

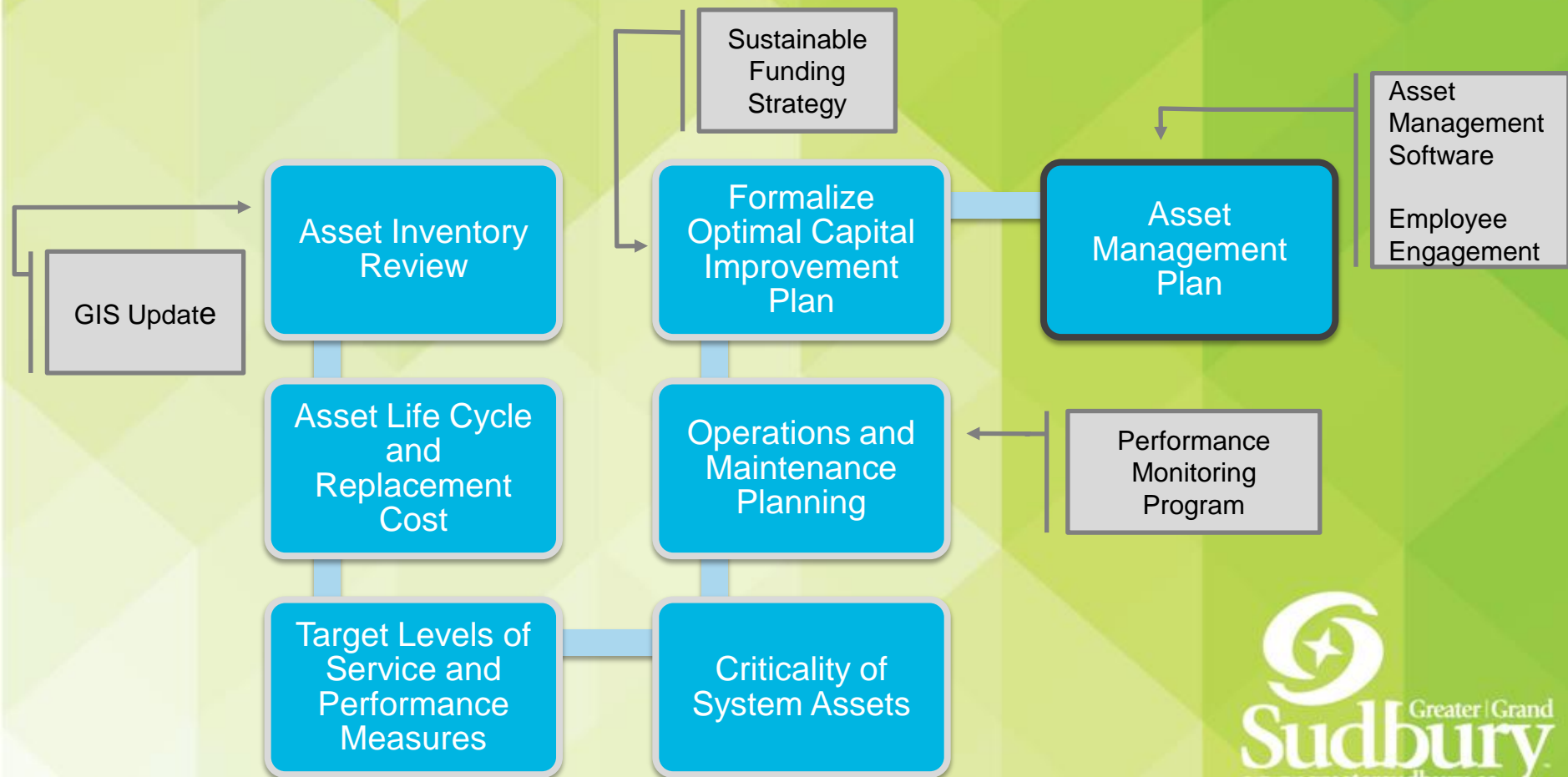
# **City of Greater Sudbury Stormwater Asset Management Plan**

