



Region of Waterloo

Water Supply Strategy Project Charter

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www.regionofwaterloo.ca/en/water-and-wastewater.aspx
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Table of Contents



1.0 Introduction and background	2
2.0 Guiding principles	3
3.0 Shaping the Water Supply Strategy	4
4.0 Project goals and objectives	5
5.0 Updating the Water Supply Strategy	6
6.0 Communications, collaboration and consultation	8
7.0 Project delivery	9



A hand is shown pouring water from a metal watering can into a garden. The watering can is tilted, and water is being poured onto the plants. The background is a lush green garden with various plants and flowers.

1.0 Introduction and background

As residents and business owners in Waterloo Region, we are fortunate to know we can turn on our taps and expect clean, quality water. The Region is initiating an update to our Water Supply Strategy, to look at our current water supply sources, assess future water demand, and investigate possible new water sources. We will be considering a range of opportunities to ensure we can all continue to enjoy a safe and secure water supply into 2051.

Project Purpose

The Water Supply Strategy will look at:

- Current sustainable water supply sources and water demands.
- Population growth and how it impacts future water demands.
- The gap between today's water supply and tomorrow's needs and resourcing that gap in a sustainable, efficient way.
- The effect of climate change on our water supply resources.

Our drinking water system

This project will focus on the integrated urban drinking water system — a complex system with over 100 groundwater wells and a limited supply from the Grand River — that supplies water to Kitchener, Waterloo, Cambridge, and some surrounding townships.

2.0 Guiding principles

The following principles will guide the Water Supply Strategy:



Sustainability: Minimize climate change risk and energy use to ensure our residents and businesses have a secure water supply for years to come.



Engagement: Create opportunities for community input to develop a collaborative strategy.



Source Protection: Protect water supply sources using best practices in monitoring, resource management, and policies.



Innovation: Use new technology and best practices to save money and maximize operational efficiencies.



Strategic Alignment: Advance the Region's Strategic Plan directives on creating a Thriving Economy and supporting Environment and Climate Change action to deliver a world-class water system for the community.



Collaboration: Connect with valued partners, including Indigenous rights holders, local municipalities and community members, to develop a water system that benefits current and future generations.



3.0 Shaping the Water Supply Strategy

The Water Supply Strategy will develop and evaluate recommendations to meet future water supply needs. The following questions will help define and shape the recommendations.

1. Will additional water supply be needed?
2. What are the opportunities for additional sustainable water supply sources?
3. What is the best approach to meet the water supply needs of the community?
4. How can the Region further encourage water conservation and reduce water use?
5. How can the Region reduce climate impacts and improve resiliency in our water supply?
6. How can the Region's approach to water supply management integrate community knowledge and perspectives?

4.0 Project goals and objectives

Goals

Ensure safe, secure and sustainable water sources that meet the demands of the community today and into the future.

The Water Supply Strategy aligns with the Region's Strategic Plan by:

-  Supporting the **Environment and climate action** objectives through water efficiency and source water protection.
-  Supporting the **Thriving economy** objectives by planning water supply infrastructure to support the growing community.
-  Supporting the **Healthy, safe and inclusive communities** objectives by providing safe, quality drinking water.
-  Supporting the **Responsive and engaging public service** objectives by inviting public to provide input throughout this strategy development.

Objectives

- Align with and build on the previous work the Region has completed for long-term water supply management.
- Balance the need for additional supply sources due to growth, with greater water efficiency methods.
- Evaluate sustainable local water sources to protect resources for the future.
- Enhance resiliency to climate change and reduce energy demand.
- Incorporate infrastructure renewal planning to ensure a continuous water supply to the community.
- Create a strategy that reflects the needs and values of the community through meaningful engagement and communications.





5.0 Updating the Water Supply Strategy

We are updating the Water Supply Strategy to assess current and future growth needs, review sustainability practices, align the plan to the Region's Strategic Plan, and to ensure we comply with legislative requirements.



Regulatory and Policy

- **Comply with** Provincial and Federal Government regulations and policies regarding water quality.
- **Plan infrastructure and operational enhancements** to address peak water demands.
- **Undertake a planning process** to meet the requirements of the Municipal Class Environmental Assessment for Master Plans.



Growth

- **Determine the approach for new water supply sources** to accommodate growth.
- **Review assets** to optimize existing systems and consider the age and condition of current assets.
- **Identify the criteria** for initiating new, upgraded, or expanded infrastructure and operational changes.
- **Consider resource demands** (money and staff) to adequately develop and operate larger and more complex systems required to serve the community.



Sustainability

- **Identify water supply options** to optimize the use of local resources.
- **Reduce greenhouse gas emissions and energy requirements** to mitigate climate change.
- **Improve resiliency to climate change** to allow the water system to adapt to extreme weather and changing source water quality.
- **Ensure water quality** through use of source protection planning opportunities and water treatment upgrades.
- **Include water efficiency** and conservation efforts to reduce water demands including peaks.
- **Evaluate financial constraints** related to a sustainable user rate.



Strategic

- **Improve the reliability of the water supply system** by increasing the amount of water storage and supply sources.
- **Establish the future need/justification** for new projects.
- **Integrate a flexible approach** to allow additional projects/decision-making beyond the Water Supply Strategy.
- **Collaborate with community partners** to address concerns related to new infrastructure and environmental protection.
- **Inform Regional planning initiatives** including development charges needed to support growth.

