

SANITARY COLLECTION & TREATMENT



AT A GLANCE

Gibsons' Sanitary Collection & Treatment System is comprised of:

- Wastewater Treatment Plant (WWTP)
- Treated sewage ocean outfall
- Prowse Road Lift Station
- 35 km collection pipes, including gravity and force mains
- 500 manholes
- Approximately 1700 service connections

COMMUNITY GOALS

- upgrade and expand the system for increased reliability and to meet growing demand
- upgrade the effluent outfall and outfall facility
- require existing development to connect to the system
- minimize "inflow and infiltration"
- divert flow away from Prowse Road Lift Station
- pursue funding options for Prowse Road Lift Station

RELIABILITY AND RISKS

Reliable service requires:

- regular monitoring and preventative maintenance
- communications to the public re) their role in caring for the system

Risks of cutting costs are:

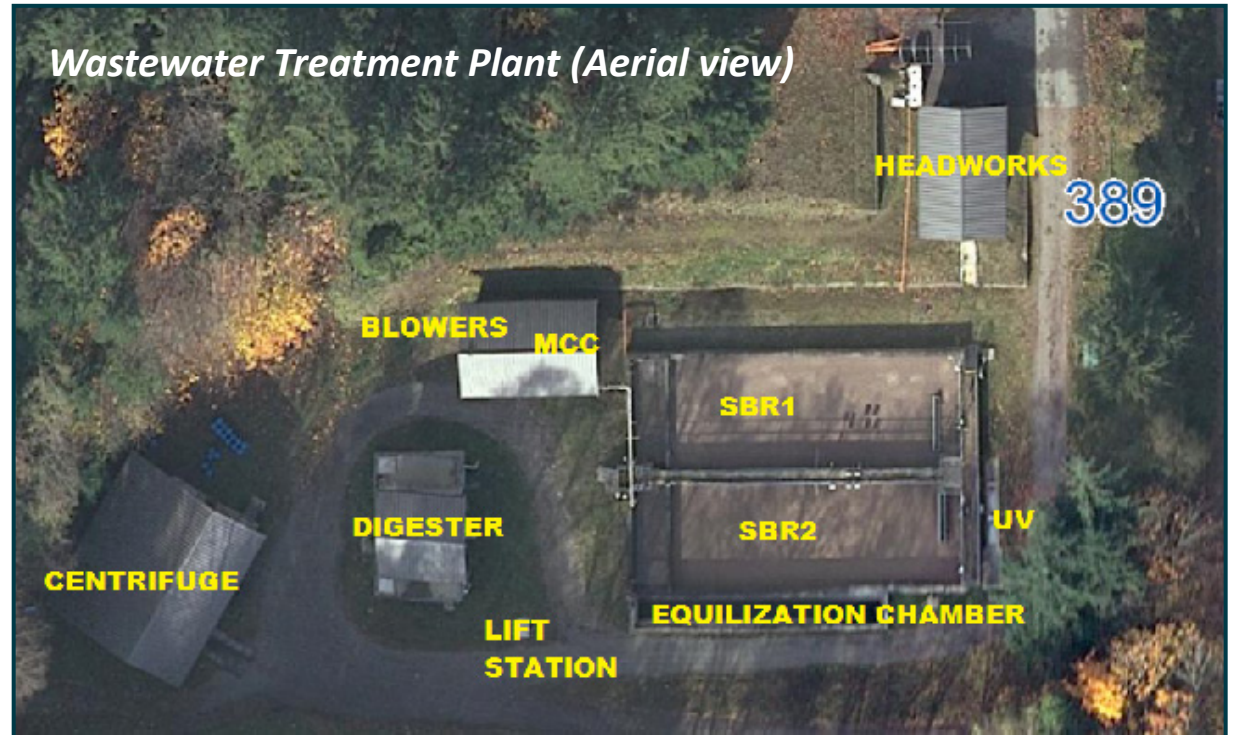
- expensive reactive maintenance to fix leaks, breaks and blockages
- disruptions to service
- risk of sewage backups and resulting property damage
- increased treatment costs

Inflow and Infiltration ("I&I")

Inflow & Infiltration is clean storm and/or groundwater that enters the sewer system through cracked pipes, leaky manholes, or improperly connected storm drains, down spouts and sump pumps.

Most inflow comes from storm water and most infiltration comes from groundwater. I&I puts additional pressure on Gibson's sanitary collection system, as we end up unnecessarily treating clean water.

To help alleviate costs associated with I&I, the Town employs a video monitoring program to identify where unwanted water is getting into our system.



ASSET MANAGEMENT

Replacement Value

\$49.0 million (or \$10,600 per person)

Operations & Maintenance

Ongoing videoing and flushing of critical mains, scheduled maintenance of wastewater treatment plant. Operating the treatment plant requires three full-time staff.

Current & Planned Capital Projects

2018

- Prowse Road Lift Station - Design: \$60,000
- WWTP Optimization & Upgrade - Design and Tender: \$396,000

2019

- Prowse Road Lift Station - Construction: \$995,500
- WWTP Optimization & Upgrade - Construction: \$1.7 million
- Annual Collection System Rehabilitation: \$55,100

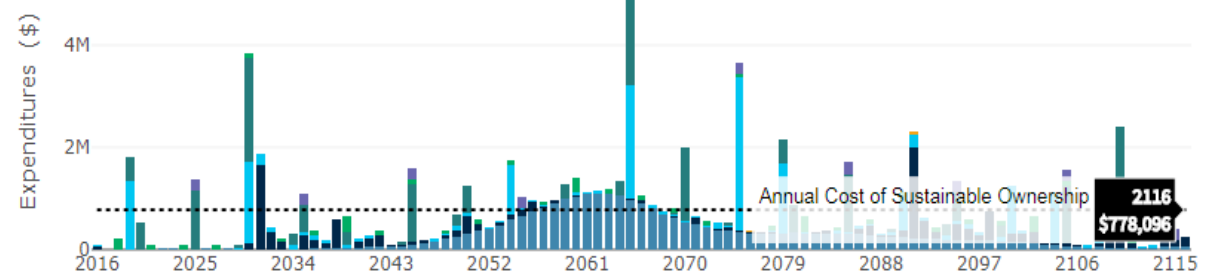
2020

- Collection System Rehabilitation: \$57,900
- Wastewater Strategic Plan Update: \$55,100

2021

- Collection System Rehabilitation: \$60,800

REPLACEMENT SCHEDULE



A sustainable sanitary system is estimated to cost \$778k annually just to replace aging infrastructure.

WWTP Upgrade & Prowse Pump Station Retrofit

The contract to provide design, engineering and construction services for Gibson's Wastewater Treatment Plant was awarded in 2018.

Project work is to include construction of a buffer tank, a chemical addition building and a chemical delivery system, as well as an upgrade to the Prowse Road Lift Station.

Design of the upgrades began in 2018, with construction anticipated in 2019 and 2020.

Fats, Oils, Grease (FOG)



An annual flushing and monitoring program has revealed issues with preventable blockages, such as grease build up due to lack of grease interceptor control. In response, the Town has implemented a multi-pronged communications and inspection program aimed at both commercial and residential addresses.