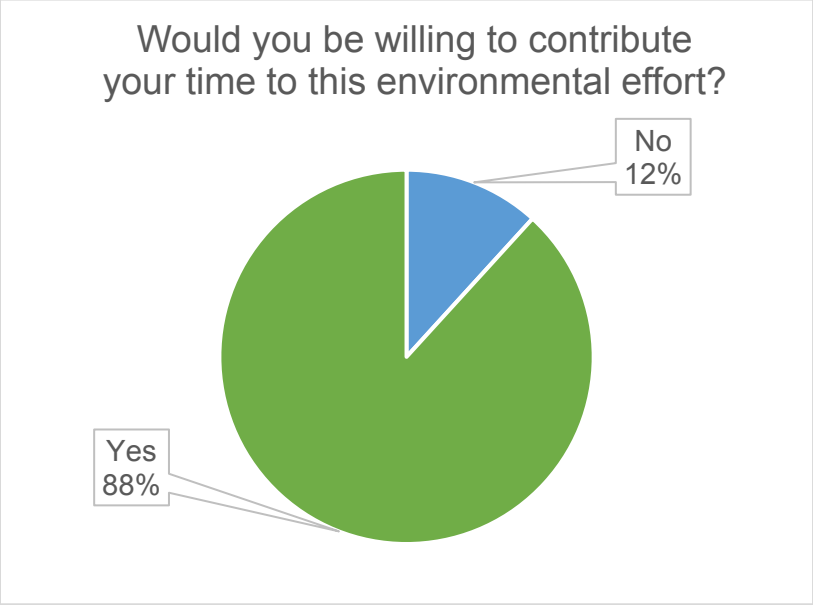


Figure 4: Willingness to contribute (n=17)

Please indicate which of these you would be willing to implement on your property.

The City currently encourages homeowners and businesses to manage stormwater on their property and provides a rebate to those properties that do so. Participants indicated a willingness to implement the majority of the proposed measures, except green roofs. Participants were most willing to implement:

- Roof downspout connections
- Rain barrels or cisterns
- Tree planting
- Rain gardens

Figure 5: Willingness to implement measures (n=17)

Participants provided feedback on the stormwater measures they would not be willing to implement on their property. The comments are summarized below.

- Green roofs are not suitable for all homes (concerns about load and/or roof pitch)
- Permeable driveways are too expensive to install
- Lack of space for additional trees on their property
- More information required on some measures (e.g., soakaway pit)
- Feeling that a naturalized yard looks "messy"

Overall, participants were willing to explore measures but were concerned about cost and the ability to implement. Site logistics and property ownership impact the ability to implement some measures.

Do you have any additional feedback you would like to provide?

Participants provided the following feedback:

- Continue to provide (and promote) the supports available (both financial and informational) for landowners to implement green stormwater management practices on their properties.
- Incorporate stormwater management measures in all new development; the onus should be on developers.
- One individual suggested the City should implement a stormwater charge based on the property's area of impervious surface
- Some participants were frustrated that they were still experiencing flooding in their homes, despite implementing stormwater management measures and are looking to the City for support.

Mapping Stormwater Issues

Participants indicated where within the City, they noticed stormwater issues. One participant contributed two markers outlining:

- Surface flooding along the Royal Recreation Trail (RRT) between the Hanlon bridge and Edinburgh Road; and
- Erosion of the RRT where the storm sewer from Water Street drains into the Speed River.

Experiences with Flooding

Participants provided the following information about their property and experiences with flooding.

- Twelve participants live in a detached home, three live in a condo/apartment, and two live in a semi-detached home
    - Thirteen indicated they are the property owner
    - Participants have lived at their respective properties for an average of 16 years
- Seven participants have experienced surface flooding on or near their property
    - Six participants indicated this type of flooding occurs during storm events
    - Flooding most often occurs in the spring and is compounded by debris blocking sewer drains
    - Participants reported the flooding lasting from a few hours to more extended periods (needing to wait for the ground to thaw and water to absorb into the ground)
- Four participants have experienced basement flooding problems
    - Two indicated water entered through a window, and two stated water entered through the floor drain/cracks in the floor
    - Of those who experienced basement flooding, none reported a reverse grade driveway
- Six participants' homes have downspouts connected to the sewer
- One participant reported having a sump pump installed in the basement

Next Steps

The City of Guelph and the project team will consider all community members' feedback along with staff and consultant expertise and best practices to inform preferred alternatives for the Stormwater Management Master Plan Update. In early 2021 a Community Stormwater Management Working Group was established to gain input and expertise on the study's technical aspects, and a second meeting will be held in the Fall 2021. The second phase of formal community-wide engagement is tentatively scheduled for Winter/Spring 2022.

Appendix T.5: Pop-Ups

CITY OF Guelph

City News

/cityofguelph @cityofguelph guelph.ca/news

Notices

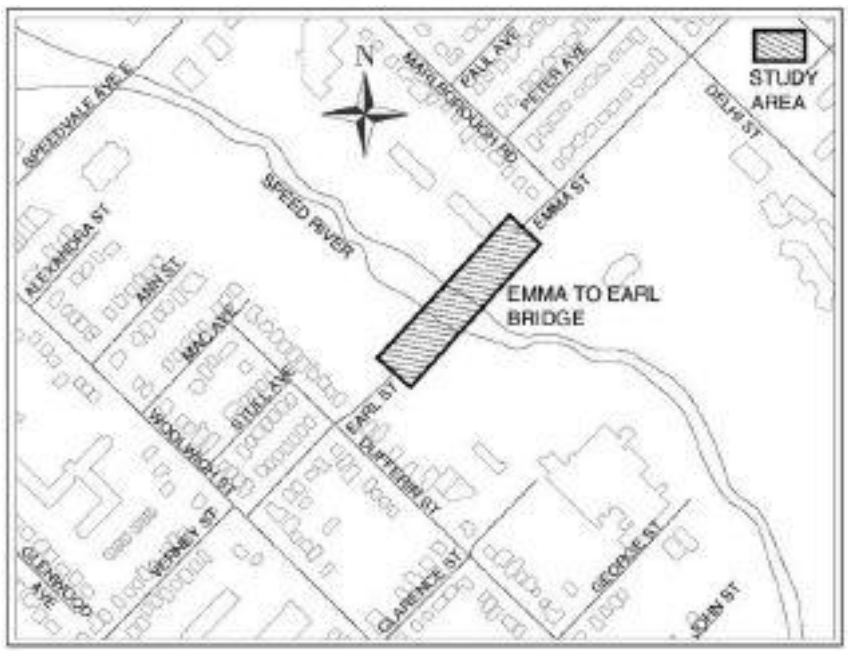
Emma Street to Earl Street pedestrian bridge

Notice of Study Completion

The Study

The City of Guelph completed a Class Environmental Assessment (EA) for a proposed pedestrian bridge connecting Emma Street to Earl Street over the Speed River, potentially providing a connection to the Downtown Trail. The purpose of the EA study was to determine the bridge location and the appropriate style of bridge to be constructed.

Figure 1 Study Area Showing Proposed Bridge Location



The Process

The EA was conducted as a Schedule 'B' project in accordance with the "Municipal Class Environmental Assessment" document (Municipal Engineers Association, October 2000, as amended in 2007, 2011 and 2015), under the Ontario Environmental Assessment Act. The process included Indigenous, public and review agency consultation, an evaluation of alternatives, an assessment of potential environmental impacts of the proposed improvements, and identification of reasonable measures to mitigate any adverse impacts. The EA identified a two-span truss bridge as the preferred alternative solution to be constructed in the existing hydro corridor. Further details are provided within the EA Project File.

Public Review

The Final Report (dated: August 10, 2022) that documents the planning and decision-making process for the study is now available for public review. By this Notice of Completion, the Final Report is being placed on the public record for a thirty (30) day review period from and including August 18, 2022 at the following location and on the City's website at: **https://guelph.ca/living/construction-projects/emma-street-earl-street-bridge-improvements/**

City of Guelph City Hall
1 Carden Street
Guelph, ON N1H 3A1

Interested persons may provide written comments to the City of Guelph by September 16, 2022. All comments should be sent directly to the City's Manager of Design and Construction, Mr. Reg Russwurm P.Eng., at City Hall (mailing address above) or by email at **reg.russwurm@guelph.ca**.

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Indigenous and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name for the ministry.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements in the request. This will ensure that the ministry is able to efficiently begin reviewing the request. The request should be sent in writing or by email to:

Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
Email: minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
Email: EABDirector@ontario.ca

Requests should also be sent to the City of Guelph by mail or by email. Please visit the ministry's website for more information on requests for orders under Section 16 of the Environmental Assessment Act at: https://www.ontario.ca/page/class-environmentalassessments-part-ii-order

This Notice was first issued August 18, 2022.

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

Events

Hot Summer Nights

Thursday, August 25 from 6:30-7:45 p.m

Riverside Park (near the carousel)

Guelph Fire crews are rolling into four parks this summer to help you beat the heat as you learn about fire and emergency safety with the return of Hot Summer Nights. Bring a swimsuit, towel, water bottle and energy to get hosed down and meet real life firefighters, police officers and paramedics up close.

Stormwater Pop-up Event

Saturday, August 27 from 1 – 5 p.m

Riverside Park

A pop-up event is being held as part of the stormwater management master plan study. Come learn about the plan, provide feedback, and try a fun activity to get some Guelph gear. If the weather is not permitting, the event will be held on August 28.

For more information visit **https://www.haveyoursay.guelph.ca/storm-water-master-plan-update**

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

The City of Guelph

Aug 2, 2022 ·

Hey #Guelph! As part of our Stormwater Management Master Plan Study we're hosting a pop-up event on August 6 outside the Guelph Civic Museum from 1-7 p.m. Join us to learn about the plan, provide feedback, and try a fun activity to get some #Guelph gear! See you there!

For more information check out:

About this website

haveyoursay.guelph.ca

Stormwater Management Master Plan

You and 2 others

3 shares

Like Comment Share

City of Guelph
@cityofguelph

Hey #Guelph! As part of our Stormwater Management Master Plan study we're hosting a pop-up event on August 6 outside the Guelph Civic Museum from 1-7 p.m. Join us to learn about the plan, provide feedback, and try a fun activity to get some #Guelph gear! See you there!

4:11 PM · Aug 2, 2022

3 Retweets **2** Likes

City of Guel... @cityofgue... · Aug 2, 2022

Replying to @cityofguelph

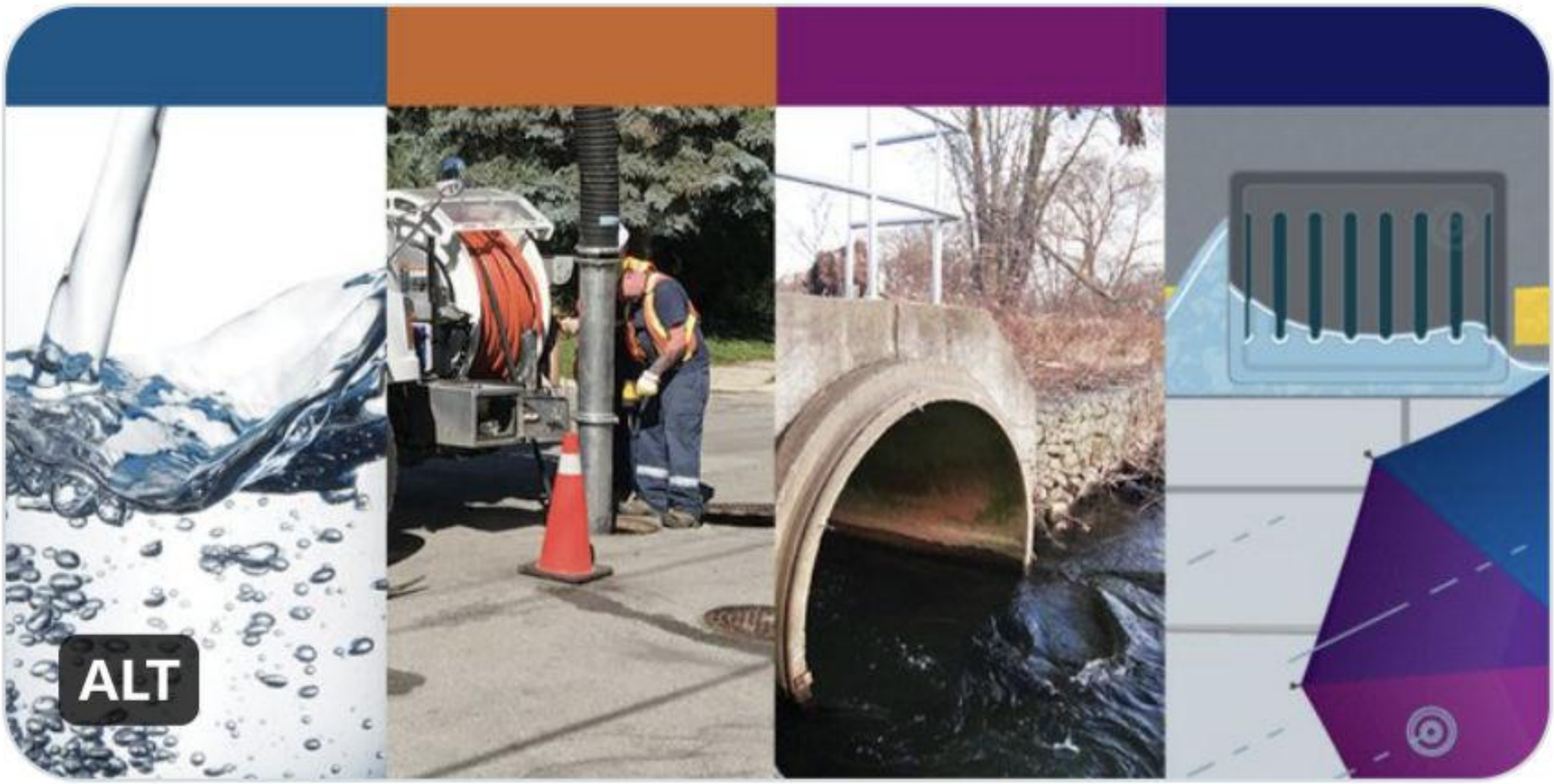
For more information check out:

haveyoursay.guelph.ca
Stormwater Management Master Plan

2 1

City of Gue... @cityofgu... · Aug 23, 2022

Hey #Guelph! As part of our stormwater management master plan study, we're hosting a pop-up event on August 27 at Riverside Park from 1-5pm. Join us to learn about the plan, provide feedback, and try a fun activity to get #Guelph gear! See you there! ow.ly/z6uS50KhLHJ



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The City of Guelph

Aug 23, 2022 ·

Hey #Guelph! As part of our stormwater management master plan study, we're hosting a pop-up event on August 27 at Riverside Park from 1-5pm. Join us to learn about the plan, provide feedback, and try a fun activity to get some #Guelph gear! See you there!
For more information check out:
https://www.haveyoursay.guelph.ca/storm-water-master-plan-update

5 1 share

Like Comment Share

City of Guel... @cityofgue... · Sep 7, 2022

Hey #Guelph! As part of our stormwater management master plan study, we're hosting a pop-up event on September 10 outside of City Hall from 1-5pm. Learn about the plan, provide feedback, and try a fun activity to get #Guelph gear! See you there! ow.ly/USuC50KhLVY

1

The City of Guelph

Sept 7, 2022 ·

Hey #Guelph! As part of our stormwater management master plan study, we're hosting a pop-up event on September 10 outside of City Hall from 1-5pm. Join us to learn about the plan, provide feedback, and try a fun activity to get some #Guelph gear! See you there!
For more information check out:
https://www.haveyoursay.guelph.ca/storm-water-master-plan-update

1 3 shares

Like Comment Share

Stormwater Management Master Plan

As rain falls and snow melts, it flows from your property onto the streets and into storm drains – we call this **stormwater**. Along the way to the storm drains, stormwater picks up debris and pollutants and drains directly into our rivers and waterways.

The City of Guelph is updating the 2012 **Stormwater Management Master Plan** to help protect Guelph's waterways, drinking water supply, and overall environment.

The master plan will guide how the City manages stormwater over the next 25 years to meet the needs of our growing city.

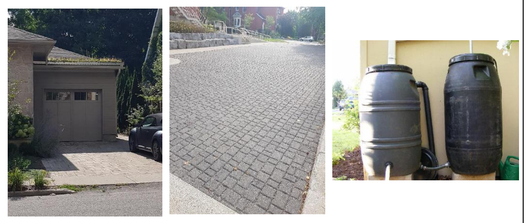
The City's existing stormwater management infrastructure

467 km storm sewer pipes

89 km of rivers, streams, and creeks

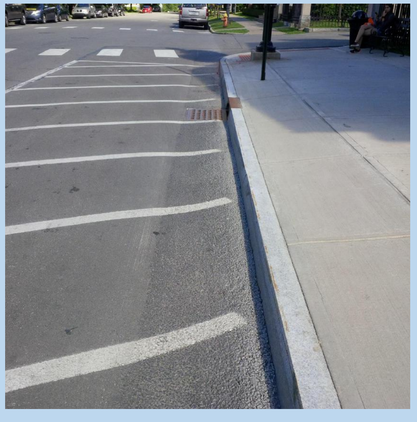
136 Oil and Grit Separator (OGS) units

83 Active stormwater management facilities

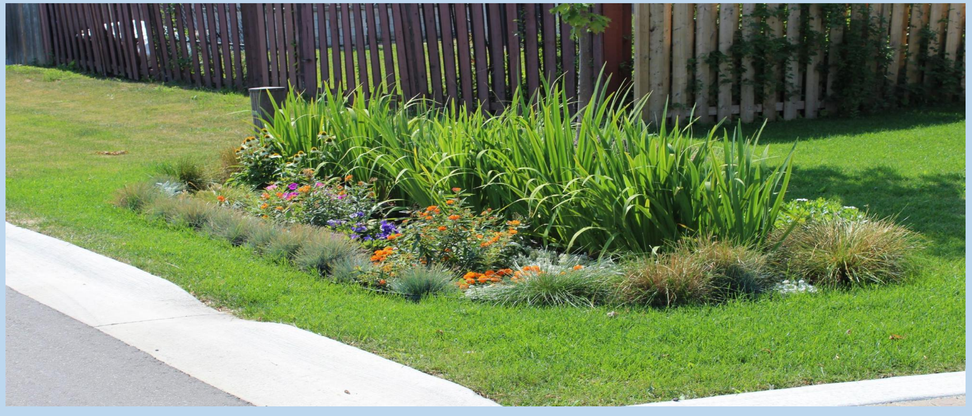
Stormwater management practices to be considered	Examples	Place dot stickers next to the top two (2) stormwater management practices you would like to see addressed in the updated Stormwater Management Master Plan
Source control measures (e.g. green roofs, permeable pavements, rain gardens, rainwater harvesting, etc.)		
Conveyance control measures (e.g. bioswales, grassed channels, etc.)		
End-of-pipe measures (e.g. wet ponds, dry ponds, wetlands, underground storage tanks, etc.)		
Environmental restoration (e.g. drain pipe restoration, watercourse restoration, open space replanting, etc.)		
Pollution prevention measures (e.g. road salt management, street sweeping, curbing pesticide use, etc.)		
Operation maintenance (e.g. stormwater sewer flushing, catch basin cleaning, stormwater pond clean-outs etc.)		

Place dot stickers next to the top two (2) stormwater management solutions that you would like to see in Guelph.

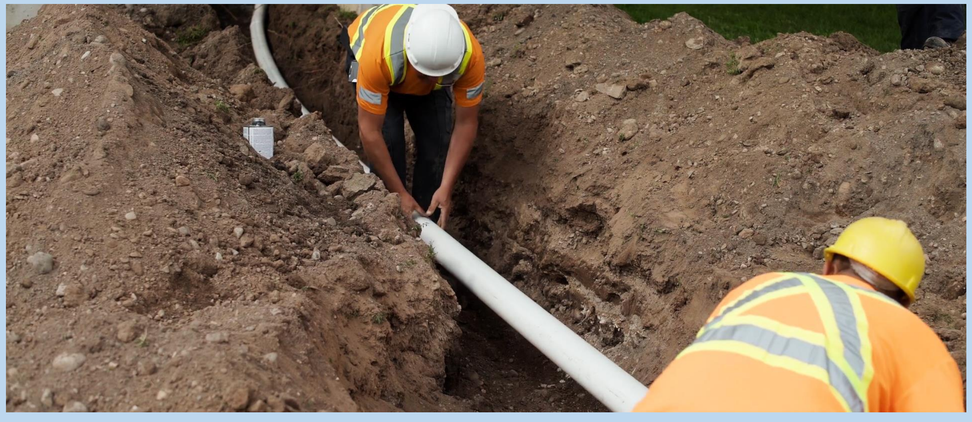
Updated stormwater management ponds



New curb and gutter systems



Boulevard vegetation



Underground pipe systems

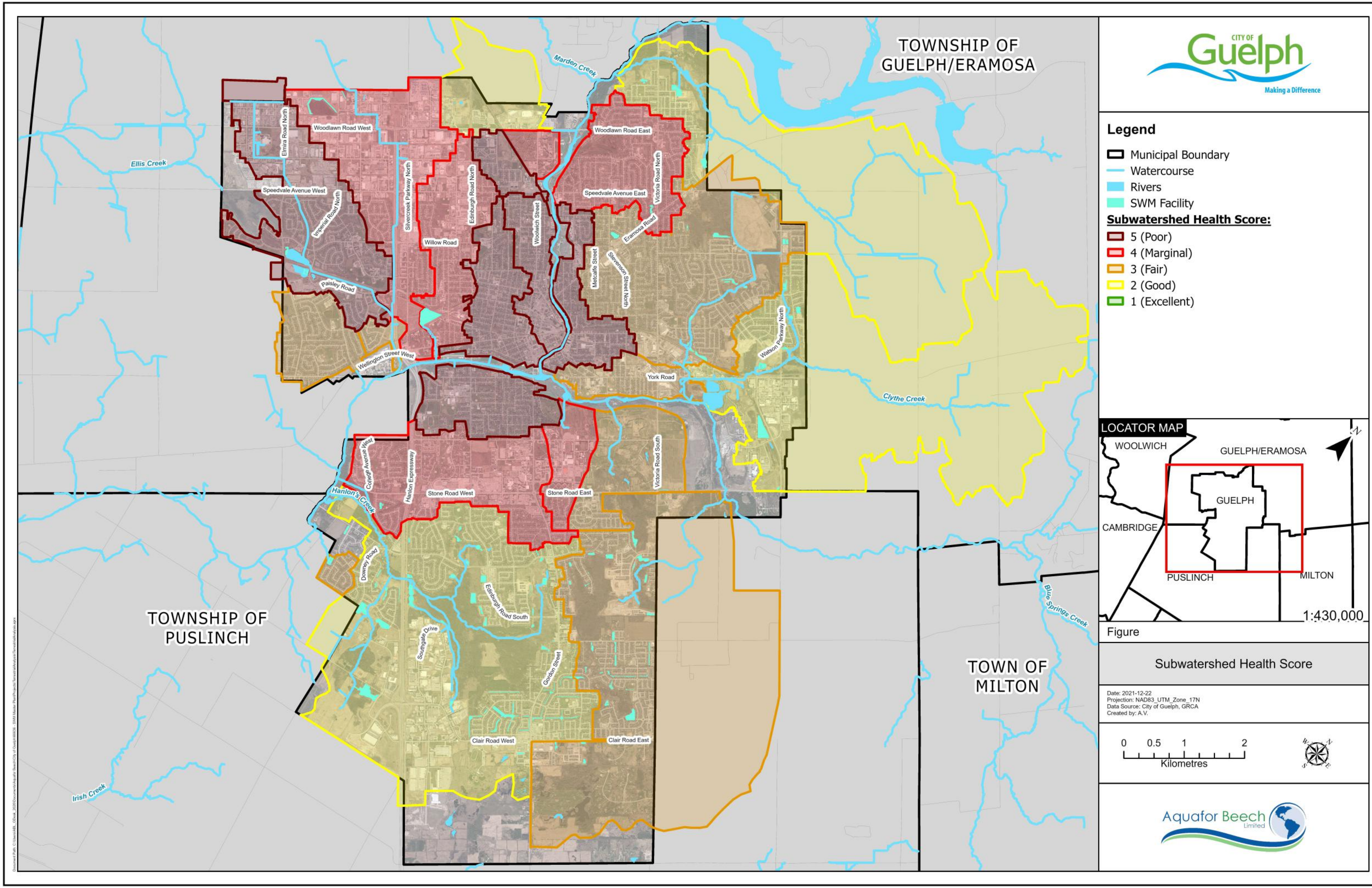
Other – using a sticky note, write down any other solution you would like to see.

STORMWATER LAB

Protect Our Water
Protect Our Future

Come and Play!

How Can You Slow Down the Storm?


TOWNSHIP OF GUELPH/ERAMOSA
TOWNSHIP OF PUSLINCH
TOWN OF MILTON
Marden Creek
Ellis Creek
Clythe Creek
Hanlon's Creek
Irish Creek
Blue Springs Creek
Woodlawn Road West
Woodlawn Road East
Elmira Road North
Speedvale Avenue West
Speedvale Avenue East
Imperial Road North
Silvercreek Parkway North
Edinburgh Road North
Woolwich Street
Victoria Road North
Willow Road
Eramosa Road
Metcalfe Street
Stevenson Street North
Paisley Road
Wellington Street West
Watson Parkway North
York Road
College Avenue West
Hanlon Expressway
Stone Road West
Stone Road East
Victoria Road South
Downey Road
Edinburgh Road South
Southgate Drive
Gordon Street
Clair Road West
Clair Road East
CITY OF Guelph
Making a Difference
Legend
Municipal Boundary
Watercourse
Rivers
SWM Facility
Subwatershed Health Score:
5 (Poor)
4 (Marginal)
3 (Fair)
2 (Good)
1 (Excellent)
LOCATOR MAP
WOOLWICH
GUELPH/ERAMOSA
GUELPH
CAMBRIDGE
PUSLINCH
MILTON
1:430,000
Figure
Subwatershed Health Score
Date: 2021-12-22
Projection: NAD83_UTM_Zone_17N
Data Source: City of Guelph, GRCA
Created by: A.V.
0 0.5 1 2
Kilometres
Aquafor Beech Limited

Pop-Up Engagement Summary

Overview

Between August and September 2022, the City of Guelph hosted three pop-up engagements at public spaces across Guelph to share information about the Stormwater Management Master Plan Update. During the pop-up engagements, participants were presented with two information boards that provided an overview of the project and two discussion boards to collect their feedback. The purpose of the discussion boards was to allow participants to share their priorities for stormwater management practices and solutions being considered by the project team.

- The first discussion board asked participants to identify the top two (2) stormwater management practices they would like to see addressed in the updated Stormwater Management Master Plan.
- The second discussion board asked participants to identify the top two (2) stormwater management solutions they would like to see in Guelph. This board also invited participants to share any other feedback.

In addition, the pop-up engagements featured an interactive children's education activity demonstrating how non-porous surfaces lead to rapid stormwater runoff and inviting participants to implement stormwater management solutions.

In total, 142 participants were engaged in the pop-up engagements, with 108 providing input. The following table summarizes the level of participation at each pop-up engagement.

Pop-up Engagement	Participation
Pop-up #1: August 6, 2022 (1 pm to 7 pm) at Guelph Civic Museum patio	• 49 participants engaged • 37 participants provide input
Pop-up #2: August 27, 2022 (1 pm to 5 pm) at Riverside Park	• 64 participants engaged • 49 participants provided input
Pop-up #3: September 10, 2022 (1 pm to 5 pm) outside Guelph City Hall	• 29 participants engaged • 22 participants provided input

Prioritization Results

The following summarizes the prioritization results from the 'dotmocracy' activities on the two discussion boards. Figure 1 shows that participants identified source control measures and environmental restoration as the top two stormwater management practices they would like to see addressed in the updated Stormwater Management Master Plan. Figure 2 shows that participants identified boulevard vegetation and updated stormwater ponds as the stormwater management solutions they would most like to see in Guelph from the solutions presented.

