Translating Science Into Action

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October 22, 2019
Using Science to Inform Decision Making

Monitor the outcome so you can Adapt if necessary
Past State of Stormwater Management Practices

• Pre-development sediment and erosion control,
• Post-development stormwater quality and quantity,
• Environmental compliance approvals for stormwater maintenance.
Geomorphologic Impacts

- Increased runoff volume and flow duration is resulting in increased streambank erosion.
Groundwater Recharge

- Increased impervious area reduce groundwater recharge,
- The predevelopment to post water balance is not being maintained.

Are SWM Practices Working?
Flood Mitigation

• Lack of maintenance

Are SWM Practices Working?

Add Climate Change
Are SWM Practices Working?

Nutrient Attenuation

- Lack of maintenance

Claud (mg/L) vs. Chlorophyll (ug/L) over time.
Are SWM Practices Working?

• Working as designed to reduce sediment and peak volumes.
• Not sufficient to achieve our targets and accommodate growth.

Change was needed!
The Solution: Green Infrastructure

- Storage
- Conveyance
- Filtration
- Infiltration
Was a voluntary market transformation program working with our municipal partners and development community to promote Low Impact Development and more sustainable building practices.
Mitigate impacts of new growth

Address existing urban areas

Monitor and Report on progress

Goals

• Improving water quality
• Reducing urban runoff and the risk of flooding
• Building resilience to Climate Change

Objectives

Rain Scaping

Lake Simcoe Region conservation authority

10 years after winning the Thiess International Riverprize
Mitigate\Protect

• Stormwater management guidelines,
• Charrettes and consultation
• Environmental Approvals
• Low Impact Development Treatment Train Tool,
• Training and Education.
Restore \ Improve

- Restoration Services,
- Formalized program,
- Implemented Offset Programs.
Monitoring\Reporting

- Demonstrate that environmental targets are being achieved,
- Document the benefits of various green infrastructure BMP’s.
Questions?
For more information
www.lsrca.on.ca