

# Welcome

- We will begin shortly.
- For your convenience, you will find a chat box on the screen where you can leave your questions and/or comments at any time during the presentation.
- Questions/comments will be addressed after the presentation.

Region of Waterloo

# Water Supply

## Strategy Update



## Public Meeting #1

December 4, 2024

# Land acknowledgment

The land on which we gather today are the lands traditionally cared for by the Haudenosaunee, Anishinaabe  and Chonnonton People.

We give thanks to all the waters of the world for quenching our thirst and providing us with strength. Water is life. We know its power in many forms — waterfalls and rain, mists and streams, rivers and oceans. With one mind, we send our greetings and our thanks to the spirit of Water.



# Housekeeping and agenda

- We have invited our consultant team to join us in this presentation.
- Attendees will remain muted throughout the presentation until the questions & answers session at the end of the presentation.
- This meeting is being recorded.
- The presentation slides, recording, and online survey will be available at the EngageWR website.

**Agenda:**

1. Project team introductions
2. Presentation (20-30 mins)
3. Questions & answers (30 mins)



# Project team introductions

Region of Waterloo

Nicole Sapeta

Kaoru Yajima

CIMA+

Sandra Rodriguez

Dennis Mutti

Sammy Hiseler

econics

Kirk Stinchcombe

SLR

Craig Johnston

# Purpose of this Public Meeting

The purpose of this Public Meeting is to:

- Introduce the Water Supply Strategy Update.
- Provide an overview of the project approach.
- Provide background information on the existing water supply system.
- Gather your feedback on priorities that should be considered in the project approach.



# Project introduction

**The Region is updating its water supply strategy to ensure a safe, secure, and sustainable water supply through to 2051.**

The Water Supply Strategy Update will:

- Build on work from previous master plan studies,
- Review current water supply sources,
- Assess future water demands; and,
- Investigate possible new water supply sources.

This is the first Public Meeting to provide an opportunity for you to formally get involved and participate in the study.



# Why are we updating the Water Supply Strategy?

The **water supply strategy** is a '**roadmap**' for the long-term provision of safe, secure and sustainable water supply for the Region.

Updates to the water supply strategy are necessary to ensure alignment with:

- Existing and future growth needs
- Current regulatory framework
- Environmental changes
- Sustainability practices
- Technology advancements



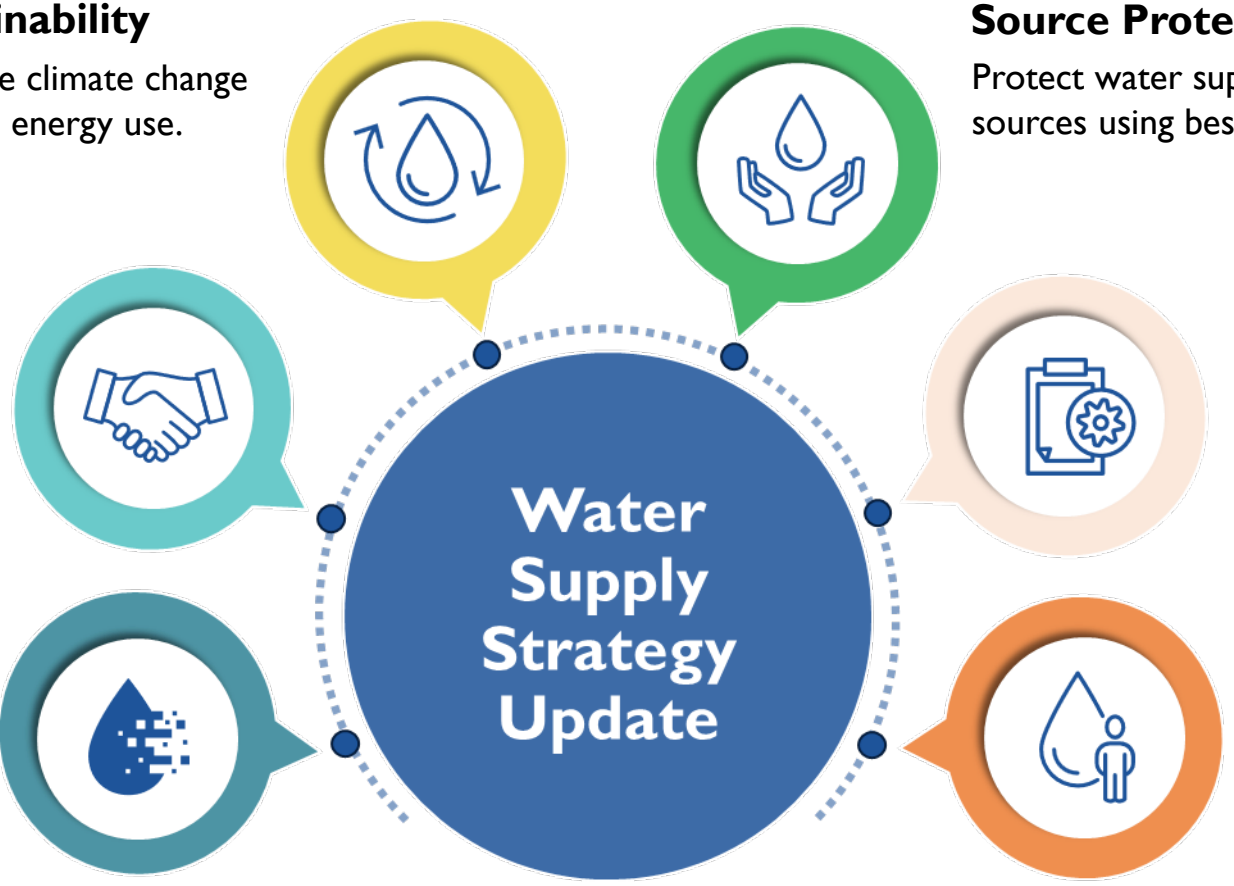
# Guiding principles for the Water Supply Strategy Update