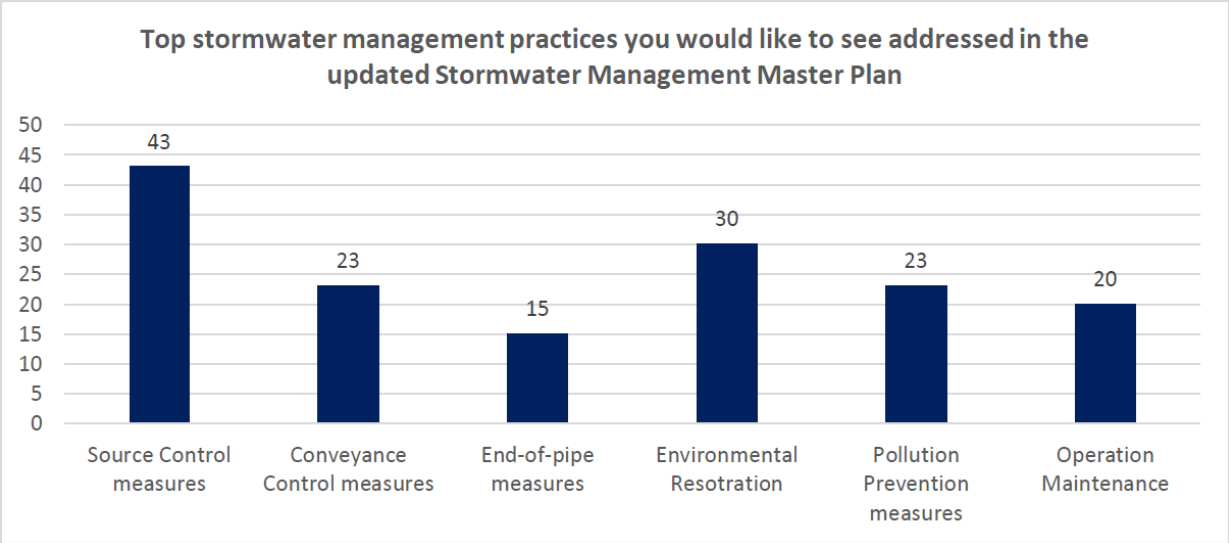


Figure 1: Top stormwater management practices participants would like to see addressed in the updated Stormwater Management Master Plan (n=154).

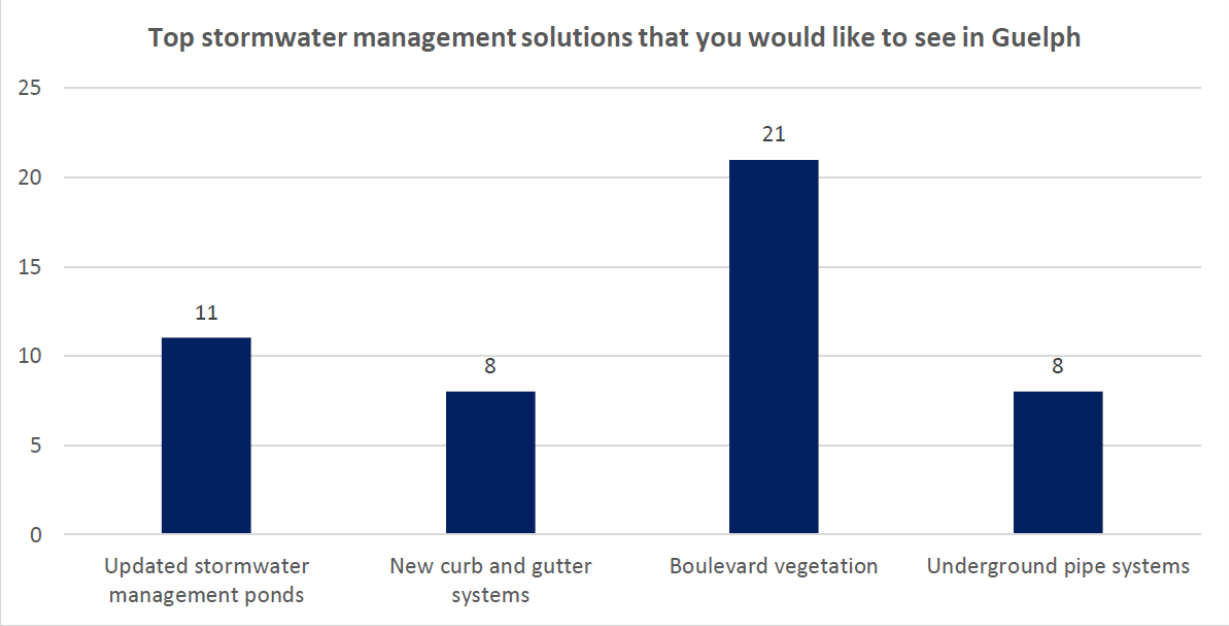


Figure 2: Top stormwater management solutions participants would like to see in Guelph (n=48).

Key Themes

The following contains a summary of key themes raised during the pop-ups. A complete set of verbatim comments can be found further below.

Source Control Measures

Resident engagement

Many participants expressed a desire to implement stormwater management solutions at their homes and to learn more about solutions that the community can implement. Participants were enthusiastic about solutions such as rainwater harvesting, but many were unaware that the City has a rebate program for installing rainwater barrels. It was recommended that the City invest in community outreach and education to build community ownership of the master plan and inspire greater adoption of stormwater solutions in residential properties.

Charges and incentives

Participants were supportive of incentivizing good stormwater management practices through utility charges. However, it was noted that stormwater charges are less effective at motivating change at existing residential properties due to the high cost of retrofits compared to the potential savings they would generate for a small property. It was suggested that rebates and credit programs be tailored to attract residential landowners.

Low Impact Development Best Management Practices (LID BMPs)

In particular, multiple participants expressed a desire for incentives encouraging individuals and businesses to implement LID BMPs such as pollinator gardens, naturalized lawns, and trees on their properties. Participants were also supportive of promoting permeable pavements through green building standards.

Trees

Multiple participants also expressed a desire for more trees to be planted as part of source and conveyance control measures, noting that trees help provide shade and lower temperatures on local streets. It was noted that soil cells should be installed under pavements to promote tree health.

Conveyance Control Measures

Boulevard vegetation

Many participants expressed support for boulevard vegetation, noting the multiple co-benefits that this stormwater management solution provides. Participants emphasized a desire to include native plant species that require less maintenance and flowering plants that support pollinators while contributing to community beautification.

End-of-pipe Measures

Some participants suggested that the greenspace around stormwater ponds can be activated to contribute to local trails or as venues for events. It was noted that activating these spaces can help raise public awareness about the role of stormwater ponds in stormwater management.

Environmental restoration

Many participants supported measures to address soil erosion and sedimentation along Guelph's waterways.

Pollution Prevention Measures

Participants were concerned with the quality of water that enters the ground and local waterways. Many participants recommended that the City reduce dependence on road salts for winter road management and transition to using environmentally friendly alternatives.

Operation maintenance

Participants supported investment in more routine maintenance of stormwater management infrastructure. In particular, many participants noted that catch basin drains are often clogged by plant litter. Participants recommended cleaning catch basins more regularly to reduce flooding risk and installing new catch basins that are less prone to clogging.

Other

Many participants expressed appreciation for the City's efforts at engaging and educating the public on this project. Participants noted that stormwater management and the reduction of runoff and flooding help improve the walkability of neighbourhoods.

Next Steps

The City of Guelph and the project team will consider the community feedback gathered from these pop-up engagements and online through the project webpage, along with staff and consultant expertise and best practices, to develop recommendations for a preferred stormwater management strategy. Following, a third meeting with the Community Stormwater Management Working Group on November 22, 2022 to discuss and gain input on the study's technical aspects, a Public Information Centre (PIC) meeting will be held on November 29, 2022, to present the preferred stormwater management strategy. The study is expected to be completed in Winter 2022/2023.

Verbatim Comments

The following contains the verbatim participant comments on sticky notes during the pop-ups.

Source Control Measures

- Make residential rebate/credit program more attractive for residential land user
- Green roof bylaw!
- Change the bylaw on lawn height to at least 2 ft or higher to encourage natural pollinator gardens
- Education + incentives on how we can help from home (our gardens / green space)
- I would like to see incentives for individuals and businesses to convert their grass lawns to something that benefits the public.
- Projects or initiatives that empower and inspire individuals/members of the community to help stormwater management at the source would be helpful – use the human/city population resources. We want to help and don't mind being told!
- Naturalized gardens
- Incentivize good behaviour through stormwater management utility charges
- Educational signs throughout Guelph

Conveyance Control Measures:

- Boulevard vegetation – I feel like this idea is good because it will help everything
- Move away from useless grass monocultures in boulevards and medians. Any other vegetation would be better – visually appealing plants, native low-lying plants requiring less maintenance, flowering plants for pollinators, and trees that provide shade and slow traffic when next to the road.
- Soil cells

End-of-pipe Measures:

- Using wet ponds as features instead of just ponds. Things like trails or using as a venue

Operational Maintenance:

- Keeping catch basins from getting overgrown with bullrushes and lilies
- Getting new storm drains will help the clogging and flow of the drains

Other:

- Stormwater management is important to help ensure the walkability of neighbourhoods – not flooded and protect sidewalk infrastructure.
- 100-year + 1,000-year flood risk planning
- This pop-up is great!

Appendix T.6: Public Open House #2

CITY OF Guelph

City News

/cityofguelph @cityofguelph guelph.ca/news

Notices

Stormwater Management and Water and Wastewater Servicing Master Plans

Notice of in-person and virtual public open house

November 29

1. **Drop in to learn about the project:** Tuesday, November 29 any time between 5:30-7:30 p.m.
   - **Live in person:** Join us at City Hall, 1 Carden street, meeting room B and C
   - **Live virtually:** Join us virtually through the links posted on the Have Your Say pages (links below)

   There is no formal presentation, just great conversation in person or virtually. Staff will be on hand to explain the project, answer your questions and discuss your thoughts and feedback. We encourage you to review the materials on **haveyoursay.guelph.ca/storm-water-master-plan-update** and **haveyoursay.guelph.ca/water-and-waste-water-master-plan-update** in advance.

2. **At your own pace On Have Your Say** - If you can't attend in person or online on November 29, please visit **haveyoursay.guelph.ca/storm-water-master-plan-update** and **haveyoursay.guelph.ca/water-and-waste-water-master-plan-update** to review the display boards and use the survey and Q&A features to leave comments and ask questions by December 20. Your feedback will be incorporated into the project outcomes.

The purpose of the public open house is to share work completed to date, present the preferred stormwater management solutions, share information to support the capital implementation plan, answer questions and collect feedback.

The Stormwater Management Master Plan looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years. It has studied subwatershed health, erosion sites, the minor and major conveyance network, existing and new end-of-pipe treatment facilities and provided criteria and policy direction based on new Provincial legislation – all to support the City's growth to 2051.

The Water and Wastewater Servicing Master Plan began in January 2020 and has studied alternative solutions for the City's existing water and wastewater distribution and collection system capacity constraints as well as required updates to infrastructure to support growth to 2051 as per the City's Shaping Guelph project.

Both plans are being carried out according to the Municipal Engineers Association's Municipal Class Environmental Assessment (October 2000, as amended in 2007, 2011 and 2015), which is an approved Class of Environmental Assessment under the Environmental Assessment Act.

Intent to collect information during virtual public open house: Feedback is being collected as part of community engagement and public input on the SWMMP, as well as to satisfy the requirements of the Environmental Assessment Act. Any comments or questions submitted during the event or through Have Your Say may be published or shared and will be used to reflect overall feedback and help inform the study. Personal information is collected under the authority of the Municipal Act, 2001, and in accordance with the provisions of the Municipal Freedom of Information and Protection of Privacy Act.

If you have questions about the collection, use and disclosure of this personal information, please contact the City's Information and Access Coordinator by phone at 519-822-1260 extension 2349 or email privacy@guelph.ca.

For more information
Colleen Gammie, Infrastructure Planning Engineer
Engineering and Transportation Services
City of Guelph
519-822-1260 extension 2282
colleen.gammie@guelph.ca

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

(This notice first issued November 17, 2022)

Register for winter recreation programs starting December 7

On Wednesday, December 7 at 7:30 a.m., you can register for winter recreation programs including swimming, sports and leisure activities. All program schedules are now available online at **recenroll.ca.**

Register in three easy ways:

- Login to **recenroll.ca**
- Call 519-837-5699
- Visit West End Community Centre, Victoria Road Recreation Centre or Evergreen Seniors Community Centre

For more information

recreation@guelph.ca
519-837-5699

Accessible winter maintenance for people with a disability

Get in touch with us to report an accessibility concern caused by snow or ice build up in areas such as:

- Accessible on-street parking spaces
- Crosswalk buttons
- Sidewalk ramps
- Guelph Transit bus stops

Call 519-837-5648, for after-hours Bell Relay or TTY 519-826-9771, or email operations@guelph.ca. If your situation is an emergency, please call 911.

For more information visit **guelph.ca/snow**

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

CITY OF Guelph

City News

/cityofguelph @cityofguelph guelph.ca/news

Notices

Moving Guelph Forward – City of Guelph Transportation Master Plan

Notice of Study Completion

Notice date: December 1, 2022

The City of Guelph has prepared a Transportation Master Plan (TMP) update that lays out how residents and visitors will move through the city over the next three decades. The TMP is a long-range strategic plan that directs how Guelph's future transportation system will be built and operated. It establishes policies and programs to guide the delivery of transportation infrastructure and services.

The TMP was conducted as a Master Plan project in accordance with Approach 1 of the "Municipal Class Environmental Assessment" document (Municipal Engineers Association, October 2000, as amended in 2007, 2011 and 2015), under the Ontario Environmental Assessment Act. The engagement, technical analysis and background review satisfies Phases 1 and 2 of a class EA study.

The TMP evaluated four alternative network solutions. Based on the study findings and input from technical agencies, stakeholders, and the public, the preferred solution is Alternative 3 which has a sustainability and resiliency focus. The recommended network can be seen in **Figure 1**.

The preferred solution is strongly aligned with sustainability values and goals. It is also aligned with the safety, equity, land use plans and future resiliency of the city. This option offers better opportunities in the future to adapt to unknowns. The Pedestrian Priority, Cycling Spine, Quality Transit and Resilience Networks will be implemented in Alternative 3. It also partially implements the Goods Movement Priority Network. The Preferred Solution helps manage congestion for people who drive by encouraging more people to travel by non-car modes and by optimizing the vehicular road network. The TMP supports improvements to the safety and environment of all travelers, particularly the more vulnerable road users - people walking, cycling and using transit.

While the Master Plan addresses need and justification at a broad level, more detailed studies for each of the projects included in the Master Plan will be done at a later date in accordance with the Municipal Class Environmental Assessment (EA). Schedule C projects will follow Phases 3 and 4 for each project at a later date. The list of projects and their Class Schedules is available in Table 3 (page 150) of the final report at **guelph.ca/tmp**.

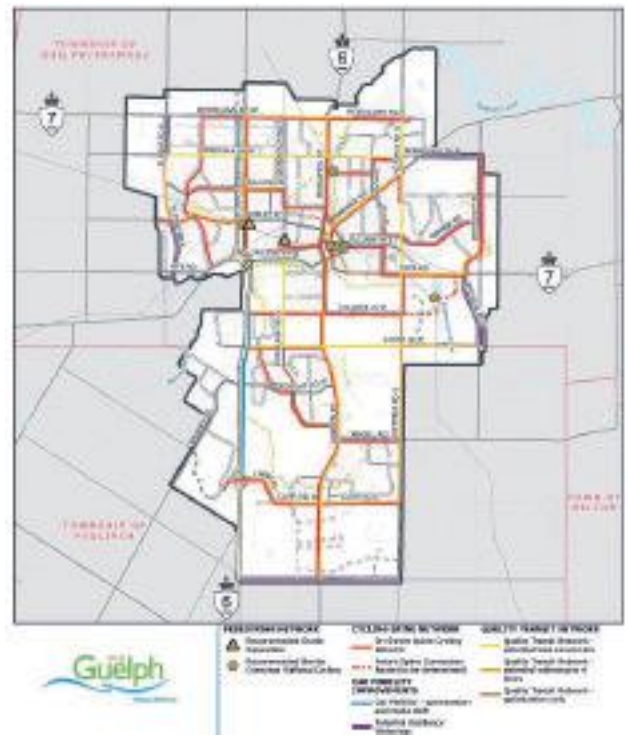
How to provide comments

The TMP and supporting documents are available for review at **guelph.ca/plans-and-strategies/transportation-master-plan/tmp-documents** or in person at the following locations:

City Hall
1 Carden Street, Guelph, ON N1H 3A1
Monday to Friday between 8:30 a.m. to 4:30 p.m.
519-837-5604
engineering@guelph.ca

Interested persons may provide written comments to the project team email transportation@guelph.ca by December 31, 2022 (30 days after the date on this notice). You can also contact the following project team member:

Figure 1 – 2022 Transportation Master Plan Recommended Network



Jennifer Juste, Manager Transportation Planning
Engineering and Transportation Services
City of Guelph
519-822-1260 extension 2791
jennifer.juste@guelph.ca

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual /comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester contact information and full name for the ministry.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements in the request. This will ensure that the ministry is able to efficiently begin reviewing the request.

The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. West, 1st Floor
Toronto, ON M4V 1P5
EABDirector@ontario.ca

Requests should also be sent to the project team member by mail or by email.

This Notice is issued on **December 1, 2022**.

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

Sign By-law variance

The City received applications for variances from the City of Guelph Sign By-law Number (2021)-20621, as amended. The request for variances is for the following property: 158 Clair Road East.

Request

To permit one electronic drive-through pre-sell menu board sign and two electronic drive-thru menu-board signs at Tim Horton's, which all have a distance less than 30 metres and are visible to the adjacent residentially zoned property line (98 Farley Drive).

How to participate

Reports relating to these applications will be available online on Thursday, November 24, 2022 at **guelph.ca**. For questions about these applications please email building@guelph.ca. These variance applications will be addressed at the Council Planning meeting at 6:30 p.m. on December 6, 2022. This is both an in person and a remote Council meeting that can be watched online at **guelph.ca/live**. If you wish to speak about these applications or provide a written submission, please register online at **guelph.ca/delegate** using the "Request to speak at a meeting" online form, email clerks@guelph.ca, or call the City Clerk's office at 519-837-5603 (TTY 519-826-9771) by Friday, December 2, 2022 at 10 a.m.

CITY OF Guelph

City News

/cityofguelph @cityofguelph guelph.ca/news

Notices

Stuff an emergency vehicle this weekend with pounds of food

Looking for a way to give back to your community this holiday season? Help off-duty police, paramedics and firefighters stuff an emergency vehicle this Saturday, December 3.

The eleventh annual Stuff an Emergency Vehicle event takes place from 9 a.m. to 3 p.m. at the Guelph Zehrs located at 1045 Paisley Road.

We're collecting non-perishable food and cash donations in support of the Guelph Food Bank. Together, let's see how many police cars, ambulances and fire trucks we can stuff!

Register for winter recreation programs starting December 7

On Wednesday, December 7 at 7:30 a.m., you can register for winter recreation programs including swimming, sports and leisure activities. All program schedules are now available online at recenroll.ca.
Register in three easy ways:

- Login to **recenroll.ca**
- Call 519-837-5699
- Visit West End Community Centre, Victoria Road Recreation Centre or Evergreen Seniors Community Centre

For more information

recreation@guelph.ca
519-837-5699

Have your say haveyoursay.guelph.ca

Current engagement opportunities

Short-term rental business licencing

Closes December 11

We're looking for community feedback on adding regulations for short-term rentals to the existing Business Licence Bylaw.

Requiring short-term rental (rented less than 30 days) operators to acquire a licence would standardize and regulate how these rentals operate and may include required fire inspections, public health inspections and mandated insurance limits. Regulations could also help identify acceptable locations and building types for short-term rentals. Staff will bring recommended licence fees to Council for approval.

You can participate by filling out a survey at **haveyoursay.guelph.ca**, attending an open house or calling us during open office hours to ask questions or get more information.

For more information

Scott Green, Manager
Corporate and Community Safety, Operations
City of Guelph
519-822-1260 extension 3475
scott.green@guelph.ca

Stormwater Management and Water and Wastewater Servicing Master Plans

Closes December 20

The Stormwater Management Master Plan looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years. It has studied subwatershed health, erosion sites, the minor and major conveyance network, existing and new end-of-pipe treatment facilities and provided criteria and policy direction based on new Provincial legislation – all to support the City's growth to 2051.

The Water and Wastewater Servicing Master Plan began in January 2020 and has studied alternative solutions for the City's existing water and wastewater distribution and collection system capacity constraints as well as required updates to infrastructure to support growth to 2051 as per the City's Shaping Guelph project.

Visit **haveyoursay.guelph.ca/storm-water-master-plan-update** and **haveyoursay.guelph.ca/water-and-waste-water-master-plan-update** to scroll through the display boards, ask questions and leave comments on the virtual platform

Events

Mayor's Tree Lighting

Saturday, December 3 from 5:45-6:30 p.m.

Market Square, 1 Carden Street, Guelph

Mayor Cam Guthrie will light Guelph's holiday tree in Market Square this Saturday. The official tree lighting will take place at 6:15 p.m. Join us for a free, family-friendly, holiday event!

The tree lighting celebration features a live performance by Verese Vassell-Bowen. In the spirit of the holidays, the United Way Guelph Wellington Dufferin will have their Everyday Heroes on-site selling 50/50 tickets and will also be collecting monetary donations at the event.

Get more information and see all our upcoming events at **guelph.ca/events**.

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

Jessica Lovell/Metroland

Guelph General Hospital (GGH) needs nurses, and has scheduled a virtual job fair in December to help with the recruitment process.

WHO'S HIRING? GUELPH GENERAL HOSTS VIRTUAL JOB FAIR

Guelph General Hospital (GGH) needs nurses, and has scheduled a virtual job fair in December to help with the recruitment process.

"The demand for nurses is high everywhere, so we feel it is important to make the opportunity to apply and interview for our positions as easy as possible," GGH human resources director Geoff Wood said in a news release. "Active recruitment strategies such as virtual job fairs are a convenient way for the hospital to meet the applicants and share why we believe GGH is a great place to work."

Thinking of applying? Here's what you need to know:

WHEN IS THE JOB FAIR?

The job fair takes place on Tuesday, Dec. 6, from 9:30 a.m. to 4:30 p.m.

Candidates can preregister online at www.gghorg.ca/registration-for-virtual-job-fair.

WHAT POSITIONS ARE AVAILABLE?

This event is all about nurses. The hospital is looking to hire part-time and full-time registered nurses and registered practical nurses.

A COUPLE OF OTHER USEFUL DETAILS

Hospital employees are required to have a criminal reference and vulnerable sector check.

It is also a condition of employment at Guelph General Hospital that all employees be fully vaccinated. Proof of vaccination must be submitted prior to your start date.

CITY OF Guelph

City News

/cityofguelph @cityofguelph guelph.ca/news

Notices

Holiday hours

December 26 and 27, 2022 and January 2, 2023

City facilities will close December 26, 27 and January 2 for statutory holidays.

City Hall will be open December 28, 29 and 30 to serve you in person, by email and by phone. Other City facilities, services and programs will operate on reduced holiday hours. Details available at **guelph.ca/holidayhours**

Have your say **haveyoursay.guelph.ca**

We want to hear from you

Help us make Guelph the most engaged community in Canada.

We're looking for diverse voices to help shape the next generation of our Community Engagement Policy and Framework. You can help make our process better in two steps.

Step 1, choose any time from the list below:

- Tuesday, December 6, 7-9 p.m.
- Wednesday, December 7, 9-11 a.m.

Step 2, call us at 519-822-1260 extension 3979, TTY at 519-826-9771 or text 226-821-2132 to speak with a member of our Community Engagement team.

Alternatively, you can leave us your ideas using any of the following features on **haveyoursay.guelph.ca**

- Share thoughts and ideas in the forum
- Ask a question
- Or take our quick poll

There will be additional virtual and in-person engagement opportunities for this project coming soon.

For more information

Glen Lombard, Manager, Community Engagement
City of Guelph
519-822-1260 extension 3957
glen.lombard@guelph.ca

Current engagement opportunities

Short-term rental business licencing

Closes December 11

We're looking for community feedback on adding regulations for short-term rentals to the existing Business Licence Bylaw.

Requiring short-term rental (rented less than 30 days) operators to acquire a licence would standardize and regulate how these rentals operate and may include required fire inspections, public health inspections and mandated insurance limits. Regulations could also help identify acceptable locations and building types for short-term rentals.

Staff will bring recommended licence fees to Council for approval.

You can participate by filling out a survey at **haveyoursay.guelph.ca**, attending an open house or calling us during open office hours to ask question or get more information.

For more information

Scott Green, Manager, Corporate and Community Safety
City of Guelph
519-822-1260 extension 3475
scott.green@guelph.ca

New playgrounds coming to a park near you

Visit haveyoursay.guelph.ca before December 15

We're replacing three playgrounds in 2023:

- Dovercliffe Park, 38 Dovercliffe Road
- Howitt Park, 81 Beechwood Avenue
- University Village Park, 93 Ironwood Road

We want you to tell us:

- What kind of equipment you would like to see
- What you like about the existing playground
- If there are any specific accessibility features you would like us to include

Engagement is open from November 29 to December 15.

We will share two final designs options for each playground and invite you to vote on which one you like best.

For more information

Stefan Ilic, Landscape Technologist
Park and Trail Development
City of Guelph
519-822-1260 extension 3349
stefan.ilic@guelph.ca

Stormwater Management and Water and Wastewater Servicing Master Plans

Closes December 20

The Stormwater Management Master Plan looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years. It has studied subwatershed health, erosion sites, the minor and major conveyance network, existing and new end-of-pipe treatment facilities and provided criteria and policy direction based on new Provincial legislation – all to support the City's growth to 2051.

The Water and Wastewater Servicing Master Plan began in January 2020 and has studied alternative solutions for the City's existing water and wastewater distribution and collection system capacity constraints as well as required updates to infrastructure to support growth to 2051 as per the City's Shaping Guelph project.

Visit **haveyoursay.guelph.ca/storm-water-master-plan-update** and **haveyoursay.guelph.ca/water-and-waste-water-master-plan-update** to scroll through the display boards, ask questions, and leave comments on the virtual platform.

Fees for single-use beverage cups and reusable bags

Closes January 3

One of the recommendations of the Solid Waste Management Master Plan is to develop a strategy to reduce single-use item waste.

We're proposing fees for single-use disposable cups and reusable bags, to help minimize the number of cups and bags that end up in the landfill and to ensure that reusable bags are reused as intended. Specifically:

- a fee of at least $1 for reusable bags in 2024 (the first year) with a fee increase each year after; and
- a fee of at least $0.25 for disposable cups which will be shown on menus and receipts.

Visit **haveyoursay.guelph.ca/waste-reduction-strategies** to learn more and tell us what you think about these proposed fees for single-use beverage cups and reusable bags.

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

CITY OF Guelph

City News

/cityofguelph @cityofguelph guelph.ca/news

Notices

Sparkles in the Park returns at Riverside Park

Festive light displays, carousel rides and more

The Rotary Club of Guelph is once again hosting its annual Sparkles in the Park event, held at Riverside Park, from December 17 to 31.

