



PUBLIC INFORMATION CENTRE #1
Water and Wastewater Servicing
and Capacity Master Plan Update

WEDNESDAY OCTOBER 18, 2023

Victoria Room, City of Kawartha Lakes Town Hall

6:00 pm TO 8:00 PM

Presentation at 7:00 PM (Simulcast through Zoom)



Land Acknowledgement

"The City of Kawartha Lakes respectfully acknowledges that we are situated on Mississauga lands and the traditional territory covered by the Williams Treaties.

We are grateful for the opportunity to work here and we thank all the generations of people who have taken care of this land - for thousands of years. We recognize and deeply appreciate their historic connection to this place. We also recognize the contributions of Métis, Inuit, and other Indigenous peoples, both in shaping and strengthening this community and country as a whole. This recognition is connected to our collective commitment to make the promise and the challenge of Truth and Reconciliation real in our community."

Welcome and Introductions

- Introductions
- PIC Format and Housekeeping Notes
 - Have questions?
 - In-person: Raise your hand
 - Remote: Use the chat feature at the bottom to ask your question
 - Emergency Exits and Restrooms
- Open-Door versus Closed-Doors:
 - You may have questions or concerns which cannot be addressed by this process. We will try to direct you to the appropriate Contact-Person if we cannot address them.
- Provision for Technical Issues:
 - Project Website: www.kawarthalakes.ca/majorprojects

Today's session is being recorded and will be posted online afterwards along with this presentation

Study Background

The City has experienced a significant increase in growth over the recent years, which is driving demands for improvements and upgrades to its water and wastewater infrastructure.



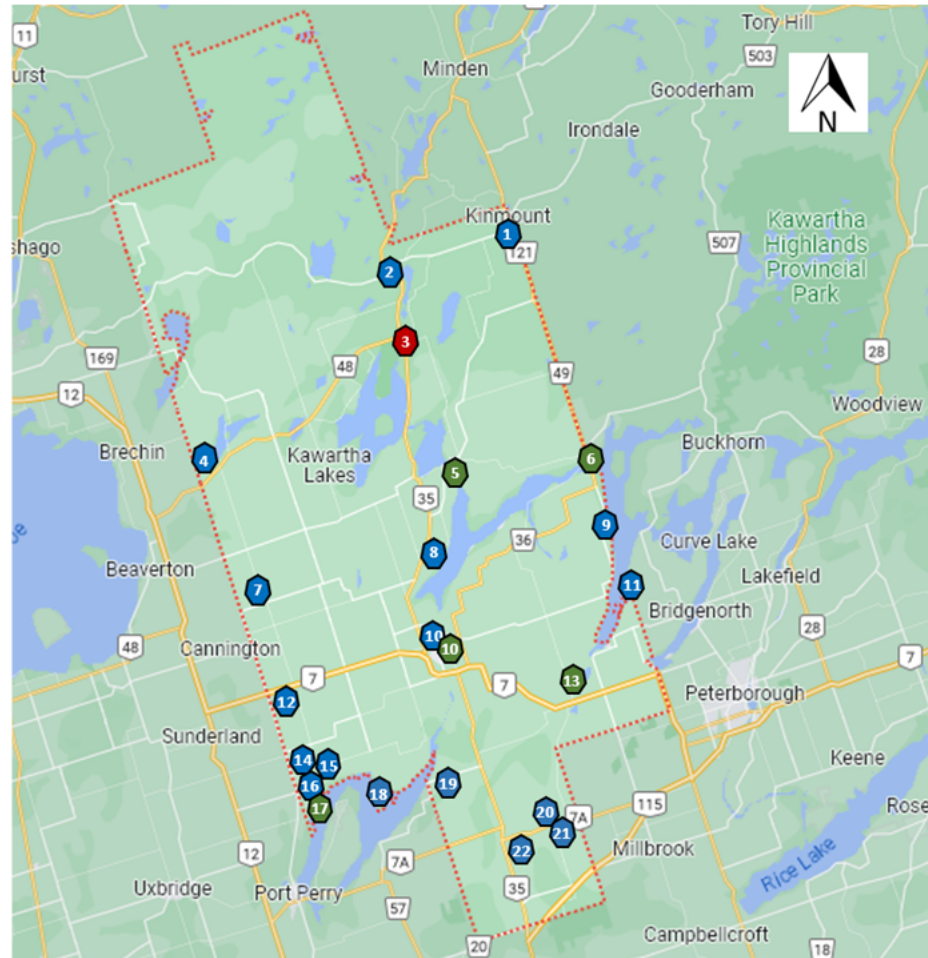
- The City is expected to grow to **117,000 people and 39,000 jobs by 2051**. This is identified in the Provincial Growth Plan (*A Place to Grow*, 2020), and is reflected in the City's *Growth Management Strategy* planning process.
- Council adopted the Province's housing target for Kawartha Lakes of 6,500 newly constructed housing units by the end of 2031.



