



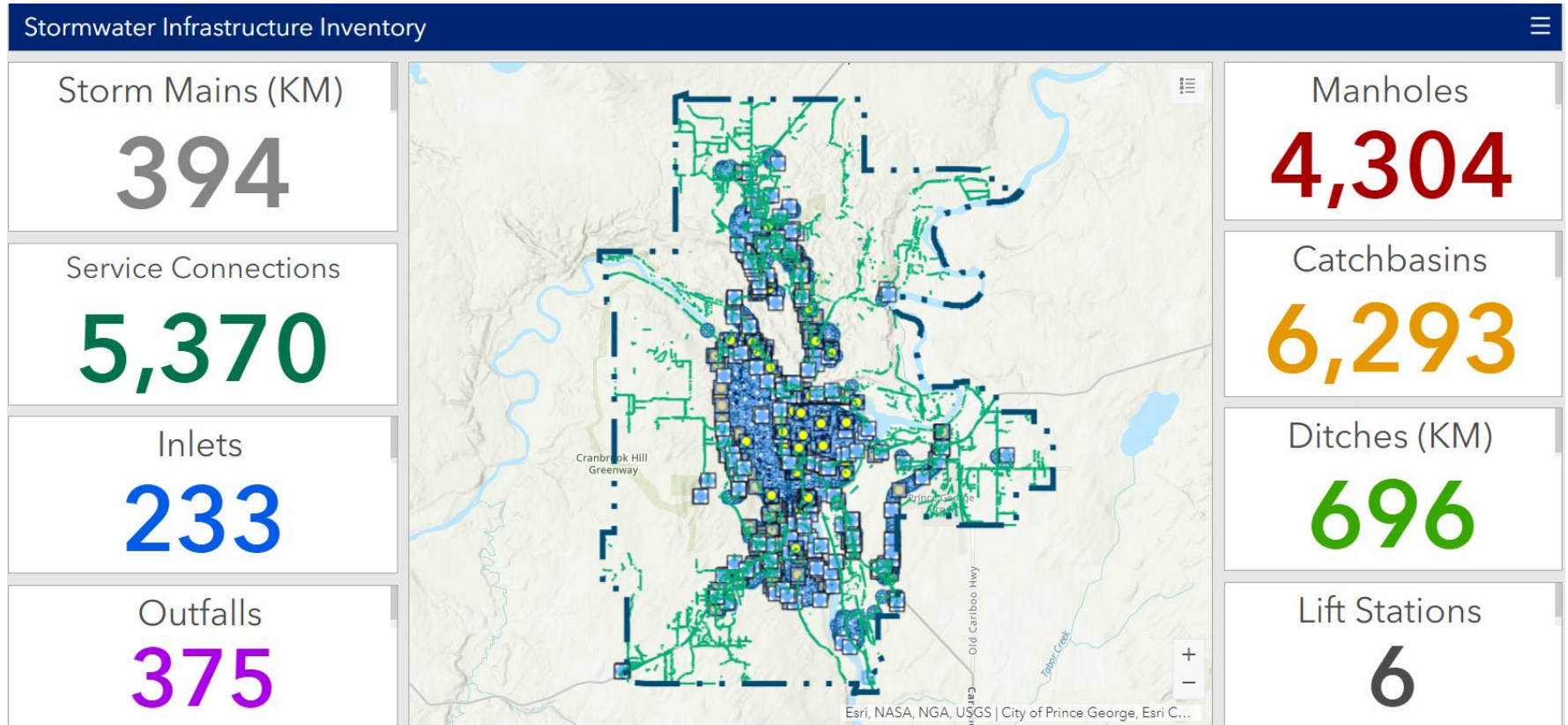
Integrated Stormwater Management Plan

Action Update

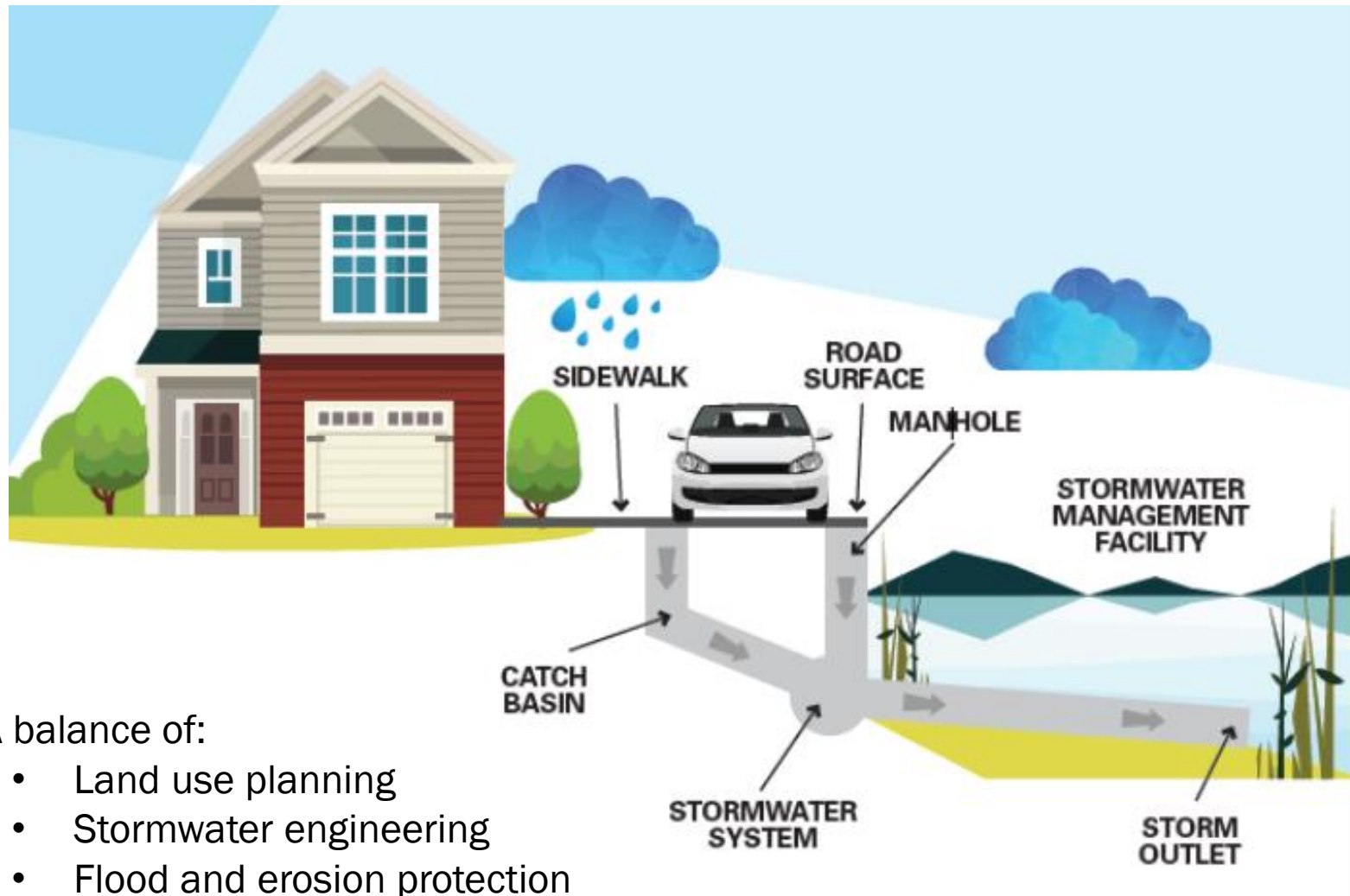
PRESENTATION OUTLINE:

- ISMP Overview
- Actions Completed
- Next Steps

STORMWATER INFRASTRUCTURE INVENTORY



WHAT IS THE PURPOSE OF AN ISMP



A balance of:

- Land use planning
- Stormwater engineering
- Flood and erosion protection
- Environmental protection

ISMP COMPONENTS

Guiding Document, Roadmap, and Public Engagement Plan

- *Guiding Document with key messages*
- *Public Engagement Plan*
- *Action Plan – Roadmap*