Events include:

- Festive light displays open nightly from 5:30 to 9:30 p.m.
- Free Carousel rides on December 23 to 26 and December 30 from 6 to 8 p.m. and December 31 from 5:30 to 9 p.m.
- Fireworks on New Year's Eve

You can choose to walk or drive through Riverside Park for this fun, family-friendly holiday event.

For more information
sparklesinthepark.ca

Holiday hours

December 26 and 27, 2022 and January 2, 2023

City facilities will close December 26, 27 and January 2 for statutory holidays.

City Hall will be open December 28, 29 and 30 to serve you in person, by email and by phone. Other City facilities, services and programs will operate on reduced holiday hours. Details available at **guelph.ca/holidayhours.**

Notice of passed bylaw amendments

Guelph City Council passed the following bylaw amendments on December 6, 2022:

- Bylaws (2022) – 20755 and (2022) – 20756 about 265 Edinburgh Road North. For more information about the bylaw amendments, visit **guelph.ca/2020/12/265-edinburgh-road-north/**
- Bylaws (2022) – 20759 and (2022) – 20760 about 639 Eramosa Road. For more information about the bylaw amendments, visit **guelph.ca/2022/08/639-eramosa-road**

For more information about any of the above, contact Planning Services at 519-837-5616 or planning@guelph.ca. If you would like to appeal any of the bylaws above or the refused amendment, you must file a Notice of Appeal with the City Clerk before 4 p.m. on January 3, 2023, by contacting the Clerk's Office at 519-837-5603 or clerks@guelph.ca.

Have your say haveyoursay.guelph.ca

Current engagement opportunities

New playgrounds coming to a park near you

Closes December 15

We're replacing three playgrounds in 2023:

- Dovercliffe Park, 38 Dovercliffe Road
- Howitt Park, 81 Beechwood Avenue
- University Village Park, 93 Ironwood Road

We want you to tell us:

- What kind of equipment you would like to see
- What you like about the existing playground
- If there are any specific accessibility features you would like us to include

Engagement is open until December 15.

We'll share two final designs options for each playground and invite you to vote on which one you like best in spring 2023.

For more information

Stefan Ilic, Landscape Technologist
Park and Trail Development
City of Guelph
519-822-1260 extension 3349
stefan.ilic@guelph.ca

Silvercreek Parkway North improvements

Closes Spring 2023

We're upgrading Silvercreek Parkway North with new sanitary sewers and watermain pipes, new curbs, multi-use paths: and raised bus stops. The Guelph Junction Railway crossings will also be upgraded to improve safety. Visit **haveyoursay.guelph.ca/silvercreek-parkway-north** to learn about the project and ask questions.

Stormwater Management and Water and Wastewater Servicing Master Plans

Closes December 20

The Stormwater Management Master Plan looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years. It has studied subwatershed health, erosion sites, the minor and major conveyance network, existing and new end-of-pipe treatment facilities and provided criteria and policy direction based on new Provincial legislation – all to support the City's growth to 2051.

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Visit **haveyoursay.guelph.ca/waste-reduction-strategies** to learn more and tell us what you think about these proposed fees for single-use beverage cups and reusable bags.

General information

Practice fire safety this holiday season

Enjoy a fire-safe holiday season by following these tips

While fire can happen at any time, it most often strikes when we let our guard down – when we're distracted by the hustle and bustle of the holidays, by our cellphones, by the kids or by the doorbell.

This holiday season, practice fire safety by following these tips:

- Always stay in the kitchen when something is cooking on the stove; never leave a cooking pot unattended.
- Place lit candles away from anything that can burn and out of the reach of children and pets where they can't be knocked over. Remember to snuff out candles before leaving the room or going to bed. Consider using battery-operated or electric flameless candles.
- Make sure the base of real trees is always immersed in water to prevent them from getting too dry.
- Check all sets of decorative lights before putting them up, and discard any sets that are damaged.
- Develop and practice a home fire escape plan, so everyone in your home knows what to do if the smoke or CO alarms sound.

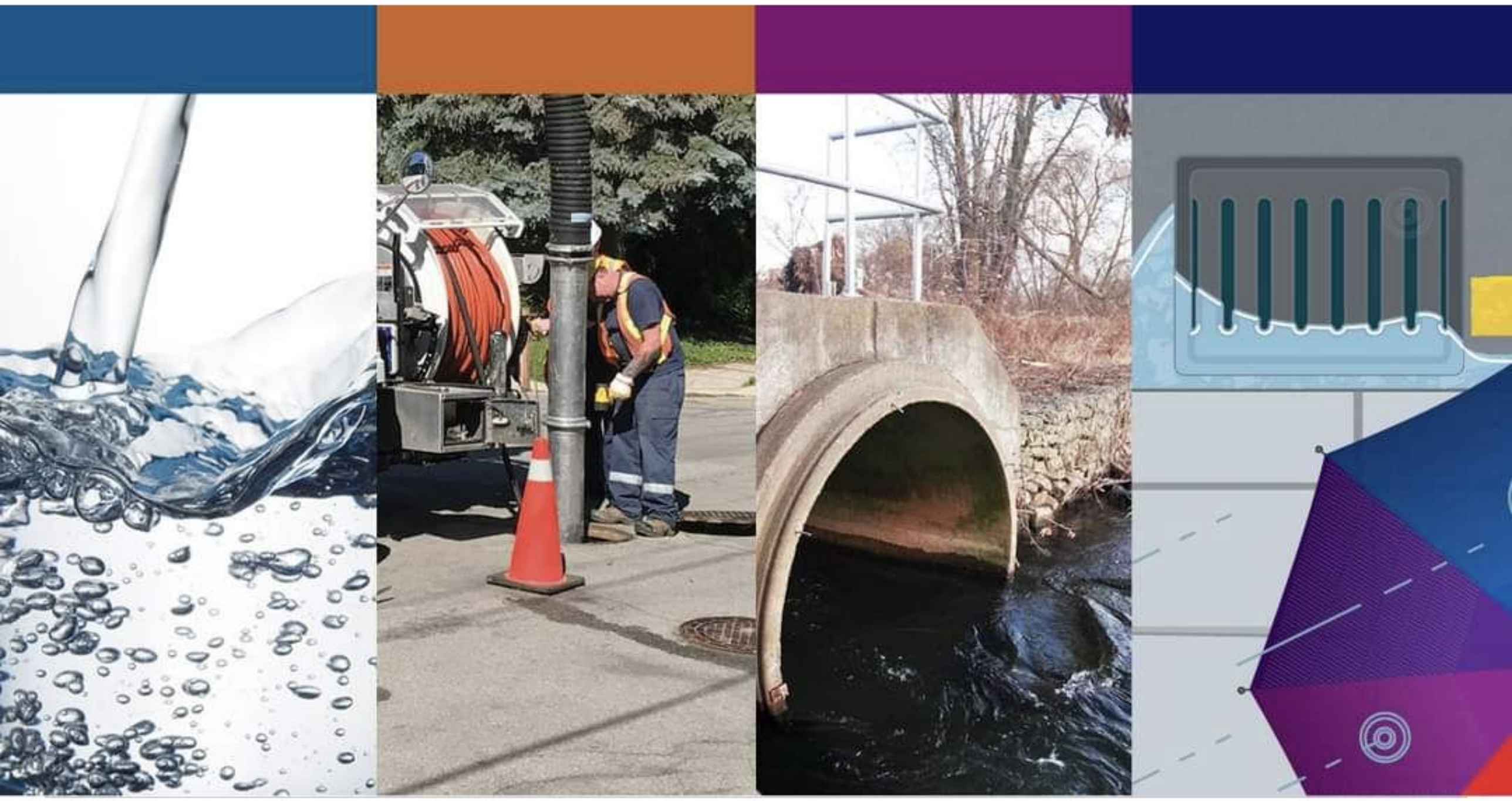
For more information
Fire Prevention Bureau
Guelph Fire Department
519-763-8111
fireprevention@guelph.ca
guelph.ca/fire

Accessible formats available by calling **519-822-1260** or **TTY 519-826-9771**

The City of Guelph

Nov 24, 2022 ·

Hey #Guelph! We manage stormwater, water and wastewater and need your input to make sure our proposed management plans will support our community now and into the future. Join us in person or online Nov. 29 to have your say!
https://guelph.ca/2022/11/public-notice-stormwater-management-and-water-and-wastewater-servicing-master-plans/

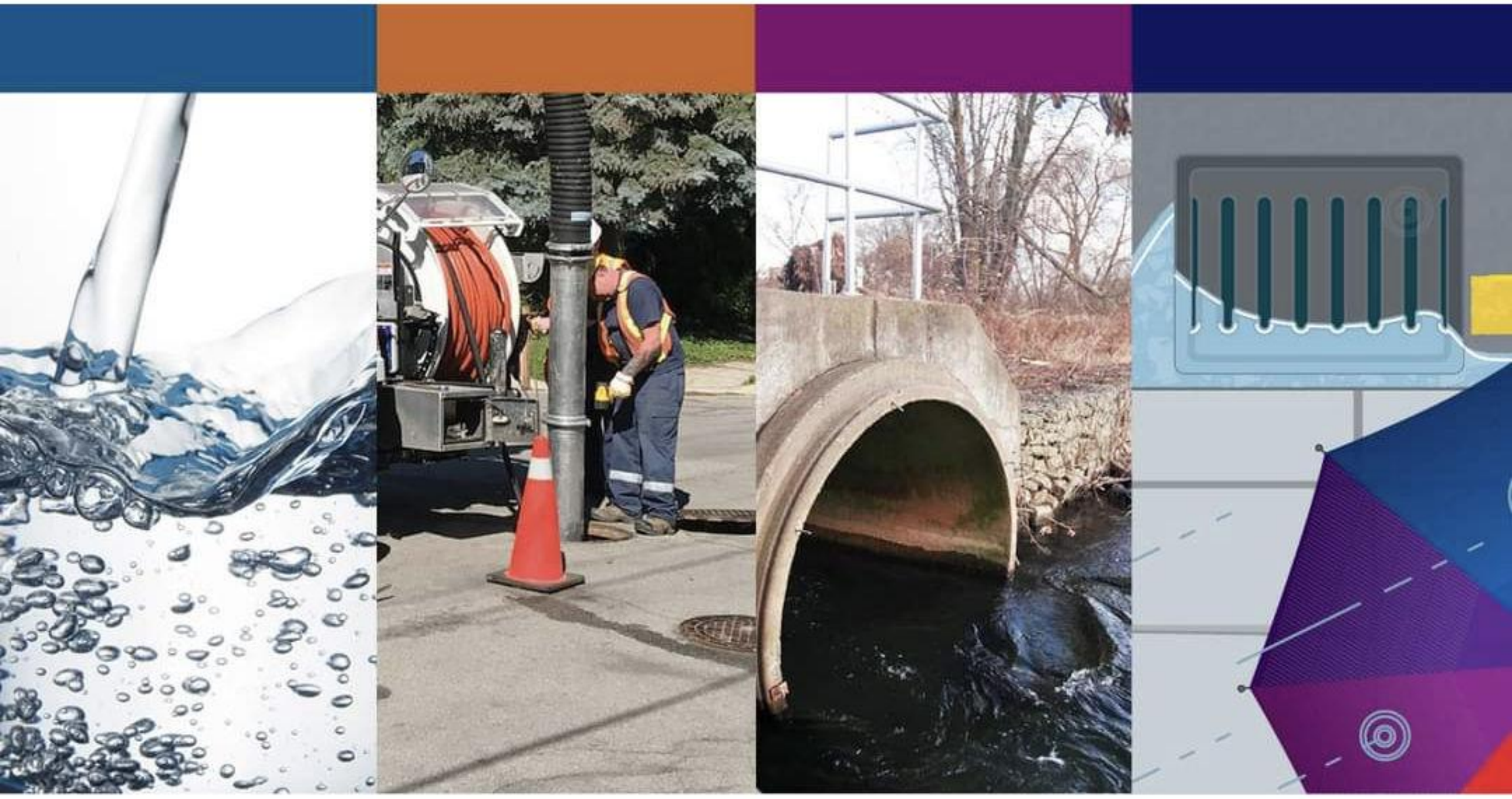


Like Comment Share

The City of Guelph

Nov 27, 2022 ·

Our plan to manage water and wastewater requires updates to support growth through to 2051. We've developed a management plan based on your feedback – on Nov. 29, tell us what you think! Visit haveyoursay.guelph.ca for details. Visit https://www.haveyoursay.guelph.ca/water-and-waste-water-master-plan-update



1

Like Comment Share

The City of Guelph

Dec 3, 2022 ·

To be future-ready, we need to upgrade our water and wastewater underground utilities. Our plan is based on your input. Provide feedback until Dec. 20. here: https://www.haveyoursay.guelph.ca/water-and-waste-water-master-plan-update

7

4 comments • 2 shares

Like Comment Share

The City of Guelph

Dec 8, 2022 ·

Your input helped us develop a plan to manage stormwater to be a future-ready #Guelph. Did we hear you? Have we captured your feedback? We're receiving comments until Dec. 20 at https://www.haveyoursay.guelph.ca/storm-water-master-plan-update

3

8 comments

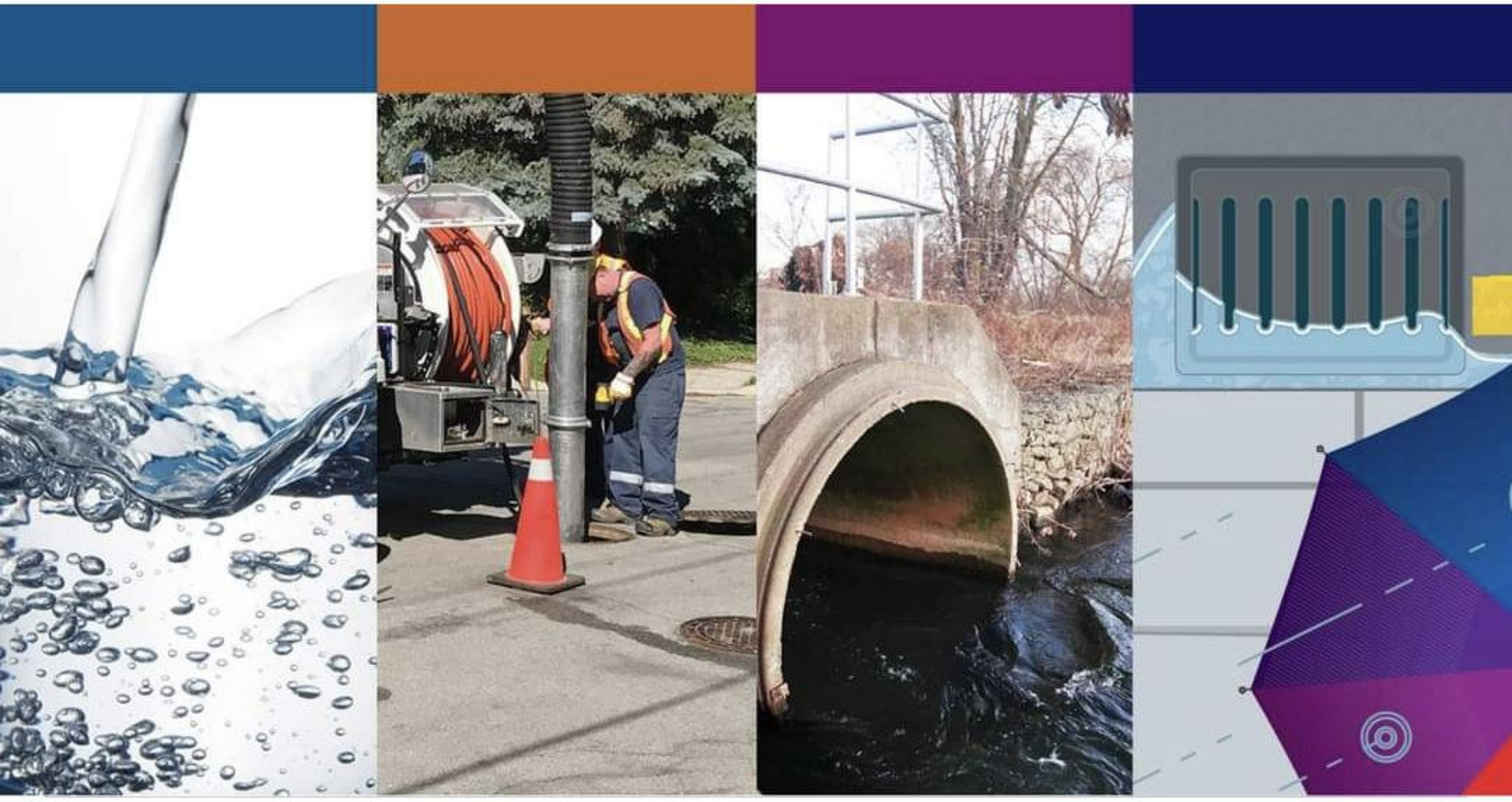
Like Comment Share

The City of Guelph

Dec 14, 2022 ·

Our plan to manage water and wastewater requires updates to support growth through to 2051. We've developed a management plan based on your feedback. Share your comments with us until Dec. 20

https://www.haveyoursay.guelph.ca/water-and-waste-water-master-plan-update



Like Comment Share

November 09, 2022

Stormwater Management Master Plan

Notice of Public Open House – November 29, 2022

Join us for the second Stormwater Management Master Plan (SWMMP) Public Open House on November 29.

How to participate

There are three ways to participate:

1. **Live in-person** – Drop in at City Hall to learn about the project, ask the project team questions, and provide feedback.

   Time: 5:30 pm -7:30 p.m. (drop in, anytime)

   Location: City Hall Room B, 1 Carden Street, Guelph, ON, N1H 3A1

2. **Live virtual –** You are welcome to drop in on Zoom during the time slot above. There will be no formal presentation; however, the project team will be available to answer questions. We encourage you to review the materials posted on Have Your Say in advance. Here is the link to join: November 29th Virtual Open House Drop-In

3. **On Have Your Say** - If you can't attend the in person or virtual open house – please visit the project's Have Your Say page to view the project materials, ask questions and/or provide feedback.

The question/comment period runs from November 29 to December 20, 2022.

About the project

The SWMMP is being carried out according to the Municipal Engineers Association's Municipal Class Environmental Assessment (2015, as amended), which is an approved Class of Environmental Assessment under the Environmental Assessment Act. The SWM MP is a long-term plan that looks at how the City is currently managing stormwater and guides how we will continue to do so over the next 25 years. It has studied subwatershed health, erosion sites, the minor and major conveyance network, existing and new end-of-pipe treatment facilities, and provided criteria and policy direction based on new Provincial

legislation –to support the City's growth to 2051. The Public Open House will share work completed to date, present the options and preferred stormwater management solutions, share information to support the capital implementation plan, answer questions, and collect feedback.

Important information

Feedback is being collected as part of the engagement process for the SWM MP, and to satisfy the requirements of the Environmental Assessment Act.

For more information, please visit https://guelph.ca/plans-and-strategies/stormwater-management/

If you would like to speak to one of our project team members, have questions or comments, would like to be added to the project mailing list, or if you require this document to be provided in an alternative format as per the Accessibility for Ontarians with Disabilities Act (2005), please contact:

Colleen Gammie, P.Eng.
Infrastructure Planning Engineer
Design and Construction, Engineering and Transportation Services
519-822-1260 extension 2282
colleen.gammie@guelph.ca

Information will be collected following the Freedom of Information and Protection of Privacy Act. Except personal information, all comments will become part of the public record. If you have questions about the collection, use and disclosure of this personal information, please contact the City's Information and Access Coordinator by phone at 519-822-1260 extension 2349 or email privacy@guelph.ca.

City of Guelph – Stomrwater Management Master Plan
Public Open House Sign-In Sheet

November 29, 2022

Name	Address (optional)	Phone Number (optional)	Email (required for mailing list)	Would you like to be added to the email mailing list?
Steve Peterson		519-504-5221	Speterson@mtcbs.com	Yes
Linda Busuttil	10 Clarion Pl -	5198370344	linda.busuttil@guelph.ca.	
Geoff Gilmour	7 Avondale Ave	519-822-0433		
Brian Edwards	Caledon, Ont	4165252587	brian.edwards@tylin.com	✓
NITYA SHAH	KITCHENER, ON	437-2415915	nitya.shah@tylin.com	
Pete Graham	80 Southgate Guelph.	519.820.0100	pgraham@gwddevelopments.ca	
Vanessa Hyland	18 Oliver St NIE 3B5		kathleenvhyland@gmail.com	

Personal information requested on this form is collected following the Freedom of Information and Privacy Act.

Public Open House #2 Summary

November 29, 2022

Background

The City of Guelph has initiated a Stormwater Management Master Planning process. The purpose of the Stormwater Management Master Plan (SWM-MP) is to develop a long-term plan for the safe and effective management of stormwater runoff while maintaining, and where possible, improving, the ecosystem health and ecological sustainability of the City's water resources. The SWM-MP will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, thermal mitigation, and water balance/infiltration targets.

Policies detailed in the Growth Plan for the Golden Horseshoe require municipalities to undertake Stormwater Management Master Planning. This process includes the requirement for a watershed-based approach, examines environmental impacts from existing and planned development, assesses climate change impacts, includes Green Infrastructure (GI) and Low Impact Development (LID), incorporates retrofit opportunities, and includes a full life cycle and a plan for its implementation. The Plan will also be compliant with the Grand River Source Protection Plan and the City of Guelph's Official Plan, Source Water Protection Program, and Natural Heritage Action Plan.

What We Did

On November 29, 2022, the City of Guelph hosted the second Public Open House for the SWM-MP. The open house followed a "drop-in" style, where materials were displayed in-person and online for public review. Project team members were available in person and online to provide additional context and answer questions. In total, six participants attended in-person, and one participant attended online.

Following the Public Open House, members of the public were invited to share additional feedback between November 29 to December 20 through the Have Your Say webpage or directly to the project team by phone or email. The Have Your Say webpage encouraged participants to use the Survey and Q&A features to leave comments and ask questions.

Public Open House #2 Engagement	Participation
Public Open House (in-person): November 29, 2022	• 6 attendees
Public Open House (online): November 29, 2022	• 1 attendee

Public Feedback Period: November 29, 2022 – December 20, 2022	• 1 contact by phone
	• 114 visitors to the Have Your Say webpage
	  ○ 2 Survey Participants
	  ○ 3 Q&A participants

Engagement Purpose

The purpose of the Public Open House was to:

- Review the context of the SWM-MP project as a Municipal Class Environmental Assessment (MCEA)

- Share work completed to date and present the options and preferred stormwater management solutions
- Present financial considerations, recommendations, and next steps
- Solicit public feedback, questions, and comments about the SWM-MP

Display Materials

Participants were encouraged to review display materials and provide feedback and ask questions relating to the following topics:

- SWM MP project context, including the study process and timeline, project need, problem statement, and study goals and objectives
- What we heard through previous engagement activities
- Recommended pollution prevention, operations, and maintenance practices
- Source and conveyance control
- Existing stormwater management facilities
- New end-of-pipe opportunities
- Watercourse and erosion restoration
- Urban flood management and stormwater infrastructure
- Next steps and sample recommendations

What We Heard

The following is a summary of feedback received by participants that attended the Public Open House.

- Participants expressed that they were generally in attendance to learn more about the project.
- Participants expressed concern about the location of the recommended surface facility at Margaret Greene Park.
    - Participants expressed concern about potential impacts to the park, while expressing interest in park improvement opportunities resulting from a stormwater management facility being built.
- Some participants requested information on how Bill 23, the More Homes Built Faster Act, 2022 would impact the SWM-MP project.
- Some participants requested information on how the SWM-MP project recommendations would relate to other City projects, including the Water and Wastewater Servicing Master Plan.
- It was recommended that end-of-pipe opportunities for water cooling be considered to mitigate the negative environmental impact of warm discharges to cold water streams.

Public Feedback Period

Direct Feedback to Project Team

During the public feedback period the project team received one correspondence by phone, where a member of the public requested clarifying information about end-of-pipe facilities and new water quality requirements for roads. The project team did not receive feedback by email during the public feedback period.

Survey

During the public feedback period, two survey responses were received through the Have Your Say webpage's Survey feature. The following is a summary of the online survey feedback:

- Participants expressed that stormwater management is important because Guelph's drinking water supply is ground water.
- Participants indicated that they would be most willing to implement roof downspout connection and tree planting on their property as additional stormwater management measures.
    - A participant noted that they already have two rain barrels at their property.
    - Participants indicated that they are not willing to implement a permeable driveway because it is outside their budget and because their existing driveway has significant remaining lifespan.
- It was recommended that stormwater management has a focus on reducing peak stream-flows downstream of Guelph due to its impacts on riverbank erosion and lateral erosion contributing to trees falling.
- It was recommended that end-of-outfall ponds be considered to support both water quality and water quantity reduction where outfalls drain to large areas.
- It was recommended that developers undertaking major redevelopments of commercial sites be required to implement water quality controls that improve upon existing conditions, rather than only being required to not make conditions worse.
- It was suggested that City data on surface flooding, sewer backups, and water quality issues be publicly disclosed as part of this project's reporting to help determine priorities for action.

Q&A

The questions and comments received through the Have Your Say webpage's Q&A feature, and the responses from the project team are provided blow. Questions are marked by a 'Q', comments are marked by a 'C', and responses are marked by an 'A'.

Q: What are the implications to the master planning process with new development rules coming from Bill 23? My understanding is that environmental protections are lessened to reduce costs for new housing in all areas of the City.

A: The City is currently reviewing the recent Provincial legislation and how it may impact all of the recently completed and ongoing master plans. At this time, it is not anticipated that the legislation would result in changes to the technical work in the Stormwater Management Master Plan, but it may impact the speed at which the plan is desired to be implemented. City Council met on November 22nd to discuss the impacts of Bill 23 and Bill 109 and the Council Agenda can be found here: https://pub-guelph.escribemeetings.com/FileStream.ashx?DocumentId=32291

C: I hope the plan really emphasizes the need for long-term protection from development for the forests, riparian zones, other wetlands, and any non-paved area. I hope this plan will have power to stand against any housing development pressures that may come from private sources or from (potentially) conflicting City of Guelph Planning documents. I know we're mandated to grow, but the best protection for our water is ground and the flora above any technological point-treatments. I hope that the use of land use designation remains a powerful tool.

Q: Will the master plan be doing something about the large volumes of polluted runoff and silt that is entering the Speed River from the storm drain at the stub end of Stone Road? After snow melt and storms the drain outlets into a creek that empties into the speed river. The historical aerial photos on the Grand River Conservation Authority (GRCA) mapping and Google Earth show that the delta has formed in the river over time. Also, the riverbank on the west side is suffering a significant erosion problem from the force and volume of water entering the river from this storm drain. I am surprised that the city has never been charged for releasing such large volumes of polluted water into the Speed River. I could not see in your maps if there is an oil and grit separator at the end of this drain before it enters the river. This pollution is entering the river just upstream of the Hanlon Creek. There are brook trout in this stream that use the Speed River. Please advise how the SWM-MP will deal with this problem? Also, I would like to comment on the problems with awake drainage of stormwater in residential neighbourhoods. What happens in existing neighbourhoods when accessory units are allowed to pave over backyards and cut mature trees to build on the lots? How will the city deal with this runoff from intensification? The swale drainage in my neighbourhood does not work.

A: Thank you for your comment about the outfall at the west end of Stone Road. This outfall drains a part of the city that was built before modern stormwater management practices were a part of new developments. The Stormwater Management Master Plan looked for opportunities to increase stormwater treatment in areas of the city like this one. The Master Plan is therefore recommending the following:

- A new subsurface stormwater facility in Oak Street Park, located at the eastern end of the catchment draining to the Stone Road outfall.
- Requiring new construction, including road reconstruction, to provide 5mm of volume control. Volume control is generally implemented through low impact development (LID). LID helps to filter and slow down stormwater, reducing peak flows and erosion, and making it cleaner before it is released into the Speed River.