**Sustainability**
Minimize climate change risk and energy use.

**Source Protection**
Protect water supply sources using best practices.

**Collaboration**
Connect with valued partners to develop a water system that benefits current and future generations.

**Strategic Alignment**
Advance the Region's Strategic Plan directives.



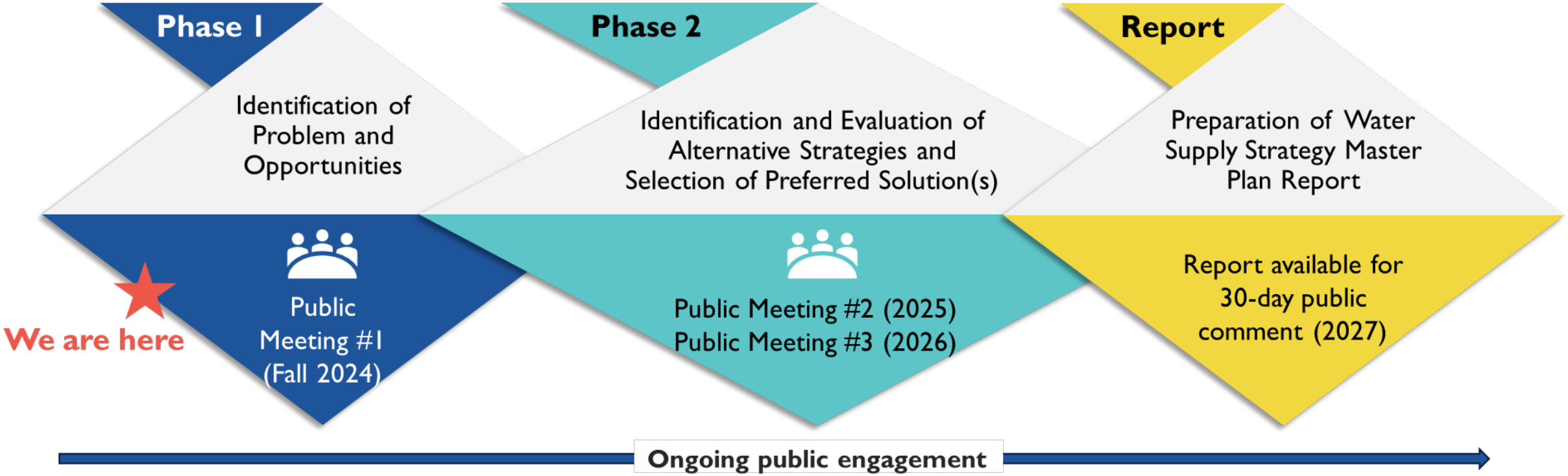

**Innovation**
Use new technology and best practices to maximize efficiency.

**Engagement**
Create opportunities for community input.

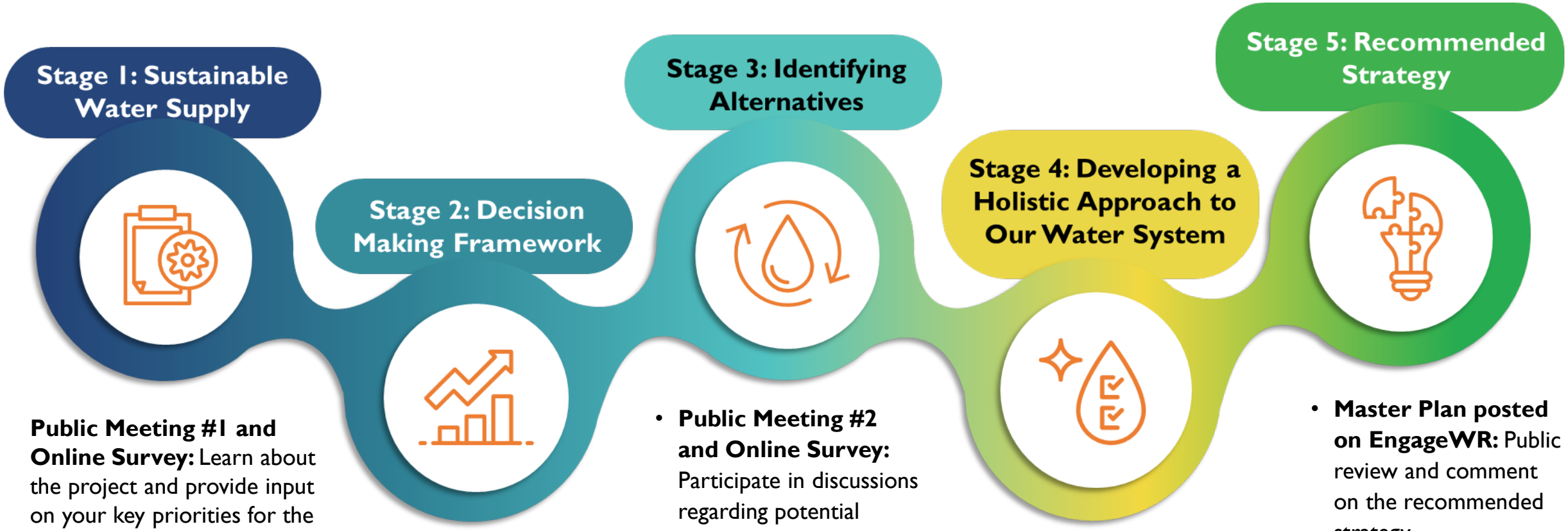
# The Municipal Class Environmental Assessment process

The Water Supply Strategy Update is being completed as a Master Plan study under the Municipal Class Environmental Assessment process, Phases 1 and 2.

There will be opportunities throughout the project for the community to provide input. Project updates will be available at engagewr.ca/watersupply.



# Key tasks involved in the Water Supply Strategy Update




- **Public Meeting #1 and Online Survey:** Learn about the project and provide input on your key priorities for the Water Supply Strategy Update

- **Public Meeting #2 and Online Survey:** Participate in discussions regarding potential options for water supply

- **Public Meeting #3 and Online Survey:** Provide feedback on the evaluation scoring

- **Master Plan posted on EngageWR:** Public review and comment on the recommended strategy

# Important information for the Water Supply Strategy Update

## Information that goes into the strategy

- Water use trends
- Population growth
- Water supply system infrastructure
- Sustainable supply from water sources
- Water efficiency and conservation programs
- Targeted and regulated levels of service
- Community input