TWP #1 – Technical Background

- *Watershed Drainage Plans (WDP) Review*
- *Climate Projections*
- *Prioritization Framework*
- *WDP Gap Reduction Plan*
- *GIS Consolidation & Review and Gap Reduction Plan*
- *Recommendations*

TWP #3 – Policy and Regulations

- Review Plans, Bylaws, Fines, Authority and Enforcement
- Gap Analysis and Peer Municipal Comparison

TWP #2 – Engineering & AM Issues

- Rain Gauge Monitoring Program
- Green Assets Strategy
- Condition Assessment Program
- Asset Longevity
- Sub'd Bylaw & Design Guidelines
- Network Level Risk Assessment
- Best Practices Review
- Replacement Costs
- Development Contributed Assets

TWP #4 – Financial Options

- Review Previous funding initiative
- Summary of other Municipal Stormwater financing models

Public Engagement (Fall 2021)

Final Presentation to Council (Dec 2021)

ISMP ROAD MAP

City of Prince George Integrated Stormwater Management Plan Roadmap

VISION

Sustainable and cost-effective service delivery of stormwater management that protects life, property, and a healthy environment.

PILLARS



Social Health & Well-being



Environmental Leadership & Climate Action



Economic Growth & Development



City Government & Infrastructure

GOALS

Enhance livability through beautification, connections to nature and recreational opportunities

Preserve and enhance the health of the community's watersheds

Protect life and property from flooding & erosion

Infrastructure costs are minimized and apportioned equitably

ACTION ITEMS

Education & Outreach

- Educate staff, Council and residents on the value of stormwater management
- Educate developers, designers, contractors and City staff on Bylaw/Design Guideline requirements



Resources

- Establish sustainable funding and sufficient staffing to implement action items and achieve goals



Asset Inspection & Renewal

- Establish storm sewer/culvert condition assessment program
- Complete highest priority stormwater asset renewal projects



Policy & Bylaw Updates

- Strengthen erosion and sediment control requirements within City bylaws
- Update Subdivision & Development Servicing Bylaw and Design Guidelines to consider climate change, control water quality and quantity, and mandate new standards
- Update the Storm Sewer Bylaw to clearly outline responsibilities and prevent harmful discharges
- Strengthen the enforceability of polluter pays principles within City bylaws
- Establish green infrastructure strategy
- Update Development Cost Charges (DCC) rates
- Protect existing natural assets that serve key watershed functions



ISMP ROAD MAP

VISION

Sustainable and cost-effective service delivery of stormwater management that protects life, property, and a healthy environment.