Unfortunately, due to the size of the storm sewer, it is not feasible to install an Oil and Grit Separator at the outfall to the Speed River. Instead, these units would have to be installed throughout the catchment. There are already 4 OGS units in the catchment, and it is expected that more will be installed as a result of the volume control requirement, where LIDs are found not to be feasible. Volume control will also help to address the second issue you raise regarding intensification in already-built neighbourhoods. The Master Plan is proposing that for *"redevelopment, infill development, intensification, or adaptive re-use without restrictions, stormwater runoff volumes will be controlled, and the post-construction runoff volume shall be retained on site for runoff that is generated from the first 5mm of rainfall from all surfaces on the entire site."* This will help to reduce the pressures on the existing stormwater infrastructure in these neighbourhoods.

Next Steps

Feedback from the Public Open House and Have Your Say will be used by the City and its consultants to inform the development of the preferred stormwater management strategy and implementation plan. The completed SWM-MP is expected to be presented to City Council on April 4th, 2023.

Welcome

to the

Public Open House for the
City of Guelph Stormwater Management Master Plan

November 29, 2022

Stormwater Management Master Plan Study Process and Timeline

Where are we in the study process and **when** will you see us next?

What is the Municipal Class Environmental Assessment (MCEA)?

The MCEA helps plan municipal infrastructure while protecting the environment. It provides:

- an efficient way for the City to provide municipal services which is economically and environmentally responsible;
- a process that is consistent and easily understood to help plan and complete infrastructure projects; and
- the flexibility to take into account local concerns, such as the environmental setting, public interests, and project needs.

This study follows the requirements for master plans under Approach #2. This approach fulfills all the MCEA requirements for Schedule B projects. It also identifies any Schedule C projects for future studies.

Study Process

Previous Open House September 2020

We Are Here November 2022

Study Completion Spring 2023

Stage 1

- Review background information and identify data gaps
- Define existing conditions
- Identify the problem and opportunity
- Identify study goals and objectives
- Develop long list of alternatives

Stage 2

- Fulfill data gaps (field work)
- Develop and evaluate alternative management strategies
- Develop a short list of alternatives
- Selection of preferred alternatives

Stage 3

- Describe preferred stormwater management strategy
- Develop an implementation plan

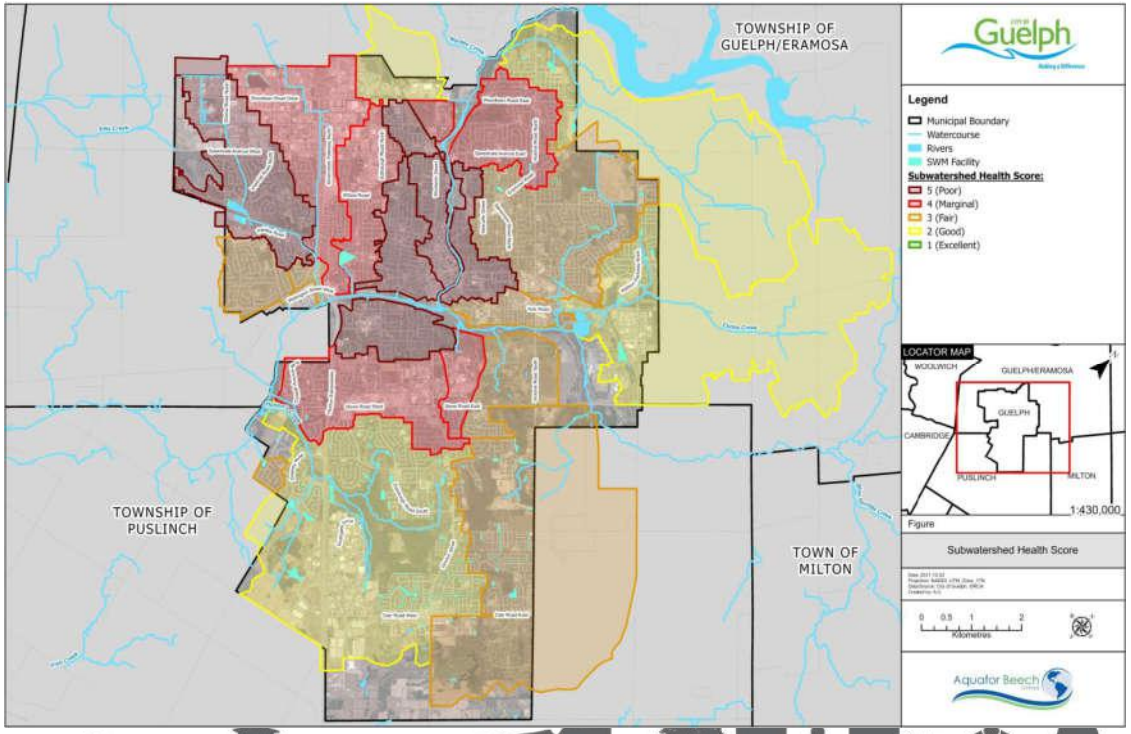
Stormwater Management Master Plan Project Need

The last Stormwater Management Master Plan (SWM-MP) was completed in 2012. Updates are now needed for four reasons:

1. Subwatershed health: Subwatershed health was largely unknown or was outdated. The 2022 SWM-MP evaluated terrestrial ecology, aquatic ecology, stormwater management, and erosion control to identify which subwatersheds of the city of Guelph are in poor health. This will help prioritize projects in the Implementation Plan.

2. Infrastructure deficiencies: Many infrastructure deficiencies were identified in the 2012 SWM-MP, and others were identified since then. Results from the 2022 SWM-MP identified the following issues:

- Computer modeling shows that 41 per cent of the City's storm sewers are undersized. Future development and climate change could increase this to 59 per cent without additional actions.
- Inspections of stormwater management facilities found that 9 are in poor condition which could lead to a high risk of significant financial, environmental, or health and safety costs under significant rainfall events.
- 37 per cent of stormwater management facilities don't achieve Enhanced water quality treatment.



3. New policies: The new SWM-MP considers the following policy updates:

- The Province of Ontario is requiring a new Consolidated Linear Infrastructure Environmental Compliance Approval (CLI ECA) for municipal stormwater management systems. Volume control is a key component of the CLI ECA to help improve water quality, reduce erosion, and maintain the natural water balance.
- The Province is also close to releasing the new Low Impact Development Stormwater Management Guidance Manual.

4. Climate change: Modeled increases in high-intensity rain events, including those used for design purposes, could result in more flooding events. The City has committed to addressing climate change policies throughout the Official Plan. This includes protection of the natural heritage and water resource systems, resilient infrastructure that increases urban vegetation, and preparing for extreme weather events. The SWM-MP reflects these commitments.

Stormwater Management Master Plan Problem Statement

Problem statement

We're updating the 2012 Stormwater Management Master Plan to ensure stormwater (rainwater) is sustainably managed in a way that helps protect Guelph's water supply and environment. The master plan looks at how the City is currently managing stormwater and guides how we will continue to do so now until 2051. It will take into account government legislation; technological advances and infrastructure needs; and address issues we face today like flood control, maintaining the quality of our local waterways (rivers, lakes and streams) and drinking water supply (groundwater), and the overall environment.

Stormwater Management Master Plan Study Goals and Objectives

Study goals and objectives

The main goal of the study is to provide the City with a preferred SWM strategy to identify, protect and enhance natural features, ecological functions and biophysical integrity. The plan will establish SWM policy and guidelines, address stormwater infrastructure, and identify and prioritize identified works.

Water quality
- Improve surface water quality
- Maintain or enhance the quality of drinking water sources

Water quantity
- Minimize the threat to life and property from flooding
- Preserve the hydrologic cycle and maintain or enhance groundwater supplies through infiltration

Erosion control
- Reduce the impacts of excessive erosion on aquatic and terrestrial habitats and property
- Identify stream erosion issues and integrate within a master planning process

Natural environment
- Protect, enhance and restore natural features
- Improve habitat resiliency resulting from climate change

Water resources sustainability
- Integrate the management of stormwater and drinking water
- Improve infrastructure resiliency and climate change adaption

Infrastructure
- Provide a level of service to ensure infrastructure functions effectively
- Encourage the implementation of innovative solutions to mitigate the impacts of stormwater runoff

Policy and implementation
- Reflect regulation development
- Fill gaps in existing stormwater planning documents
- Integration of asset management plans for stormwater, which include long-range financial forecast and planning direction

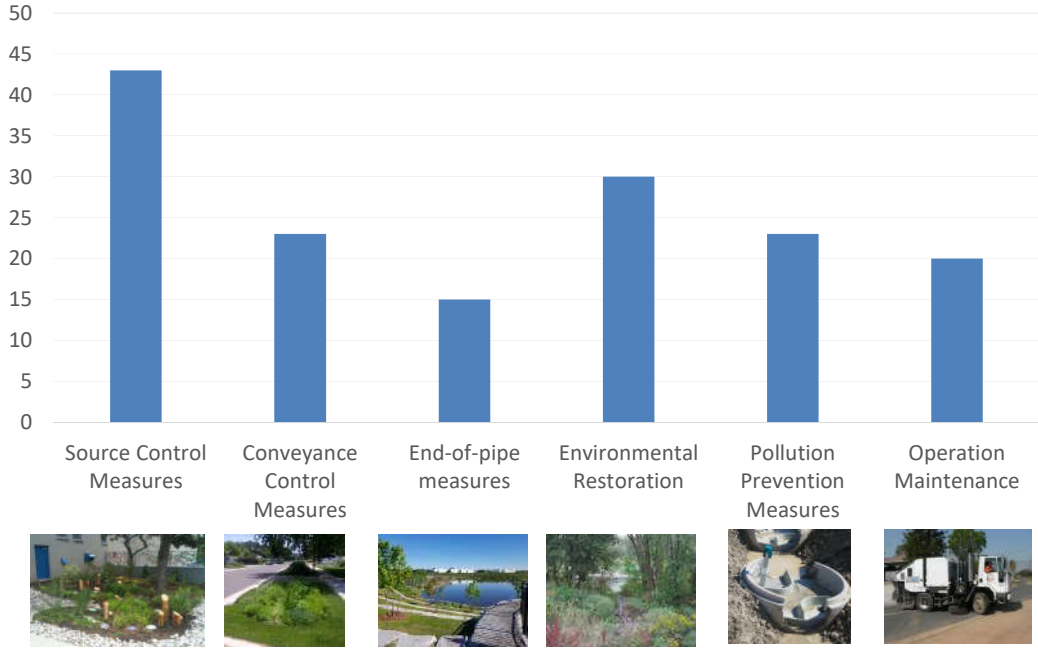
Community
- Improve stormwater education resources and programs
- Enhance the enrolment in the stormwater credit program

Stormwater Management Master Plan What We Heard Through Engagement

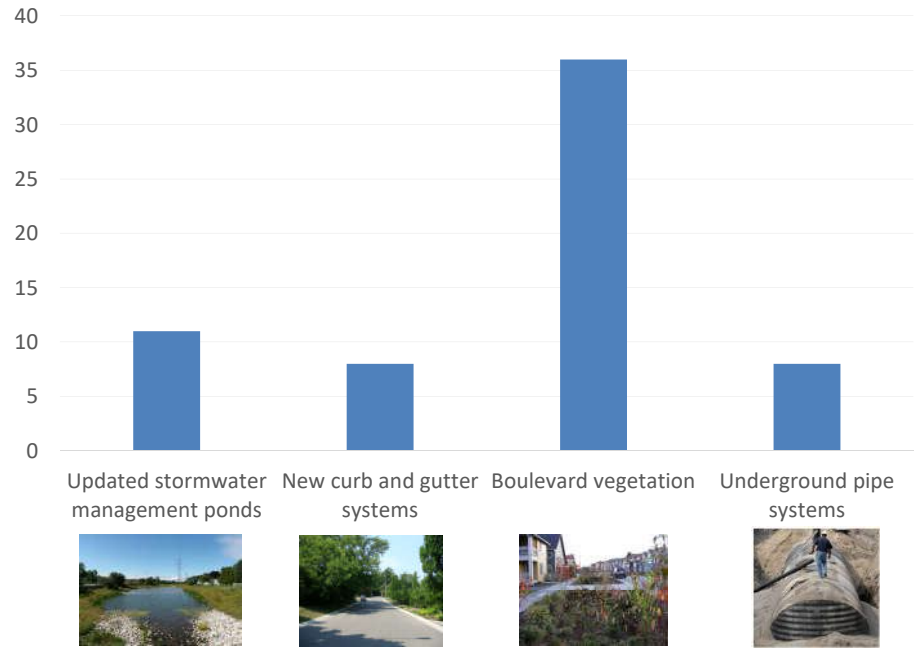
Public feedback

The City of Guelph hosted an online survey and mapping exercise in 2020 and three pop-up engagements in 2022. In total, 20 people engaged in the online survey or map, and 142 participants were engaged in the pop-up engagements, with 108 providing input. Participants were asked about top stormwater management practices they would like to see addressed, as well as top stormwater management solutions that they would like to see in Guelph.

Top stormwater management practices you would like to see addressed in the updated Stormwater Management Master Plan



Top stormwater management solutions that you would like to see in Guelph



Master Planning

Stormwater Management Master Plan

Recommended Pollution Prevention, Operations and Maintenance Practices

Pollution Prevention, Municipal Management and Operational Practices are important to prevent pollutants from impacting the environment and to maintain effective stormwater infrastructure. The study explored approaches to manage pollutants and sediment within the City's stormwater management infrastructure in the most cost-effective manner. The following study and resulting recommended works were completed following Schedule A/A+ of Municipal Class EA process, and are pre-approved.

Oil and grit separator cleanouts

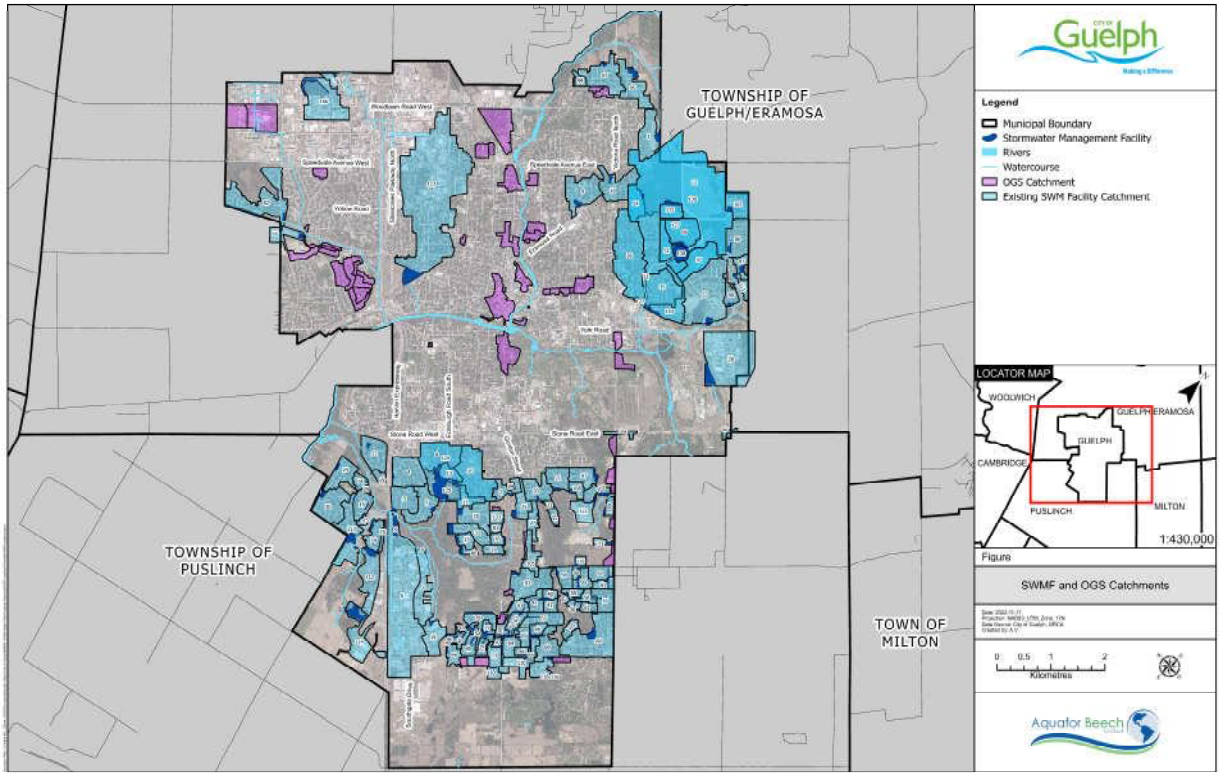
Oil and grit separator (OGS) units are designed to capture sediment from the storm sewer network prior to stormwater being discharged. The City of Guelph is responsible for the operation and maintenance of 150 OGS units in the City. It is recommended to remove sediment from up to 55 OGS units per year based on sediment accumulation rates in each unit.

Stormwater management facility cleanouts

Stormwater management facilities (SWMF) may be designed to remove sediment from the storm sewer network before being discharged. The City of Guelph is responsible for the operation and maintenance of SWMF. To make sure the facilities function properly, sediment needs to be removed sometimes. Previous studies found that 11 facilities need to be cleaned out.

Other Opportunities and Existing Practices

- Catch basin cleaning
- Street sweeping
- Erosion and sediment control at construction sites
- Leaf pick-up and removal
- Public education
- Business education and awareness
- Yellow Fish Road program



Cost of Recommended Sediment Removal Works		
	Number of facilities	Cost ($)
SWMF Sediment Removal	11	$1.59 Million (total)
OGS Sediment Removal	55	$76,800 per year

Stormwater Management Master Plan Source and Conveyance Control

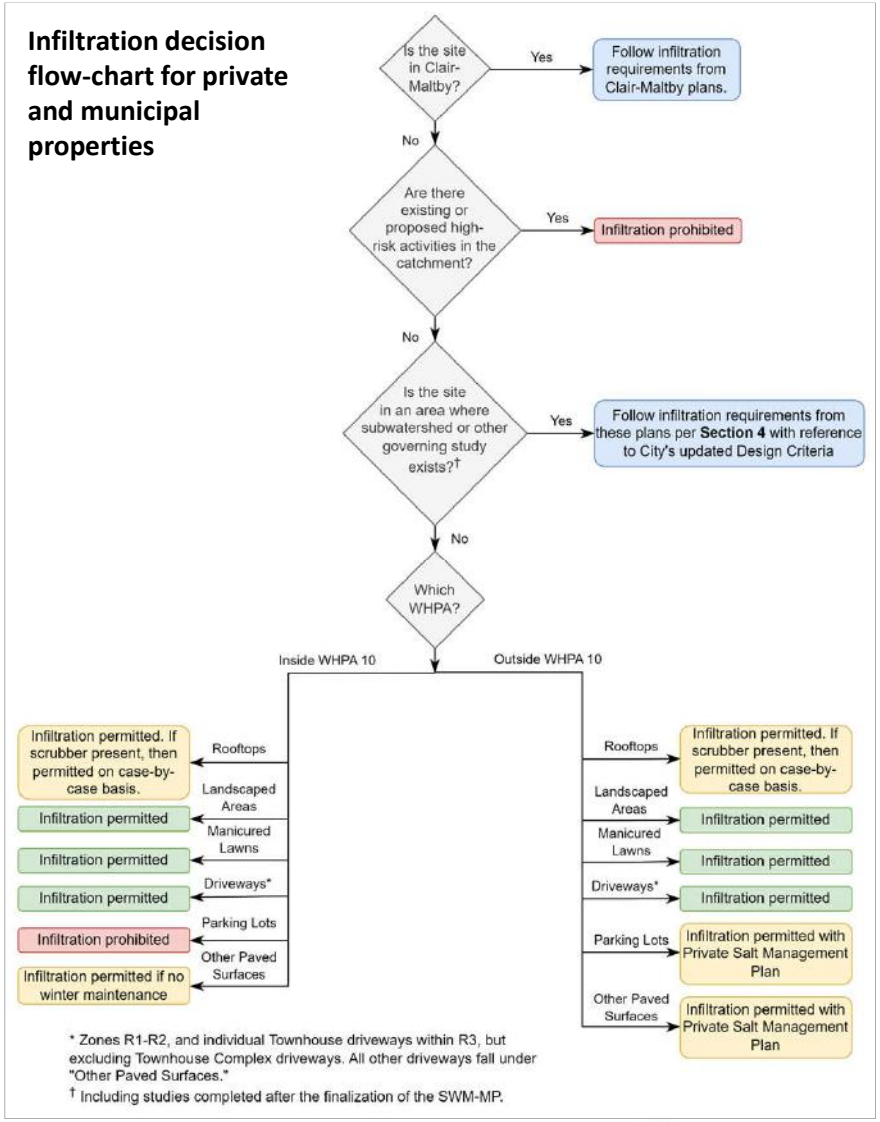
Source control measures: Source controls are physical measures that retain runoff and encourage the infiltration of water into the ground. Source control measures can include techniques such as green roofs, permeable pavement, soakaway pits, rain garden (bioretention), rainwater harvesting and downspout disconnection, etc.

Conveyance control measures: Conveyance controls are linear stormwater transport systems that are generally located adjacent to roadways. They encourage infiltration of water into the ground, improve water quality and reduce runoff. They can include traditional curb and gutter systems and techniques such as bioswales, grassed channels and subsurface perforated pipe systems.

Groundwater protection (Infiltration Policy)

Infiltration facilities can reduce runoff and restore natural hydrologic processes. These processes are important for the Natural Heritage System and water bodies, protecting stormwater infrastructure, and climate change adaptation and mitigation. An infiltration policy was developed to identify where and how stormwater can be safely infiltrated in the City. This policy is based on the Grand River Source Protection Plan. The policy intent is to protect local groundwater resources, not to identify opportunities for groundwater recharge.

Infiltration decision flow-chart for private and municipal properties



Stormwater Management Master Plan

Existing Stormwater Management Facilities

Stormwater management facility assessments

The SWM-MP assessed the City of Guelph's stormwater infrastructure. This involved examining the design and capacity of existing SWM facilities, and identified facilities that may be under capacity. Of the 27 facilities analyzed, 37 per cent do not achieve an enhanced permanent pool volume target, and 26 per cent have an insufficient extended detention storage volume. In addition, 41 facilities were inspected to identify physical deficiencies. Recommendations included retrofits of 48 facilities at a cost of $78.21 million.

Example physical deficiencies

Outlet pipe about 95% submerged in water

Infiltration facility with high levels of standing water

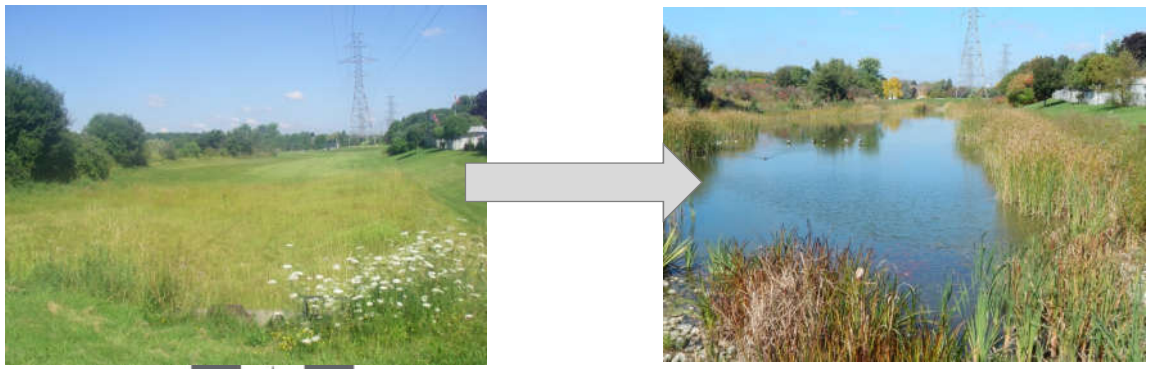
Dry pond basin with invasive Phragmites plants

Side slope missing vegetation

Cracking concrete spillway structure

Example retrofit

This facility is now able to improve water quality and is sized appropriately for its catchment.

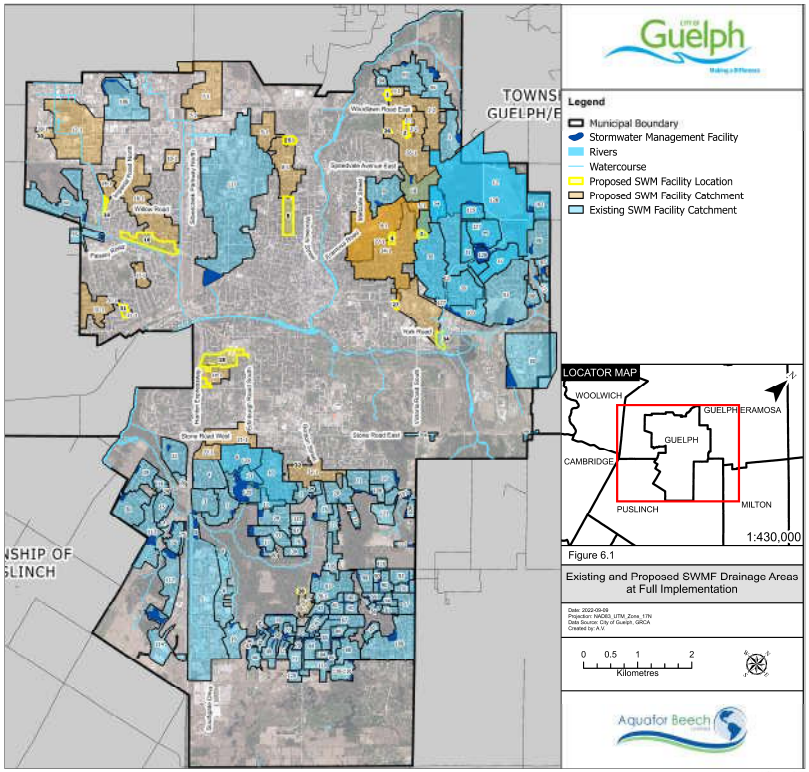


Stormwater Management Master Plan

Stormwater Management Facilities

New end-of-pipe opportunities

Approximately 53 per cent of the City of Guelph's urban area does not have any form of water quality or quantity control. The SWM-MP identified 16 feasible sites for new SWM facilities. Three (3) different facility types are proposed at these locations, including subsurface storage facility, surface facility, and Low Impact Development. These proposed facilities would increase the percentage of Guelph's built-up urban area under SWM control to 57 per cent, an increase of 22 per cent.



Recommended Facilities and Costs		
Site ID	**Location Name**	**Recommended Facility Type**
1	Golfview Park	Subsurface
2	Waverley Park	Subsurface
3	Victoria Road Recreation Centre	Subsurface
4	Green Meadows Park	Subsurface
5	Bailey Park	Subsurface
8	Exhibition Park	Subsurface
14	Dunhill Place Park	Subsurface
16	Margaret Greene Park	Surface
18	Centennial Park	Subsurface
26	L-13 Windsor Park	Subsurface
27	Stevenson / Guelph Junction Railway	Surface
28	Dawn Avenue	Low Impact Development
30	606 Massey Road	Surface
31	Springdale Park	Subsurface
32	Oak Street Park	Subsurface
34	End of Industrial Street	Surface
Total Cost		**$56.77-$80.65**

Stormwater Management Master Plan

Watercourse and Erosion Restoration

Overview of work

The watercourse and river conditions were assessed within the city of Guelph limits. This included documenting erosion sites, assessing the existing conditions of the stream reaches, classifying channel stability, and identification of watercourse restoration opportunities. 30 erosion sites were identified and classified as first-order groups of individual or composite erosion sites.

