



# Township of Georgian Bluffs Drinking Water Systems

2024 Major Maintenance  
Recommendations



# East Linton Drinking Water System

The East Linton Low Lift Station, Water Treatment Plant, Booster Station, Standpipe and Distribution Mains.

## East Linton Low Lift Pumping Station

- Built in 1993-94
- 1800 mm precast concrete intake structure at approximately 5.8 m depth
- Approximately 130 m x 300 mm DI intake pipe
- Three (3) 20 HP Low Lift Pumps replaced in 2008



## East Linton Water Treatment Plant

- Water Treatment Plant built in 1993-94.
- UV Disinfection System installed in 2004.
- Flocculation/Filtration Units replaced with New Pall Aria Microfiltration System in 2008.
- Atlas Copco air compressors replaced in 2021 and 2023.



## East Linton Booster Station Standpipe and Distribution Mains

- Presqu'île Drinking Water System built in 1988
- 2,040 cubic meters capacity Standpipe installed in 2008
- Presqu'île watermains connected to East Linton Water Distribution in 2010 and WTP was transformed into the existing booster station.
- Although some sections of distribution water mains are “aged”, most if not all are PVC pipes.
- Sections of water main in the south end of Balmy Beach road and Grey Road 1, west end of Indian Acres Road, Ishwar Drive and Indira are undersized and are considered for replacement.



## Major Maintenance 2024

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



# Shallow Lake Drinking Water System

The Shallow Lake Water Treatment Plant and Distribution Mains.

## Shallow Lake WTP

- The Water Treatment Plant was built in 1996.
- The Green Sand Filtration System was added in 2000 in order to help with the removal of manganese.



- The Anion Resin Exchange System was installed in 2009 in order to help reduce high levels of THMs
- The high lift fire pump motor was replaced and a new VFD was installed in 2018
- The UV system was installed in 2019 to help improve pathogen inactivation and reduce CT requirement.



- Sacrificial anodes were installed on the packaged conventional dual media filtration system in 2021
- The Green Sand Filtration System was refurbished in 2021-22





- One of the three ion exchange tanks, media and underdrain was replaced in 2022
- Three ion exchange heads were rebuilt in 2023.



## Shallow Lake Distribution System

- The water distribution system was also mostly built in 1996.
- PVC water mains vary from 150 mm to 200 mm in diameter.



## Major Maintenance 2024

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



# Pottawatomi Drinking Water System

The Pottawatomi Water Treatment Plant and Distribution Mains.

## Pottawatomi WTP and Distribution systems

- The Water Treatment Plant and Water Distribution Systems were built in 1987.
- Iron sequestration, UV disinfection and cartridge filtration were later added.
- Well head was later extended.



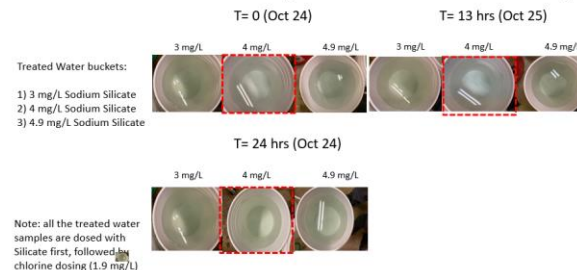
- A risk assessment to determine public health risks of operating the Pottawatomi Village was performed in 2004.
- A raw water assessment study was performed in 2015.
- Well pump and down pipes were replaced in 2016, 2020 and 2023.



- CT contact tanks and pressure tanks were replaced 2018, 2019 and 2020.
- Iron sequestration optimization exercises were performed by OCWA in 2021-22.
- Iron reduction pilot testing was performed by the WCWC in 2022-23



### Third Round Bucket Test – (Sodium Silicate + Chlorine)



## Major Maintenance 2024

- OCWA Proposed \$5,500

Total	\$5,500
-------	---------



# Oxenden Water Distribution System

- The Oxenden water distribution system was built in 1996 and is supplied by the Wiarton WTP.
- Distribution mains are 250 mm 150 mm diameter PVC.



## Major Maintenance 2024

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