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City of Greater Sudbury

# Stormwater Asset Management Plan

## Project Overview



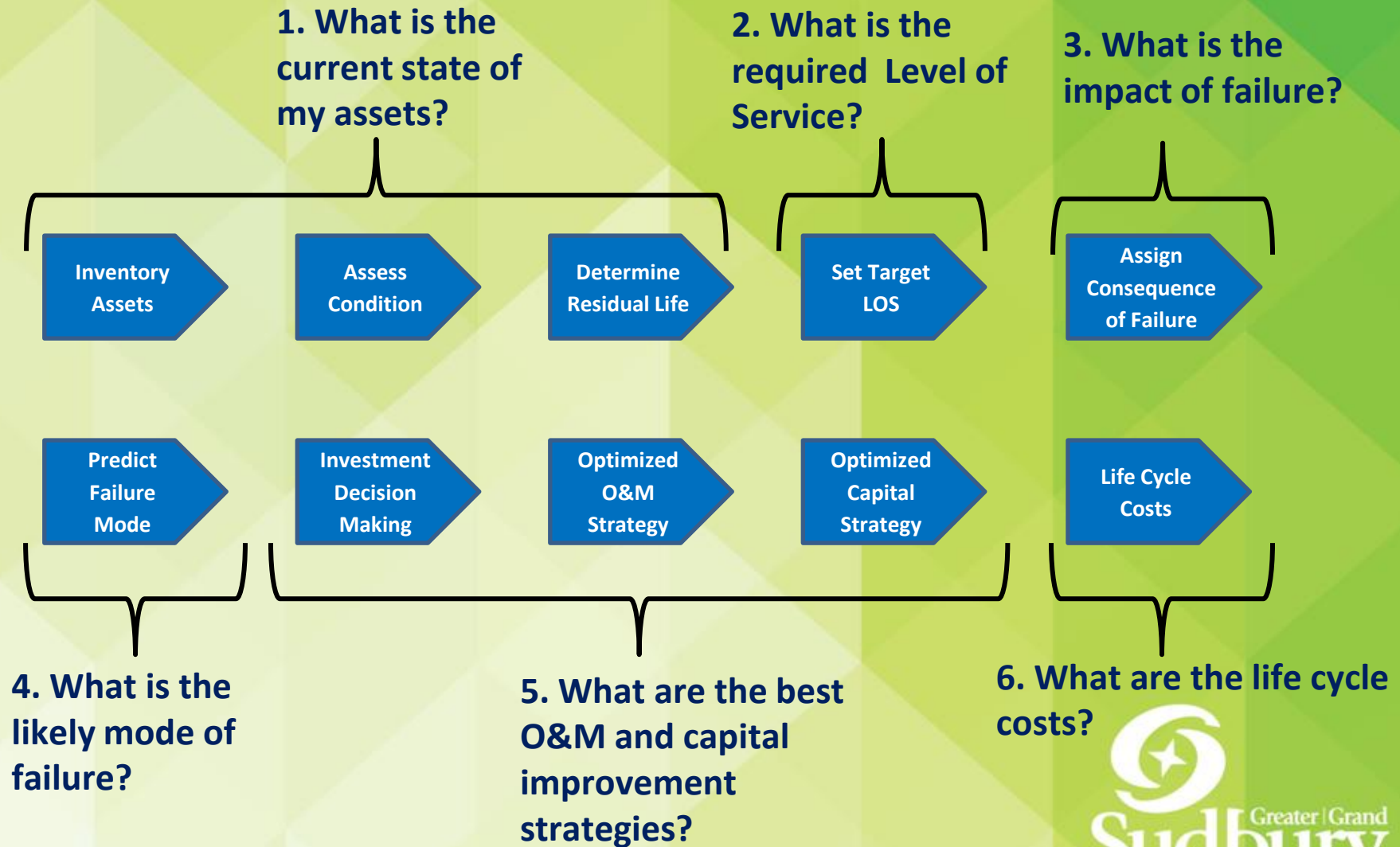
# Asset Management Planning

- How much do you reinvest in your system?
- What should you do first and why?

*Asset Management is the systematic and coordinated activities and practices of an organization to optimally and sustainably deliver on its objectives through cost-effective life-cycle management of assets*

*-City of Greater Sudbury Council Report, June 2018*

# Typical Asset Management Approach



# Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure

1. July 1, 2019 – All Municipalities are required to prepare their first **Strategic Asset Management Policy**.
2. July 1, 2021 – All Municipalities are required to have an **Asset Management Plan** for its entire **core municipal infrastructure** (*non-core is due July 1, 2023*).
3. July 1, 2024 – All **Asset Management Plans** must include **Levels of Service** the Municipality proposes to provide and a **strategy to fund the required activities**.