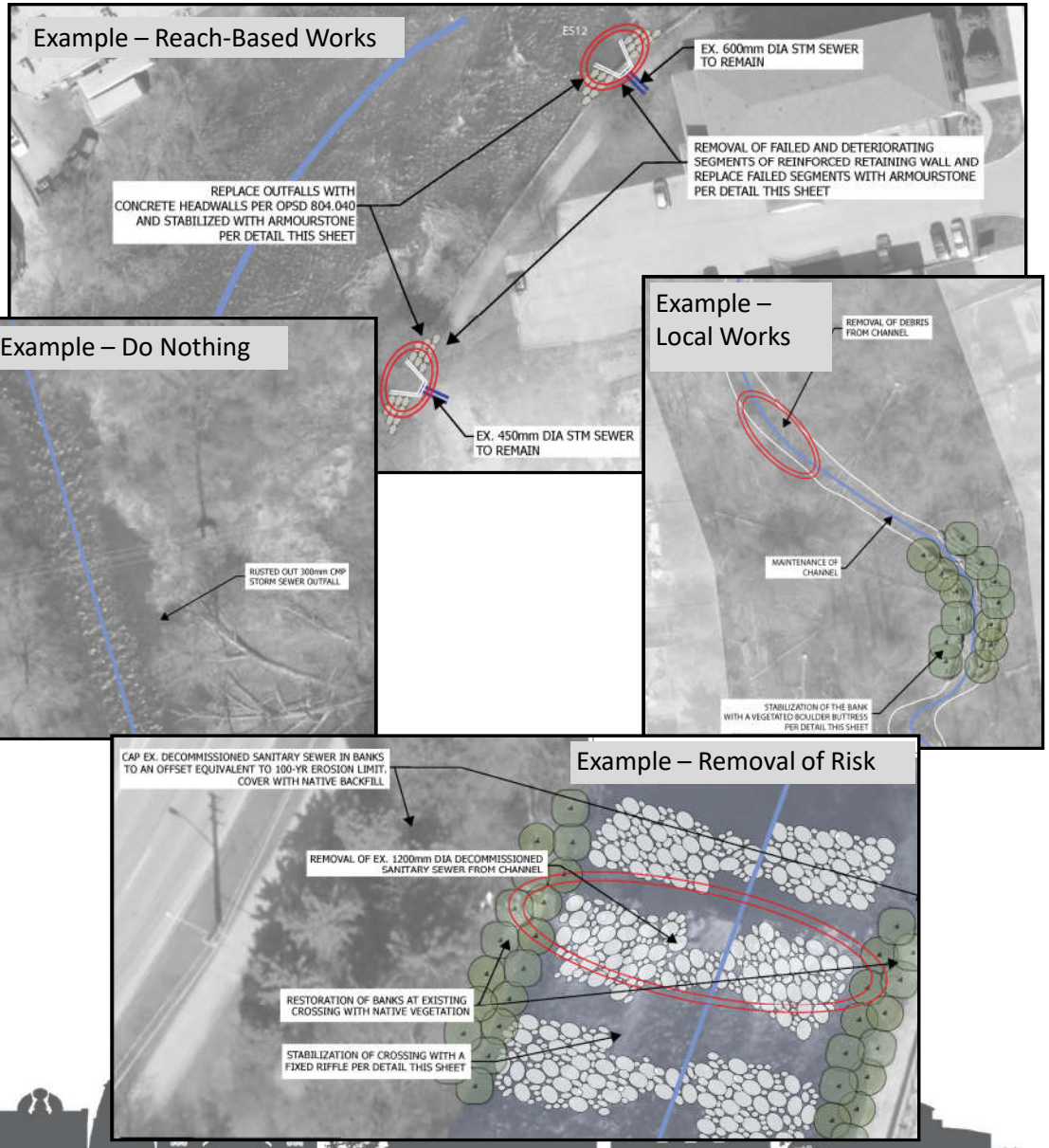
Options/alternatives evaluation

Each erosion site was evaluated for 4 different alternatives using City-approved environmental, social, economic, and technical criteria. These criteria considered how the project will affect the environment and the surrounding community.

1. **Do nothing** (2 sites) - This option is mandatory in the Class EA process. It forms the basis of comparison against all other options to determine whether the solutions provide better outcomes than leaving the site alone.
2. **Local works** (16 sites) - stream restoration works occur at strategic locations to limit the impact of existing erosion.
3. **Reach based works** (3 sites) - Local works would not address erosion risk at its current location or would transfer those effects of erosion up and/or downstream within the reach.
4. **Removal of risk** (4 sites) - The cause of risk (i.e., infrastructure) would be moved away from the channel.

Costs

To complete the preferred alternative on each site is estimated to cost $8.9-$11.3 million.



Stormwater Management Master Plan

Urban Flood Management and Stormwater Infrastructure

Stormwater infrastructure model

A computer model of the City of Guelph's stormwater infrastructure was created to include stormwater ponds and all storm sewers greater than 250mm. The model was run with a variety of criteria and scenarios:

1. Existing conditions;
2. Intensification;
3. Intensification and climate change;
4. Upsizing select storm sewers and implementing new stormwater facilities;
5. Applying 28mm of volume control across the entire city;
6. Applying 5mm of volume control across the entire city; and
7. Applying 14mm of volume control across the entire city.

Existing conditions

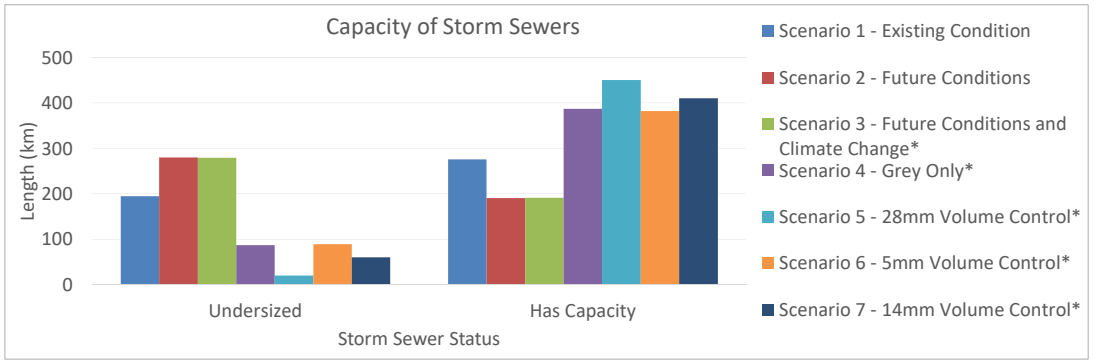
The City of Guelph's storm sewers are required to convey a 1:5 year storm event. However, 41 per cent of pipes are undersized during the 1:5 year storm. For major storm events (1:100) the City's right-of-way (ROW) was evaluated. Less than 1 per cent of the City's ROW had flow depths exceeding 0.3m, therefore indicating a small portion is deficient in their service criteria.

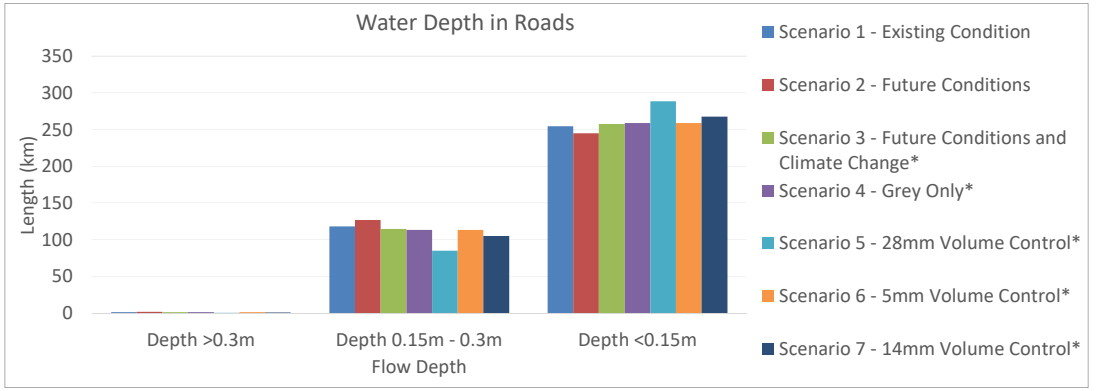
Future scenarios – Intensification and climate change

Intensification due to new construction in already-developed neighbourhoods resulted in an additional 43 per cent of storm sewers being undersized than during existing conditions, resulting in 59 per cent of the City's storm sewers being undersized. This means system upgrades may be required to accommodate the proposed intensification.

Future scenarios – Summary

- Scenario 4 - Upsizing select storm sewers and implementing new stormwater facilities reduced undersized storm sewers by 69 per cent.
- Scenario 5 – 28mm of volume control reduced undersized storm sewers by 93 per cent.
- Scenario 6 – 5mm of volume control reduced undersized storm sewers by 68 per cent.
- Scenario 7 – 15mm of volume control reduced undersized storm sewers by 78 per cent.



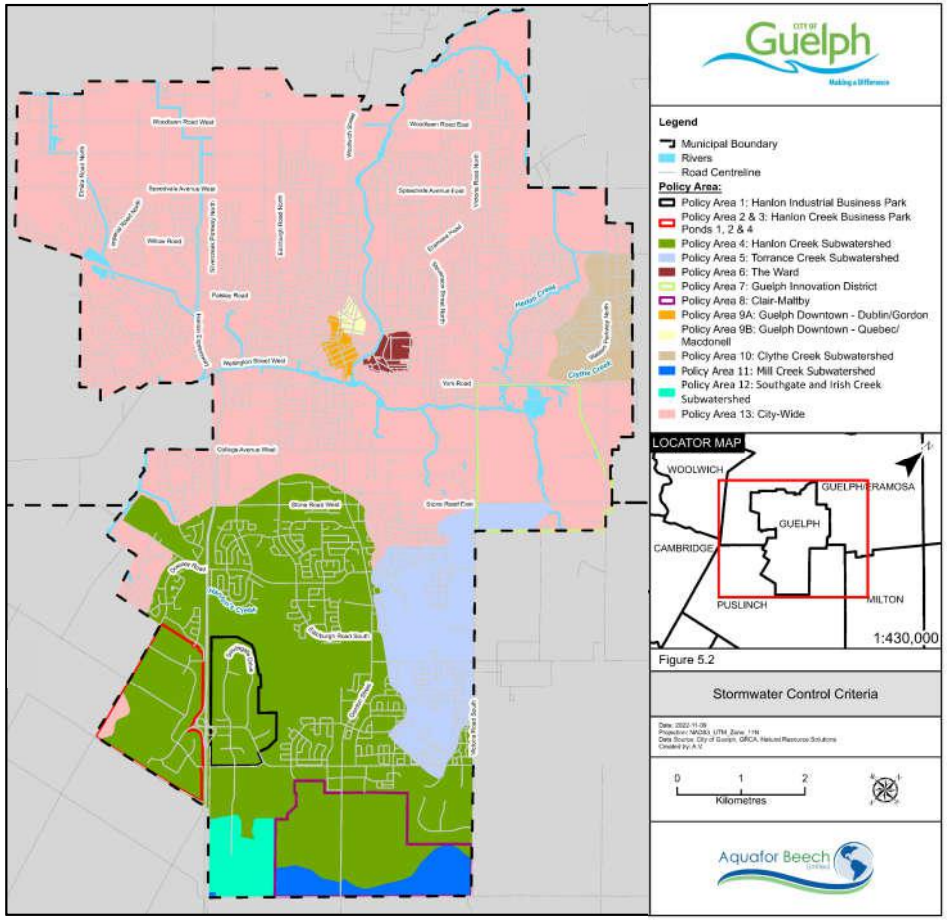


* Scenario was based on future conditions and climate change

Stormwater management criteria – infiltration and water balance

The City of Guelph's existing stormwater management criteria were consolidated and evaluated and new criteria recommended (bold) for implementation. This filled in gaps in the existing criteria, and updated some criteria to reflect modern practices. Note that criteria presented below have been simplified for discussion purposes. The full set of criteria are presented in the Stormwater Design Criteria and Targets report (November 2022).

Policy Area	Infiltration/ Water Balance Criteria
1: Hanlon Industrial Business Park	Recharge Volume (acre feet) = 5-year peak flow (ft^3/s) x 0.035
2: HCBP Pond 1	Block-by-block recharge rates to be met
3: HCBP Pond 2 and 4	Block-by-block recharge rates to be met
4: Hanlon Creek Subwatershed	• Generally, no runoff to Tributary E or F headwaters • Areas adjacent to Clair Road can drain into greenway system of Upper Hanlon • Areas south of Clair Road but isolated from direct outlet must rely on infiltration/evaporation • Remaining areas per Policy Area 13 (City-Wide)
5: Torrance Creek Subwatershed	• Zone 1: Infiltrate all runoff from 1:100 year event • Zone 2 and 3: Infiltration target of between 100 and 150mm/year
6: Downtown – The Ward	**Per Policy Area 13 (City-Wide)**
7: Guelph Innovation District	27mm capture in infiltration LID BMPs
8: Clair-Maltby	20mm captured within LID BMPs
9A: Downtown – Dublin/Gordon	**Per Policy Area 13 (City-Wide)**
9B: Downtown – Quebec/Macdonell	
10: Clythe Creek Subwatershed	**Per Policy Area 13 (City-Wide) or as updated per the pending Clythe Creek Subwatershed Update**
11: Mill Creek Subwatershed	Maintain existing recharge and discharge characteristics
12: Southgate and Irish creek	• Minimum groundwater recharge target of 300mm/yr • Maintain quantity and proportion of runoff to Wetlands B and E • Maintain runoff quantities to Wetlands A-H
13: City-Wide	• Maintain predevelopment recharge rate, volume and hydroperiods at post-development conditions • **Provide a minimum of 5mm of volume control**



Stormwater Management Master Plan

Urban Flood Management and Stormwater Infrastructure

Stormwater management criteria – water quality and quantity control

The City of Guelph's existing stormwater management criteria were consolidated and evaluated and new criteria recommended (bold) for implementation. This filled in gaps in the existing criteria, and updated some criteria to reflect modern practices. Note that criteria presented below have been simplified for discussion purposes. The full set of criteria are presented in the Stormwater Design Criteria and Targets report (November 2022). Please see map on previous board for policy area locations.

Erosion control criteria:

- To provide erosion control, all policy areas should provide extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours or control the 90th percentile event.

Water quality criteria:

- Enhanced water quality treatment includes removing 80 per cent of total suspended solids, which should be achieved in all policy areas. Low impact development quality treatment is required in Policy Area 8.
- If discharging to a cool or cold water stream, then measures should be implemented to cool stormwater or prevent it from heating up (Policy Areas 4, 6, 7, 8, 9, 10, 11, and 13)

Water quantity criteria:

- Pre-development discharge rates must be met in post-development conditions in Policy Areas 1, 2, 3, 4, 5, 6, 9, 10, and 13.
- All runoff from the Regional storm must be captured and infiltrated in Policy Areas 8, 11 and 12.
- Target discharge rates have also been set for Policy Areas 1, 3, and 7.

Erosion caused by water being released too quickly from a stormwater facility

Before and after images of water treated by a low impact development facility

Urbanization generally increases runoff which can result in flooding

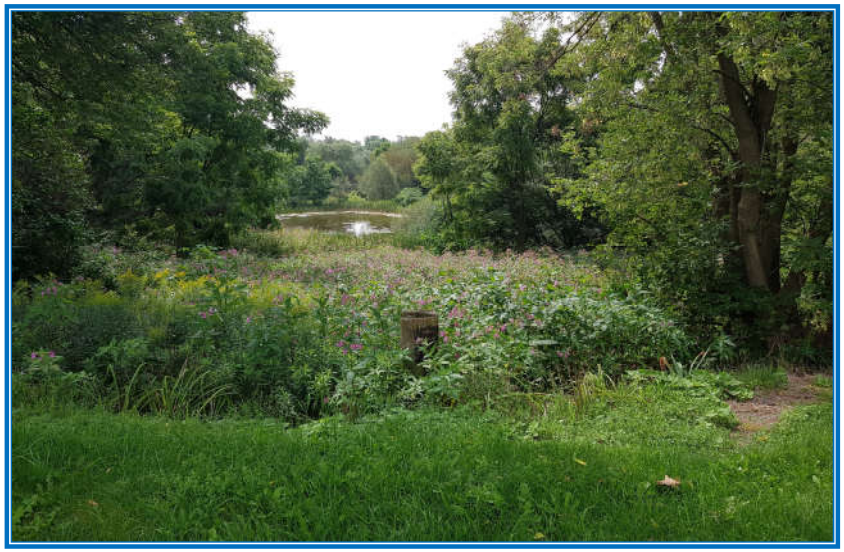
Next Steps

Sample recommendations

1. That the City update their policies, manuals and guidelines to align with the recommendations of the SWM-MP technical reports.
2. That the City take the cost estimates from the SWM-MP and apply them in the ongoing rate study. Updating the Stormwater Service Fee will generate a sustainable income for maintaining and constructing the City's stormwater infrastructure.
3. That the City apply the recommendations of the SWM-MP as part of other city initiatives, plans, studies and programs to leverage potential synergies as the opportunities.
4. That the City integrate source and conveyance control SWM practices into road construction and reconstruction projects.
5. That the City monitor key storm sewer locations to calibrate the computer model. The model calibration will permit the City to better evaluate options to improve the level of service.
6. That the City add required staffing to support implementation of the SWM-MP.

Stormwater Management Master Plan Contact Information

Have Your Say!



Colleen Gammie, P. Eng.
Infrastructure Planning Engineer
Design and Construction, Engineering and Transportation Services
City of Guelph
E-mail: colleen.gammie@guelph.ca
Phone: 519-822-1260 extension 2282

Chris Denich, P.Eng.
Consultant Project Manager
Aquafor Beech Limited
E-mail: denich.c@aquaforbeech.com
Phone: 647-993-2267

Thank you for participating

Appendix T.7: Accessibility Committee Meeting

Stormwater Management Master Plan and Accessible Surfaces

Colleen Gammie

2022-10-18

Agenda

- Brief overview of Stormwater Management Master Plan and accessible surfaces
- What feedback are we looking for?
- What will we do with your feedback?

Stormwater Master Plan - Overview

- Environmental Assessment
- Scope:
  - Level of service across the City for Stormwater Management
  - Road Right-of-Ways
- Policy review
- Capital Implementation Plan with projects to 2051 and policy changes

What feedback are we looking for?

- Feedback on accessibility and Low Impact Development Best Management Practices for our road Right-of-Ways

What will we do with your feedback?

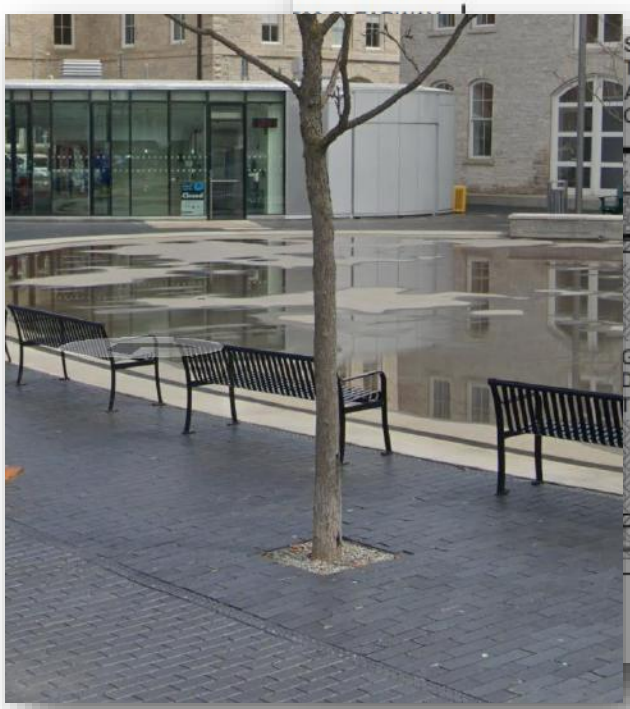
- Collate and include in Stormwater Management Master Plan document
- Provide to Complete Streets Design Team for consideration

What is a Low Impact Development Best Management Practice (LID BMP)?

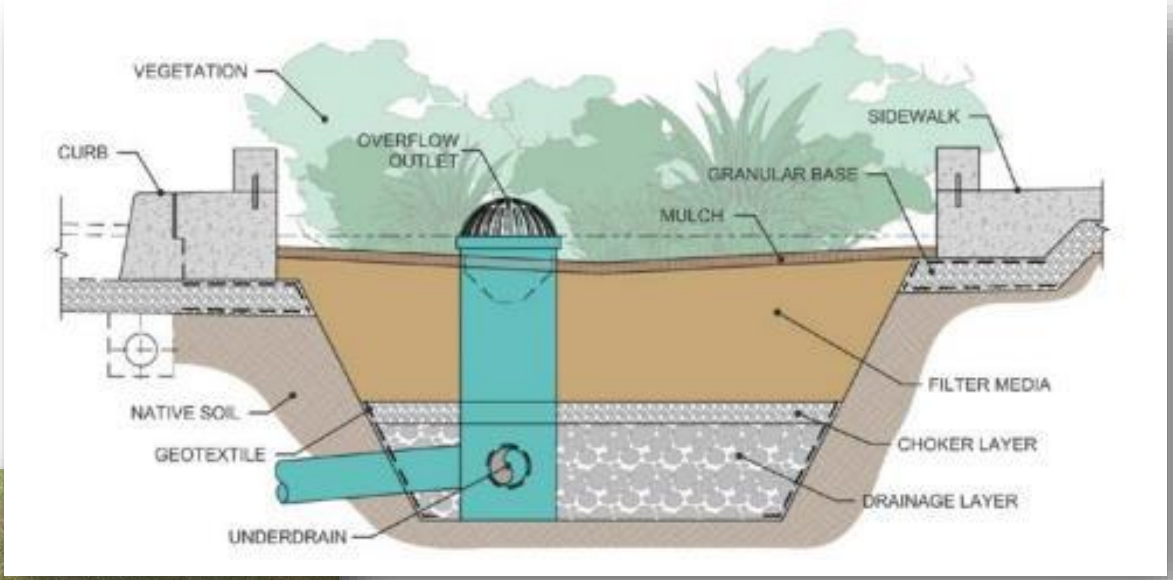
- Source control for runoff
- Conveyance alternatives to pipes
- Part of treatment train

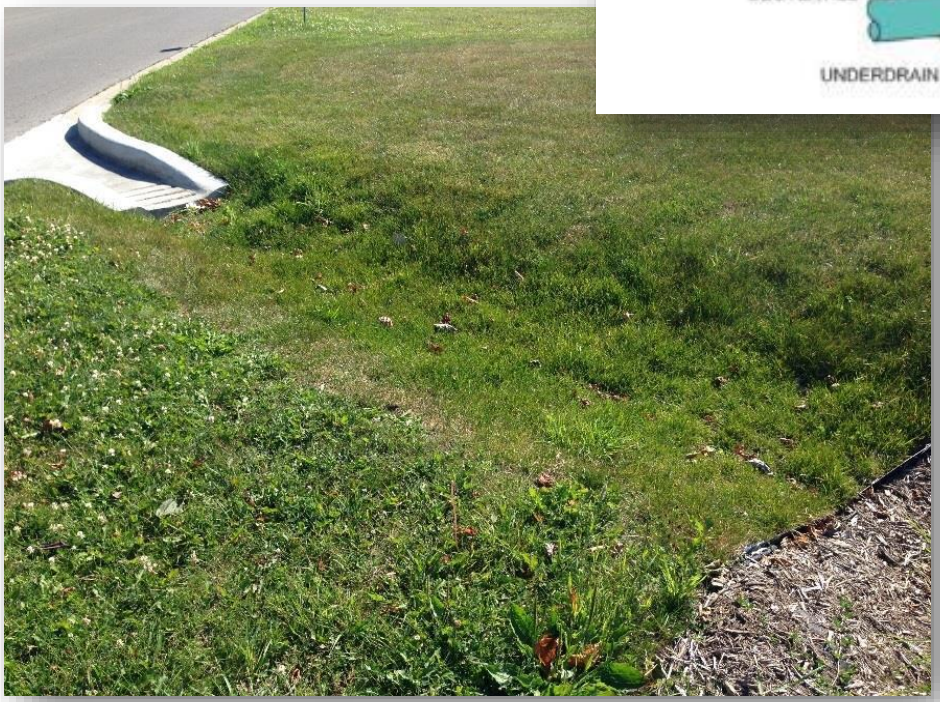
Bioretention

Street Trees with Soil Cells



Swales


VEGETATION
CURB
OVERFLOW OUTLET
SIDEWALK
GRANULAR BASE
MULCH
FILTER MEDIA
NATIVE SOIL
GEOTEXTILE
CHOKER LAYER
DRAINAGE LAYER
UNDERDRAIN



Outdated Permeable Pavers

Permeable Pavement

- Permeable Interlocking Pavers
- Porous Asphalt
- Pervious Concrete

Next Steps

- Include LID BMP options and feedback in Stormwater Management Plan
- Stormwater Management Plan becomes part of the Complete Streets Design Guideline (CSDG)
- CSDG Team return to AAC in 2023 for engagement

Feedback and closing remarks

Meeting Minutes

City of Guelph Accessibility Advisory Committee (AAC)

Tuesday, October 18, 2022

Remote meeting through Microsoft Teams

In-person meeting available in Meeting Room B at Guelph City Hall

From 3:00 to 5:00 p.m.

Meeting Chair: Lorelei Root

Meeting Vice-Chair: Mike Greer

Members in attendance: Lorelei Root, Mike Greer, Deborah Stienstra, Edgar (Ted) Stevens, Bryan McPherson, Malcolm McLeod, Donna McMurdo (joined at 3:23), Erin Caton (joined at 3:48)

Staff: Sarah Cunneyworth (Accessibility), Leanne Warren (Accessibility), Colleen Gammie (Engineering and Transportation Services), Glen Lombard (Strategic Communication and Corporate Engagement), Heather Granger (Recreation), Liraz Fridman (Engineering and Transportation Services), Paul Hutchison (Engineering and Transportation Services)

Regrets: Lynn Jeaurond, Chris Lytle, Kathy Bietz, Elizabeth Lowenger

Agenda Items:

Welcome to all.

Territorial Acknowledgement was read by Chair.

Item 1, 2 and 3

Item 1: Approval of the Agenda

Motion to approve: Mike

Seconded: Malcolm

Carried

Item 2: Declaration of Conflict of Interest – None heard

Item 3: Approval of Minutes of August 16, 2022

Motion to approve: Deborah

Seconded: Mike

Carried

Item 4

Stormwater Management Master Plan - Low Impact Development – **For Discussion** – Colleen Gammie – Infrastructure Planning Engineer, Engineering and Transportation Services

Colleen presented a brief overview of the Stormwater Management Master Plan and Low Impact Development Best Management Practices s (LID BMP) for rights-of-way areas throughout the city.

- A LID BMP can be a source control for water runoff, conveyance alternatives to pipes and/or part of a treatment train.

- Types of LID BMPs include:
    - Bioretention
    - Street trees with soil cells
    - Swales
    - Permeable surfaces such as permeable interlocking pavers, porous asphalt, and pervious concrete

Colleen asked the AAC for feedback related to accessibility regarding the various LID BMPs that were introduced. Feedback gathered will be included in the Stormwater Management Master Plan document and will also be provided to the Complete Streets Design Team for consideration.

AAC members provided the following feedback:

- Recommend that a plan be in place to ensure that the root system of street trees with soil cells doesn't cause any buckling in the sidewalk or pedestrian routes.
- Bioretention planters in a boulevard with raised curbs around them can create a barrier and make it difficult for people to pick up after their service animal.
- Interlocking pavers can be a barrier because of the gaps between pavers and/or chamfered edged.
- Recommended the bioretention cells at Kitchener City Hall as an example of this planting method done properly

The AAC look forward to learning more as this project progresses.

