



# **Class Environmental Assessment and Conceptual Design of the Heidelberg Water Supply System Public Consultation Centre #2 Presentation Transcript**

## **Slide 1 – Title Slide**

Hello and thank you for joining us for the Heidelberg Water Supply System Public Consultation Centre (or PCC) #2.

## **Slide 2 - Welcome**

The purpose of this PCC is to provide an update on the study since Public Consultation Centre 1. It will also provide an overview of the Evaluation of Alternative Solutions and the Preliminary Preferred Alternative.

Thank you for your interest in learning about the project and getting involved.

We encourage you to review the information and contact a member of the project team by phone or email if you have any questions or comments. Contact information is provided at the end of this presentation and on the Region of Waterloo's website.

A PDF of this presentation including a transcript and additional information on the project is available on the Region of Waterloo's website if you'd like to review it in more detail. A link to the website is provided below.

<https://www.regionofwaterloo.ca/CurrentWaterProjects/>

## **Slide 3 – Project Overview**

To better understand the project, we are answering the following three questions.

1. what are we doing,
2. why are we doing it, and
3. what does it mean to you?

To answer the first, the Region is planning a long-term water servicing solution for the community of Heidelberg.

Why are we doing it?

The current water supply system serves Heidelberg. A recent condition assessment identified that significant water treatment system components will reach the end of their service life within the next five years. We are taking steps now to ensure we are ready to provide ongoing water servicing to the community.



What does it mean to you?

In addition to exploring the potential to upgrade the existing Heidelberg Water Treatment Plant, the project is also assessing alternative opportunities to supply drinking water to Heidelberg that could provide operational efficiencies. One such opportunity considered is to supply Heidelberg from the neighbouring St. Clements water supply system. The project will not add municipal water supply servicing to areas where it is not currently provided.

#### **Slide 4 – Study Area Map**

The map provides the approximate limit of the study area. Heidelberg and St. Clements are currently served by two separate water supply systems. The locations of the two water treatment plants are shown – the groundwater wells for each community are located at these plants.

The Heidelberg Water Treatment Plant is located in the Township of Woolwich. The St. Clements Water Treatment Plant is located in the Township of Wellesley. Both communities are located within the Region of Waterloo.

The Region of Waterloo has included both the communities of Heidelberg and St. Clements in the study area due to the potential to supply drinking water to Heidelberg from the St. Clements water system, as well as to scope potential environmental or technical opportunities and constraints.

#### **Slide 5 – Overview of PCC#1 Feedback**

The first Public Consultation Centre video slide presentation was available on the Region's website between May 28 to June 30, 2021.

We received feedback from residents about matters that are highly valued when identifying alternatives.

Highly valued aspects include providing effective and efficient water treatment, protecting the natural environment, reducing greenhouse gas emissions, and maintaining drinking water quality including aesthetic considerations such as taste and smell.

Alternatives should avoid environmental features, noise or property disruptions, and property impacts, where possible.

Resiliency planning was highlighted to consider operational and climate change impacts, as well as planning for backup power to ensure the continuous supply of drinking water in the event of a power failure.



Water availability should be confirmed so that capacity is available to address current and future water supply needs. The need for efficient investments in the water supply are also needed.

### **Slide 6 – The Municipal Class Environmental Assessment Process**

The Municipal Class Environmental Assessment, or EA process is a five-phase planning process that is approved under the Ontario Environmental Assessment Act. All Municipalities in Ontario are required to complete an EA study as part of the planning process for municipal infrastructure projects.

This project is being planned as a Schedule B project, which means it follows Phase 1 and Phase 2 of the EA study process.

These steps include:

- identifying the problem or opportunity,
- developing and evaluating alternative solutions,
- identifying the preferred solution,
- documenting the decision-making process in a Project File Report for the public and stakeholders to review and comment, and
- implementing the recommendations through design and construction.

We are currently in Phase 2 of the study. This PCC shares the identification and evaluation of alternative solutions for public review and comment.

### **Slide 7 – Evaluation Criteria**

As the project enters Phase 2, alternative solutions were developed and assessed against the potential impacts to Social/Cultural, Natural Environment, Technical, and Financial factors.

As an example, for the Social/Cultural environment, alternative solutions will be assessed to find those that:

- Minimize impacts on existing residences, businesses, and community features over the short-term and long-term,
- Minimize potential effects on approved/ planned land uses,
- Protects cultural heritage and archaeological features, and
- Protects public health and safety.

Following PCC 1, in response to public feedback the Evaluation Criteria were revised to include changes to the taste or smell of the drinking water supply as part of short or long-term impacts to existing residences, businesses and community features. System resiliency and the need for backup power were also added to the technical category.



## **Slide 8 – Alternative Solutions**

Alternatives were identified based on the background review and consultation in PCC1. This slide includes an overview of the Alternatives considered for this project.

Alternative 1: Do Nothing: This alternative involves conducting no upgrades at the Heidelberg Water Treatment Plant and is carried forward for comparison purposes and in accordance with EA requirements.

