

	<h1>POLICY</h1>	<u>Policy No:</u> MUN-UTI-2003
<u>Policy Title:</u> STORMWATER MANAGEMENT <u>Policy Type:</u> COUNCIL <u>Category:</u> Municipal Services <u>Sub-Category:</u> Utility & Service <u>Author:</u> Manager, Stormwater Utility <u>Dept/Div:</u> Infrastructure Services, Engineering Division	<u>Approval Date:</u> November 21, 2016 <u>Next Review Date:</u> November 2021 <u>Reviewed Date:</u> <u>Last Amended:</u> <u>Replaces:</u> I-1135, I-1140, I-1145 <u>Repealed:</u> <u>Replaced by:</u>	
<u>Related Policies, Procedures and/or Guidelines:</u> www.kitchener.ca/stormwatermasterplan		

1. POLICY PURPOSE:

This policy serves as a decision support tool as well as a methodology for the prioritization of works outlined in the Integrated Stormwater Management Master Plan (ISWM-MP).

2. DEFINITIONS:

“**Stormwater**” - refers to rainwater and melted snow that flows over roads, parking lots, lawn and other sites in rural and urban areas.

“**Stormwater Management**” - refers to practices which help to minimize the impact of polluted runoff flowing into watercourses, control the rate at which, or prevent, flooding from occurring and reduces the strain that stormwater places on municipal infrastructure.

“**Low Impact Development**” - is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls.

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3. SCOPE:

POLICY APPLIES TO THE FOLLOWING:	
<input checked="" type="checkbox"/> All Employees	
<input type="checkbox"/> Management	<input type="checkbox"/> Permanent Full-Time Employees
<input type="checkbox"/> Permanent Full-Time Non Union	<input type="checkbox"/> Permanent Full-Time C.U.P.E. 791
<input type="checkbox"/> Temporary	<input type="checkbox"/> Part-Time Non-Union
<input type="checkbox"/> Student	<input type="checkbox"/> Permanent Full-Time Union
<input type="checkbox"/> Continuous Part-Time Employees	<input type="checkbox"/> Part-Time Employees
<input type="checkbox"/> Continuous Part-Time Non-Union	<input type="checkbox"/> Continuous Part-Time Union
<input type="checkbox"/> Specified Positions only:	<input type="checkbox"/> Other:
<input type="checkbox"/> Council	<input type="checkbox"/> Local Boards & Advisory Committees

This policy applies to all staff involved in any form of decision making related to any form of construction on municipal and private land. This includes but is not limited to:

- Engineering
- Facilities Management
- Operations – Roads and Traffic
- Operations – Environmental Services
- Transportation Services
- Building
- Planning
- Economic Development

4. POLICY CONTENT:

A. Stormwater Infiltration in the Context of Source Protection Planning

This component defines where and how infiltration based stormwater management controls, commonly referred to as Low Impact Development (LID) controls, can safely be planned and constructed in the context of the approved source protection planning policy under the *Clean Water Act*.

Developed in consultation with the Region of Waterloo staff and the Ministry Of Environment and Climate Change, this component of the policy acknowledges that the use of infiltration practices to reduce runoff and restore natural hydrologic processes is crucial to maintaining and improving the City of Kitchener’s natural water systems, maintaining the viability of local stormwater infrastructure, and contributing to climate change adaptation & mitigation strategies. As the implementation of infiltration practices becomes

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more prevalent, the City of Kitchener has a duty to protect local groundwater resources by implementing a land use-based stormwater infiltration framework which is developed based on a sound understanding of identified and future risks.

Sites with high risk activities are generally discouraged from incorporating LID techniques that utilize infiltration as its primary function for sensitive drainage areas and require the proponent to prepare a Pollution Prevention Plan and/or Risk Management Plans as part of SWM Reporting requirements. Spill prevention and management are a central focus of such plans.

