

Build Beautiful Stormwater Master Plan

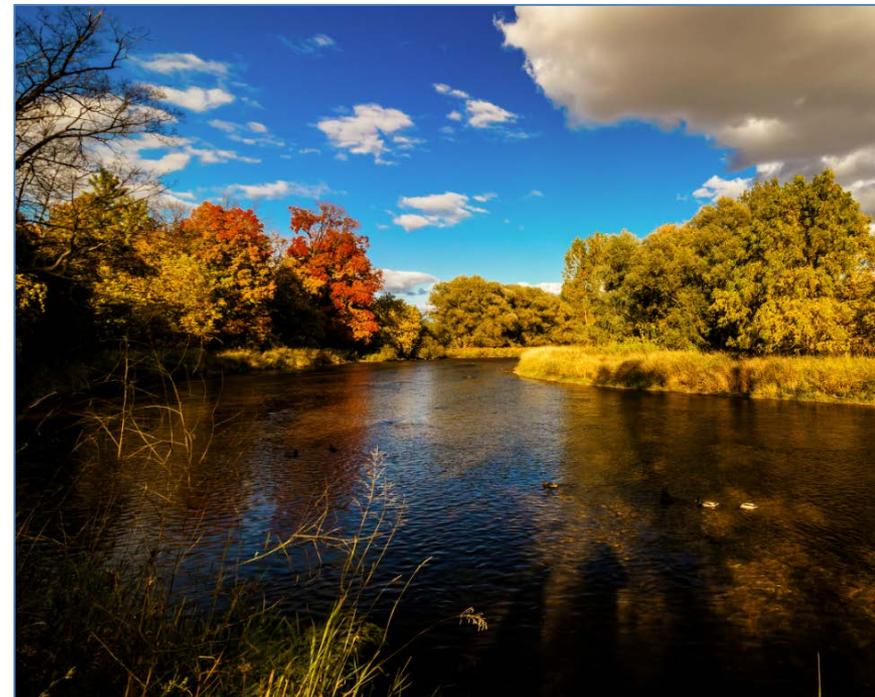
Infrastructure Planning &
Engineering Services

Muneef Ahmad
Manager, Stormwater Projects & Approvals



Presentation Overview

1. Stormwater Master Plan Background
2. Role of Legislation & Best Practice Review
3. Consultation
4. SWMP Framework
5. Moving Forward



1. Stormwater Master Plan Background



Stormwater Master Plan - *Background*

Drivers:

1. Build upon previous focus on stormwater quality
2. Refresh strategic vision
3. Respond to Climate Change Action Plan Item #12-2: 'Develop a comprehensive long-term SWM strategy'
4. Bridge to (concurrent) Asset Management Plan
5. Incorporate evolving industry practices & policies



Stormwater Master Plan - *Background*

Vision Statement:

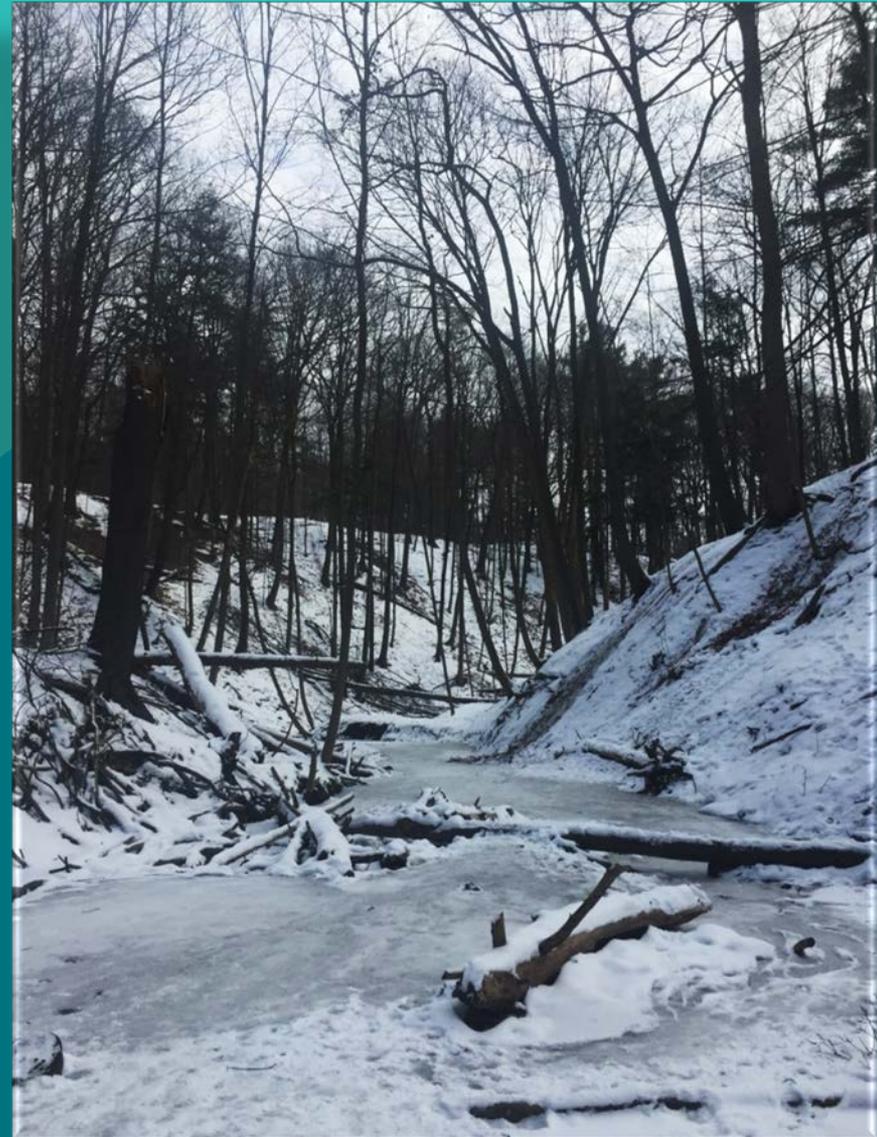
Build value in water resources through collaboration, to protect and enhance the quality of our built and natural environment.