Item 5

Review of Draft Community Engagement Compensation Policy – **For Discussion** – Glen Lombard – Manager, Community Engagement, Corporate Communications

Glen returned to the AAC to present the draft Community Engagement Honourarium Policy and what led the City to develop this policy.

Through his presentation, Glen described when an honourarium would and would not be appropriate, as well as information about:

- How compensation rates relate to the amount of participation,
- How compensation will be paid; and
- That income tax implications will be taken into consideration and result in a variety of honourarium tender (example could be a gift card).

Glen asked the AAC for feedback related to the information presented, and for suggestions for improvements to the draft policy.

AAC members provided the following feedback:

- From an equity lens, should the compensation rates include direct costs such as transit, parking, and dependent care
- Concern that advisory committee members and other City volunteers will be asked to participate in engagement rather than seeking out and compensating members of the public for engagement
- Consider compensating trauma support for participants who are sharing information that is triggering to them, more specifically participants of marginalized communities
- Agreed with Glen that income tax implications are an important consideration because earning more than $500/year impacts a participant income tax-wise for not only the current year but may also impact the participant's income for the following year.
    - Glen replied that the idea is to determine a rate that considers a variety of things, rather than reimbursing each participant for each expense separately (for example: if a participant takes transit to get to the engagement initiative, there wouldn't be a cash

reimbursement for the transit costs and then also a compensation for their engagement)

- Glen advised that there would be notification given to the participant when the $500 threshold is getting close to allow the participate to decide if they'd like to proceed, knowing that some additional information is needed once the $500 is reached. Additionally, the City does not have to report anything to the CRA so long as it is below $500 per person, per year.
- Glen replied that participants do get a choice of how to receive the compensation. They can choose cheque, cash or a suite of gift card options.

Item 6

Sledge Access Project – **For Information**– Heather Granger – Recreation Coordinator, Inclusion

Heather purchased 6 sledges to increase accessibility for people who require an adapted skating device. The purchase of these sledges, along with how to access them will be promoted. The promotion will focus on increasing awareness and details about this opportunity for individuals to try the sledges for recreational skating and sledge hockey.

The sledges will be available at the West End Community Centre public skates beginning in January 2023.

- Customers can request a sledge during any public skate at the front desk or through registration online 72 hours prior to any public skate
- Sledges will be inspected and monitored by the Inclusion Coordinator
- Based on usage patterns, hope to expand to offer sledges at all arenas with public skates

Starting in January 2023, dedicated sledge hockey stick and puck will be offered in partnership with Woolwich Thrashers Sledge Hockey and the Upper Grand District School Board.

- Participants can bring their own sledge or reserve a City of Guelph sledge

The AAC provided the following recommendations:

- Encourage having a staff person be available to give instructions to those who are using the equipment for the first time. This could include offering opportunities to try a sledge with assistance
- Reach out to resources like ParaSport Ontario to host information sessions
- Connect with community resources including Guelph Mobility to help coordinate people arriving on time if this increases demand

Heather invited AAC members to connect with her with any additional feedback and ideas. Heather can be reached at heather.granger@guelph.ca or 519-822-1260 extension 2701.

Item 7

Vehicle For Hire Program Funds Allocation – **For Recommendation** – Sarah Cunneyworth – Accessibility Coordinator

As a follow up to the August AAC meeting, Sarah informed the AAC of the current Vehicle for Hire Program and reminded the AAC that they will make a recommendation for how the program funds should be allocated. The AAC could recommend that the funds be allocated to one or multiple initiatives.

Sarah talked about the idea of a partnership with the March of Dimes Home and Vehicle Modification Program (funded by the Ministry for Seniors and Accessibility). The funds collected through the Vehicle for Hire Program could become another source of funding for the vehicle modification portion of their program for applicants living in the city of Guelph. Sarah told the AAC that she has an upcoming meeting with March of Dimes to explore this potential partnership.

- An AAC member recommended exploring Guelph Wish Fund for Children vehicle modification program as another potential partnership
    - Sarah to follow up with Guelph Wish Fund for Children

The AAC made the following motion:

Motion: To receive the information provided regarding possible ways to allocate funds of the Vehicle for Hire Program and to defer the motion to recommend how funds should be allocated to February 2023 to give time to explore a potential partnership and gather more information from March of Dimes and Guelph Wish Fund for Children.

Motion by: Mike

Seconded: Bryan

Carried

Item 8

Site Plan Internal Review Report

1. General site plan report: number of site plans reviewed to date in 2022 – **For Information** – Lorelei Root – AAC Chair

Lorelei reported that 84 site plans have been reviewed to date in 2022.

Item 9

Committee Business– **For Information** – Lorelei Root – AAC Chair, Mike Greer – AAC Vice-Chair, Sarah Cunneyworth – Accessibility Coordinator

1. 2022 AAC Accomplishments

The Chair listed the following staff engagements during 2022:

- Cycling Network Study: The AAC were engaged early in this project with opportunity to provide feedback, when staff returned for a follow up engagement the AAC felt their feedback was heard
- Guelph's Season Patio Program: From the AAC's 2021 recommendations, an accessibility checklist for inspections, and an education resource on the buying power of people with disabilities, was created by staff and given out with Patio Program applications and published to the City's website
- Elections: The AAC has seen more extensive engagement on this topic in 2022 than in other years because of AAC concerns identified in a 2021 engagement by the Clerk's Office. The AAC struck a sub-committee that worked with Clerk's Office staff. The Clerk's Office prepared feedback opportunities for AAC members specifically for the 2022 Provincial and Municipal elections.
- Upgrades to downtown on-street parking through consultation with the AAC
- Single-Use Plastics Items Ban: the AAC recommended that educational information be given to the public, possibly through businesses and City communications, regarding reducing stigma for people who use straws and that plastic bag alternatives include 2 handles. From the AAC recommendation, Council directed staff.
- Playgrounds: Staff engaged the AAC on the 2022 annual play equipment lifecycle project in July and again in August for their feedback on accessible play equipment, playground surfaces and playground service level
- Community Engagement staff engaged the AAC on the Community Engagement Honourarium Policy.
- Traffic Calming: AAC continued to be informed of traffic calming installations throughout 2022. Staff engaged the AAC to get their feedback on the various traffic calming measures.
- Meeting Format: the hybrid meetings are new and have been going well.

2. Follow up regarding single-use plastics ban delegation to Council

- The AAC Chair delegated to Council on September 14, 2022. She spoke about the five recommendations from the AAC regarding the Federal single-use plastics ban. Council motioned action on the recommendations of the AAC with some slight terminology changes. Council's recommended actions include the City exploring a potential program to provide free or subsidized flexible single-use plastic straws at locations around the City, as well as advocating to the Federal Government on behalf of people with disabilities on the importance of single-use plastic straws. The Chair reported that she was pleased with how this topic has evolved.
    - Sarah advised there is a media release with the specific Council motion available on Guelph.ca.

3. Municipal Election Feedback Survey

- Sarah told the AAC that a link to a feedback survey will be sent out by email to the AAC following this meeting. The survey is like the one sent to the AAC for feedback of the Provincial election. One change to the survey is that only 12 individual submissions will be allowed, as there are currently 12 AAC members.

4. United Nations (UN) International Day of Persons with Disabilities (IDPD) Flag Raising Ceremony by Guelph Barrier Free Committee (GBFC) on December 2, 2022 to recognize December 3.

- Sarah invited the AAC to attend a flag raising ceremony that will be hosted by the Guelph Barrier Free Committee on December 2 at 12:00 p.m. at Guelph City Hall, Market Square to recognize December 3: United Nations (UN) International Day of Persons with Disabilities (IDPD).

Item 10

Traffic Calming Methods Workshop – **For Recommendation** – Liraz Fridman – Transportation Safety Specialist, Engineering and Transportation Services and Paul Hutchison – Supervisor, Traffic Engineering, Engineering and Transportation Services

Liraz started the presentation by noting the purpose of the workshop is to review the City's Traffic Calming Policy and to discuss how and why road safety measures are selected on particular streets through the City.

Further, Vision Zero was adopted in January 2022 as part of the Council approval for the Transportation Master Plan. Vision Zero requires a focus on four pillars: safe roads, safe vehicles, safe drivers and safe roads. Liraz continued by explaining there is a big focus on speed because slower travel speeds save lives – more specifically sources show that for every 1.6 km/h reduction in speed, collisions with pedestrians and vehicles were reduced by 5%. As part of the City's goal towards implementing Vision Zero, equity data is being used to consider where safety improvements could be made rather than relying solely on residents' requests as previously done.

Liraz added that traffic calming, specifically vertical measured, have the biggest impact on travel speeds sourcing a 2015 study out of Toronto which showed that speed humps reduced the incidence of pedestrian motor vehicle collision rates by 26% on local roads. However, as part of the City of Guelph Traffic Calming Policy, speed cushions as opposed to speed humps are used because they have a center channel allowing emergency service vehicles to pass without deflection, and they have a less aggressive height and length than speed humps. She explained further that speed cushions are used as a last resort, and in combination with other traffic calming measures. Speed limits and Automated Speed Enforcement (ASE) have both shown to improve safety without the use of vertical deflections (speed cushions) – noting that

a study from Toronto showed that speed limit reductions from 40km/h to 30km/h involved a 28% decrease on pedestrian fatality.

Paul reviewed the traffic calming measures installed on both Starwood Drive and Kortright Road. On Starwood Drive speed cushions are the only usable measure in the toolbox because of the driveway spacing and layout of the road. On Kortright Road, a combination of speed cushions, median islands, flexible bollards, and traffic calming curbs are used to reduce the speed of vehicles traveling on this road. On every road that traffic calming is used the effectiveness of the measure is evaluated before and after implementation.

The following list of horizontal traffic calming measures, in the Traffic Calming Policy was presented:

- Center island median – place in the middle of the road to narrow lane width
- Chicane – series of curb extensions placed on alternating sides of the road, staggered to create a curved roadway segment
- Concrete median with flexible bollard – see center island median
- Curb extension (including traffic calming curbs) – used to narrow lane widths and form "pinch points"
- Curb radius reduction – used to slow traffic as they make turning movements at intersections
- Lateral shift – another form of curb extension where traffic must shift direction
- Roundabout – used in place of other traditional right of way controls
- Traffic circle – functions similar to a roundabout, typically added to an existing intersection
- Traffic island – similar to a center island median and placed in the middle of a roadway
- Sidewalk extensions – road narrowing that reduces pedestrian crossing distances and increases pedestrian space.

The AAC provided the following feedback:

- Members of the AAC expressed concern about the context and tone of both the presentation itself and the responses from presenting staff to the AAC's feedback, using terms like ableist, offensive, inappropriate, and harmful.
- Stop signs and pedestrian crossing areas are recommended on roads like Starwood Drive because there is only one spot for pedestrians to cross the road safely. Could stop signs and pedestrian crossing areas be installed to help slow vehicles on Starwood Drive?
    - Staff responded that stop signs and pedestrian crossing areas are not traffic calming measures – they are not used to slow speed of vehicles. Additionally, they have poor stopping compliance which impacts pedestrian fatalities.
- The committee asked if anyone has studied the injuries that people with disabilities experience as a result of vertical measures?
    - Staff responded that other municipalities have been consulted regarding this issue and no other municipality is talking about injuries experienced by people with disabilities due to vertical measures.
- Concern of rear-ended collisions when slowing the vehicle down for speed cushions.

Motion: To extend this meeting by 5 minutes.

Motion by: Erin

Seconded: Lorelei

Carried

- the AAC felt that their concerns were not reflected in the presentation from Staff. A focus on traffic calming measures that are taking accessibility into account would have been

appreciated. Concerns that people with disabilities experience pain and/or injury from vertical measures has been expressed by the committee several times.

    - Staff responded that safety is paramount – we look at what has the greatest impact on safety. We haven't had other solutions brought forward from other municipalities or people with disabilities.

- The AAC asked if Vision Zero includes consideration of people with disabilities. Specifically, people with disabilities that could become injured as a passenger being transported in an ambulance, using public transit, using taxis, etc.
- Emergency service vehicle response times are affected by vertical traffic calming measures.
    - Staff responded that there have been no notable delays for emergency service vehicles responding to calls. Additionally, when developing the Traffic Calming Policy - Guelph emergency services are a major stakeholder. All emergency service vehicles can drive over speed cushions without vertical deflection because the speed cushions have a center channel.
- The AAC do not want the conversation to end here.

4:55 to 5:00 Item 11 (5 minutes)

Closing Remarks – AAC Chair, Accessibility Staff and All Members

The AAC Chair, Vice Chair and Accessibility Staff thanked the AAC for their participation, feedback, and contributions, noting that the December AAC meeting will include orientation and two committee business topics.

Motion: To adjourn the meeting.

Motion by: Ted

Seconded: Erin

Carried

Next Meeting:

Tuesday, December 20, 2022

Hybrid (in-person at City Hall or virtual through Microsoft Teams)

Technical Information

Terminology Explained

1. **For Information** – Something has taken place or there is an event that the Committee members should be aware of. For example, Access Recognition Awards by the Guelph Barrier Free Committee
2. **For Recommendation** – Committee will make a motion that provides a recommendation to staff or Council
3. **For Discussion** – Committee will discuss a topic and provide the Liaison with direction. For example, topics reported in detail to the Committee of Council
4. **For Engagement** – These note the formal engagement of committee members on topics, usually directly related to the Engagement requirements in the AODA

Microsoft Teams Keyboard Shortcut Keys

Toggle mute off and on

Windows: Ctrl and Shift and M

Mac: Command and Shift and M

Raise or lower your hand

Windows: Ctrl and Shift and K

Mac: Command and Shift and K

Toggle video off and on

Windows: Ctrl and Shift and letter o

Mac: Command and Shift and letter o

Zoom in

Windows: Ctrl and Plus (+)

Mac: Command and Plus (+)

Zoom out

Windows: Ctrl and Minus (-)

Mac: Command and Minus (-)

Return screen to 100%

Windows: Ctrl and letter o

Mac: Command and letter o

Appendix T.8: Guelph Wellington Development Association / Guelph & District Home Builders' Association / City Staff Technical Liaison Committee

A High-level Overview of Consolidated Linear Infrastructure – Environmental Compliance Approval

Prasoon Adhikari

November 16th, 2022

Consolidate Linear Infrastructure-Environmental Compliance Approval (CLI-ECA)

- The CLI ECAs consolidate approvals for low-risk linear infrastructures- Sanitary Collection and Stormwater works
- The City of Guelph will have:
  - One CLI-ECA for Sewage Collection System (Final)
  - One CLI- ECA for Municipal STM Mgt. System (Draft)
- Includes pre-authorization conditions similar in scope to municipal drinking water.
- Industrial, commercial and higher risk sewage works will still require a separate ECA

Preauthorization

Stormwater Management System

Additions, Modifications, Replacement and Extension of:

- Storm sewer, ditch or culvert w/in Municipal SWM System
- SWM Facilities: SWM ponds, infiltration trenches, OGS, LID facilities
- Third Pipe Collection System

Sewage Collection System

- Construction of separated/ nominally separated sewers and forcemains
- ~~Upgrades to combine or partially separated sewers, combined sewage storage tanks & structures~~
- New pumping stations
- Alterations to real-time control systems, collection system storage, existing pumping stations and odour control units

Forms

Stormwater Management System

- Form SW1: Alteration Authorized for Storm Sewers, Ditches, Culverts Form
- SW2: Alteration Authorized for Stormwater Management Facilities
- Form SW3: Future Alteration Authorized for Third Pipe System

Sewage Collection System

- ~~Form A1: Alteration Authorized for Equipment Discharging a Contaminant of Concern to the Atmosphere from a Municipal Sewage Collection System.~~
- ~~Form CS1: Alteration Authorized for Combined Sewers/Partially Separated Sewers/Combined Sewage Storage~~
- Form SS1: Alteration Authorized for Separate/Nominally Separate Sewers/Forcemains
- Form SS2: Alteration Authorized for Municipal Sewage Collection System

Note: All these forms can be obtained directly from MECP's website

Stormwater Management Master Plan

GWDA / GHBA Meeting

November 16th, 2022

Project Overview

- Ongoing update to the 2012 SWM MP
- Studying
  - Existing ponds, OGS units and required upgrades
  - Minor / Major network and required upgrades
  - Opportunities for new end-of-pipe treatment and at-source quality control
  - Erosion site remediation
  - Governing policy

Design Criteria Update

- Consolidated Linear Infrastructure Environmental Compliance Approval Appendix A requirements for both sites and road construction
- Consolidation of requirements from various subwatershed and secondary plan studies

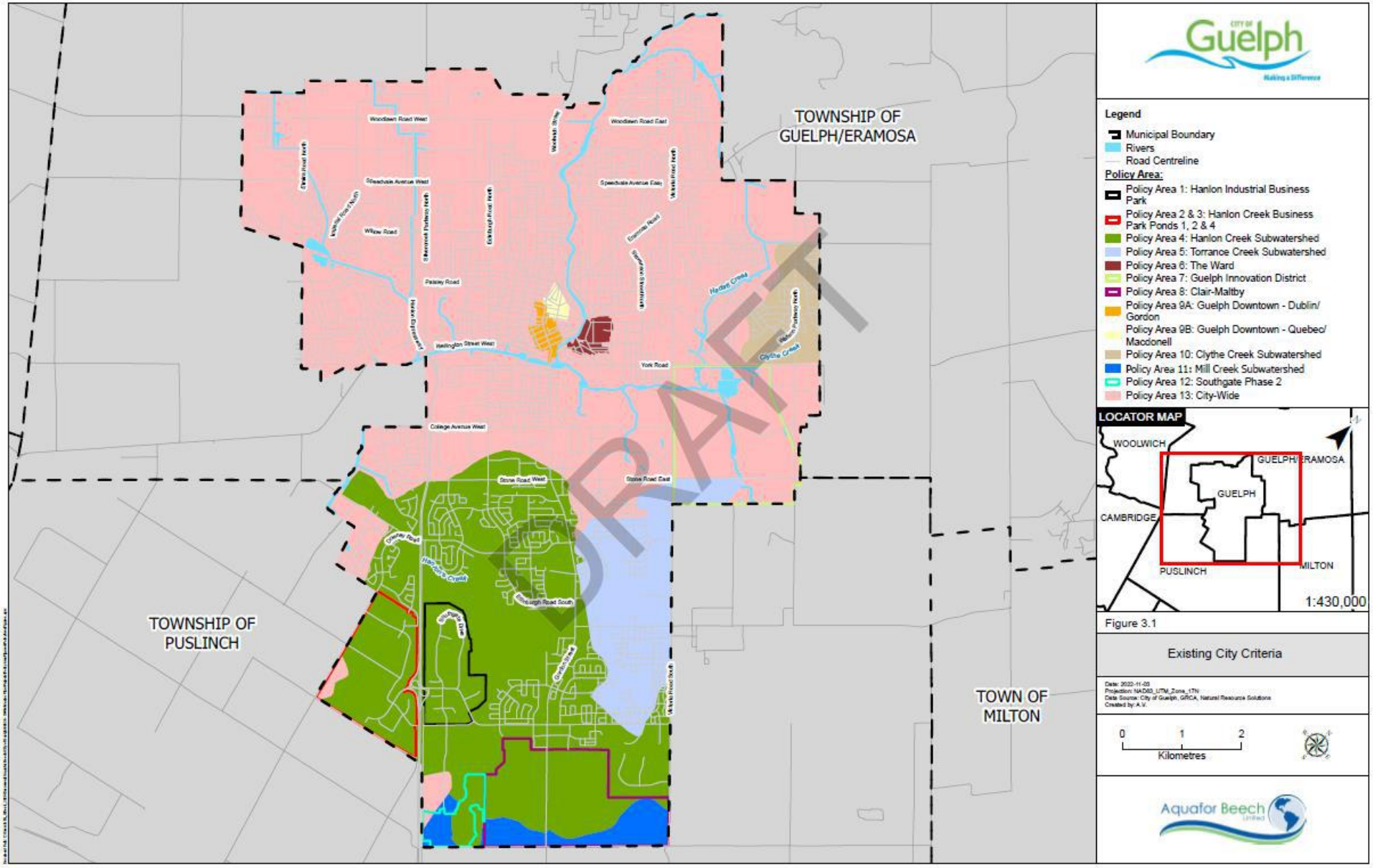
Regulatory – CLI ECA

Water Balance [3]	**FOR DEVELOPMENT SCENARIOS** [8] **Assessment Studies:** i) Control as per the criteria identified in the water balance assessment completed in one or more of the following studies: a watershed/subwatershed plan, Source Protection Plan (Assessment Report component), Master Stormwater Management Plan, Master Environmental Servicing Plan, Class EA LID feasibility study, or local site study including natural heritage, EGRA, inflow and infiltration strategies, if undertaken. The assessment should include sufficient detail to be used at a local site level and consistent with the various level of studies; OR **IF Assessment Studies in i) NOT completed:** i) Control [1] the recharge to meet pre-development [7] conditions on property; **OR** ii) Control [1] the runoff from the 90th percentile storm event. **Lake Simcoe Watershed:** i) The evaluation of anticipated changes in water balance between pre-development and post-development through a stormwater management plan in support of an application for Major Development [11] shall be undertaken and adhered by. The assessment should include sufficient detail to be used at a local site level. If it is demonstrated, using the LIDTTT tool [9], that the site's post to pre-development water balance cannot be met, and Maximum Extent Possible [6] has been attained, the proponent may use LSRCA's Recharge Compensation Program [10]. **FOR RETROFIT SCENARIOS** [5] **Assessment Studies:** i) Control as per criteria identified in the water balance assessment completed in one or more of the following studies: a watershed/subwatershed plan, Source Protection Plan (Assessment Report component), Master Stormwater Management Plan, Master Environmental Servicing Plan, Class EA LID feasibility study, or local site study including natural heritage, EGRA, inflow and infiltration strategies, if undertaken. The assessment should include sufficient detail to be used at a local site level and consistent with the various level of studies; **OR** ii) If constraints [2] identified in i) Maximum Extent Possible [6] based on environmental site feasibility studies. **IF Assessment Studies in i) NOT completed:** i) Control [1] the recharge to meet pre-development [7] conditions on property; **OR** ii) Control [1] the runoff from the 90th percentile storm event.

Footnote	1. Stormwater runoff volumes generated from the geographically specific 90th percentile rainfall event on an annual average basis from all surfaces on the entire site are targeted for control. Control is in the following hierarchical order, with each step exhausted before proceeding to the next: 1) retention (infiltration, reuse or evapotranspiration), 2) LID filtration, and 3) conventional stormwater management. Step 3, conventional stormwater management, should proceed only once Maximum Extent Possible [6] has been attained for Steps 1 and 2 for retention and filtration. 2. Site constraints must be documented. A list of site constraints can be found in Table 2. 3. Where the opportunity exists on your project site or the same subwatershed, reallocation of development elements may be optimal for management as described in footnote [1]. 4. Possible to look at combined grey infrastructure and LID system capacity jointly. 5. Retrofit means: 1) a modification to the management of the existing infrastructure, 2) changes to major and minor systems, or 3) adding stormwater infrastructure, in an existing area on municipal right-of-way, municipal block or easement. It does not include conversion of a rural cross-section into an urban cross-section. 6. Maximum Extent Possible means maximum achievable runoff volume control through retention and LID filtration engineered/landscaped/technical stormwater practices, given the site restrictions. 7. Pre-development is defined as the stringer of the two following scenarios: 1) a site's existing condition, or 2) as defined by the local municipality. 8. Development includes new development, redevelopment, infill development, or conversion of a rural cross-section into an urban cross-section 9. Low Impact Development Treatment Train Tool developed in partnership by TRCA, LSRCA and CVC. 10. See MECP Guide for ECA Application for more background information. 11. Major Development has the same meaning as in the Lake Simcoe Protection Plan, 2009.

Water Quality [3]	**FOR DEVELOPMENT SCENARIOS** [8] **General:** i) Characterize the water quality to be protected, including identification of stormwater contaminants (e.g. suspended solids, nutrients, bacteria, water temperature) for potential impact on the natural environment, and control as necessary, **OR** ii) As per the watershed/subwatershed plan or similar area-wide stormwater study.
	Suspended Solids: i) Control [1] 90th percentile storm event and if conventional methods are necessary, then 80%, 70% or 60% suspended solids removal (based on the receiver) as per full ETV or local particle size distribution **Phosphorus:** i) Minimize existing phosphorus loadings to Lake Erie and its tributaries, as compared to 2018 or conditions prior to the proposed development, **OR** ii) Minimize phosphorus loadings to Lake Simcoe and its tributaries. Proponents located in the Lake Simcoe watershed shall evaluate anticipated changes in phosphorus loadings between pre-development and post-development through a stormwater management plan in support of an application for Major Development [11]. The assessment should include sufficient detail to be used at a local site level. If, using the LIDTTT tool [9], it is demonstrated that the site's post to pre-development phosphorus budget cannot be met, and Maximum Extent Possible [6] has been attained, the proponent may use LSRCA's Phosphorus Offsetting Policy [10]. **FOR RETROFIT SCENARIOS** [5] i) Improve the level of water quality control currently provided on site, **AND** ii) As per the 'Development' criteria for Suspended Solids, **OR** iii) **If 'Development' criteria for Suspended Solids cannot be met**, Works are designed as part of a treatment train in a multi-year retrofit undertaking, in accordance with a rehabilitation study or similar area-wide stormwater study, such that the completed treatment train will achieve the 'Development' criteria for Suspended Solids, within 10 years.

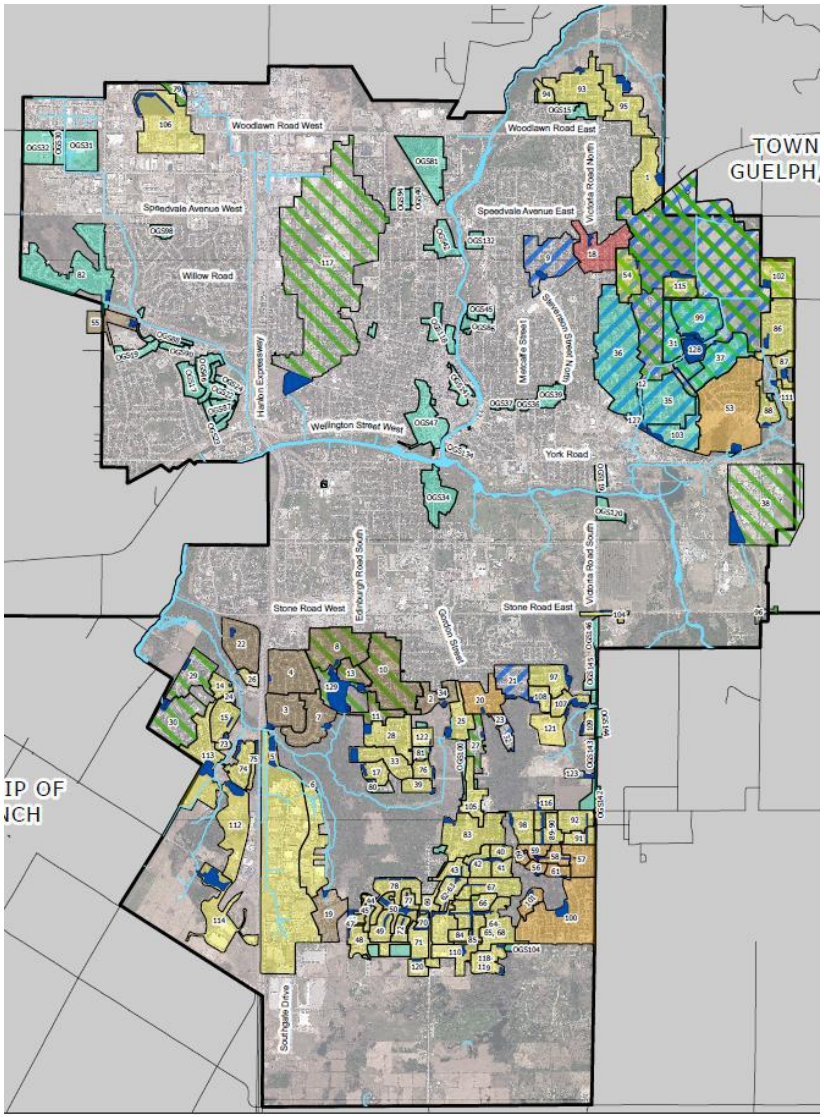
Footnote	1. Stormwater runoff volumes generated from the geographically specific 90th percentile rainfall event on an annual average basis from all surfaces on the entire site are targeted for control. Control is in the following hierarchical order, with each step exhausted before proceeding to the next: 1) retention (infiltration, reuse or evapotranspiration), 2) LID filtration, and 3) conventional stormwater management. Step 3, conventional stormwater management, should proceed only once Maximum Extent Possible [6] has been attained for Steps 1 and 2 for retention and filtration. 2. Site constraints must be documented. A list of site constraints can be found in Table 2. 3. Where the opportunity exists on your project site or the same subwatershed, reallocation of development elements may be optimal for management as described in footnote [1]. 4. Possible to look at combined grey infrastructure and LID system capacity jointly. 5. Retrofit means: 1) a modification to the management of the existing infrastructure, 2) changes to major and minor systems, or 3) adding stormwater infrastructure, in an existing area on municipal right-of-way, municipal block or easement. It does not include conversion of a rural cross-section into an urban cross-section. 6. Maximum Extent Possible means maximum achievable runoff volume control through retention and LID filtration engineered/landscaped/technical stormwater practices, given the site restrictions. 7. Pre-development is defined as the stringer of the two following scenarios: 1) a site's existing condition, or 2) as defined by the local municipality. 8. Development includes new development, redevelopment, infill development, or conversion of a rural cross-section into an urban cross-section 9. Low Impact Development Treatment Train Tool developed in partnership by TRCA, LSRCA and CVC. 10. See MECP Guide for ECA Application for more background information. 11. Major Development has the same meaning as in the Lake Simcoe Protection Plan, 2009.