## Information that comes out of the strategy

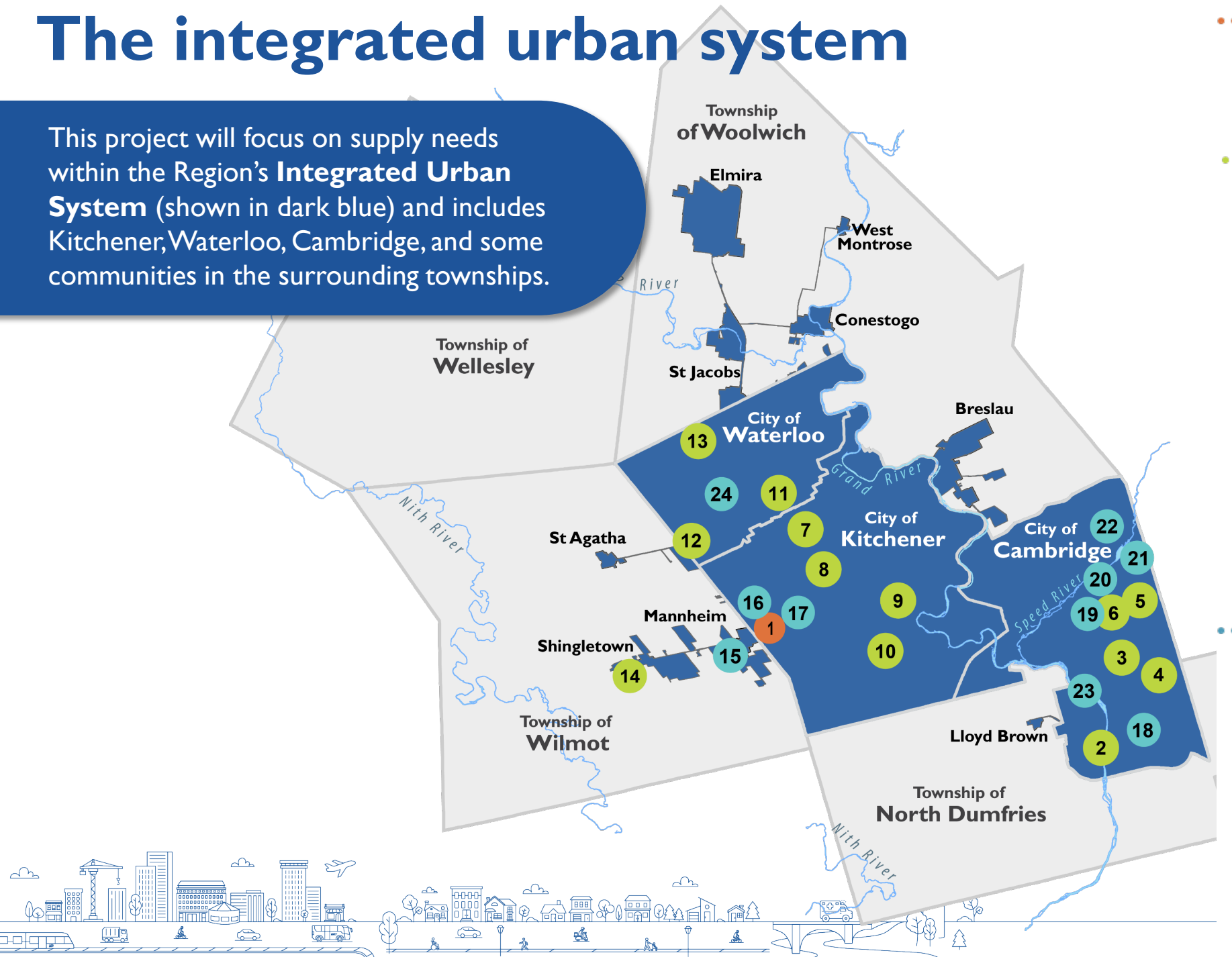
- Preferred approach to water supply
  - Strategic initiatives
  - Water efficiency and conservation programs
  - Water supply sources
- Implementation plan for the 20-30 year planning horizon
- High level estimates for cost
- Recommendations for specific projects that require further study

# Where do we get our drinking water?



# The integrated urban system

This project will focus on supply needs within the Region's **Integrated Urban System** (shown in dark blue) and includes Kitchener, Waterloo, Cambridge, and some communities in the surrounding townships.