Alternative 2: Upgrade the Heidelberg Water Treatment Plant. This alternative involves implementing upgrades to the existing Heidelberg Water Treatment Plant to allow the plant to continue supplying Heidelberg in the long-term.

Alternative 3: Supply Water from St. Clements to Heidelberg via a new Transmission Main, and Decommission Heidelberg WTP. This alternative involves building a new 1.1 km watermain along Lobsinger Line to interconnect the St. Clements and Heidelberg water distribution systems. The Heidelberg WTP would be decommissioned under this alternative. No upgrades were required at the St. Clements Water Treatment Plant as part of this Alternative.

Alternative 4: This Alternative involves constructing a new 3 km transmission main that connects the St. Clements distribution system on Lobsinger Line to the existing Heidelberg WTP treated water storage tank. Water would be supplied to the existing Heidelberg WTP treated water storage tank from the St. Clements distribution system, and then pumped to the Heidelberg system using the existing pumps. This alternative includes partial decommissioning of the treatment processes at the Heidelberg WTP, but maintains the treated water tank and high-lift pumps.

Alternatives 1, 2, 3 and 4 were carried forward for evaluation.

## **Slide 9 – Alternative Solutions**

The map on this slide identifies the location of the alternatives. Alternative 2 work is located entirely at the Heidelberg Water Treatment Plant. No connection is required between communities.

Alternatives 3 and 4 each include a transmission main along Lobsinger Line. Alternative 3 involves direct supply from St. Clements using a new 1.1 km transmission main along Lobsinger Line to the nearest connection point in Heidelberg.

Alternative 4 includes a longer 3 km transmission main from the St. Clements distribution system on Lobsinger Line to the existing Heidelberg Water Treatment Plant.

## **Slide 10 – Summary of Evaluation of Alternatives**

The Evaluation Criteria table shown includes each of the Alternatives carried forward.

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Document Author: KAYMAN  
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Each of the alternatives compare favourably in the social/cultural category, however Alternative 1 is lower due to potential for impacts to residents and businesses due to service disruptions if no improvements are made. Alternative 4 is also ranked lower since the increased transmission main length may result in a higher potential for disruption, such as noise, dust and traffic impacts within a built-up area. Alternative 4 also involves construction over a longer distance and therefore a higher potential for cultural heritage impacts.

The alternatives were well aligned with the environmental criteria. Mitigation measures are anticipated to be available for construction-related impacts.

Alternative 3 was very well aligned with the technical and financial criteria and highest ranked in each category. The other alternatives had increased technical and financial costs associated with them relative to Alternative 3.

Alternative 3 was identified as the overall preliminary preferred alternative.

### **Slide 11 – Preliminary Preferred Alternative: Alternative 3**

The key features of the Alternative 3 are described below as it was identified as the preliminary preferred alternative.

To implement the alternative, an approximately 1.1km transmission watermain would be constructed between St. Clements and Heidelberg Distribution Systems. Water would be pumped from the existing wells at St. Clements.

A metering chamber is required along Lobsinger Line. The inset photo shows an example of a typical metering chamber consisting of a small box within the right of way. The exact location of the metering chamber on Lobsinger Line would be confirmed during the detailed design stage.

The existing Heidelberg Water Treatment Plant would be decommissioned.

Alternative 3 results in lower operational and maintenance costs as only one Water Treatment Plant is required to service both communities. Lower greenhouse gas emissions are also possible due to the removal of the existing plant at Heidelberg. The St. Clements Water Treatment Plant has enough capacity to provide the water supply for both communities based on growth forecast data.

Alternative 3 also has a shorter transmission main with a smaller footprint and relatively lower potential for environmental impacts compared to Alternative 4.



## Slide 12 – Next Steps

The next step for the Project Team is to receive your input on the information presented today. A preferred alternative solution will be confirmed based on input received and consultation with agencies, stakeholder groups and Indigenous communities.

The decision-making process will be documented within a Project File Report, which will be made available for public review for at least 30 days. The Project File Report is anticipated to be prepared in Fall 2022.

Following the EA process, a Conceptual Design plan will be prepared. The Region will move forward with the detailed design process in 2023 with construction to follow at the completion of the design.

## Slide 13 – Thank you!

Thank you again for your interest in this project! We are glad you took the time to learn more about the project and how you can get involved.

Do you have any questions about the information presented here? Would you like more information on the evaluation process and recommended solution?

There are many ways to get in touch with the project team:

- You can fill out a comment sheet available on the Region's website, and return via mail or email to a member of the project team; or
- You can contact a project team member directly by email, telephone, or mail.

Comments are requested to be received by **July 7, 2022** and can be sent to:

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Or you can send comments to the Stantec project manager:

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Links for the project website and the Region of Waterloo You Tube webpage are provided:

<https://www.regionofwaterloo.ca/CurrentWaterProjects/>

<https://www.youtube.com/user/regionofwaterloo>

Thank you again for your interest in this project. We look forward to hearing from you.