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## **Council Meeting – June 21, 2022**

Subject: Inter-Urban Water Supply Agreement with Haldimand County  
Report Number: EIS-22-042  
Division: Environmental and Infrastructure Services  
Department: Engineering  
Purpose: For Decision

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### **Recommendation(s):**

THAT Council Report EIS-22-41 on the Inter-Urban Water Supply Agreement with Haldimand County be received;

AND THAT Council approves the financial principles for the Water Supply Agreement between Norfolk County and Haldimand County;

AND THAT Norfolk County undertake a water rates update study based on the financial principles outlined in the draft Water Supply Agreement from Haldimand County;

AND FURTHER THAT the Mayor, and Clerk be authorized to execute the agreement once finalized.

### **Executive Summary:**

Since 2019, Norfolk County has been working in partnership with Haldimand County with the goal of establishing an Inter-Urban Water Supply serviced from the Nanticoke Water Treatment Plant (Nanticoke WTP). The Inter-Urban Water Supply (IUWS) system will provide a cost effective and timely solution for Norfolk County's drinking water supply quality and quantity issues.

The project has progressed and the Water Supply Agreement with Norfolk County is in a final draft form. The Water Supply Agreement and supplemental rate calculation completed by Haldimand County addresses the cost of new infrastructure construction, operating costs, phasing, governance and water supply volumes.

Norfolk County will undertake supplemental rate calculations and financial analysis to validate the water rate for Norfolk County users. Previous studies and the 2016 integrated servicing master plan (2016 ISMP) confirmed technical feasibility and benefits of a consistent and higher quality water supply from the Nanticoke Plant.

Through this report staff are recommending that the Norfolk County Water Supply

Agreement be finalized and executed in accordance to the financial principles discussed in this report.

## **Discussion:**

### **Background:**

An Inter-Urban Water Supply solution, where the Norfolk County drinking water system is supplied from the Nanticoke WTP, was recommended and approved by Council in 2021. This solution will leverage economies of scale as well as an increased and more diversified customer base for both Norfolk and Haldimand County, both of which are positive factors that contribute to a better water servicing and a stabilized water rate for all users.

### **Analysis:**

Haldimand County's Nanticoke Water Treatment Plant (WTP) has a Permit To Take Water (PTTW) and supporting infrastructure capable of meeting the long term water servicing needs of Norfolk County. After expansion to add dedicated treatment capacity, the Nanticoke WTP water supply can provide a cost effective and timely solution to the current quality and quantity issues faced in Norfolk communities. The expansion is required based on recent capacity rerating studies and recommendations from the Ministry of Environment Conservation and Parks (MECP).

The goal of this initiative is to fulfill the long term drinking water supply needs for the communities of Norfolk County by establishing and constructing the necessary agreements, finances, approvals and infrastructure to connect to the Nanticoke WTP and implement the county-wide Inter-Urban Water Supply System.

The proposed current water servicing strategy consists of three implementation phases:

- Phase 1 (2026) – construction of transmission system with the first two connection points to Simcoe and Port Dover, and additional water treatment capacity of 10,000 cubic meters per day to be dedicated to Norfolk supply from the Nanticoke WTP.
- Phase 2 (2031) – Additional water supply of 15,000 cubic meters per day from the Nanticoke water treatment plant (WTP). Total Norfolk water supply capacity of 25,000 cubic meters per day.
- Phase 3 (2041) – Additional water treatment capacity of 15,000 cubic meters per day from the Nanticoke water treatment plant (WTP). Total Norfolk water supply capacity of 40,000 cubic meters per day.

The Inter-Urban Water Supply system with dedicated treatment capacity from the Nanticoke WTP in Haldimand County will have the following benefits to Norfolk County:

1. **Short and long-term benefits on Norfolk's water servicing capacity** and ability to unfreeze development in Port Dover, approve new developments in Simcoe and Port Dover.
2. **Short and long-term benefits on Norfolk's operational capacity** to ensure consistent storage and backup flows county-wide in case of high demand events (fire flows, scheduled watermain flushing, seasonal high peak demand).
3. **Long term sustainability benefits on Norfolk's economy.** The Inter-Urban Water Supply system will deliver high quality water services to both existing and planned customer bases according to the long term growth management strategy. Rural communities, hamlets and touristic amenities could be serviced in addition to the six main communities currently connected to the existing water systems.
4. **Long term positive impacts on Norfolk County's water rates.** It is anticipated that Norfolk's water rates will stabilize and/or decrease over the long term due to economies of scale of a larger customer base and decommissioning of the existing aged water infrastructure.

#### **Financial Principles and Legal Implications:**

The financial component of the draft Water Services Agreement (see Attachment 1) was developed using the following principles that will ensure neither county will be subsidizing water costs for the other and that were derived from the Hamilton/Haldimand Water Supply Agreement:

##### **1. Capital Costs**

The capital costs associated with the construction of the dedicated treatment capacity and delivery of water "the servicing" to Norfolk will be completely funded by Norfolk. This includes the necessary expansion to the existing Nanticoke Water Treatment Plant, as well as the transmission main extensions to bring the water to Norfolk's boundary. Capital cost will be gradually provided based on monthly construction payment certificates.