Also identified within the Implementation Plan are the infiltration opportunities and constraints and lists of acceptable practices within various land-uses ranging from Residential, Mixed Use, Commercial, Industrial Employment, Institutional and Open Space and Natural Heritage Conservation as well as local, minor and major roadways within the City of Kitchener.

B. Stormwater Volume Criteria and Targets

This component outlines the minimum stormwater volume criteria as well as outlines the application of general stormwater management targets as part of:

- New development,
- Redevelopment, reurbanization and residential intensification, and
- Linear projects (roadways, trails and transit infrastructure etc.).

As part of this component, all sites within the City of Kitchener are required to:

- Continue to control off-site runoff for **flood control and erosion** per the approved watershed, subwatershed, master drainage plans, Environmental Impact Statement (EIS), Provincial Policy and Guidelines or other area specific studies. Special Policy Areas which address known or flood prone areas would remain in effect.
- Continue to achieve **infiltration targets** to maintain the existing water balance per current approved and future subwatershed plans. The Development Engineering section will identify relevant subwatershed plans and policies.
- Control for **water quality** (pollutant loadings) in accordance with current MOECC guidelines to 'Enhanced-Level 1' protection as defined in the 2003 Stormwater Management Planning & Design Manual.

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- **Retain** a minimum of 12.5mm of runoff from the all surfaces on the entire site and to enroll in the City of Kitchener Stormwater Utility Credit program. Retention can be a combination of infiltration, evapotranspiration or rain water re-use (also known as rainwater harvesting). All volume retained on-site will be counted towards achieving flood and erosion control, water quality control as well as credits toward existing infiltration targets.

In all cases, the targets as specified in this component shall be superseded by more stringent targets as developed by the MOECC or through future Watershed Studies, Subwatershed Studies, Master Drainage Plans, Environmental Impact Statement (EIS) and/or other area specific studies such as GRCA Wetland Policy.

C. Stormwater Management Fee

A Stormwater Management Fee (formerly Cash-in-lieu) has been established such that a development proponent shall provide a designated financial contribution at the current per hectare rate as defined by the City of Kitchener, as amended from time to time where the requirements of the **Stormwater Infiltration in the Context of Source Protection Planning and the Stormwater Targets and Volume Criteria** are not be fully achieved. This fee will be applied towards off-site stormwater management elsewhere in the city, in conformance with the recommended approaches of the Integrated Stormwater Management Master Plan (ISWM-MP).

Funds will be collected by the City of Kitchener SWM Utility until such time as a suitable project or program is identified for partial or full funding.

Sites with Restrictions

For all sites regardless of perceived constraints, the proponent shall be required to fully comply with the appropriate volume control targets described above. Should pre-consultation with City of Kitchener engineering staff and/or pre-design investigation by the proponent and reviewed by the City Engineer identify that volume targets are not achievable; the proponent must consider and present the merits of relocating project elements to address varying soil conditions and other constraints. Site constraints which may result in the City permitting alternatives to the above prescribed volume targets are based on:

- i. Shallow bedrock;
- ii. High groundwater;
- iii. Contaminated soils (i.e. Brownfields);

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- iv. High Risk Site Activities;
- v. Prohibitions: Issue Contributing Areas (ICA) and or WHPAs with a vulnerability score equal to or greater than 8; and,
- vi. Restrictions: including WHPAs with a vulnerability score of 2 to 6 inclusive

On sites where the proponent cannot implement the required volume control to the Maximum Extent Possible or MEP as confirmed by the City of Kitchener Development Engineering, the site is required to contribute to the Stormwater Management Fee at the current per hectare rate as amended from time to time.

5. **HISTORY OF POLICY CHANGES**

Administrative Updates

No administrative history - policy effective November 21, 2016.

Formal Amendments

2016-11-21 - Policies I-1135, I-1140 & I-1145 were repealed and replaced with MUN-UTI-2003. See report number INS-16-080 dated October 27, 2016.