PILLARS



Social Health & Well-being



Environmental Leadership & Climate Action



Economic Growth & Development



City Government & Infrastructure

GOALS

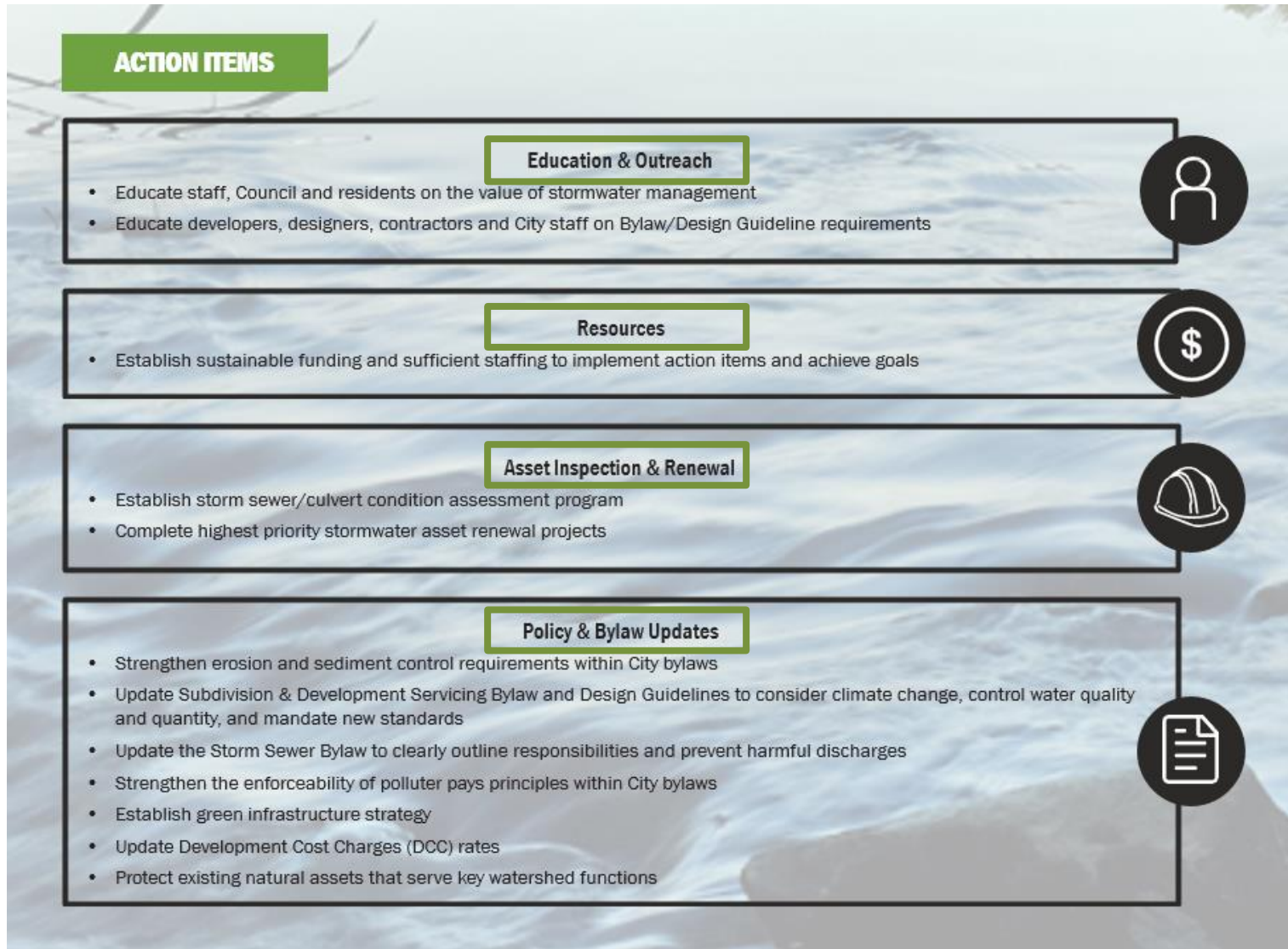
Enhance livability through beautification, connections to nature and recreational opportunities

Preserve and enhance the health of the community's watersheds

Protect life and property from flooding & erosion

Infrastructure costs are minimized and apportioned equitably

ISMP ROAD MAP



ROADMAP ACTION ITEMS COMPLETED:

STORMWATER MANAGEMENT OUTREACH

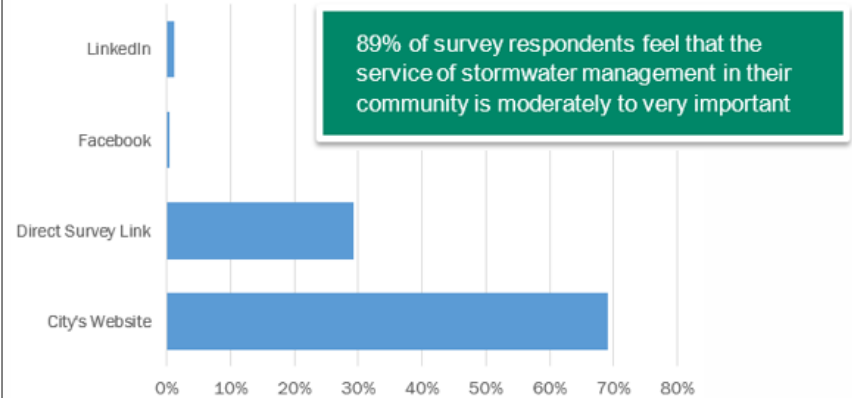
YouTube Video



Over 4,300 views of the City's stormwater video.