# Sudbury Stormwater Asset Inventory

**17,347** storm structures

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**1,899 km +** ditches

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**188 km** Municipal Drains

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**459 km** storm sewers

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**72 km** culverts

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**23** oil/grit separators

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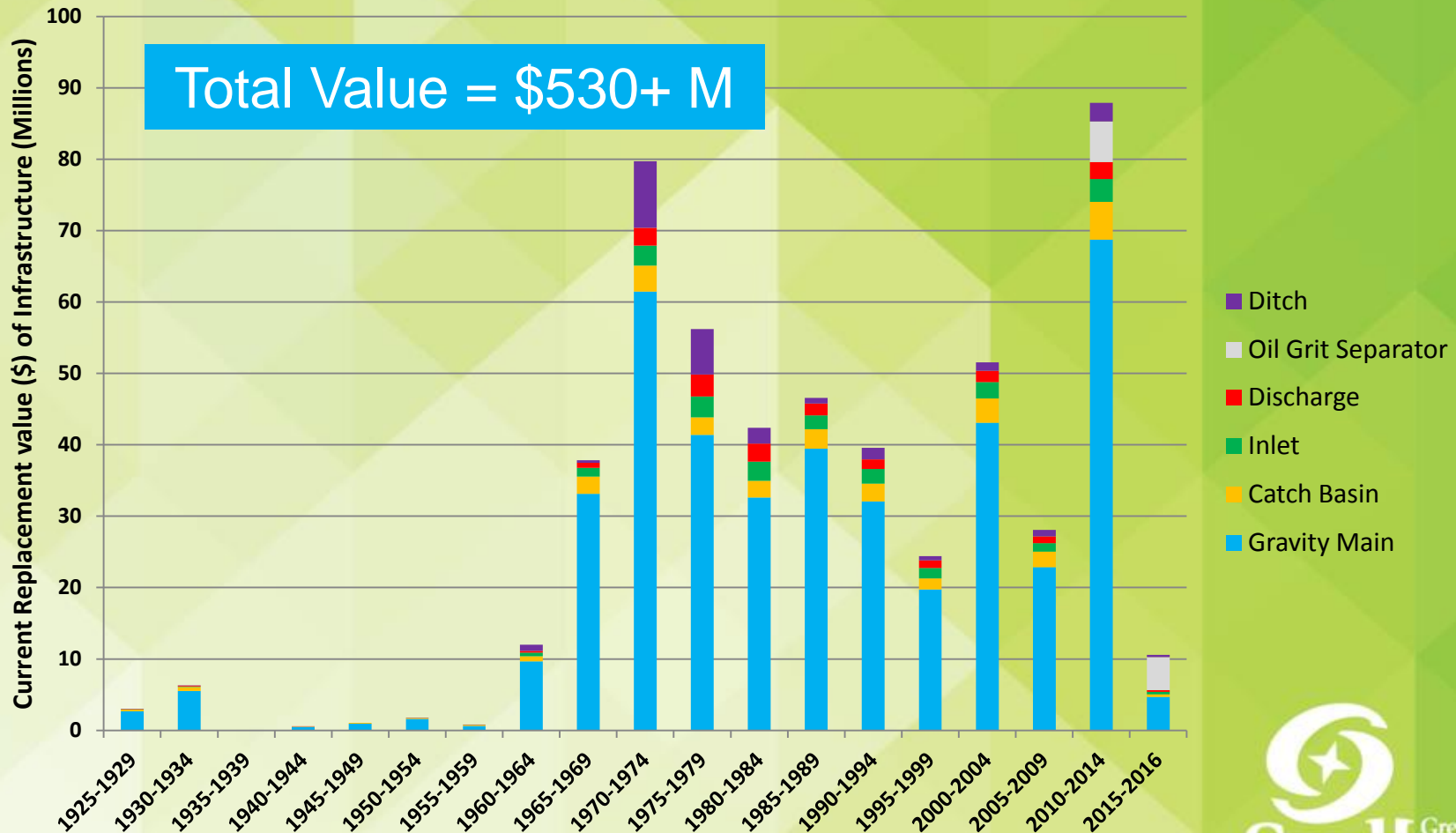
**15** stormwater ponds

## Purpose:

- ✓ Minimize flooding to private property
- ✓ Ensure safe passage through the City
- ✓ Protect the public and the environment

