



## Guelph Water Supply Master Plan Update

Community engagement summary – Phase 2, January 2022

The City of Guelph (City) is updating its 2014 Water Supply Master Plan to define how Guelph will continue to access a sustainable supply of water — to meet residential, industrial, commercial and institutional demands — to the year 2051. The Water Supply Master Plan update follows the requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment and will be co-ordinated with the City's future Official Plan update.

Reviewing the existing water supply system is an opportunity to discuss with Guelph and the surrounding communities how best to manage this vital supply so that the City continues to provide the high level of service Guelph residents have come to expect.

Community input is an essential part of the Water Supply Master Plan update process. People care about where their water comes from, and they want to see a safe and sustainable supply maintained for present and future generations.

Phase 1 engagement occurred between Fall 2019 to March 2020, and results from that phase of the Project are detailed in *Guelph Water Supply Master Plan – Phase 1: Community engagement summary, October 2020*.

### Phase 2 overview

Topics covered and presented to the community during Phase 2 engagement (March 2020 to December 2021) included

- a review of Phase 1 topics;
- a detailed review of Guelph's existing water supply (namely the 25 production wells, the Arkell Spring Grounds and the Eramosa River intake and recharge system);





- reviewing the water supply requirements to accommodate the 2051 population and water demand projections based on average day demand, maximum day demand and system redundancy;
- a detailed assessment of the water supply alternatives (water conservation, efficiency and water reuse programs; optimizing and/or restoring existing groundwater systems (including off-line sources); establishing new groundwater and surface water supply sources; and limiting population growth / doing nothing); and
- the preliminary results of the water supply alternatives evaluation.

## How we engaged

Phase 2 engagement included

- updating the project website to provide useful information, including links to the previous 2014 Water Supply Master Plan Update, contact information and invitations to online engagement opportunities, and details regarding the second open house;
- online engagement through Have Your Say Guelph, linked through the project website and promoted via the electronic mailing list and social media;
- the second and third Community Liaison Group workshops to continue updating interested stakeholders and collecting feedback;
- the second municipal and agency workshop to provide crucial inputs from a government and approval agency perspective;
- newspaper advertising and electronic mailings to invite participation in the second community open house;
- the second community open house (held virtually) to provide an update on work completed to date for the Water Supply Master Plan Update, giving community members an opportunity to discuss the project with the Project Team and provide comments;
- one meeting with Mississaugas of the Credit First Nation;





- one meeting with Six Nations of the Grand River;
- meetings with the Councils of the Township of Puslinch and Township of Guelph Eramosa; and
- co-ordination with other related master plan updates (i.e., Water and Wastewater Servicing Master Plan, Wastewater and Biosolids Master Plan, Stormwater Master Plan and the Municipal Comprehensive Review / Official Plan Update).

## What we heard

Guided by a series of engagement questions, the community provided their input to the project. Key themes that emerged from the feedback included

- enhancing conservation efforts and options including water taking limitations, grey water usage, increased water recycling programs, and addressing non-revenue water leakage;
- concerns regarding the viability of returning wells impacted by contamination to service, and related safety precautions;
- the need for ongoing protection of water quality throughout the revitalization of the Dolime Quarry;
- the recommendation to consider climate change impacts in the assessment of water supply alternatives;
- general support for the preferred alternative, with some questions and concerns regarding the implementation timelines and the prioritization of the water supply alternatives; and
- jurisdictional concerns regarding source protection and the installation of wells outside of the City of Guelph and the need for ongoing cooperation and consultation efforts with surrounding Townships to ensure any water taking is reasonable, fairly considered and, where appropriate, fairly compensated.





## **Detailed feedback on the results of the technical work including the future population targets, water supply demand forecasts, and the existing water supply capacity assessment**

Stakeholders were invited to comment on the analysis completed regarding the City's planned population in 2051 and the water supply capacity needed to support the anticipated demand. Some of the feedback included:

- The uncertainty of future water supply demands and forecasts due to climate change was identified. The potential for decreased rainfall was mentioned with concern for what the water demand would be during a drought, and how farmers might need to increasingly rely on irrigation systems.
- The price of water was also questioned in terms of how a change in supply and demand would affect residential prices, and if there was a pricing strategy in place for moderating water usage and encouraging conservation efforts.