Online Survey

116 Survey Respondents



Stormwater plan coming

By Cheryl Jahn

Sep 22, 2021 | 4:48 PM

Facebook

Over 21,000 views of the City's Facebook post about stormwater, the ISMP and consultation process

STORMWATER MANAGEMENT OUTREACH

Our stormwater story

Stormwater & Stormwater Management

City of Prince George
September 8, 2021



CITY OF
PRINCE GEORGE

Online Services

A A A

Move Up
PG

City
Services

Parks &
Recreation

Co
Cu

Stormwater Management

[Home](#) / [Community & Culture](#) / [Environment & Sustainability](#) / [Stormwater Management](#)

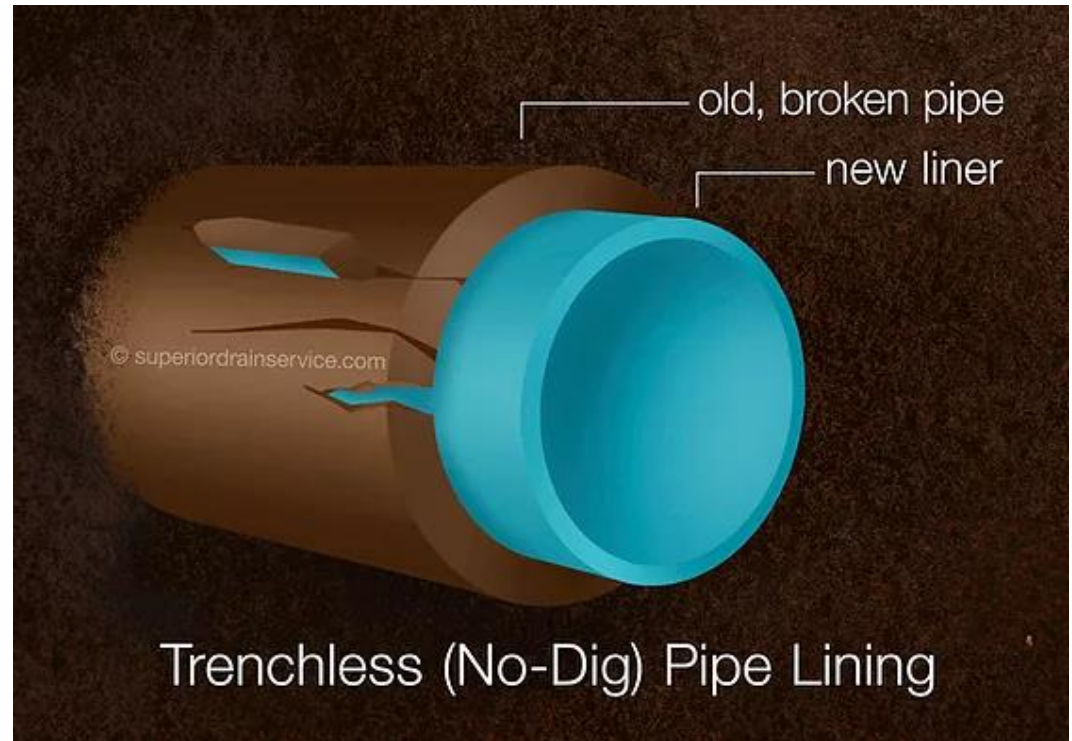
INFRASTRUCTURE RENEWALS SINCE 2022

2.3km Gravity Main Lined

Pre - Liner Installation



Post - Liner Installation



INFRASTRUCTURE RENEWALS SINCE 2022

8 Outfalls Renewed



16 Ponds Renewed



7km of Pipe Inspected Using a CCTV Camera



53 Catchbasins Renewed



PROTECTING NATURAL ASSETS



WHAT'S NEXT:

BYLAW UPDATES

- Erosion & Sediment Control Bylaw: 2024-2025



BYLAW UPDATES

- Update the Storm Sewer Bylaw to clearly outline responsibilities and prevent harmful discharges: Start in 2026.
- Strengthen enforceability of polluter pays principles with City bylaws