**As a result, there would be no internal rate of return or investment fee charged to Norfolk for these works.**

##### **2. Operating Cost Recovery**

A proportionate share of the operating costs specific to the treatment and delivery of water is to be allocated to Norfolk. To calculate the operating rate each year, the total operating cost anticipated is divided by the total annual flow anticipated. The resulting rate is a charge per cubic meter of water volume utilized. At year-end, the actuals for operating costs and flows will be reviewed and the calculation adjusted and reconciled.

### **3. Lifecycle Cost Recovery**

For the financial management of assets, lifecycle costing is used to identify the annual contribution required to replace an asset at the end of its useful life. Haldimand currently utilizes this approach for calculating water and wastewater rates for its users.

The cost for replacement of the assets is fixed (subject to inflationary factors) regardless of the volumes utilized. As a result, rather than estimating a rate per cubic meter, the lifecycle costs have been identified as an annual charge.

### **4. Administrative Cost Recovery**

It is recognized that Haldimand will have additional administrative costs associated with administering the water supply agreement as well as the Water Operations agreement currently in place with the Ontario Clean Water Agency (OCWA). As a result, the calculated operating rate per cubic meter and annual lifecycle charges will have a 2.84% administrative charge applied to them for cost recovery purposes. This administrative charge is based on the rate established with the County's service agreements with industry.

## **Financial Comments:**

As identified in the April 2022 presentation, the development of a final draft agreement was the next step to continue to move this project forward. This agreement provides the framework for the development and construction of the infrastructure required to service Norfolk County. In addition, it also includes other items such as phasing, ownership, capacity requirements and governance. Most importantly, four financial principles detailed above are included which will form the basis in determining what Norfolk County will pay for water rates. Once these principles have been approved, staff can move forward in reviewing the cost details and allocations in order to determine the inputs in the development of water rate.

Once this agreement is executed, Financial Management and Planning will need to work with Watson's and Associates Ltd. to update the current water rates study based on the changes taken place in the delivery of water to Norfolk County residents. This study will also include a comprehensive financial analysis that has not been completed to date based on the current infrastructure project approved.

## **Interdepartmental Implications:**

- Finance Department will complete the Norfolk water rates update study based on the financial principles outlined above to support the agreement.
- Environmental Services will identify the operational needs and financial impact associated with the IUWS system.

- Planning Department will incorporate the IUWS servicing capacity into the short and long-term planning strategies, capacity servicing allocation policy, and updated Official Plan.
- Engineering Department will amend the approved 2021 budget for the IUWS project.
- A Public Awareness Campaign will be initiated through Engage Norfolk in order to inform Norfolk residents and business on the IUWS progress and servicing capacity availability for future connection.

#### **Consultation(s):**

- Norfolk County - Engineering Department, Environmental Services Department, Planning Department, Legal Counsel, Finance Department, Chief Administrative Officer, and
- Haldimand County Senior Management

#### **Strategic Plan Linkage:**

This report aligns with the 2019-2022 Council Strategic Priorities "Build and Maintain Reliable, Quality Infrastructure", "Focus on Service". "Create an Optimal Place for Business" and "Build Solid Foundations".

Explanation: Providing high quality water supply services to Norfolk County's residents and businesses is critical to the County's sustainable growth to 2041 and beyond.

#### **Supporting Reports:**

- Norfolk Council Reports PW 20-23 (Nov 17, 2020), PW 21-11 (Feb 9, 2021) and EIS 21-29 (Jun 8, 2021), IUWS Status Update Presentation (Apr 12, 2022)
- Haldimand Council Report WWE-01-2022 (Jun 21, 2022)

#### **Conclusion:**

Norfolk and Haldimand Counties have negotiated a draft water supply agreement and outlined a set a four financial principles for the wholesale water rate calculation. These principles are discussed in the Financial Principles and Legal Implications section of the report. With these financial principles agreed to, both counties can proceed collaboratively in the detailed review of costs and values used to formulate an equation that will determine a Norfolk water rate going forward. Ongoing review of actual costs and regular review of the calculations will ensure that the established rate is transparent and that costs are appropriately allocated to Norfolk.

Norfolk requires the Inter-Urban Water Supply System with Nanticoke water solution in

2026. These principles will ensure that the rate calculations will be consistently applied and are reflective of operational and capital construction costs applicable at the time the water is required and indexed for inflation going forward. Since Norfolk will be responsible for the construction capital costs, it was agreed that Norfolk should be considered a stakeholder in the design and construction process.

Based on the recent negotiations and thorough review of the above financial principles with Haldimand County, Staff recommends finalization of the Water Supply Agreement.

#### **Attachment(s):**

- Final Draft Water Supply Agreement (Attachment 1)

#### **Approval:**

Approved By: Al Meneses,  
Chief Administrative Officer

Reviewed By: Andrew Grice  
General Manager, Environmental and Infrastructure Services

Prepared By: Mariana Balaban, P.Eng., Ph.D.,  
Project Director, Engineering, Environmental and Infrastructure Services