Build Beautiful to connect to nature and our communities.

The logo features the word "buildbeautiful" in a sans-serif font, with "build" in brown and "beautiful" in blue. Below it, the words "Stormwater Master Plan" are written in a smaller, dark blue sans-serif font. The background of the logo area is light blue with a decorative pattern of overlapping, semi-transparent blue circles of varying shades on the right side.

buildbeautiful
Stormwater Master Plan

2. Role of Legislation & Best Practice Review

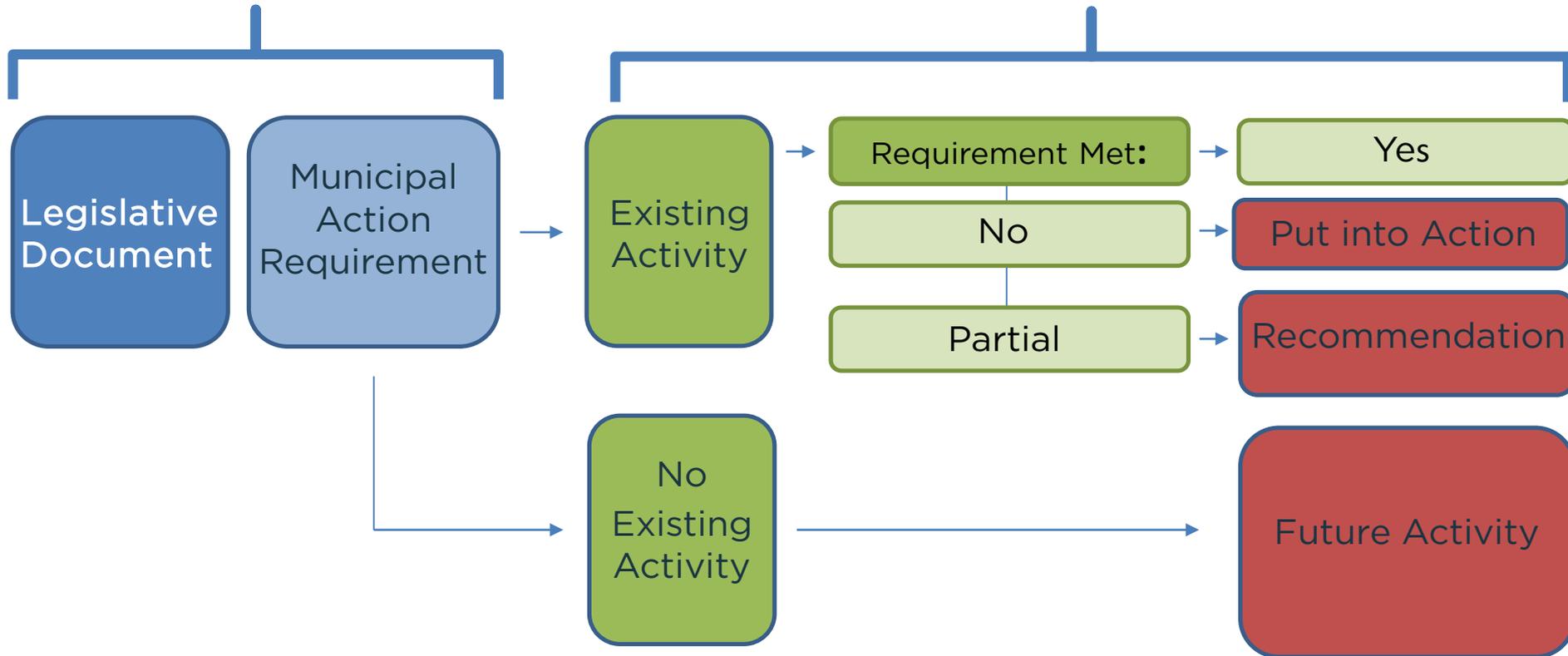


Stormwater Master Plan - *Legislation*

The “**legislative checklist**” ensures that Mississauga’s legislative requirements are being addressed through City actions, no gaps exist, and stakeholder needs are being met.

Legislative Framework

Stormwater Master Plan



Stormwater Master Plan – Best Practices Review

A review of Stormwater Best Practices in Ontario, National and U.S. cities was completed to inform the City of Mississauga's Stormwater Program and Actions.

Ontario:

- Town of Oakville
- City of Kingston

National:

- City of Vancouver
- City of Calgary

United States:

- New York City (Environmental Protection)
- City of Portland
- City of Nashville
- Seattle Public Utilities





3. Consultation

Stormwater Master Plan - *Consultation*

Consultation

- EAC Engagement #1 - Introduction
- EAC Engagement #2 - Background memo
- Online Survey #1 & Social Flare
- EAC Engagement #3 - Precedents & Legislation
- Two Stakeholder Meetings
(Peel Region, CVC, CH, TRCA)
- Virtual Public Information Centre
- Online Survey #2
- EAC Engagement #4 - Consultation summary
- Indigenous Peoples & Nations Engagement

Timing

November 2019

July 2020

November 2020

February 2021

*June 2020 &
April 2021*

April 2021

April 2021

June 2021

May 2021 - Aug.2022



Stormwater Master Plan - *Survey #1*

Public Interest and Need for Stormwater Management



89% think stormwater is either extremely or very important for the City to manage



90% are concerned about the environmental quality of the streams and rivers located within the City



Total Survey Participants: 111

Where to Manage Stormwater in Creative Ways



Public Parks (22%)



City Facilities (20%)



Parking lots (20%)



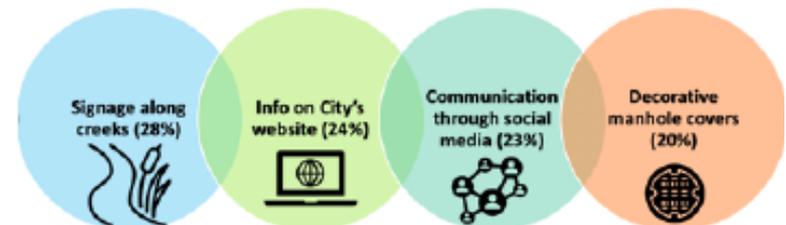
On my street (15%)



Private businesses (13%)