TOWNSHIP OF GUELPH/ERAMOSA
TOWNSHIP OF PUSLINCH
TOWN OF MILTON
DRAFT
Legend
Municipal Boundary
Rivers
Road Centreline
Policy Area:
Policy Area 1: Hanlon Industrial Business Park
Policy Area 2 & 3: Hanlon Creek Business Park Ponds 1, 2 & 4
Policy Area 4: Hanlon Creek Subwatershed
Policy Area 5: Torrance Creek Subwatershed
Policy Area 6: The Ward
Policy Area 7: Guelph Innovation District
Policy Area 8: Clair-Maltby
Policy Area 9A: Guelph Downtown - Dublin/ Gordon
Policy Area 9B: Guelph Downtown - Quebec/ Macdonell
Policy Area 10: Clythe Creek Subwatershed
Policy Area 11: Mill Creek Subwatershed
Policy Area 12: Southgate Phase 2
Policy Area 13: City-Wide
LOCATOR MAP
WOOLWICH
GUELPH/ERAMOSA
GUELPH
CAMBRIDGE
PUSLINCH
MILTON
1:430,000
Figure 3.1
Existing City Criteria
0
1
2
Kilometres

Policy Area	Location†	Infiltration / Water Balance	Quality	Quantity	Erosion	Additional Information
1	Hanlon Industrial Business Park	Recharge Volume (acre feet) = 5-year peak flow (ft^3/s) x 0.035	• Limit sediment pond discharge to 0.015 ft^3/s per square foot of pond surface area • Enhanced level of quality treatment*	• Storm outlet rate is: 0.014 m^3/s – 100yr Hanlon Design Storm • Control peak flow post to pre for all design events (2 through 50 year)	Control 90th percentile event or Extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours	Appendix A1
2	HCBP Pond 1	Block-by-block recharge rates to be met	Enhanced level of quality treatment*	Control peak flow post to pre for all design events (2-100 year)	Control 90th percentile event or Extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours	Appendix A2
3	HCBP Pond 2 & 4	Block-by-block recharge rates to be met	Enhanced level of quality treatment*	• Control peak flow post to pre for all design events (2-100 year) • 100-year design storm runoff limited to 180 L/s/ha through on-site controls	Control 90th percentile event or Extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours	Appendix A3
4	Hanlon Creek Subwatershed	• No urban drainage permitted to the headwaters of Tributary E or F, except lands that have positive drainage outlet, unless a pilot scale demonstrates effectiveness over five years. • Areas adjacent to Clair Road can drain into greenway system of Upper Hanlon area subject to the same design criteria. • Areas south of Clair Road but isolated from direct outlet must rely on infiltration/evaporation. • Remaining areas per Policy Area 12 (City-Wide)	• Implement thermal preventive and mitigation measures to maintain cold water fish habitat • Achieve specified water chemistry targets • Enhanced level of quality treatment*	• See infiltration requirements • Control peak flow post to pre for all design events (2-100 year) after achieving infiltration requirements	Control 90th percentile event or Extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours	Appendix A4
5	Torrance Creek Subwatershed	• Zone 1: Zero runoff requirement (1:100 year volume captured, all water infiltrates) • Zone 2 & 3: Infiltration target of between 100 and 150mm/yr	Enhanced level of water quality treatment*	• Control peak flow post to pre for all design events (2-100 year) • 1:100 year flow controlled to pre-development levels in Zones 2 and 3 • If no positive outlet, must provide on-site storage for twice the 5-year design storm runoff volume • Commercial, industrial, and high density residential: store excess runoff for 2-year storm underground or on rooftops	Control 90th percentile event or Extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours	Appendix A5
6	Guelph Downtown - The Ward	Per Policy Area 13 (City-Wide)	• Implement thermal preventive and mitigation measures to maintain cool water fish habitat • Enhanced level of water quality treatment*	Control post-development flows up to the 100-year event to the 2-year pre-development flows	Control 90th percentile event or Extended detention of the 4 hour, 25mm Chicago distribution rainfall event for 24 hours	Appendix A6
7	Guelph Innovation District	27mm capture in infiltrative LID BMPs	• Implement thermal preventive and mitigation measures to maintain cool water fish habitat	• 27 mm volume control on-site • Unitary storage and discharge rates for 25-year and 100-year events	Additional controls not required due to infiltration volume	Appendix A7

Design Criteria Update

- SWM MP study recommends adopting a 5mm VC as part of meeting full water quality treatment and TSS removal (90th Percentile for Guelph is 27-28mm)
- Maintaining existing water balance still required
- Maintaining post-to-pre quantity still required
- Distributed LIDs may count towards overall SWM (must meet requirements)
- Policy review and update in subsequent years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Woodlawn Road East
Speedvale Avenue West
Speedvale Avenue East
Willow Road
Wellington Street West
York Road
Stone Road West
Stone Road East
Victoria Road North
Victoria Road South
Edinburgh Road South
Harbon Expressway
Metcalfe Street
Gordon Street
Southgate Drive
TOWN
GUELPH,
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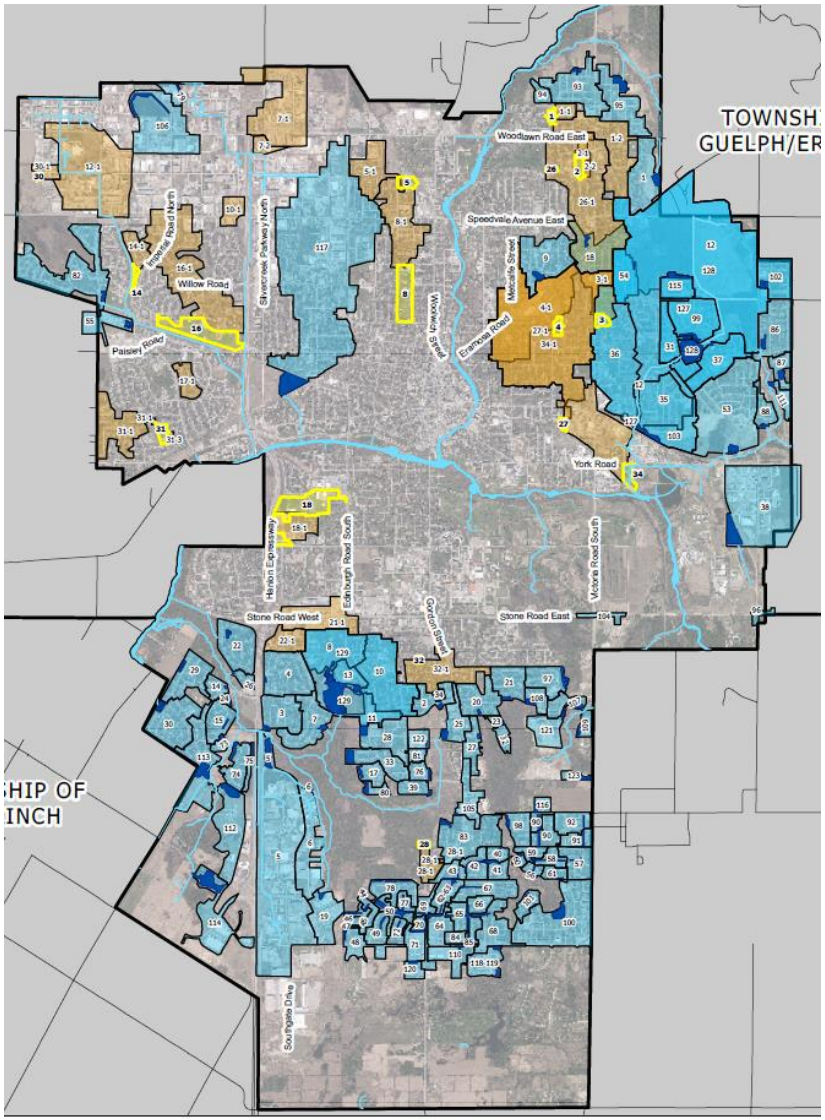
Woodlawn Road East
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Willow Road
Paisley Road
York Road
Stone Road West
Stone Road East
Victoria Road North
Victoria Road South
Edinburgh Road South
Harbon Expressway
Metcalfe Street
Southgate Drive
TOWNSH
GUELPH/ER
HIP OF
INCH

Volume Control

- **Improve water quality, reduce pollutant loads**
- Increased quantity control – delay to peak flow
- One-stop-shop for quality, balance, etc.
- Aligns with MECP guidelines and ECA requirements
- Improved water quality/balance on impervious sites
- Co-benefits (greener streets and sites, GHG reduction)

Volume Control

1. **Control Hierarchy Approach 1 (Retention)** – Low Impact Development retention techniques which utilize the mechanisms of infiltration, evapotranspiration and or re-use to recharge shallow and/or deep groundwater; return collected rainwater to the atmosphere and/or re-use collected rainwater for internal or external uses respectively. The target volume is controlled and not later discharged to the municipal sewer networks (with the exception of internal water re-use activities) or surface waters and does not therefore become runoff.

   Rationale:
   - Reduced runoff volumes
   - Less variable pollution control as pollutant loads to receivers are reduced through runoff volume reductions (infiltration, evapotranspiration and re-use) as compared to approaches which rely on removal efficiencies (i.e. % removal)
   - Urban flood and combined sewer overflow (CSO) prevention by increasing the sewer capacity by reduced volume and peak flows, as well as delayed time-to-peak;
   - Maintenance of pre-development water balance;
   - Contribution to stream baseflow and mitigation of thermal impacts to urban streams; and
   - The preservation of groundwater quantity and levels.

2. **Control Hierarchy Approach 2 (LID Volume Capture and Release)** – Low Impact Development filtration technologies which utilize filtration to filter runoff using LID techniques with appropriate filter media per the LID Stormwater Planning and Design Guide (2010, v1.0 as amended from time to time). The controlled volume is filtered and released to the municipal sewer networks or surface waters at a reduced rate and volume (a portion of LID Volume Capture and Release may be infiltrated or evapotranspirated).

   Rationale:
   - Reduced runoff volumes (LID filtration controls have been demonstrated to provide runoff volume reductions irrespective of the ability to infiltrate through absorption, material wetting and increased depression storage).
   - Less variable pollution control as pollutant loads to receivers are reduced through runoff volume reductions as compared to approaches which rely on removal efficiencies (i.e. % removal)
   - Additional water quality benefits result from treatment process of filtration which may also include pollution adsorption and sedimentation;

3. **Control Hierarchy Approach 3 (Other Volume Detention and Release)** – Other stormwater technologies which utilize filtration, hydrodynamic separation and or sedimentation (i.e. end-of-pipe facilities) to detain and treat runoff using an appropriate filter media per industry standard verification protocols; separate contaminates from runoff; and/or facilitate the sedimentation and removal of contaminants respectively. The controlled volume is treated and released to the municipal sewer networks or surface waters at a reduced rate.

   Rationale:
   - Additional water quality benefits result from treatment process of filtration (which may also include pollution adsorption and sedimentation), separation of pollutants from runoff, or sedimentation;

- Infiltration Policy
- LID Guidance
- Complete Streets Design Guideline (separate project)

Consultation

- Community Working Group
  - GWDA Representation
- Public Open House #2 – November 29th
- Complete Streets Design Guidelines
  - How do LIDs fit within ROWs

Questions

Meeting Minutes

Meeting: Guelph Wellington Development Association/Guelph & District Home Builders' Association/City Staff Technical Liaison Committee

Date: Wednesday, November 16, 2022

Location: Virtual

Time: 2:30 – 3:30pm

Present: Angel Kroetsch, Shakiba Shayani, Paul Magahay, Craig Robson, Lisa Schuett, Nancy Shoemaker, Lloyd Grinham, Shawn Marsh, Steve Conway, Scott Hannah, Tom McLaughlin, Kevin Brousseau, Melissa Jonker, Susan Frasson, Spencer Reid, Ian Panabaker, Kevin Fergin, Chris DeVriendt, Krista Walkey, Mary Angelo, Wayne Gallagher, Neelam Motihar, Jennifer Juste, Emily Stahl, Kelley McCormick, Colleen Gammie, Prasoon Adhikari, Peter Rider, Ryan Mallory, Laurie Iversen(recorder)

Meeting Minutes

Welcome from the Chair

1. Agenda review and minutes of February 24, 2022 accepted.

2. Introductions and Review of Agenda

3. Geothermal Systems - Peter Rider (attachment)

   Peter provide an introduction and background on geothermal systems and the constraints within the City of Guelph.

4. **Development Engineering Updates** – Prasoon Adhikari/Colleen Gammie (attachment)
   1. **MECP's Consolidated liner Infrastructure-Environmental Compliance Approval** – Prasoon Adhikari
   Prasoon provided a high-level overview of the compliance approval that is replacing the multiple ECS that are typically submitted to the Ministry for sewage collection system or municipal storm water management system. Going forward there will be only one approval for City of Guelph.

   Staff are currently creating a flow chart to explain the process along with some of the key items required to complete the ECA application that are each to be submitted to the city going forward.
   This process will be in effect when the Ministry's issues the final CLU and ECA for stormwater management system. Planning for end of this year.

   2. **Design Criteria-Stormwater Management Master Plan** Colleen Gammie
   An update on the master plan project that is looking at the City's existing stormwater management system, existing ponds OGS units, major minor system infrastructure and highlighting the required upgrades in order to bring the city up to the level of service.

   Also looking at opportunities for new end of pipe treatment and at source quality control; at erosion sites across the city and are looking at updating our design criteria and policies based on some new governing policies from the ministry. This includes adopting a Volume Control Target of 5mm City-wide as per the proposed Design Criteria, and to be implemented in

accordance with the proposed Infiltration Policy.
For additional details: Stormwater Management Master Plan

5. **Development Planning Updates** – Krista Walkey/Chris DeVriendt (attachment)

1. **Bill 109**
Krista presented a high level, workflow illustrating changes that will affect the development application review process.

The 2023 Development application fees were approved at Council.

2. **Bill 23**
The city has responded to the 21 pieces of legislation that were introduced in October. Eighteen are applicable to the City of Guelph. Currently do not have a full financial picture what the impacts will be to the city.

Will be submitting an analysis of Bill 109 and Bill23 that summarizes the infrastructure, Development charges, parkland and planning challenges. Also will include changes to the Heritage Act, conservation authorities, wetland classification, building code and affordable housing.

The biggest impact for the development community will be the 18,000 units by 2031.
Still waiting for all the legislation to be approved, what this means for City resources, for trades and supply chain and rising interest rates is yet to be determined.

Status of the Official Plan is still unknown as it is with the province for review.

3**. Update to Mayors meeting**
Craig Robson is going to be assisting with the Condo process in later 2023.

The Comprehensive Zoning by-law, two-year moratorium will be a decision for the new council.

The pilot project Surety Bonds will be completed in the coming weeks.

The monthly updates for the residential permits are posted on the city web site.

Next Meeting Date: TBD

Appendix T.9: Other Communication

gingrichregehr.a@aquaforbeech.com

From: Colleen Gammie <Colleen.Gammie@guelph.ca>
Sent: February 23, 2023 11:59 AM
To: Paul M
Cc: Terry Gayman
Subject: Re: Stormwater Surface Pond in Margaret Greene Park
Attachments: SWM MP Catchment 16 - MGP.pdf

Hi Paul,

Please see below in red for additional information. If you have further questions it might be best to set up a call to exchange further information.

Thank you,

Colleen Gammie, P. Eng, PMP (she/her), Infrastructure Planning Engineer
Design and Construction, **Engineering and Transportation Services**
City of Guelph
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guelph.ca

From: Paul M <pgmcub@gmail.com>
Sent: Wednesday, February 22, 2023 9:54 AM
To: Colleen Gammie <Colleen.Gammie@guelph.ca>
Cc: Terry Gayman <Terry.Gayman@guelph.ca>
Subject: Re: Stormwater Surface Pond in Margaret Greene Park

Thanks Colleen for replying to my email. A few further questions may aid my understanding of the rationale for the construction of a catch basin within the Margaret Greene Park. For clarity, I'm going to refer to the proposed facility as an **EOPF – End-of-Pipe Facility**.

The drainage map that you provided was very helpful and shows two sewers through the Park (a small drain draining Lisa Lane and a larger sewer near the tennis courts) and one sewer that is located between the townhouses on 80 Ferman Drive. The two large sewers appear to pass under the railway and drain into the Willow West Open Drain. On a walk through the Park I found two additional manhole covers (identified as #1 and #2 on the attached map and pictures) in Margaret Greene Park. **Where do these (sewers?) originate and where do they terminate?** From your photos and our infrastructure database, it appears that these maintenance holes are part of the Wastewater Collection System, which is different from the Stormwater Management System. These sewers collect wastewater from homes and businesses in the area and carry sewage to the Water Resource Recovery Centre for treatment. There are many origination points for this sewer, some as far north as Speedvale, and the termination is at the treatment centre.

Your email stated that "A new storm sewer would need to be installed to connect the original storms sewer to the suggested location,"
Could you indicate the location of this new sewer (1800mm) into the Park (if possible mark on your drainage map)? The image below shows the existing 1800mm Storm Sewer mentioned highlighted with red shading. The new sewer

locations are dependent on the configuration of the EOPF, but could be approximately as shown with the red arrows in the image below.

How many "original storm sewer(s)" are there in the Park that will be connected to this new sewer? At this time (very conceptual design stage), it is anticipated that this is the only sewer that would be directed into the EOPF. However, the level of detail you are asking for is unable to be confirmed until further design and investigation and consultation occur in future phases of work.

Will the "original storm sewer(s) that presently run through the Park continue to drain into the Willow West Drain after construction of this new sewer? The 1800mm sewer will not be removed or disconnected from the Willow West Drain. Instead, flow will be directed into the EOPF, treated, and then directed back into the 1800mm sewer where it will continue flowing along the same alignment as before.

Will the proposed "pond" drain into the Willow West Drain? Yes, through the existing 1800mm sewer.

Your email stated that you were not able to identify the location of the catch basin and yet you state "The Lisa Lane sewer...is a small (300mm) sewer...some distance from the potential location."
Knowing this, **please indicate the "potential location" of the "pond" within Margaret Greene Park (if possible mark on your drainage map)?** See the circle in the image above. Please note that this location is conceptual only and further work (investigation, design, consultation) is required before considering this location final, however this is the general area that will be under consideration.

Your email states that "the storm sewer in Margaret Greene Park conveys drainage from an 85ha area". Margaret Greene Park is approximately 18 hectares. Are you referring to the storm sewer (near the tennis courts) that drains the Westwood Road area, the storm sewer (between 80 Ferman Drive) draining Ferman Drive or both. **Could you define the 85 hectares?** The 85ha is represented by the yellow shaded area in the catchment map.

Again, have there been past flooding problems in the 85 hectares that you indicated as the drainage area of study? The City has had minor flooding complaints along Westwood Drive in the vicinity of the park. However I would like to highlight that the EOPFs primary function is to improve water quality and provides additional capacity (i.e. flood mitigation) as a co-benefit.
What is the size of the drainage area that is serviced by the Willow West Open Drain? The exact size is not readily available however it is approximately bound by Speedvale Avenue, Elmira Road, the rail corridor, Imperial Avenue, Stephanie Drive, and the Hanlon Expressway.

Paul McCubbin
20 lisa Lane

On Wed, Feb 15, 2023 at 1:03 PM Colleen Gammie <Colleen.Gammie@guelph.ca> wrote:

> Hello Paul,
>
> Thank you for reaching out with your questions on the Stormwater Management Master Plan. Please find responses to your questions below in blue.
>
> I have read your general description for stormwater management but the devil is always in the details. **Would you please supply me with a more detailed description of the size, depth and exact location of this proposed surface pond within Margaret Greene Park (site ID #16)**. The City follows a standard approach to capital project delivery that includes preliminary work (e.g., a Master Plan), detailed design, and then construction. The size, depth, and exact location are all elements that are established during detailed design. The Stormwater Management Master Plan has studied possible locations to site facilities that will improve the quality of the stormwater runoff that is currently discharged to creeks/streams untreated. Any proposed layouts shown in the master plan are conceptual and are subject to change during detailed design. Public engagement and consultation is also a planned aspect of detailed design for project like these that contemplate park land use. Stormwater management ponds require accessibility for maintenance, security and connection to storm sewers. **Please provide me with details of these aspects.**
>
> *** Is there a fence around the pond? If so, how tall?** The need for fencing would be determined at the detailed design stage. However, surface stormwater ponds can be effectively designed such that a fence is not required, and ponds can be integrated parks as a new amenity. Surface stormwater ponds can often be designed with both passive and active amenities such as trails, outlooks, benches, exercise equipment, shade structure, terraced seating etc. to allow park users to interact with the pond and the native vegetation that may be planted around it.
>
> *** Will there be road access to the pond for maintenance?** An access road is needed for maintenance access, and would be designed at the detailed design stage. This could look like a public trail that circles the pond, providing additional trail amenities to park users.
>
> *** Will additional sewer construction be required in the neighbourhood to connect the pond?** The only additional sewer construction would be within the park itself, and depends on the final location where the pond is constructed. A new storm sewer would need to be installed to connect the original storms sewer to the suggested location, with construction timing considered to minimize impacts to park users.
>
> *** What is the rationale for a surface pond in Margaret Greene Park versus other options like subsurface storage or low impact ditch?** Subsurface storage is considered as a secondary alternative at Margaret Greene Park, if a surface facility is ultimately deemed not feasible during preliminary and detailed design. However, surface facilities are generally preferred to subsurface facilities for several reasons, including ecological benefits, aesthetics, ease of

maintenance, and lower installation and maintenance costs. Low impact development features, such as bioswales or enhanced swales, are only feasible in small drainage areas. As the storm sewer in Margaret Greene Park conveys drainage from an 85ha area, a ditch or other low impact feature is not considered a technically feasible option.

*** What additional drainage area will be covered by this pond that is not presently covered?** A map of the drainage area to the pond is attached.

As you are aware, there exists stormwater egress from Lisa Lane sewers into the Park. Over 25 years this drainage system has successfully discharged all excess water to prevent flooding. As well, there is a large ditch on the opposite side of the railway draining Paisley Road and environs. So my question would be why the need for more stormwater removal. **Has there been flooding in the past in the Lisa Lane area where the existing drainage infrastructure has been inadequate?** The Lisa Lane sewer does not link up with the 85ha drainage area that has been analyzed. It is a small (300mm) sewer that collects road runoff exclusively from Lisa Lane and discharges directly into the natural heritage system behind the properties. It is not the intent to re-direct this flow to the facility as it is some distance from the potential location. For context, the sewer that would discharge into the proposed facility is 1800mm in diameter, which has a much greater capacity. The drainage area that this pipe serves would be redirected into the facility for water quality treatment.

I'll be interested to see the details of the location and justification the City has in their proposal of a surface stormwater management catch basin in Margaret Greene Park. The Stormwater Management Master Plan is a strategic, city-wide plan that looked at stormwater management strategies to support Guelph's existing population and to support changes to imperviousness as we grow to 2051. The recommended solution includes improving water quality treatment. Currently, approximately 34% of the City's collective stormwater runoff receives treatment prior to discharging to streams/rivers. The treated areas are largely in the south and west ends, associated with newer development and newer design standards. The plan recommends installing new water quality facilities at various locations across the City in order to try to improve overall watershed health. Locations were established through a rigorous technical feasibility exercise. The study looked at the health of each subwatershed in the City and generated a score based on aquatic health, terrestrial health, erosion, etc. The location that is proposed in MGP is part of the area that drains to the Willow West Drain, which has the worst erosion score in the City, and also scored poorly in aquatic and terrestrial ecology. Water quality treatment was therefore prioritized in this catchment.

Eleven of the 16 sites identified in the Stormwater Master Plan are in City parks. During the Master Plan for Parks consultation, I don't recall Park officials indicating that the City was considering the reduction of valued parkland by constructing stormwater management facilities. I will be interested to review the comments from Parks staff as to the Stormwater Master Plan proposal in these parks. Engineering and parks staff worked together through the siting exercise and agreed that there was an opportunity to add value to the un-programmed area of the park, to be further studied at the onset of future proposed stormwater projects.

Thank you,

Colleen Gammie, P. Eng, PMP (she/her), Infrastructure Planning Engineer

Design and Construction, **Engineering and Transportation Services**

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From: Paul M <pgmcub@gmail.com>
Sent: Sunday, January 29, 2023 5:03 PM
To: Colleen Gammie <Colleen.Gammie@guelph.ca>
Cc: Christine Billings <Christine.Billings@guelph.ca>; Linda Busuttil <Linda.Busuttil@guelph.ca>; Mayors Office <Mayor@guelph.ca>
Subject: Stormwater Surface Pond in Margaret Greene Park

Colleen Gammie

P. Eng. Infrastructure Planning Engineer Design and Construction

Engineering and Transportation Services

City of Guelph

Friday I received your Stormwater Master Plan with the proposal for a surface pond in Margaret Greene Park. As you should be aware, our neighbourhood has opposed a Metrolinx's proposal for construction of a substation in Margaret Greene Park and the City was very supportive of the neighbourhood position. Having hopefully succeeded in convincing Metrolinx to reconsider their site selection in the Park, I was shocked that the City would now propose that part of the Park be used as a stormwater catch basin.