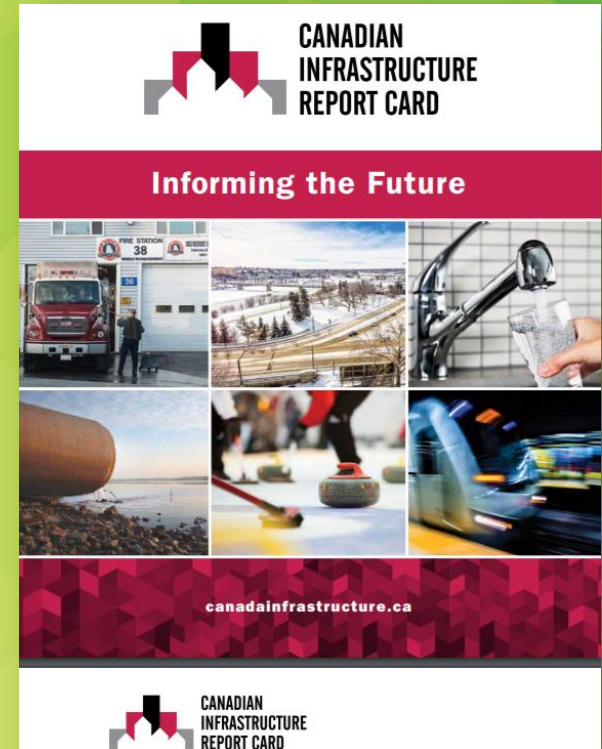


# Infrastructure Investment Over Time



# FCM Infrastructure Report Card, 2016

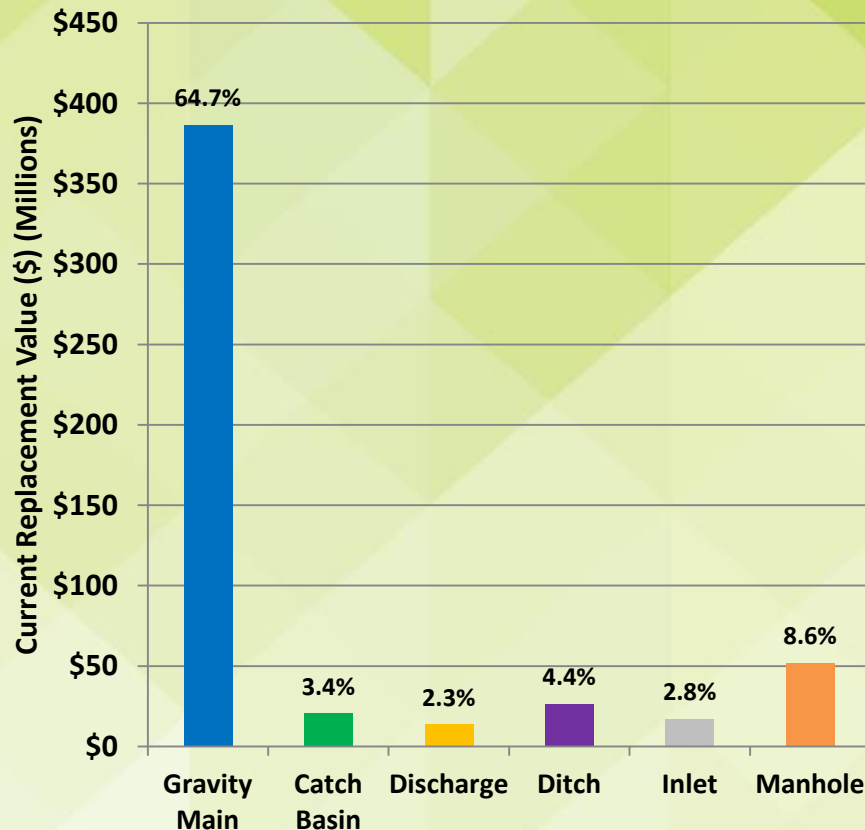
- Approximately 23% of national stormwater infrastructure ranks between “fair” and “very poor”, with a decreasing trend
- The replacement cost of stormwater assets alone totals \$134 billion, nationally