## Surface Water Treatment

Multi-step treatment approach for water drawn from the Grand River

1 Mannheim

## Centralized Groundwater Treatment

Combines multiple wells to one location for treatment

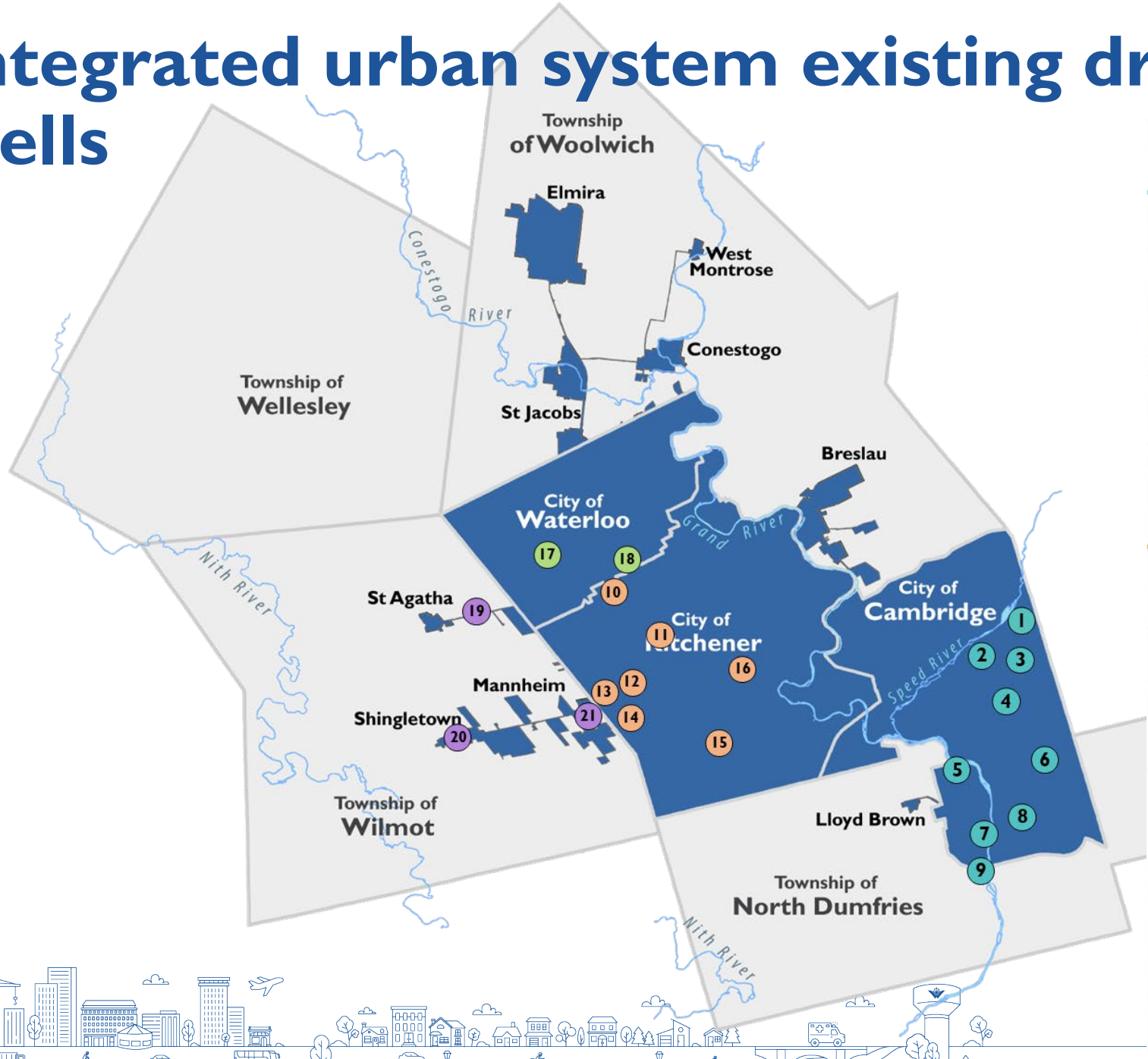
2 Middleton
3 Turnbull
4 Shades Mill
5 Pinebush
6 Rahmans
7 Strange Street
8 Greenbrook
9 Parkway
10 Strasburg
11 William Street
12 Erb Street
13 Laurel
14 Shingletown

## Groundwater System Wells

Individual well sites with treatment

15 Mannheim West
16 Mannheim North
17 Mannheim East
18 G9
19 G5
20 H3
21 H4
22 H5
23 G4
24 W10

# Integrated urban system existing drinking water wells




## Well Fields

### Cambridge

1. Hespeler (5 Wells)
2. Pinebush West (5 Wells)
3. Pinebush East (5 Wells)
4. Clemens Mill (5 Wells)
5. Blair Road (2 Wells)
6. Shades Mills (5 Wells)
7. Middleton Street (5 Wells)
8. Elgin Street (1 Well)
9. Willard (1 Well)

### Kitchener

10. Strange Street (5 Wells)
11. Greenbrook (6 Wells)
12. Mannheim East (4 Wells)
13. Mannheim North (4 Wells)
14. Mannheim Aquifer Storage & Recovery (8 Wells)
15. Strasburg (2 Wells)
16. Parkway (3 Wells)

