Welcome

to the

Public Open House for the Village of Innerkip Stormwater Management Master Plan

June 25th, 2026
5:00-7:00 pm
Innerkip Community Centre
695566 17th Line

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Study process and timeline

Where are we in the study process?

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 Township 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
Fall 2024

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

Spring 2026

Stage 2
- Develop and evaluate alternative management strategies
- Develop a short list of alternatives
- Selection of preferred alternatives

We Are Here
Summer 2026

Stage 3
- Describe preferred Stormwater Management (SWM) strategy
- Develop an implementation plan

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Why do we need a stormwater management master plan (SWM-MP)?

1. New Policies:

The Province has increased the regulatory requirements for municipal stormwater systems. The new requirements focus on volume and quality control. The overall goal of the new provincial policies is to reduce flooding and improve water quality.

2. Population Growth:

Our community is growing! As we welcome more people to call Innerkip home, we must manage our resources effectively.

3. Historic Flooding Issues:

Some areas in Innerkip have experienced flooding in the past. A plan must be developed to manage our water resources to minimize these issues in the future.

4. Proactively Manage Infrastructure:

We need to plan for the future. Current infrastructure will need to be replaced in the future, understanding our future needs will help us proactively plan our financial future.

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What is the goal of this study?

Why are we doing this?

It's time to look to the future! Existing infrastructure is aging, our population is growing, our climate is changing, and we have experienced flooding in the past. In other words, the strain on our stormwater system is increasing. We need a plan to address these issues and build resiliency into our stormwater system.

Overall Goal

The purpose of this study is to develop a short and long-term plan for the safe and effective management of stormwater runoff, while maintaining and improving the ecosystem health and sustainability of water resources within the Township. The SWM-MP will integrate flood control, erosion control, groundwater and surface water quality and quantity, natural environment, and thermal mitigation.

What does the study aim to address:

1. Decrease the likelihood of flooding that would result in property damage or safety issues;
2. Minimize the impacts of erosion on aquatic and terrestrial habitats and property;
3. Build resiliency against and adapt to the impacts of climate change;
4. Mitigate historic problem drainage areas;
5. Seek opportunities to improve stormwater management planning practices; and,
6. Seek opportunities to improve water quality.