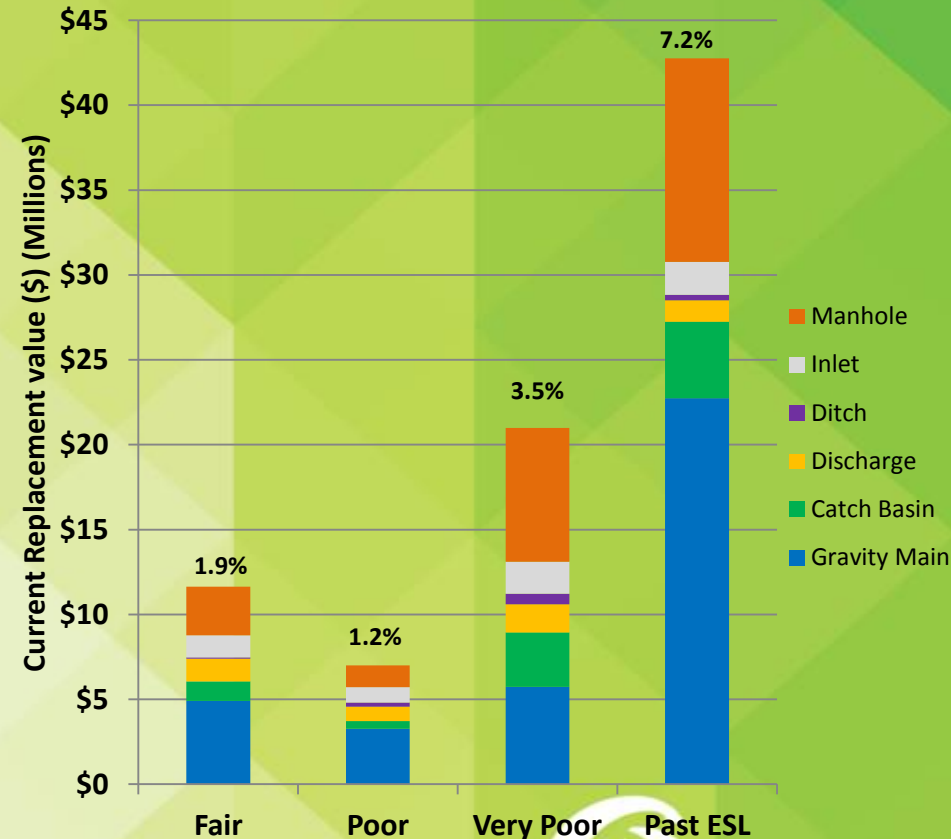


# State of the Infrastructure

**Assets Assumed as Good Condition (\$)**  
**(86.2% of System Value)**



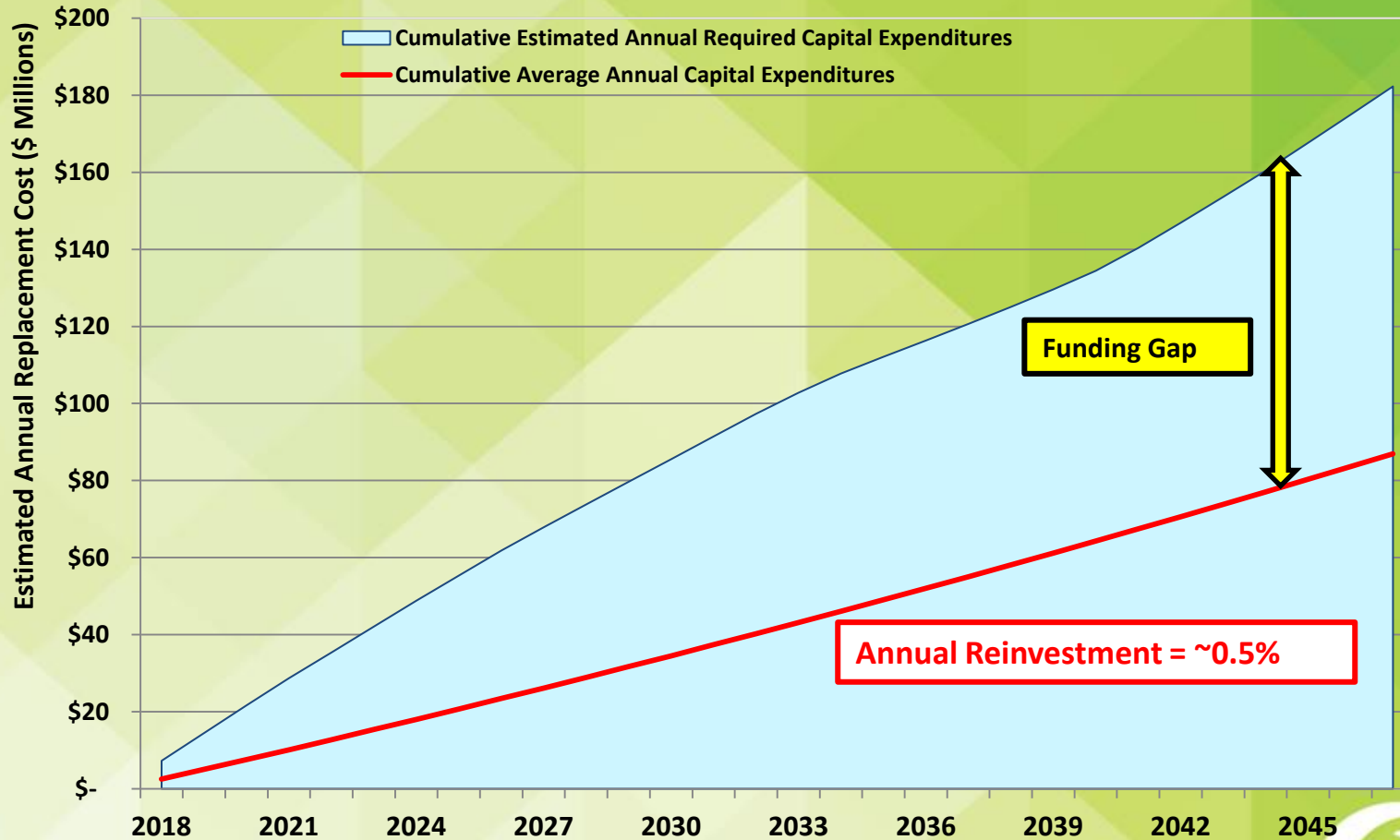
**Upcoming Investment Requirement (\$)**  
**(13.8% of System Value)**