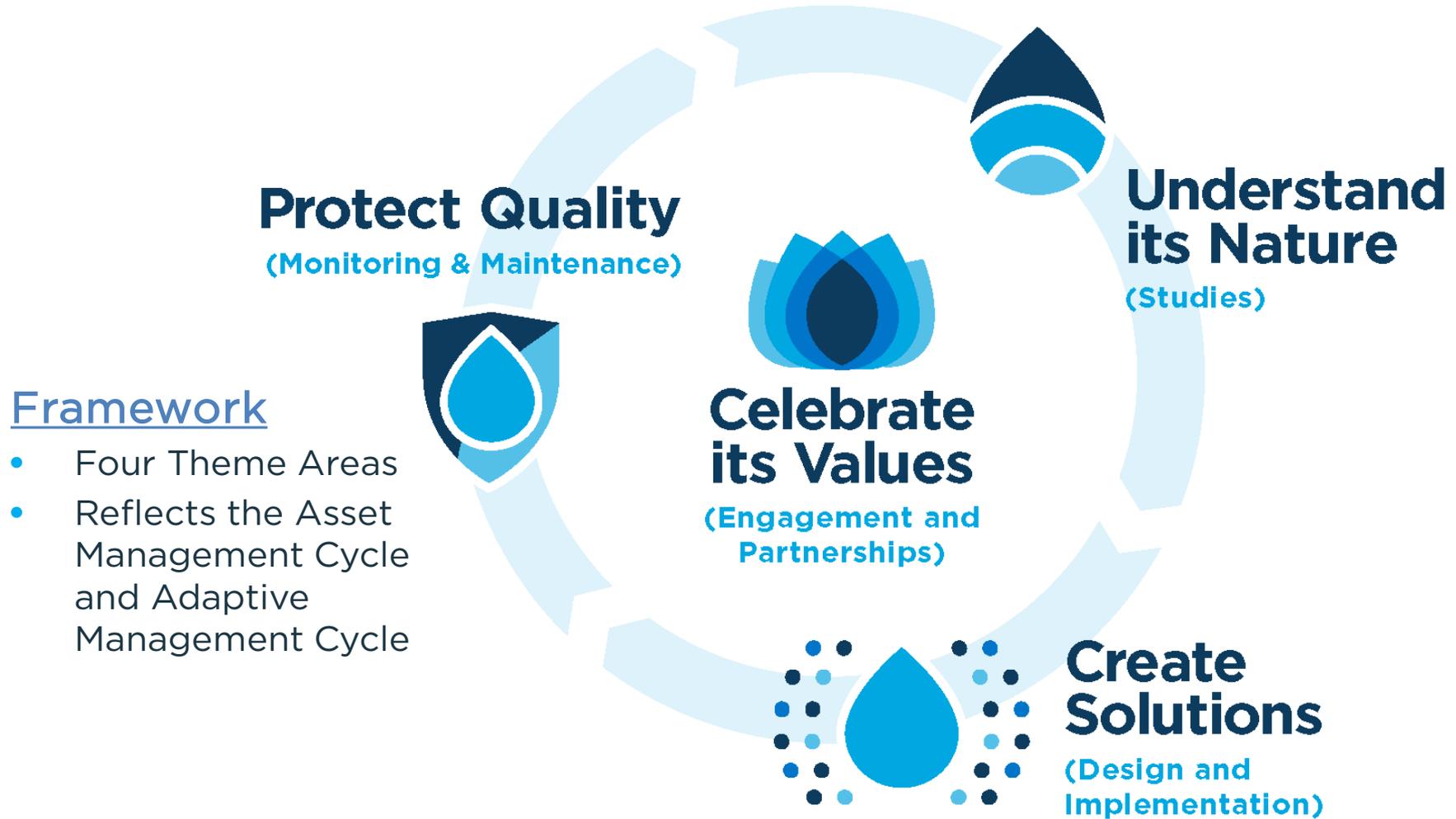
On my property (8%)



4. Stormwater Master Plan Framework



Stormwater Master Plan - *Framework*



Stormwater Master Plan - *Framework*

1. Understand Its Nature

(Studies)

- Groundwater Mapping
- Review drainage in older neighbourhoods

2. Create Solutions

(Design & Implementation)

- Flood control retrofits
- Measures to cool stormwater



3. Celebrate Its Value

(Engagement & Partnerships)

- Artist in Residence Program
- Stormwater Outreach

4. Protect Quality

(Monitoring & Maintenance)

- Asset Management
- Outfall Monitoring

5. Moving Forward



Stormwater Master Plan – *Moving Forward*

SUPPORTING ACTIVITY		ACTIVITY TYPE	TIMELINE	PRIORITY	COST	STATUS	LEAD	SUPPORT	PARTNERSHIPS
# 22 Actions	X	Plan Program Policy Partnership Project	Short (1-3 yrs) Medium (3-10 yrs) Long (10-25 yrs) Ongoing	Low Medium High	N/A \$ (0 - \$100,000) \$\$ (\$100 - \$500,000) \$\$\$ (>\$500,000)	Not Initiated Planned Underway	Env Services	Varies/TBD	Varies/ TBD

PRIORITIZATION CRITERIA		VALUE
Risk to Public	Inaction may result in the continued or increased risk to the public, such as risks to safety associated with infrastructure disrepair and risks to property associated with flooding.	Low Medium High
Risk to Environment	Inaction may result in continued or increased risk to the environment, such as risks to our watercourses due to erosion, or risks to wildlife due to pollution.	Low Medium High
Community Benefit	Activity will result in community benefits, such as beautification efforts associated with infrastructure upgrades and additional park space.	Low Medium High
Legislative Requirement	Activity is a requirement of Higher Order Policy, and inaction would result in non-compliance.	Low Medium High

Stormwater Master Plan – *Moving Forward*

Flood Control Retrofit Projects (City-wide) – Future Activity – Implementation Example

Project to determine feasibility for flood control retrofits

Supporting Activities	Activity Type	Timeline	Priority	Cost	Status	Lead	Support	Partnerships
Conduct City-wide Flood Risk Assessment & Ranking Study	Project	Medium	High	\$\$	Not Initiated	Env Services	N/A	CAs, STEP
Align with City initiatives, identify study requirements, consult with stakeholders	Plan	Medium	Medium	\$	Not Initiated	Env Services	Park Planning, Facilities & Property Management, Capital Works	CAs, STEP
Establish funding, scheduling, and implementation program	Program	Long	Medium	\$\$\$	Underway	Env Services	Capital Works, Corporate Finance	CAs, STEP