

## 2024 Budget Request

# **Request: OCWA Capital Upgrades**

# **Department: Development and Infrastructure Services**

Request ID: DEV2024BUDGET-C-01

Financial Ask: \$292,000

# Funding Source: Capital – Water Systems

This document and its attachments are public and available in an accessible format upon request.

## **Background and Strategic Priority**

Foster Economic Growth

Demonstrate and Enhance Environmental Stewardship

**Deliver Effective and Cost-Efficient Services** 

## Analysis

Capital upgrades and initiatives from Ontario Clean Water Agency (OCWA) to maintain the safe and reliable water treatment and distribution systems throughout the communities of Shallow Lake, Oxenden, East Linton, and Pottawatomi.

2024 additional capital initiatives, include fire flow testing, leak detection and asset management review, planning and reporting with the water systems throughout the municipality to ensure the assets align with the Asset Management Plan.

## **Fire Flow Test**

A hydrant fire flow test is a process of flowing water out of a fire hydrant while obtaining the required pressures (static, residual) needed to calculate the amount of water that the water system is capable of providing @ 20 psi. The National Fire Protection



Association (NFPA) and the American Water Works Association (AWWA) provides guidelines and procedures for completing the fire hydrant flow test and states that public fire hydrants should be flow tested every five (5) years.

The data collected during the field test is an asset in determining the available fire flow rates, water model calibrations and maintenance management.

### Leak Detection

The buried water infrastructure throughout the communities within the Township continues to age; as noted in November, the East Linton system is experience as much as 100% leakage (only half the water being pumped and treated from Georgian Bay is making it to meter points).

The Leak Detection review will help identify any leaks and defects in the municipal water system including transmission, distribution, and service pipelines. This data is then used to assist the Township and OCWA in fixing watermain and service leaks to eliminate water loss and catastrophic damage to the infrastructure.

In discussion with OCWA, the Township of Northern Bruce Peninsula is also seeking to undertake leak detection work and there could well be opportunities to share in capital investments (equipment) to aid this work, which would be completed by OCWA.

#### **Asset Review**

An Asset Management Plan that completes with Ontario Regulation 588/17, known as Asset Management Planning for Municipal Infrastructure.

OCWA will complete a through analysis of each drinking water facility and distribution system throughout the municipality, including, approximately 350 individual components that are represented in OCWA's work management system. The analysis will also include the linear assets.

A final report will be generated, including asset performance assessments and expenditure and performance forecast. This information will be used to align the asset inventory the Township currently has on file to ensure accurate records and asset management of the final Asset Management Plan completed by PSD Citywide.

## **Financial Impact**

The cost estimate, for OCWA to complete the necessary capital projects and 2024 capital initiatives, including contingency at \$ 292,000 and can be further broken down as the following:



## East Linton Water System

OCWA proposed Portion of Fire Flow Testing Total \$84,250 \$9,000 \$93,250

### Shallow Lake Water System

OCWA proposed	\$122,000
Portion of Fire Flow Testing	\$2,500
Total	\$124,500

## Pottawatomi Water System

OCWA proposed	\$5,500	
Portion of Fire Flow Testing	\$0	
Total	\$5,500	

### Oxenden Water System

OCWA proposed	\$2,200
Portion of Fire Flow Testing	\$3,250
Total	\$5,450

Asset Management – \$7,600 for engineering Leak Detection Program – \$55,700 for engineering



## **Report Approval Details**

Document Title:	2024 Budget Request OCWA Capital Initiatives .docx
Attachments:	
Final Approval Date:	Nov 14, 2023

This report and all of its attachments were approved and signed as outlined below:

Samantha Buchanan, Treasurer

Niall Lobley, Director of Community Services