The Objective of this Master Plan is to ensure that approved growth can be accommodated without affecting the level-of-service to existing residents and businesses.

Planning Forecast (Preliminary)

- Not yet Final, pending completion of the Growth Management Strategy process
- These are being updated, but are based on the Approved 2011 GMS (which allocated units to 2031), and Ministerial Zoning Orders (MZOs)
- **These are INPUTS to this Master Plan**



Both Municipal Water and Sanitary Systems:

- 6. Bobcaygeon
- 5. Fenlon Falls
- 17. King's Bay
- 10. Lindsay
- 13. Omemee

Municipal Water System Only:

- 11. Birch Point Estates
- 18. Canadiana Shores
- 19. Janetville
- 1. Kinmount
- 10. Lindsay (Chandlers Corner)
- 10. Lindsay (Oakwood)
- 12. Manilla
- 21. Manorview (Bethany)
- 16. Mariposa Estates
- 2. Norland
- 22. Pinewood (Pontypool)
- 15. Pleasant Point
- 14. Sonya
- 8. Southview Estates
- 9. Victoria Place
- 4. Western Trent/Palmina (Bolsover)
- 20. Woodfield (Bethany)
- 7. Woodville

Municipal Wastewater System Only:

- 3. Coboconk

Level of Service Objectives

- Development leads to increased water demands and wastewater flows, which may result in low pressure or fire flow in certain areas, or exceed the existing treatment plant capacities.
- **The objective of this Master Plan Update** will be to study the impact of the planned growth, and identify required solutions to maintain the level of service.

Water Systems

Water Treatment:

Ensure that water supply needs can be provided, with planning for upgrades when plant flows reach 80% of Capacity

System Pressures

Operating pressures between 350 and 550 kPa (50 and 80 psi)

Fire Flow

Under fire flow conditions, the pressure should not drop below 140 kPa (20 psi) at any point in the water system

Wastewater Systems

Wastewater Treatment:

Ensure that wastewater treatment needs can be provided, with planning for upgrades when plant flows reach 80% of Capacity

Design Flows

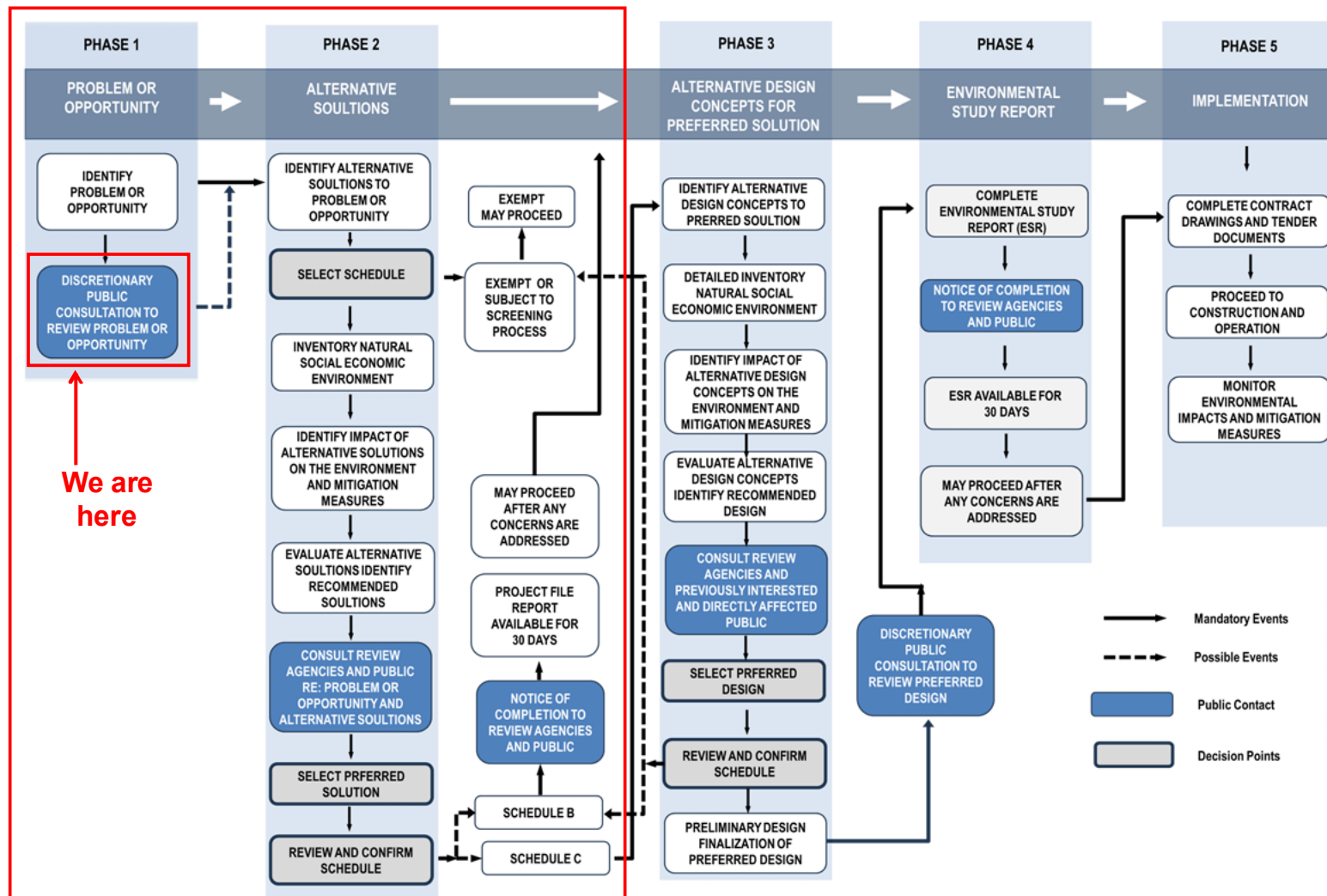
The sanitary sewers should not surcharge under Design Flow Conditions