# Risk Assessment

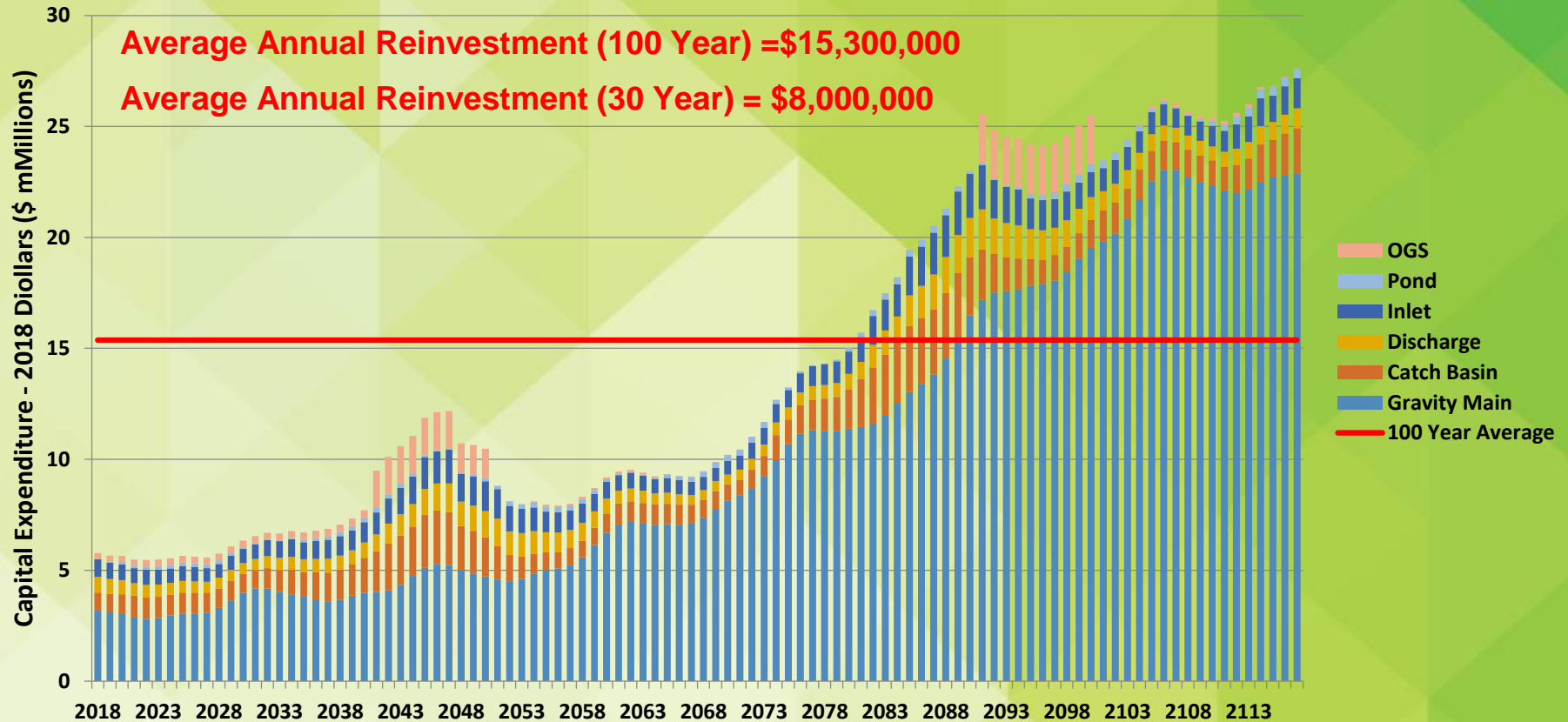
- Given the state of infrastructure, a number of assets are approaching/beyond expected service life, and are expected be replaced soon.
- Current state may expose the City to risk of non-compliance with regulators related to certain maintenance, inspection, monitoring and reporting activities.