I have read your general description for stormwater management but the devil is always in the details. **Would you please supply me with a more detailed description of the size, depth and exact location of this proposed surface pond within Margaret Greene Park (site ID #16)**. Stormwater management ponds require accessibility for maintenance, security and connection to storm sewers. **Please provide me with details of these aspects.**

*** Is there a fence around the pond? If so, how tall?**

*** Will there be road access to the pond for maintenance?**

*** Will additional sewer construction be required in the neighbourhood to connect the pond?**

*** What is the rationale for a surface pond in Margaret Greene Park versus other options like subsurface storage or low impact ditch?**

*** What additional drainage area will be covered by this pond that is not presently covered?**

As you are aware, there exists stormwater egress from Lisa Lane sewers into the Park. Over 25 years this drainage system has successfully discharged all excess water to prevent flooding. As well, there is a large ditch on the opposite side of the railway draining Paisley Road and environs. So my question would be why the need for more stormwater removal. **Has there been flooding in the past in the Lisa Lane area where the existing drainage infrastructure has been inadequate?**

Paul McCubbin

20 Lisa Lane

Guelph

(519) 821 0664

cc: Mayor Cam Guthrie **mayor@guelph.ca**

Christine Billings (Ward 4 Councillor) **christine.billings@guelph.ca**

Linda Busuttil (Ward 4 Councillor) linda.busuttil@guelph.ca

City of Guelph
Catchment 16

Legend

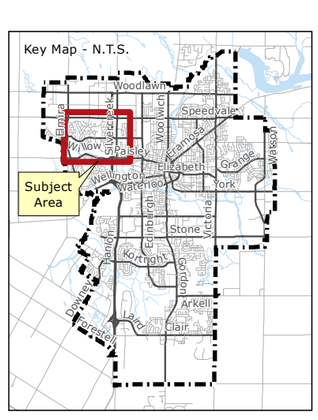
Catchment 16

Stormwater Maintenance Hole Status

- In Service
- Abandoned

Stormwater Gravity Main Pipe Type, Status

- Storm Pipe, In Service
- Willow West Open Drain



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Produced by the City of Guelph
Infrastructure, Development & Enterprise
Engineering and Transportation Services
February 6, 2023

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QUESTIONS AND ANSWERS

Stormwater Management Master plan – Margaret Greene Park

Thank you for sharing your questions and concerns about the possible stormwater management facility proposed for Margaret Greene Park. As we move ahead with this project, there will be additional opportunities for engagement. In the meantime, we hope this information is helpful.

1. What is the Stormwater Management Master Plan?

The Stormwater Management Master Plan (SWM MP) is a City-wide study that looks to ensure stormwater is sustainably managed in a way that helps protect Guelph's water supply and the environment over the long term. The Master Plan looks at how the City is currently managing stormwater and guides how we will continue to do so through to 2051. It addresses issues we face today like flood control, maintaining the quality of our local rivers, lakes and streams and our drinking water supply (groundwater), and the overall environment.

2. Why is there a stormwater facility proposed in Margaret Greene Park?

The SWM MP assessed the health of each subwatershed in the Guelph. The stormwater in the neighbourhood around Margaret Greene Park drains to the Willow West Drain subwatershed, which has a poor subwatershed health score. This means there is poor water quality, and poor habitat for plants, birds, fish, amphibians, and other animals living in or near the water. The SWM MP looked at different locations in Guelph for where new stormwater treatment facilities could be built to improve the water quality in that area.

Margaret Greene Park was one of those proposed locations because there may be enough space in the park with un-programmed recreational use that would allow the City to treat the water and improve the water quality before it discharges into the Willow West Drain. Because there is potential, the master plan directs us to look more closely in the future (2030+) to determine if the park can be used in a way that maintains parkland user benefits and improves stormwater.

We know park land is important, so that will be a key consideration in the future. One goal is to improve that subwatershed, including the water and land natural environment, for the benefit of everyone now and in the future, while also balancing other City and community goals.

3. Doesn't stormwater go to the Water Resource Recover Centre to get treated?

Stormwater is not treated at the Water Resource Recovery Centre. It discharges either directly to a stream or river, or through a stormwater management facility to a stream or river. In any given sub-catchment area there are limited treatment locations before the stormwater reaches the natural environment. The preference is to use publicly owned land before purchasing additional property.

4. Why is a surface facility proposed in Margaret Greene Park instead of a subsurface facility?

Surface facilities are generally preferred to subsurface facilities for several reasons such as: ecological benefits (such as increased wildlife presence in the area and downstream river), aesthetics, ease of maintenance, and lower construction and maintenance costs. The master plan recommends we build a surface stormwater management pond. If however, during the preliminary and detailed design we find that a surface facility isn't desirable for technical or community benefit reasons, we will consider a subsurface facility instead, subject to Council budget approvals.

We won't know for sure which type of facility will be built until after we complete the initial design and have completed community consultation and field investigations that we undertake at the commencement of capital projects of this impact.

5. Will it be safe?

The City takes public safety very seriously. We will ensure that best practice and required safety features are incorporated in the stormwater management facility.

6. Will it impact existing park amenities?

The proposed location at Margaret Greene Park was chosen because it is far enough away to avoid impacting the existing soccer fields, playground, baseball diamonds, and future splash pad. The surface facility can be designed as an additional feature in the un-programmed section of the park and could include features such as benches, landscaping, plantings, and connecting trails.

7. When will Council approve this recommendation?

City staff will present recommendations from the SWM MP to Council on April 4, 2023, which includes the proposed locations for new stormwater management facilities. If Council approves the SWM MP, they will be approving next steps, which is for staff to look further into the details of the proposed opportunities to improve water quality. It does not mean the location of the facilities are finalized. The actual design and construction budget will be presented to Council as part of the multi-year capital budget which will be open for public consultation.

8. When will the facility be built?

Once the SWM MP is approved, staff will work to determine the most appropriate time to do this work balanced against all other City priorities. Currently, we don't expect the work to start before 2030.

9. Was there any community engagement completed on this part of the project?

On November 29, 2022, the City hosted a hybrid public open house for the SWM MP to present the findings of the study including this proposed facility in Margaret Greene Park. The material was available for review and comment on the City's Have Your Say engagement page until December 20, 2022. As the SWM MP is a City-wide study, engagement has been at a broad level, with the intention that future phases of each project identified will also include community engagement.

10. Will there be more community engagement before it is built?

Absolutely. We will notify the community before we begin the preliminary field investigations. Then, once we have gathered background technical information on all the options, we will engage the community who live near and use the park to hear their ideas and preferences for the type of facility and restoration plans. We will also let the nearby community know when construction will begin, how long it will take, and other progress updates.

11. What about the splash pad?

We have initiated the splash pad project for Margaret Greene Park. Engagement and more detail will be shared as things progress. Stormwater management elements will defer to park assets (such as the splash pad) during detailed design.

Resources:

Have Your Say engagement page
Stormwater Management Master Plan
Subwatershed Health Analysis Technical Memo
New End of Pipe Facilities Technical Memo

For more information, please contact:

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City of Guelph
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MEMO TO: ColLeen Gammie P. Eng. Infrastructure Planning Engineer

FROM: Hugh Whiteley P.Eng.

DATE: September 5 2022

RE; ISSUES TO BE DEALT WITH IN STORMWATER MASTER PLAN UPDATE

City of Guelph responses have been provided in red text on February 27th, 2023.

I present below a list of issues that I consider require attention in the preparation of an Update to the 2012 City of Guelph Stormwater Master Plant

Issue 1: Stormwater Problems in South Guelph Created by Rising WaterTable

Over the past thirty years, as urban development along Gordon Street expanded southward from Arkell Road to and beyond Clair Road, the stormwater systems for these developments conveyed all the stormwater generated in the subdivisions to infiltration galleries and greenway corridors where it became recharge to the groundwater flow system. The large increase in impermeable area created by the change in landuse from agriculture to urban produces a large increase in groundwater recharge above predevelopment conditions and consequently results in rising watertable conditions.

The rising watertable in the main Clairfield Greenway was identified in the background study for the 2012 Stormwater Study. The developer's consultant had recommended designing this Greenway to be a perennial watercourse as an upslope extension of Tributary E of Hanlon Creek. (Tributary E, a coldwater stream with brook trout originates at an excavated pond at the west end of what became the Greenway). After considerable discussion with Federal and Provincial agencies it was decided not to allow overland stormflow to enter the headwater pond of Tributary E and this Greenway was identified in the subdivision plan as a dryland element designed to convey stormwater only during Regional Storm conditions,

By 2011 the watertable surrounding the Greenway had risen by about 2m and created a permanent wetland at the downstream end of the Greenway which replaced the dryland (goldenrod) vegetation present when the Greenland was created. The study team misidentified this new wetland as a created stormwater pond and asked why it was not included in the list of stormwater ponds supplied by the city).

Since 2011 the watertable has continued to rise as additional impermeable area continues to be added to the stormwater systems supplying extra recharge. The created wetland continues to expand upslope. The last time I visited the site about three years ago the ponded water extended east of the Clairfield W crossing and the perennial stream in the Greenway had its source close to the Gosling Gardens crossing.

The main environmental impact of the altered flow conditions in the Greenway is on the headwater pond of Tributary E which now receives a large flowrate of warmed water from the wetland coming from the overflow pipe that controls the watertlevel in the wetland. This is detrimental to the coldwater habitat of Tributary E. When the Clairfield Subdivision was approved there was some thought given to filling in the dug pond at its point of origin to reduce heating created by the pond but this was not chosen as being necessary at the time.

Other observations in the area indicative of possible problems created by the increasing watertable levels are the reporting of frequent flooding of the road surface and adjacent properties along Dawn Avenue. The observed increased sanitary sewer flows in the main Gordon Street sanitary sewer may be an indication of inflows created by high water table conditions.

Remedial Actions Needed

1.1 Add the Clairfield Greenway wetland to the City's list of stormwater ponds and recommend conducting a Class Environmental Assessment to select the best method to ameliorate the warming effect of discharge to Tributary E from this wetland. The Clairfield Greenway (and all greenways) are in the City's stormwater management pond database. There are several different IDs in the area, however the "main Greenway" as you have called it is likely inclusive of 68, 65, 64, 69, and 50. The SWM MP has done work to assess these ponds (https://www.haveyoursay.guelph.ca/12256/widgets/48661/documents/86292) and make recommendations for next steps including further study, construction retrofits, and maintenance activities. These are outlined here: https://www.haveyoursay.guelph.ca/12256/widgets/48661/documents/86297.

1.2 Conduct detailed integrated modelling of groundwater system in South Guelph (MIKE SHE or equivalent) to determine the long term rise in watertable with existing stormwater management policies, the extent of problems possibly created by high watertable, and the best management system to establish an stable dynamic-equilibrium watertable under full build-out conditions. Integrated modelling extends beyond the scope of the SWM MP. At this time, the SWM MP will not include a recommendation for integrated groundwater modelling. This level of study is more appropriate at a subwatershed study level. The City has plans to update all subwatershed studies in order of prioritization established through the Natural Heritage Action Plan. Hanlon Creek Subwatershed is in the Priority #2 list of works.

1.3 Install and maintain monitoring wells to assess the success of watertable stabilization measures. The City has a SWM monitoring program in place. As part of the SWM MP and in accordance with the CLI ECA, the program will be further defined next year. Locations for monitoring will be established at that time.

Information about development and stormwater management: Stormwater management is generally comprised of lot level source control, conveyance control and end-of-pipe control, which the City encourages using low-impact development (LID) best management practices. As stated in the City's Development Engineering Manual (https://guelph.ca/wp-content/uploads/Development-Engineering-Manual.pdf), site-specific monthly water balance calculations are completed using the water balance method development by Thornthwaite and Mather (1956) as documented in the MECP Stormwater Planning and Design Manual (2003). Low Impact Development (LID) best management practices (BMP) are encouraged to mitigate the developments impact on the water balance and mimic pre-development recharge. For properties where there is no watershed study quantity control criterion available, post-development peak flows shall be controlled to pre-development (existing) levels for the 2 year through 100 year storm events.

Issue 2 Correcting defects in the treatment of outflow from Stormwater Pond 29

Pond 29 is situated at the southwest corner of Ptarmigan Drive and Niska Road. As noted in a separate document, stormwater Pond 29 Assessment of Compliance with ECA, there was a continuing problem with the outflow arrangements from Pond 29 that was not detected or corrected in the 2012 Stormwater Master Plan. The difficulty, which continued until the Niska Road Project was completed, was that there was no adequate outlet channel for Pond 29.

Outflow from pond 29 discharged into a ditch on the south side of Niska Road. At the time of construction of Pond 29 this ditch was not a watercourse with bed and banks formed by flowing water. Instead, it was a grassed drainage pathway at the bottom of a low-height road embankment. Road runoff from the south half of Niska Road flowed down the embankment as sheet flow and infiltrated at the foot of the slope. There was very occasional flow downslope toward Pioneer trail that did not produce any change in the vegetated streamdbed.

The construction of pond 29 intersected the watertable and Pond 29 has a perennial outflow. The outflow from Pond 29 was directed into the roadside ditch, which was not a watercourse, There was no consideration of a proper outlet channel in the ECA for Pond 29 so the ECA as issued was defective.

The episodic high outflows from Pond 29 that occurred during storm periods created severe erosion in the roadside drainage way especially in the steeply-sloped section west of the intersection with Pioneer Trail and resulted in a deepening of the channel bottom in this stretch that created a road hazard with a deep ditch at the edge of pavement with no shoulder.

During baseflow conditions from Pond 29 the outflow from Pond 29 infiltrated in the drainage way and the bed of the drainage way was dry for a considerable distance upslope from the entrance to the Pioneer Trail culvert. Under storm conditions flow continued through the Pioneer Trail culvert and down the steeply sloped portion of the drainage way west of Pioneer Trail. At the foot of the slope flow diverted from the roadway edge to enter the riverain wetland, in extremely high flow periods, for a few days per year water continued to flow through the wetland from the point of diversion in a diffuse undefined flowpath to reach the Speed River. The rest of the year the flow that occasionally reached the bottom of the slope west of Pioneer trail infiltrated at the point of diversion.

The net result of this outflow arrangement for Pond 29 is that most of the outflow from the pond was infiltrated and served to maintain the hydroperiod of the riverain wetland that parallels the Speed River, no high-temperature water and no suspended sediment was discharged directly to the Speed River.

As a part of the Niska Road Reconstruction Project a stormwater pipe was installed which conveys the ouflow from Pond 29, and runoff from the south half of Niska Road, directly into the Speed River. The Speed River at this location has special environmental sensitivity as brook trout have been found in the Speed River at the confluence with Hanlon Creek just upstream of the new sewer outfall.

Remedial Action Needed

2.1 The ECA for Pond 29 should be revised to include specification of an approved outlet channel to the Speed River. The approved outlet should function to protect the hydroperiod of the riverain wetland which was sustained by recharge to the groundwater system from the drainage area of Pond 29 and should protect the Speed River from ecological damage caused by the frequent discharge of warmed water and suspended sediment from Pond 29 and Niska Road.

We understand that this issue was previously raised to the Ministry of Environment, Conservation and Parks during the Niska Road project and you received a response from them on April 5th, 2018. To date, the Ministry has not directed the City to take action regarding modifications to the Pond 29 ECA. The City supports the conclusion that the Niska Road project did not impact the existing ECA for Pond 29.

In relation to the SWM MP – the study included two assessments of pond 29. The first being a maintenance inspection which was focused on identifying maintenance issues within the pond. The second was a study of the catchment area size and imperviousness. Pond 29 was part of the City's sediment removal program in 2019 where a clean-out was completed as well as minor maintenance items.

Finally, as previously mentioned, the Monitoring Program will be further established in the coming years and the outlet at the Speed River may be considered as one of the monitoring locations.

Issue 3 Persisting Exceedances of Temperature Threshold in Pond 4 outflow to Tributary A HCBP

The objective for the aquatic ecosystem in Tributary A of Hanlon Creek in the Hanlon Creek Business Park is to achieve sufficiently cold-water temperatures throughout the year to sustain the brook trout population present in Tributary A under pre development conditions. To meet this objective a temperature threshold was set for the outflow of stormwater pond 4 at the headwaters of Tributary A.

Construction in the Hanlon Creek Business Park began in 2010. Full build out has not yet been achieved in Phase 1 and Phase 2 of the HCBP. Construction of Phase 3 has not yet begun. Comprehensive monitoring in the Under Construction condition has been carried out since 2010 and reported in Annual Monitoring Reports.

Over the last twelve-year monitoring period all of the Annual Reports document extensive exceedance of the temperature threshold for the summer months in Tributary A at the outlet of Stormwater Pond 4. All of the annual electrofishing results record no brook trout and all spawning surveys show no brook trout redds.

Remedial Action Needed

3.1 Options for additional remedial action, specifically the installation of a cooling heat exchanger, should be examined for control of summer temperatures in the outflow from Pond 4 in the HCBP.

3.2 The intensive monitoring results from the HCBP should be incorporated into a comprehensive Annual Monitoring Report of the physical, chemical and biological health of the City's streams receiving stormwater as exemplified by the City of Kitchener's reports.

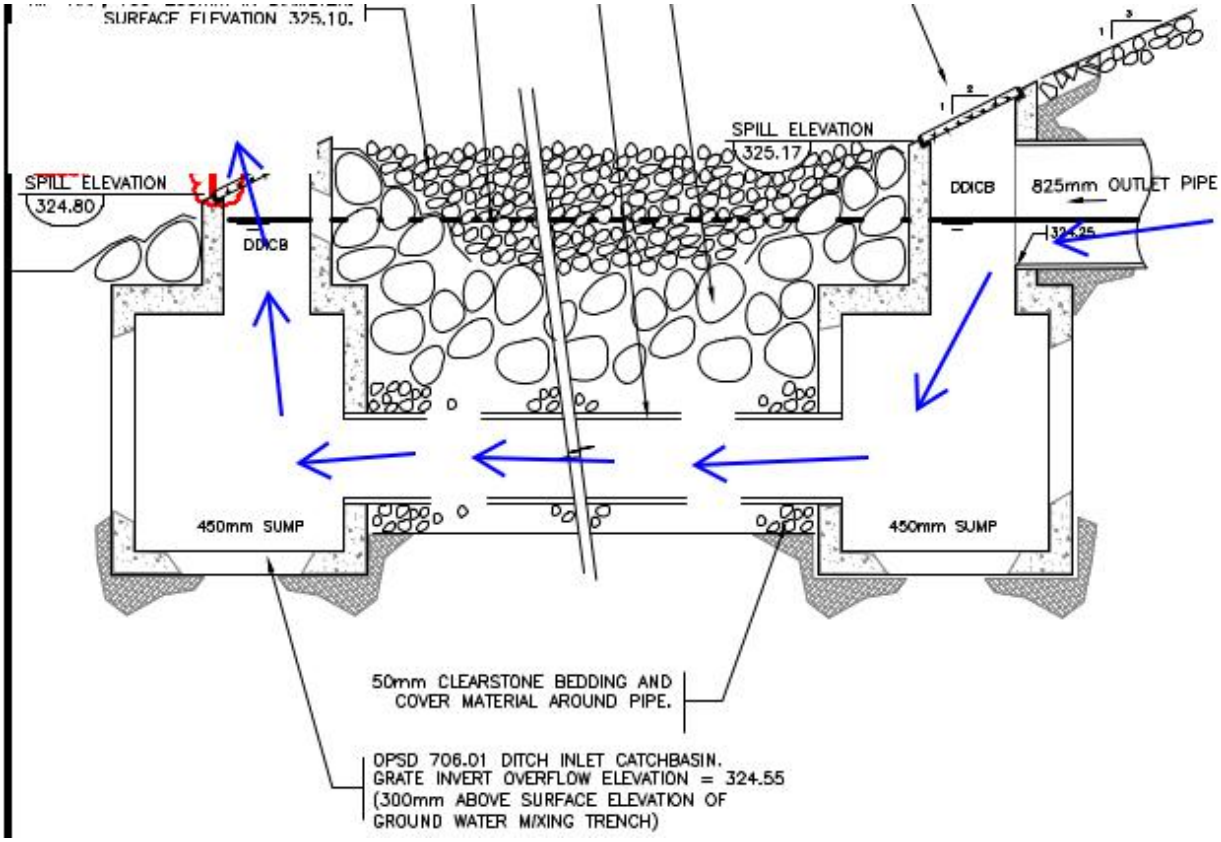
AECOM is currently retained by the City to complete surface water quantity and quality monitoring at several instream and Pond 4 locations throughout the HCBP study area. As part of the long-term monitoring program, AECOM has been monitoring the water quality and thermal performance of the Pond.

At the request of the City, in 2022 AECOM completed a field investigation (report pending) to assess the primary mechanisms by which water was warming at Pond 4, which included:

- Manual measurements of Pond inlet temperature
- Stratified temperature loggers (three depths) within the Pond
- Outlet structure temperature monitoring
- Surface monitoring of temperatures within the cooling trench
- Bathymetric survey to assess whether hydraulic short-circuiting was occurring

Warming in some areas of the cooling trench was observed, and a subsequent review of the design drawings was completed.

Based on the above, it was determined that head losses within the colling trench (i.e., through the perforations and the subsequent upwelling within the stone) are resulting in a preferential flow path whereby discharge from the Pond is moving through the twin 600 CSPs without thoroughly mixing with the groundwater in this area (refer to schematic below). As such, AECOM is proposing to plug one end of the colling trench to prevent flow-through and, if necessary, to raise the rim elevation of the upstream Double Ditch Inlet Catch Basin (DDICB) to force water through the cooling trench. While low-tech, this approach is worth attempting to improve the hydraulic performance of the trench.



AECOM manually measured the temperature of the cooling trench surface over this past summer and assessed that the water level was ~100mm below the finished grade. During these visits, surface (stone) temperatures in excess of 35°C were recorded. Since the cooling trench is almost 8 m wide in some areas, we are looking into covering the lateral areas of the trench in geotextile, which would be capped with a foot of topsoil, and then planted with vegetation. AECOM is in the process of refining the details of this with NRSI (ecology leads for this project).

The City has also requested AECOM to look into the feasibility of other thermal mitigation technologies, such as installation of shading balls, etc.

Issue 4 High Sodium in Guelph Drinking Water and High Chloride in Streams Receiving Stormwater

The application of salt to melt snow and ice on roads, parking lots and sidewalks results in episodically high concentrations of sodium and chloride in watercourses that receive stormwater runoff. Stormwater runoff that is directed to infiltration results in persisting high concentrations of sodium and chloride in the groundwater system recharged by the infiltrated stormwater.

All cities in Canada have some degree of environmental harm to aquatic ecosystems in urban watercourses caused by the episodic discharge of chloride to the watercourses from stormwater. (Additional chloride is added to streamflow at the outfall of Water Resource Recovery Facilities as a result of salt-based water softening.)

In cities where a portion of urban stormflow is directed to infiltration sites this results in elevated chloride concentrations in the groundwater system underlying the city and in the baseflow of the streams that are the outlet of the groundwater system.

In cities such as Guelph and the Cambridge/Kitchener/Waterloo complex that rely on groundwater as their principal or exclusive water source there is an additional environmental hazard created by salt use. Sodium concentrations in drinking water above 20 mg/L may cause health problems for individuals with sodium intolerance. Public health notification of concentrations of sodium above 20 mg/L in drinking water is required to allow the individuals affected to avoid this hazard.

Concentrations of sodium above 20 mg/L in drinking water may contribute to the detrimental effects on human health associated with high sodium intake so minimizing sodium concentrations in drinking water is an appropriate objective, subject to the constraint that public safety, currently safeguarded by road-salt application is maintained. The Canadian Drinking Water Guidelines for sodium in 200 mg/L. This is identified as an aesthetic standard based on taste rather than a health-hazard guideline.

Sodium concentration in Guelph's drinking water has been increasing exponentially over the past fifty years and is approaching 50 % 0f the Drinking Water Guideline maximum value. Chloride levels are also approaching 50% of the aesthetic Drinking Water guidelines.

Remedial Action Needed

4.1 To understand the extent of the problem posed by sodium and chloride in Guelph's drinking water the City must undertake a comprehensive and sustained monitoring programme for these constituents. I attach a summary of the scope of sampling needed.

- Under the Safe Water Drinking Act, municipalities are required to monitor both the raw and treated quality of the source water supplied. This monitoring is performed for both regulatory compliance and due diligence and is expected to identify any changes within the treated water, as well as, in raw sources. All operational Treated Sources of the City's drinking water are sampled and analyzed for analyte schedules contained within Ontario Regulation 170/03.
    - Sodium is sampled at all municipal drinking water sources according to Schedule 13-8 of O.Reg170/03 at a minimum of every 5 years. The City however, samples for Sodium on an annual basis due to the fact that at every treated source, sodium levels are above the lower reportable limit of 20 mg/L. The increased frequency of sampling provides more data in order to better establish sodium value trends.
    - Chloride is sampled annually at all municipal drinking water sources as part of an "Annual General Chemistry" sampling event through RCAp (Rapid Chemical Analysis Package). At this time, Chloride does not have drinking water standard and is governed only by an aesthetic objective value of 250 mg/L.
- In addition to regulatory requirements for water quality sampling, the City also conducts quarterly sampling events at a select number of multi-level environmental monitoring locations which include sodium and chloride analysis. A number of the sampled locations were chosen based on a salt vulnerability analysis that was completed for the City, using the methodology of Betts (2015) and compared against the CAD-DRASTIC method developed by Salek et al (2018), whereby a Chloride Application Density factor is calculated and combined with the DRASTIC vulnerability method.

- Betts A., B. Gharabaghi, E. McBean, J. Levison, B. Parker. 2015 Salt vulnerability assessment methodology for municipal supply wells. Journal of Hydrology 531: 523-533.
- Salek, M., J. Levison, B. Parker and B. Gharabaghi. 2018. CAD-DRASTIC: chloride application density combined with DRASTIC for assessing groundwater vulnerability to road salt application. Hydrogeology Journal.

4.2 To understand the extent of the problem posed by chloride entering the City's rivers and tributary streams from stormwater a comprehensive and sustained monitoring programme for chloride should be established and maintained.

As mentioned previously, the City has a SWM Monitoring program that is being modified and expanded through the CLI ECA and SWM MP requirements. Locations for sampling will be refined throughout the next couple o fyears.

4.3 Based on the results obtained in the monitoring programmes of drinking water and streamflow the City must develop a sodium and chloride management programme setting out the actions needed to achieve permanent sustainable levels of sodium and chloride in drinking water and chloride concentrations in streamflow.

- Sodium and Chloride concentrations in water sources are known to be primarily attributed to road salt application during the winter months, and in wastewater whereby chloride is not treated through the wastewater treatment process. The largest known contributors of sodium and chloride in Guelph's wastewater are attributed to water softeners and saltwater pools.
- It is recognized that temporal trends exist in a number of City sources and as such, the City has begun to implement the following measures in order to reduce salt loading within it's jurisdiction:
    - The City has developed a Salt Management Plan and is developing a Salt Management Action Plan which strives to constantly evolve to capture salt best management practices while ensuring the City's obligation to provide safe transportation systems in a fiscally responsible manner. The plan is based on the following principles:
        - This is a corporate wide plan reviewed and implemented in all Services Areas that impact the salt usage and monitoring within the Municipality
        - It is activity based, with standards and objectives established for each activity with minimal environmental impact
        - It is flexible with deficiencies identified and corrective actions implemented
        - Policies and procedures are well documented and communicated both within the organization and to outside contractors
        - Activities are recorded, monitoring, audited and reported on
        - Through monitoring of best management practices and the utilization of Smart about Salt and Transportation of Canada's Best Practices, the City consistently strives to improve winter control operations. Since the implementation of the City's Salt Management Plan, the following improvements have been phased in or are currently in development:
            - ESRI Automated Vehicle Locator (AVL) Implementation of Material Tracking

- Construction and Implementation of Snow Storage Facility
- Implementation of equipment for liquid anti-icing in parking facilities
- Modification of road plows to allow for more liquid anti-icing operations by adding a liquid application bar
- Incorporation of liquid chloride blends to increase the effectiveness of solid material application at lower temperatures and thus reducing the amount of material required
- Smart about Salt training for all staff