6.0 Communications, collaboration and consultation

A detailed Water Supply Strategy communications and engagement plan will be developed to outline communications and engagement goals, objectives, strategies, implementation tactics, key considerations and plan evaluation. This plan will connect with a variety of audiences and stakeholders to encourage two-way conversations, resident and business input, and ensure information is easily accessible.

Communications and engagement strategies will be developed to meet the requirements of the Municipal Class Environmental Assessment process and the Region's standards of excellent communications and engagement practices. Communications will include study updates at key milestones, background and educational information, and notifications on opportunities to provide input to the Water Supply Strategy, including public meetings and online channels.

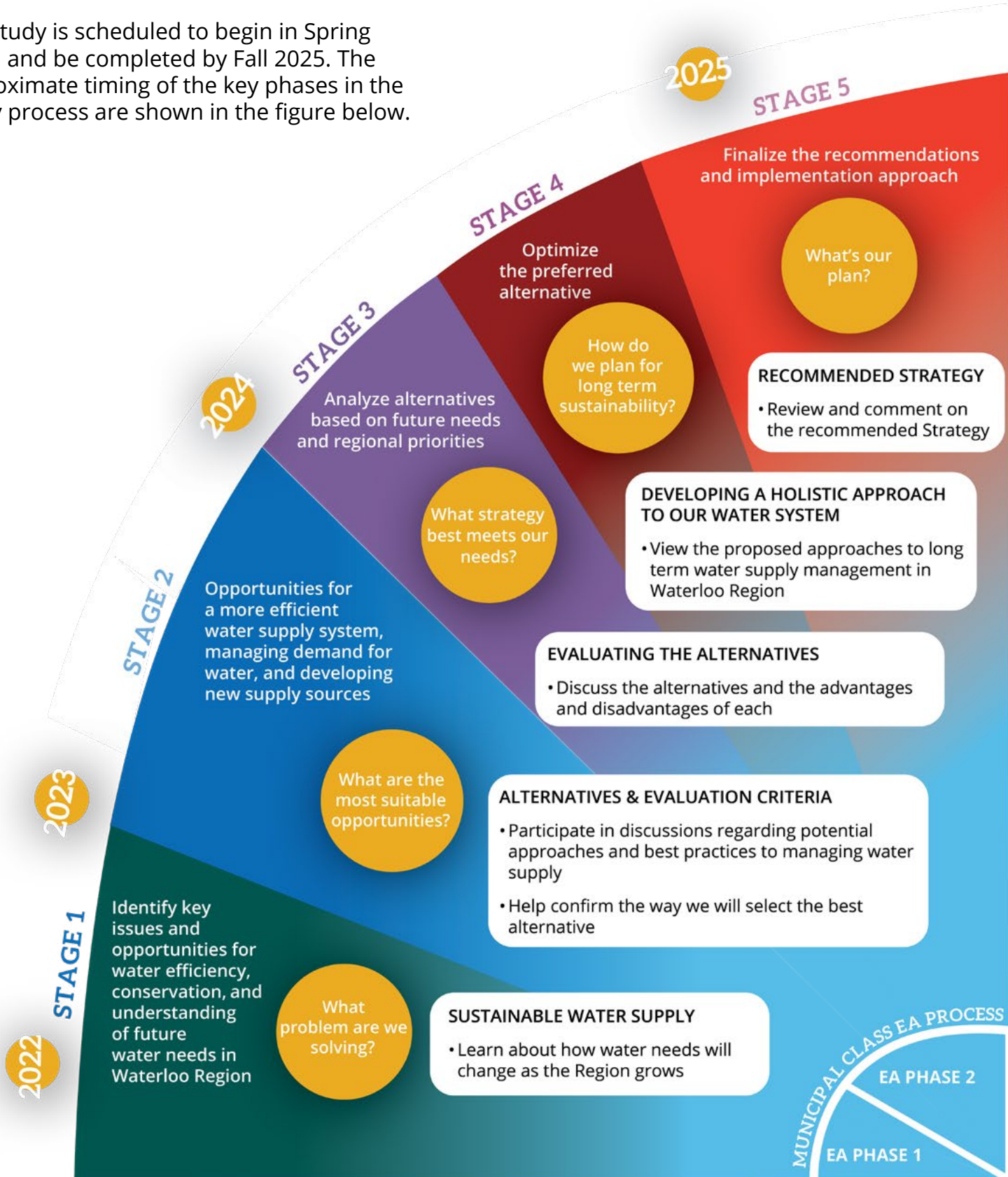
The following will set a foundation for our plan objectives and strategies:

- **Collaborate** with stakeholders and the community partners, as we assess current and future water needs and review potential sustainable water sources.
- **Engage and inform** residents and business owners through plain language messaging and the use of a variety of communications and engagement channels.
- **Leverage** partnerships, community-based organizations and service providers to share communications and engagement opportunities.



7.0 Project delivery

The study is scheduled to begin in Spring 2022, and be completed by Fall 2025. The approximate timing of the key phases in the study process are shown in the figure below.







Region of Waterloo

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