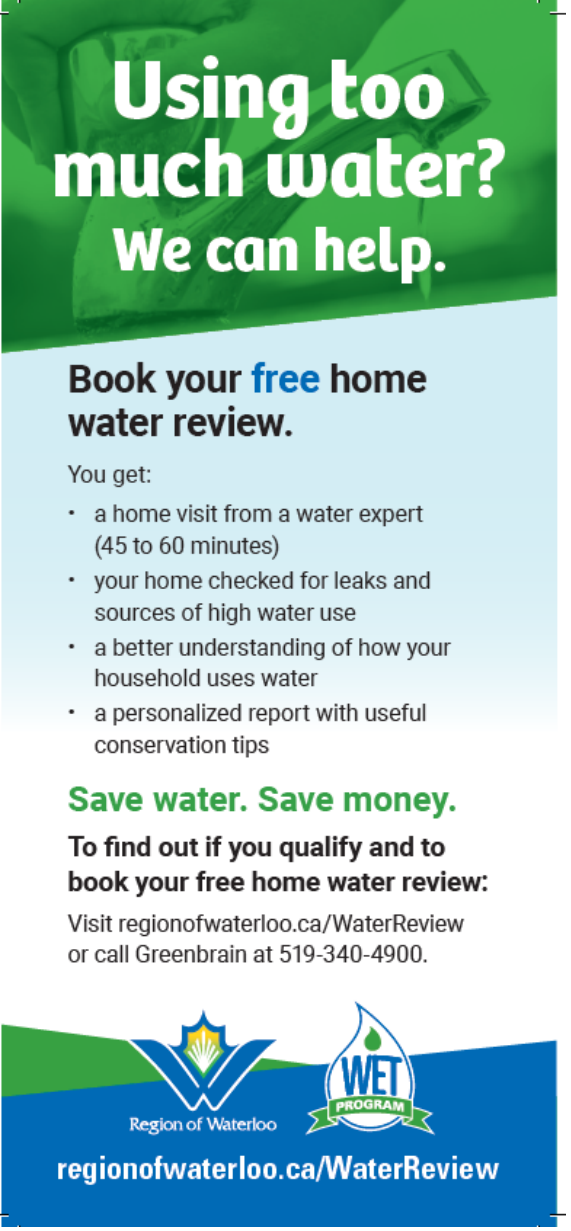
### Waterloo

17. Waterloo North (3 Wells)
18. William Street (5 Wells)

### Wilmot

19. Erb Street (4 Wells)
20. Wilmot Centre (3 Wells)
21. Mannheim West (4 Wells)

Region of Waterloo

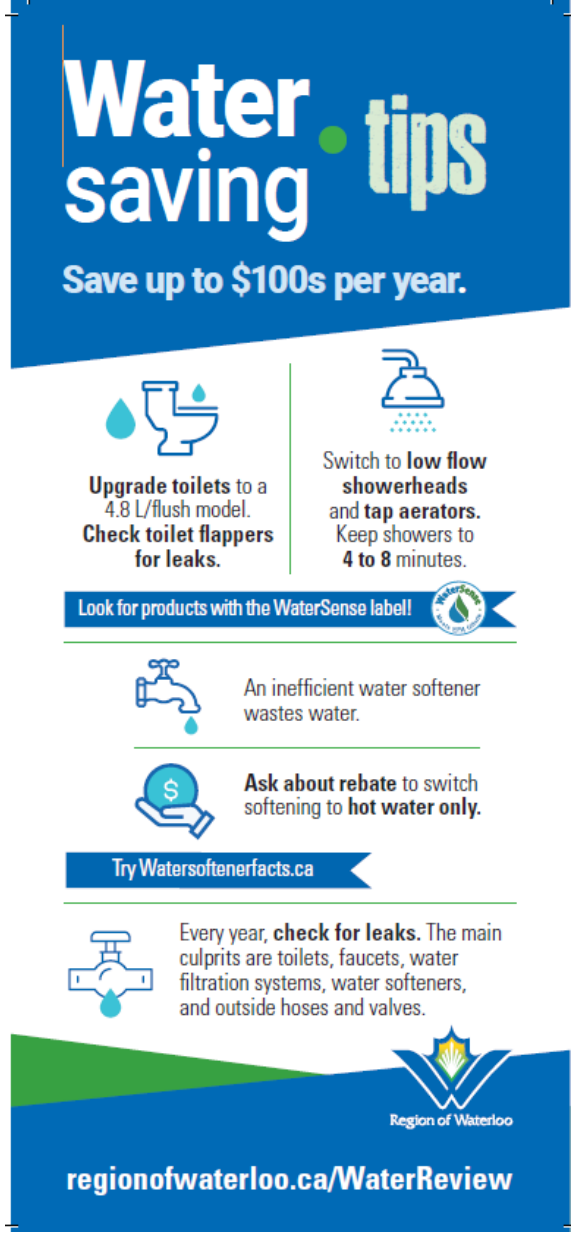



# Existing efficiency and conservation initiatives

Existing water efficiency and conservation programs include:

