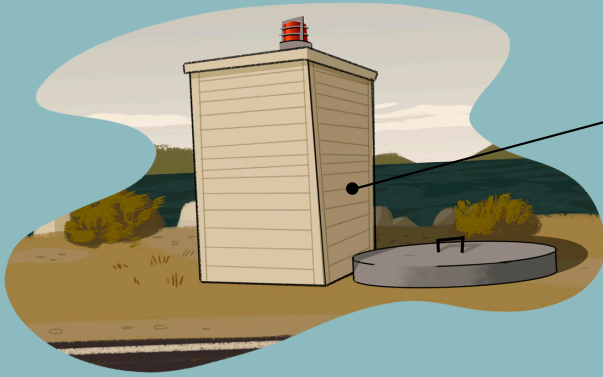


# Protecting our Bay with wastewater treatment!

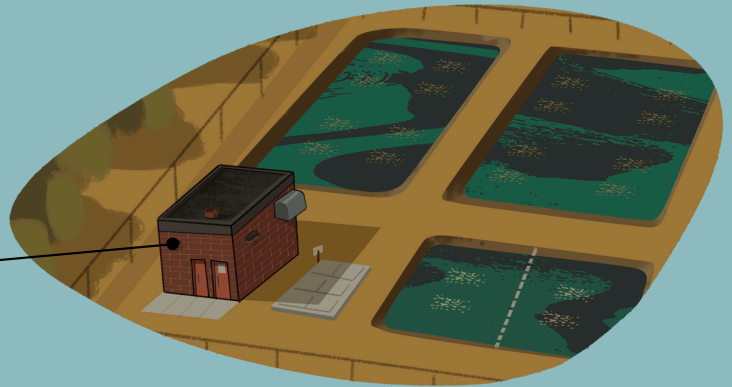


## PUMP, PUMP PUMP IT UP

We pump wastewater up from the shoreline for treatment before it enters the ecosystem. With rising sea levels, our pumping stations need bailing out!

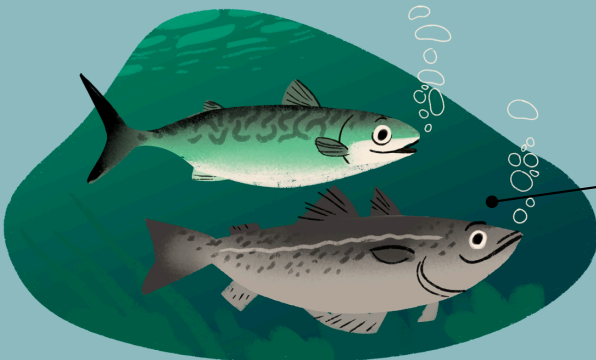
## FIRST-RATE TREATMENT

Wastewater is treated in lagoons via biological oxidation. We must work together to separate our stormwater out: by its nature, it doesn't need treatment.



## KEEPING THE HARBOUR BEAUTIFUL

We're working to protect aquatic life by removing the chlorine from the treatment process and connecting older residences to the public wastewater system.



## A wastewater system that keeps our Bay safe.

The first phases in Mahone Bay's wastewater system were complete in 1949 in the most expensive project we'd ever undertaken. Now we have a modern facility and soon we'll add a peracetic acid system to ensure no excess chlorine reaches the bay. Heavier rains and higher waves from climate change are imposing new costs. Diagnostics help us to make smart investments for the future, ensuring your utility payments are used wisely!

# Wastewater Assets



## WASTEWATER ASSETS AT A GLANCE

Mahone Bay's wastewater system includes:

- Lagoon Treatment Facility (\$2,053,750)
- 3 Lift Stations (\$558,000)
- 1 km Sanitary Main (\$690,023)
- 11 km Collection Lines (\$7,590,255)

Values are estimated replacement value

## KEY 2020-21 CAPITAL PROJECTS:

- \$137,825 for treatment upgrades to remove chlorine from effluent
- \$3,155,900 for distribution line renewal / extension (waiting on confirmation of Provincial / Federal funding)

## ASSET MANAGEMENT GOALS

- Continue to meet treatment regulations
- Renew existing wastewater collection system assets (reduce infiltration)
- Extend services to eliminate straight pipes and support new development (system can handle 1,500+ town residents)

## RISKS:

- Heavier rains overloading lift stations
- Coastal erosion and flooding threatening infrastructure

## WASTEWATER TREATMENT

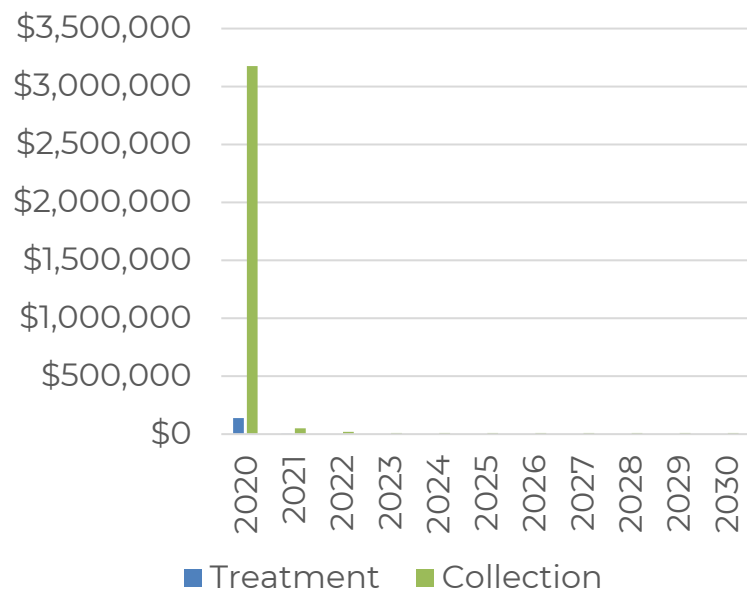
The Town of Mahone Bay operates a Class I wastewater treatment facility which uses a bar screen, grit chamber, aerated lagoon basins and chlorine contact and dissipation basins for treatment; it has an average retention time of 25 days.

In 2019, the Town of Mahone Bay discharged an average of 680,071 litres per day of treated effluent into Mahone Bay Harbour.

Certified staff monitor the treatment process and regular testing is conducted for bacteria and contaminants, in accordance with regulations.

**Did you know?** Like most Nova Scotian communities Mahone Bay didn't have wastewater treatment until 1994. Old outfalls were connected to the new treatment plant with new lift stations.

## 10-year Capital Investment Plan



Annual Infrastructure Charges to all dwellings and businesses in Mahone Bay:

2016	2017	2018	2019	2020
\$265	\$265	\$265	\$275	\$295

These Infrastructure Charges pay for important capital projects in wastewater, transportation, parks and facilities, etc.