## **Detailed feedback on the water supply alternatives**

Phase 2 largely focused on assessing the potential water supply capacity and potential impacts of the alternatives – including water conservation, efficiency and water reuse program alternatives, groundwater alternatives and surface water alternatives.

### Water conservation, efficiency and water reuse program alternatives

Four water conservation, efficiency and reuse program scenarios were presented, and each forecasted the demand reduction that could be achieved by 2051. Guelph has a history of leveraging strong water conservation efforts to reduce water demand requirements. Feedback included:

- Suggestions for enhancing water conservation initiatives such as non-revenue water reduction, grey water usage and incentives for increased usage, water recycling programs, and halting major water taking. While some of these initiatives are currently underway, promoting them to a





wider audience and incentivizing them would help to increase conservation efforts.

- Suggestions for stormwater clean up and sewage water recycling practices were also provided.

## Groundwater alternatives

Six categories of potential groundwater alternatives were shared: optimizing existing operating municipal sources, restoring existing off-line municipal sources, developing existing municipal test wells, installing new wells inside City boundaries, installing new wells outside City boundaries, and installing new Aquifer Storage and Recovery wells inside the City. Some of the feedback on the groundwater alternatives included

- The Dolime Quarry was frequently mentioned during the engagement phase. Some concerns included whether an assimilative capacity study had been conducted as it relates to the City's wastewater treatment plant and discharge from the quarry, how the aquifer was being protected and maintained in case dewatering were to stop, and potential impacts to dewatering as a result of annexation.
- The well locations were also a point of interest, including legal and jurisdictional implications of installing new wells outside of the City (in the surrounding townships).
- Water quality concerns and a recommendation for further study to determine the viability of remediating or adding treatment to the current off-line wells were raised.

## Surface water alternatives

Guelph Lake was reviewed as a potential source of surface water for direct treatment and distribution and as a potential source for an Aquifer Storage Recovery system to capitalize on peak flow. Feedback regarding these alternatives included Grand River and Lake Erie connections.





## **Detailed feedback on the results of the assessment and preliminary evaluation of the water supply alternatives**

Each of the water supply alternatives was evaluated against several criteria to identify potential impacts. The evaluation criteria categories included: First Nations, Metis, and Inuit Peoples, Technical, Natural Environment, Built Environment, Social / Cultural Environment, Legal / Jurisdictional, and Financial.

Based on the evaluation, a preliminary preferred solution was identified that recommended implementation of all water supply alternatives (except for the 'do nothing' alternative) in the short-, medium- and long-term over a thirty-year period (i.e., between 2021 and 2051). No objections to the preliminary preferred solution were raised, however there were some questions and concerns regarding the implementation timelines and the prioritization of the water supply alternatives – particularly for the development of new wells outside of the City.

## **Detailed feedback on prioritization and public acceptance of the preliminary preferred water supply alternatives**

Consultation has been a vital part of collecting feedback to inform the Water Supply Master Plan and to gain support and input for the preliminary preferred water supply alternatives. Various parties were interested in additional engagement sessions and reached out for opportunities to stay informed and involved. There was interest from the public, municipal representatives and interested stakeholders to stay involved and the suggestion to include more consultation opportunities is under advisement.

The Townships surrounding Guelph expressed interest in additional consultation opportunities during the study. The Townships of Puslinch and Guelph-Eramosa opted to invite the Project Team to their respective Council meetings to learn more about the progress and provide feedback. This feedback generally focused on

- concerns about source protection areas and land use constraints particularly with respect to impacts on the Townships;





- concerns about potential well interference effects with existing wells particularly with respect to impacts on the Townships;
- prioritizing supply within the City before considering outside sources;
- improving efficiency of existing system; and
- maximizing water conservation efforts.

## **Next Steps**

The Water Supply Master Plan update full report will be placed on public record for a 90-day review period in accordance with the requirements of the MCEA process. This period will begin on January 10, 2022. All comments will become part of the public record of the WSMP update with the exception of personal information.