System Surge (Policy Under Development)

Under Severe Storm Events, water levels in sanitary sewers shall be below basement levels

Environmental Assessment Process

Scope of the Master Plan



Water Supply and Storage Needs

Facility/System	Water Treatment Plant Utilization (% of Maximum Day Production Capacity)			Water Storage Utilization (% of Capacity)	
	Existing ⁽¹⁾	2051 Projection ⁽²⁾	Approximate Units to 100% ⁽³⁾	Existing	2051 Projection
Birch Point	44%	44%	80		
Bobcaygeon	69%	184%	780	51%	125%
Canadiana Shores	34%	34%	230		
Fenelon Falls	41%	90%	1,040	122%	171%
Janetville	52%	90%	80		
Kings Bay	58%	58%	70		
Kinmount	47%	134%	70		
Lindsay (includes Oakwood)	58%	259%	5,260	82%	241%
Manilla	53%	139%	30		
Manorview (Bethany)	22%	22%	90		
Mariposa	93%	93%	0		
Norland	71%	74%	30		
Omeme	20%	33%	130		
Pinewood (Pontypool)	46%	102%	120		
Pleasant Point	30%	30%	130		
Sonya	45%	45%	40		
Southview Estates	30%	30%	120		
Victoria Place	90%	90%	20		
Western Trent/Palmina (Bolsover)	70%	77%	40		
Woodfield (Bethany)	21%	135%	90		
Woodville	59%	108%	90	30%	54%



Upgrades to some Water Treatment Plants and Storage Facilities will need to be considered in order to support the planned growth to 2051.

Notes:

1. Based on Historical Use
2. Based on Design Criteria for Future Growth
3. Approximate, based on an assumed total residential and employment growth

Wastewater Treatment Needs

Facility/System	Wastewater Treatment Plant Utilization (% of Capacity)			Historical Wet-Weather Flow Bypasses (past 5 years)?
	Existing	2051 Projection	Approximate Units to 100% ⁽¹⁾	
Bobcaygeon	76%	185%	710	No
Coboconk	56%	58%	180	No
Fenelon Falls	72%	127%	490	YES
Kings Bay	29%	29%	120	No
Lindsay	55%	171%	10,690	No
Omeme	58%	111%	170	No



Upgrades to some Wastewater Treatment Plants will need to be considered in order to support the planned growth to 2051.

Notes:

1. Approximate, based on an assumed total residential and employment growth

System Upgrades Assessment

- Master Plan Update will also assess required upgrades to Sewage Pumping Stations and Pipe Networks (water and wastewater)
- These upgrades will be more dependent on the actual locations of planned development (greenfield and intensification of currently-serviced properties)
- These upgrades will ensure that the systems can convey any increased water/wastewater flows
- Ensuring that existing infrastructure is upgraded will mitigate any potential impacts to existing users (drop in water pressures, sewer backups, etc)



The complete list of recommended system upgrades will require the completed GMS, and will be presented at the 2nd Public Information Centre.

Next Steps

Infrastructure Planning Scenarios

- Baseline (Existing) Condition Scenario
- Future Growth Scenarios

Impact Assessment

- Identify the areas where the level of service is not met by the existing infrastructure

Identify Alternative Solutions

- Identifying alternative solutions to mitigate the impacts of the growth
- Evaluate Relative Impacts of Alternative Solutions

PIC #2 (Spring/Summer)

- The Next Steps will be detailed and presented in a similar format at the 2nd Public Information Centre
- Any recommended projects will be identified, and the Public will be invited to review the Recommendations and provide further comment
- Following PIC #2, the Master Plan Report will be prepared, summarizing the entire Process, and formalizing the recommendations.

Thank You For Attending!

If You Have Any Questions

- Speak to a Member of the Project Team Tonight
- Send an E-Mail

Comment Forms

- These are available to be completed and Submitted
- Please Submit by October 28th

Future Updates

- Website: KawarthaLakes.ca/MajorProjects
 - Scroll Down to "City-Wide"
- Please add your name to the Contact List

Project Contacts

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