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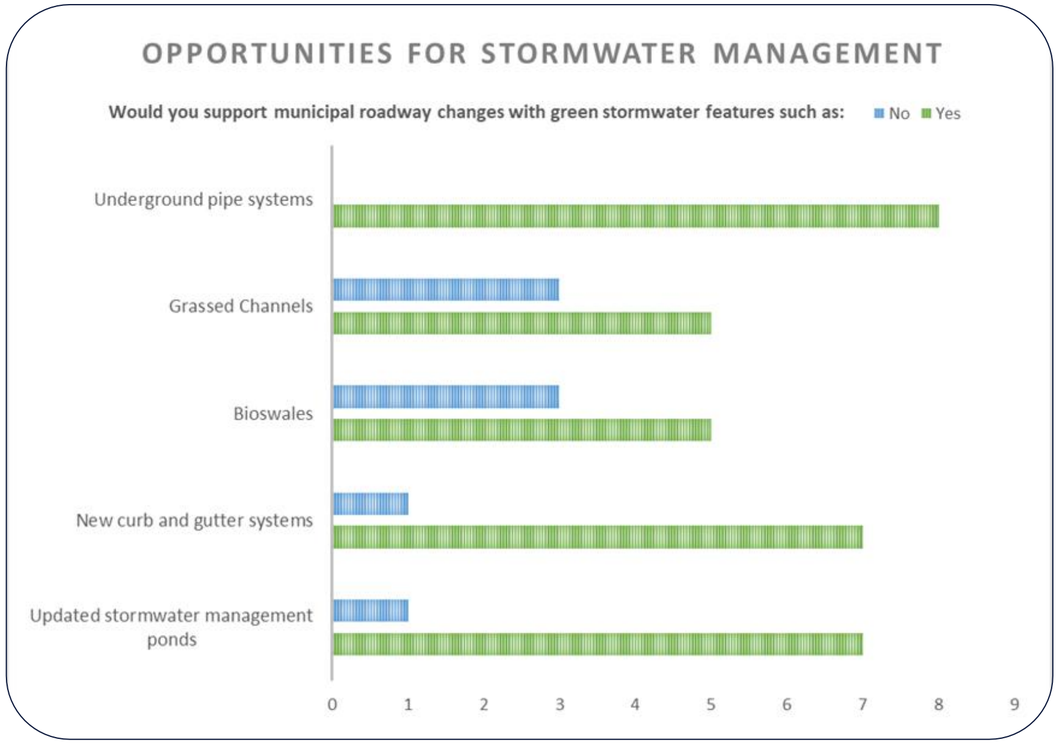
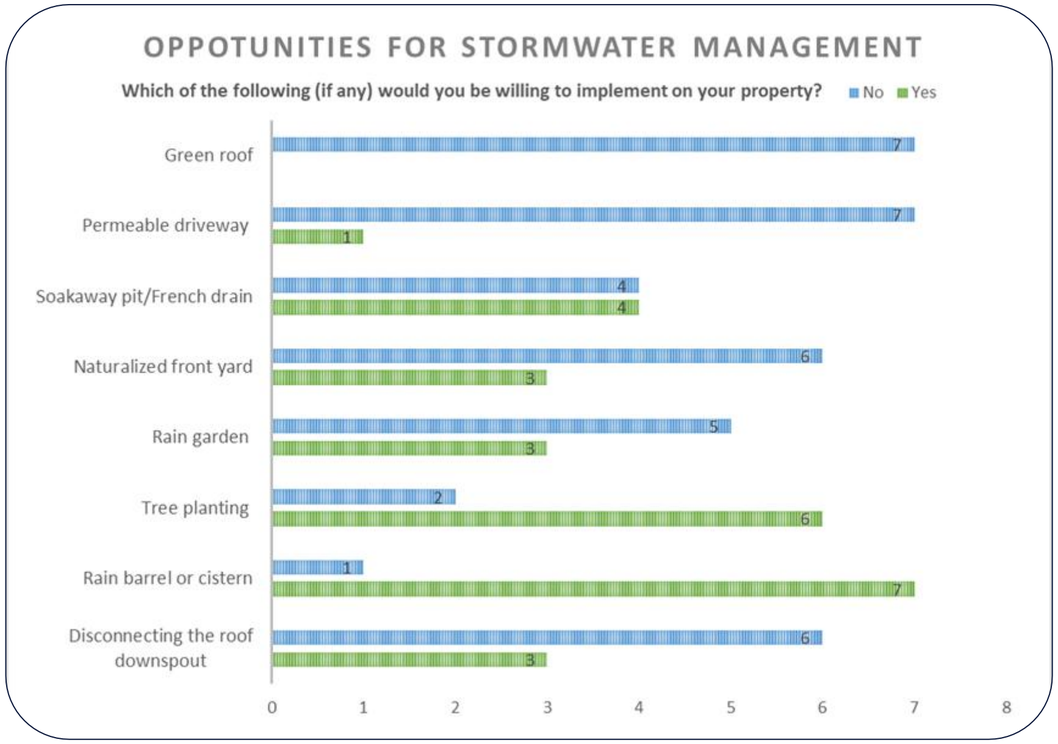
What We Heard Through Engagement

Public Open House #1

The Township hosted the first Public Open House on October 23rd, 2024. In total, 22 people attended the open house, and 12 participants completed the written survey. 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 the Village of Innerkip.





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Recommended Pollution Prevention, Operations, and Maintenance Procedures