PROHIBITED DISCHARGES & COST RECOVERY

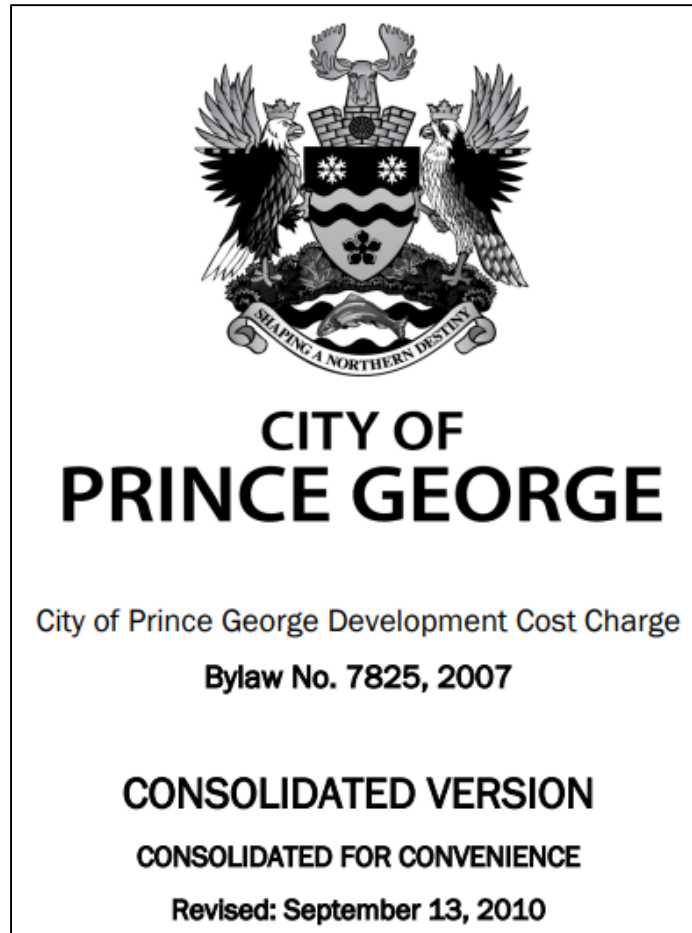
BYLAW UPDATES

- Update Subdivision & Development Servicing Bylaw and Design Guidelines to consider climate change, control water quality and quantity, and mandate new standards: Start in 2024



BYLAW UPDATES

- Update Development Cost Charge (DCC) rates: Start after adoption of OCP



The principal of
'development pays for development'
is the purpose of the DCC Bylaw

CONDITION ASSESSMENT PROGRAM

Table 25 PACP Condition Grades

Grade	Definition
5	Most significant defect grade
4	Significant defect grade
3	Moderate defect grade
2	Minor to moderate defect grade
1	Minor defect grade

Table 26 Inspected Segment Grade Interpretation

Grade	Definition
5	Immediate attention needed
4	Poor; will become grade 5 in near future
3	Fair; moderate defects
2	Good; the pipe has not begun to deteriorate
1	Excellent; no to minor defects



Source: rauschusa.com



Source: Cityworks Inspection

Benefits:

- Forecasting when infrastructure needs to be renewed or replaced;
- Minimizing infrastructure failures and the resulting costs;
- Extend the life of the asset before it becomes completely deteriorated and must be entirely replaced.

DEDICATED FUNDING

- Public Engagement:
April 2024
- Engagement Results
Council Presentation:
Summer 2024



Managing stormwater protects our residents, homes and buildings, parks, roads, creeks, and rivers. By controlling flow runoff, we can minimize and prevent hazards like flooding, erosion, sinkholes and destruction of fisheries habitat.



Stormwater Storymap on Prince George's Website:

A scenic view of a lake framed by trees and reeds, with a blue box containing the text "THANK YOU" overlaid in the center. The lake is surrounded by lush greenery, including tall reeds in the foreground and dense trees in the background. The sky is bright and clear. The text "THANK YOU" is written in white, bold, uppercase letters on a dark blue rectangular background.

THANK YOU