

City of Yellowknife

Submarine Water Pipeline Replacement



The City of Yellowknife is replacing the pipeline that supplies drinking water to residents. This pipeline currently runs underwater from the mouth of the Yellowknife River at Pumphouse No. 2, along the bed of Yellowknife Bay, to Pumphouse No. 1 located next to the Water Treatment Plant.

Since 1969, the City's primary water source is the Yellowknife River. The City completed a [Water Source Selection Study](#) in 2017. This study recommended the existing underwater pipeline be replaced, and confirmed that water from the Yellowknife River is the preferred option for the City's water supply over the long term.

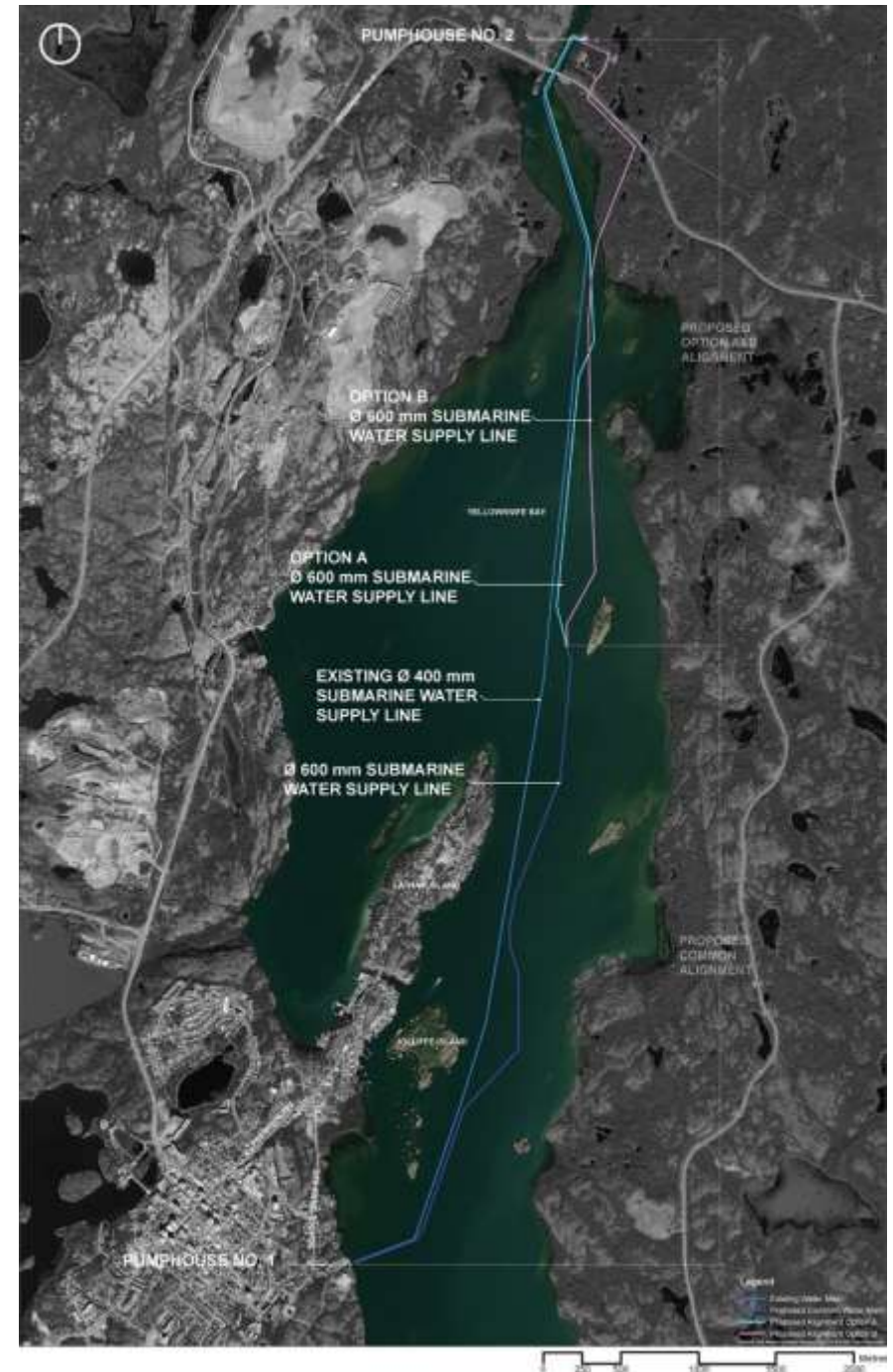
A new pipeline will also help ensure there is enough capacity in the pipe for the City's future water needs.

On behalf of the City, AECOM is exploring design and routing options for the new pipeline. The project will include many areas of study, including:

- Collecting all missing and incomplete bathymetric (lakebed) data to identify areas with stability risks.
- Conducting geotechnical investigations at the pumphouses and installing groundwater monitoring wells.
- Installing a new pipeline.
- Decommissioning the existing pipeline.
- Upgrading Pumphouses No. 1 + 2 and pump systems.
- Redesigning the intake screens at the Yellowknife River and Bay.

When installed, the pipeline will entail 8.5 km of new underwater pipe and upgrades of the City's two pumphouse facilities. This new water supply system will include a new 600 mm submarine pipeline and upgraded pumps in Pumphouse No. 1 and No. 2.

Clean, municipal water will be readily available from the City of Yellowknife for use during the project.



Note: illustrations of engineered drawings for conceptual purposes only

WATER LICENCE AMENDMENT + LAND USE PERMIT APPLICATION

As part of this pipeline replacement project, a water licence amendment application must be submitted to the Mackenzie Valley Land and Water Board (MVLWB). This application is to amend the current water licence, which was issued on May 31, 2022.

A Type A Land Use Permit will also be submitted to the MVLWB.

Did you know....not all aspects of the City's water and waste services are regulated by a water licence? For example, drinking water quality is regulated by the GNWT Department of Health and Social Services under the NWT *Public Health Act*.

QUESTIONS ABOUT THE PROJECT?

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LOOKING FOR MORE INFORMATION?

<https://www.yellowknife.ca/en/living-here/submarine-water-pipeline-replacement-project.aspx>



PROJECT TIMELINE

The pipeline replacement project is planned for the next four years. Exact dates will be determined as design is finalized and construction activities are planned.