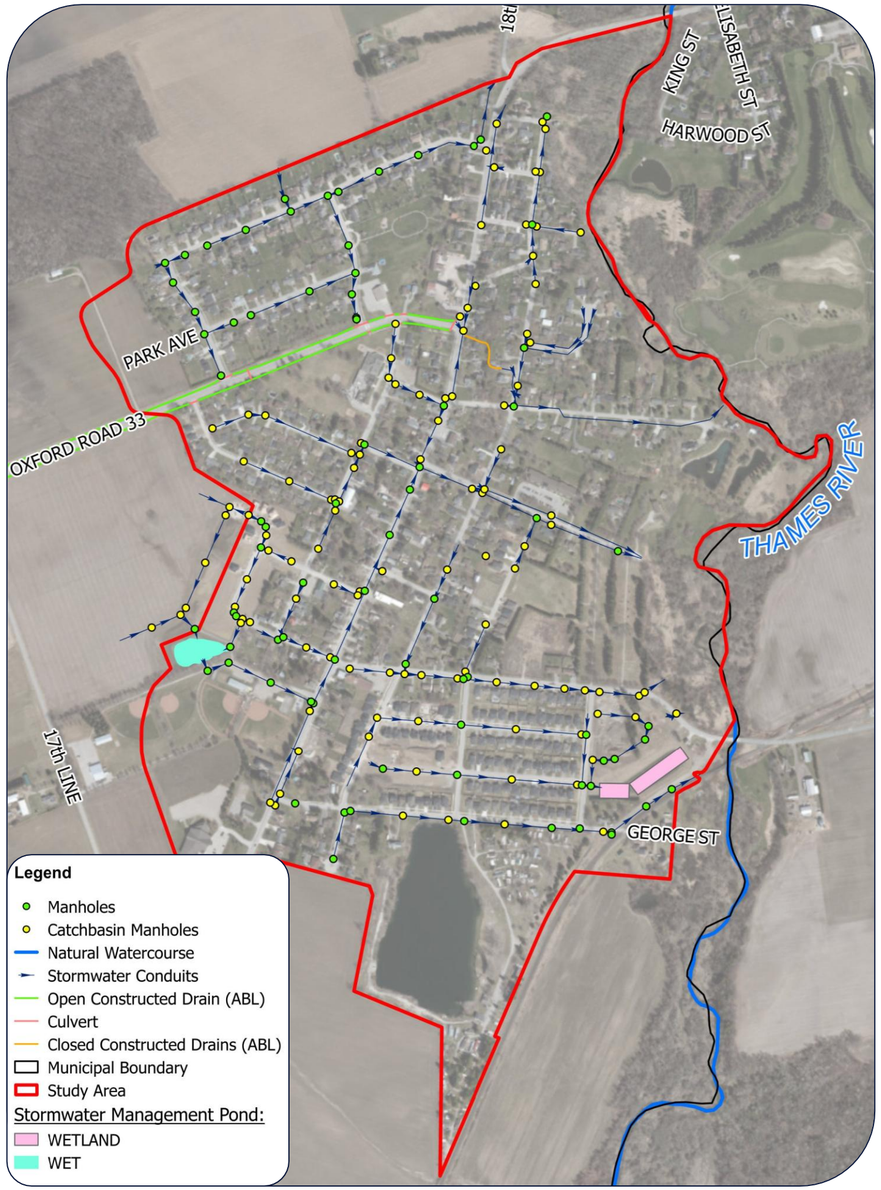
Pollution Prevention, Municipal Management, and Operation Practices are important to prevent pollutants from impacting the environment and to maintain effective stormwater infrastructure. Through consultation with Aquafor Beech Limited, the Township identified existing practices and received a list of recommended practices.

Examples of Recommended Practices

- Develop a Pollution Prevention Plan
- Public Education
- Coordinate with Area Municipalities to Develop Safer Alternative Products
- Sediment Removal Program – once facilities are assumed
- Erosion and Sediment Control Plan Review

Stormwater Management Facility Cleanouts

SWM facilities may be designed to remove sediment from the storm sewer network before being discharged. The Township is responsible for the operation and maintenance of SWM facilities. To make sure that the facilities function properly, sediment needs to be removed sometimes



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Source and Conveyance Controls

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, 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.


Perforated Pipe


Downspout Disconnection


Rain Garden (Bioretention)

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Storm Analyses

Intensity-duration-frequency (IDF) curves are used for infrastructure design and for flooding risk assessments. Historical rainfall trends and projected impacts of climate change on IDF curves were analyzed as part of the SWM-MP.

Analysis of climate change IDF projections to 2050 found an average increase in rainfall depths compared to the Township's existing IDF curve.

IDF Recommendations

It is recommended that the Township update their standard IDF curve to one that is adjusted for climate change, increasing the existing standard IDF curve by 15%.

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Existing Stormwater Management Facilities

Stormwater Management Facility Assessments

The SWM-MP assessed the Village of Innerkip's stormwater infrastructure. This involved the inspection of the Village's two stormwater management facilities to identify physical deficiencies and obtain an estimate of sediment accumulation.

Example Physical Deficiencies

Phragmites

Erosion

Overgrowth of Vegetation

Stormwater Management Facility Recommendations

- Water level monitoring at Pond 3 (Jonker St. and Lock St.)
- Vegetation management plan at Pond 3
- Operation and maintenance activities at Pond 4 (Burton St. and Coleman St.)