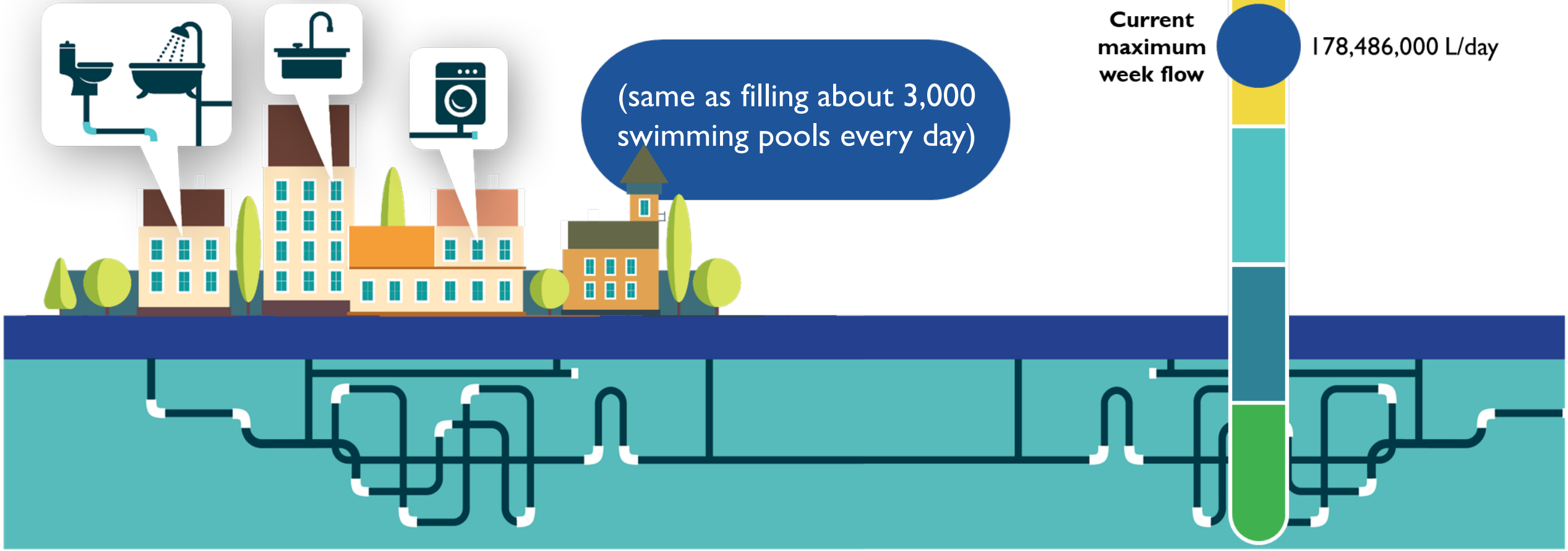
- Water Conservation By-law
- W.E.T. Home Water Review
- Funding for multi-residential buildings to replace fixtures
- Funding for business Water Efficient Certification Program
- Community, school, and youth education
- Water softener education and incentives

**Water is a limited resource that we all share. Together, we need to use it wisely.**



# Current water use

Every day about **150,000,000 liters** of treated water is supplied to the residents and businesses in the Integrated Urban System.