# Current vs. Required Expenditures



“Current national reinvestment rate is 0.3%, while targets are 1.0%” – FCM, 2016

# Capital Reinvestment – Age Based Forecast



*All figures adjusted using 1% annual inflation*

# Capital Reinvestment – Optimized Capital Plan



*All figures adjusted using 1% annual inflation*



# How To Rationalize Spending – Levels of Service



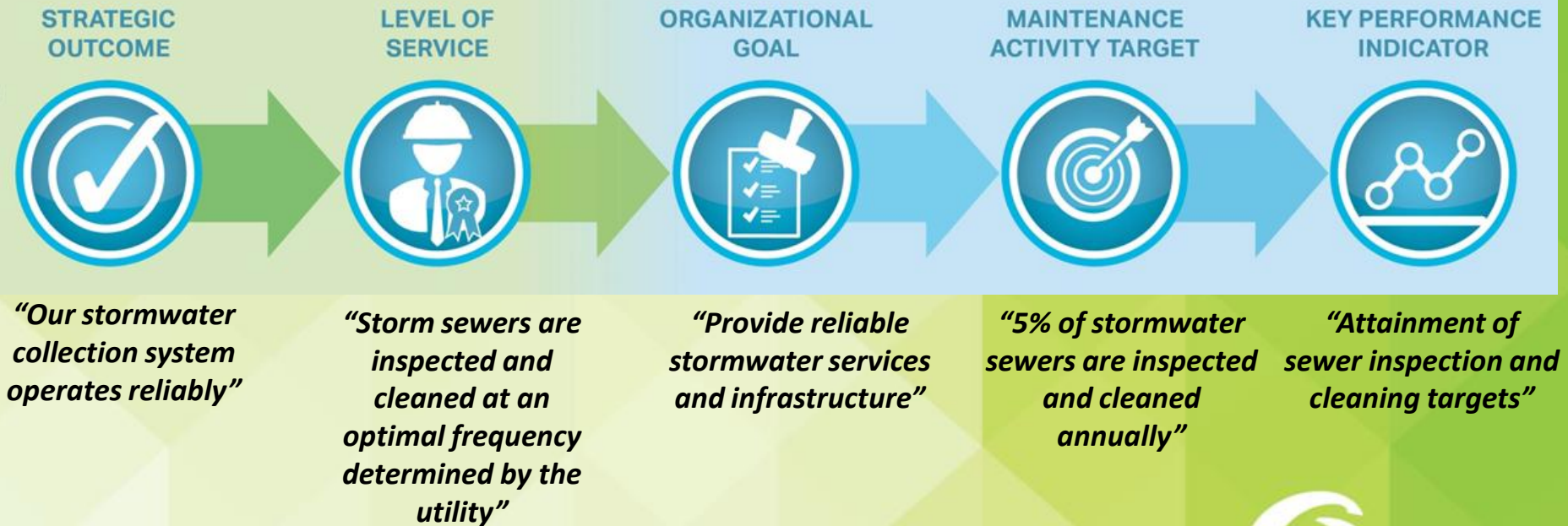
Levels of Service subsequently define organizational goals, performance indicators, and maintenance activity targets