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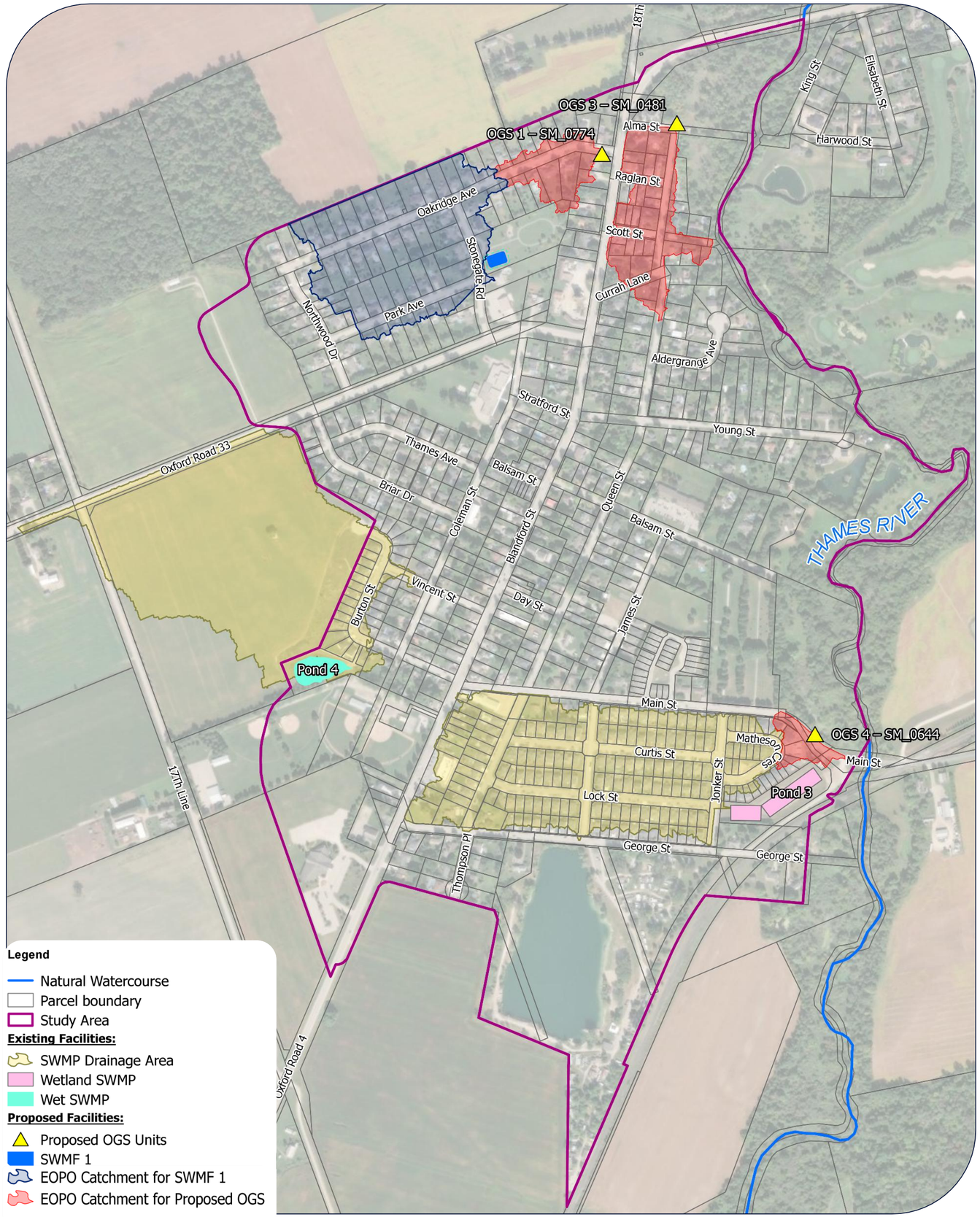
Water Quality Assessment

Approximately 87.3% of Innerkip's built urban area does not have any form of water quality or quantity control.

The SWM-MP identified one feasible site for a new SWM facility and three feasible locations for Oil and Grit Separator units to provide additional water quality control. These would increase the controlled area by 8%.



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Urban Flood Management and Stormwater Infrastructure

Stormwater Infrastructure Model

A computer model of Innerkip's stormwater infrastructure was created to evaluate the condition of the stormwater network under existing conditions and future urban built out conditions.

Flow Monitoring

Flow monitoring was performed at four different locations during the SWM-MP, and one rain gauge was installed. The data collected by these stations was used to calibrate the computer model.

Stormwater Infrastructure Upgrades

The computer model was used to identify potential areas of concern and flooding risk, and impacts to private property and municipal infrastructure. Recommendations were made for upgrades to the storm sewer system that can address these problem areas.

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Master Plan in Action

Sample Recommendations

1. That the Township update their policies, manuals, and guidelines to align with the recommendations of the SWM-MP technical reports.
2. That the Township apply the recommendations of the SWM-MP as part of other initiatives, plans, studies, and programs to leverage potential synergies from the opportunities.
3. That the Township undertake comprehensive monitoring to fully calibrate the computer model
4. That the Township integrate source and conveyance control SWM practices into road construction and reconstruction projects.
5. That the Township support the implementation of the SWM-MP through adequate financial and staffing resources.

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What is next?

Stage Three

1. Finalize implementation plan
2. Finalize Stormwater Management Master Plan.

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Thank you for participating!

https://www.ezt.ca/en/business-and-development/innerkip-master-drainage-plan.aspx

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