# Share your thoughts!

## Social

- Protects health and safety
- Minimizes impacts to residents and businesses
- Conserves built heritage and/or cultural heritage landscapes
- Conserves archaeological resources
- Considers what water means to the community

## Technical

- Manages and minimizes operational risks
- Meets existing and future needs
- Provides reliable service
- Manages and minimizes construction risks
- Aligns with planning and approval / regulatory requirements
- Ability to adapt to climate change
- Ability to implement

## Environmental

- Protects environmental features
- Protects wildlife and species at risk
- Protects groundwater, streams and rivers
- Minimize climate change impacts

## Financial

- Provides low lifecycle costs
- Provides financial sustainability

# Share your thoughts! (cont'd)

## Stay involved and in the know!

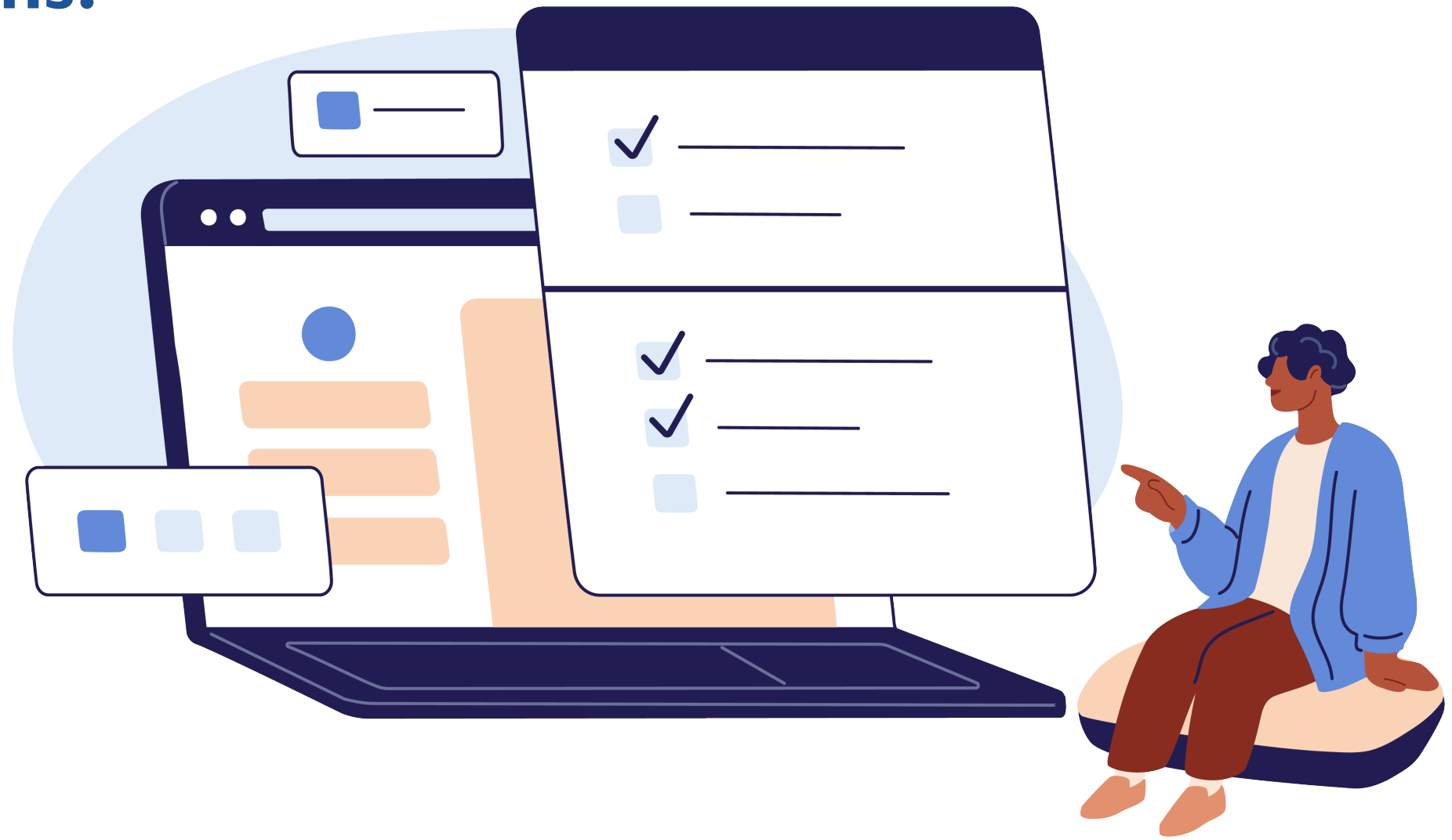
**EngageWR** project page: [engagewr.ca/watersupply](engagewr.ca/watersupply)

- Subscribe for updates
- Complete online survey
- Read about project progress. Project information and updates will be posted on the project webpage.



**Stay tuned for the next Public Meeting (2025)**

# Questions?





# Thank you!

## Contact Info


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