# Levels of Service vs. Activity Targets

## Customer

## Utility

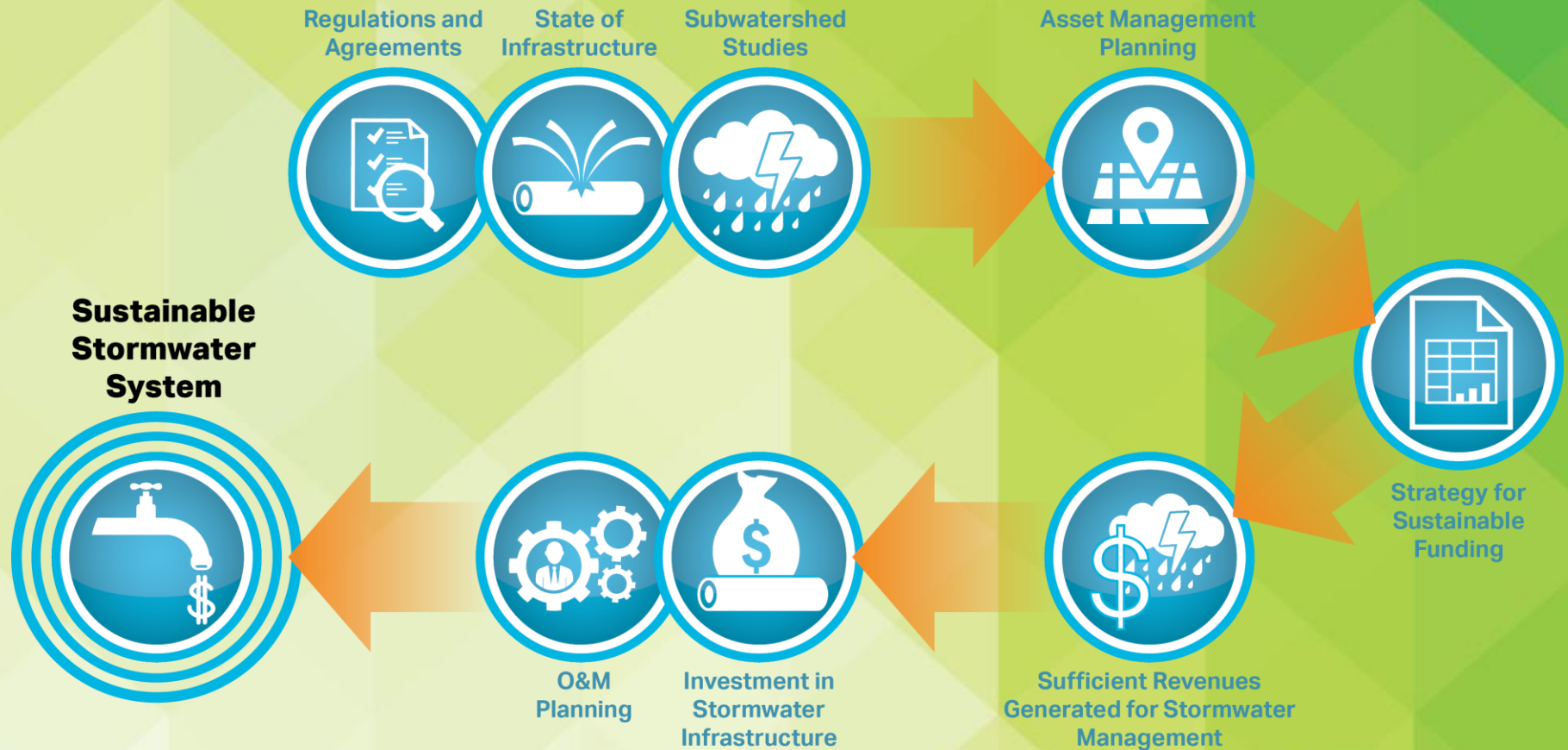


# System Operations & Maintenance

- Current O&M budget ~ \$5M / year
- Target O&M budget ~ \$9.8M / year

Current State	Future State
Many sewers are not cleaned or inspected; condition and service level is unknown.	All sewers cleaned and inspected at rate of industry best practice (12 year cycle).
Only priority manholes and catchbasins are cleaned when/as required.	All catch basins cleaned annually; manholes cleaned every six years.
Urban ditches are serviced but over 1,000 kilometers of rural ditches are not	All ditches serviced on a three year cycle.
Spring street cleaning in some areas and weekly downtown summer cleanup	Machine sweeping of arterial roads five times each year
No municipal drains are serviced	All municipal drains serviced using contract services
Inconsistent regulatory compliance	Regulatory compliance is consistent, monitored, and verified

# Sustainable Stormwater Management



Sustainable Infrastructure Funding: funding required to ***sustain assets*** so they ***meet present*** infrastructure needs ***without compromising future generations.***

# Moving Forward

- Confirm target Levels of Service through Council endorsement
- Conduct Sustainable Stormwater Funding Study
- Use asset management planning to facilitate long-term sustainability of the community

# Thank You

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