

# EASTBOURNE WATER SYSTEMS BACKGROUNDER



## CONTEXT

The Eastbourne Water System is located on the eastern portion of Keats Island, across from the Town of Gibsons and west of Bowen Island. This water system is located on the territory of the Skwxwú7mesh Úxwumixw and Tsleil-Waututh Nation. Keats Island is accessible by ferry, water taxi, or private vessel. Most residential properties on Keats Island are seasonal vacation homes and water demand is highest during the summer months.

## WATER SOURCE

The Eastbourne Water System is sourced from two aquifers, which are identified as Aquifer 547 and Aquifer 548 on the BC Provincial Groundwater Wells and Aquifer Database. Aquifer 547 is a shallow, low-yielding, unconsolidated sand and gravel aquifer that underlies most of the Eastbourne community. Aquifer 548 is a bedrock aquifer below Aquifer 547.

## SUPPLY INFRASTRUCTURE

The Eastbourne Water System provides potable water to 175 active water connections. Water supply is limited and is currently provided by four wells: (1) Gordon Well and Old East Well, two 6.1 metre (m) shallow wells, (2) Drilled Well, a 91.4 m deep well in the bedrock, and (3) Collector Well, a trench and sump system that collects surface water and groundwater. These wells rely on precipitation for recharge. The SCRD has a contract with Keats Construction to operate this water system.

Raw water is treated at a small water treatment plant built in 2003, and is currently running below its design capacity, with the ability to process more water. Water is treated through a three-step process of filtration, ultraviolet and chlorination. In 2021, the Eastbourne Water System distributed 6.8 million litres of treated water.

Due to limited water supply, the system experiences periods of low flow at the well sources during the summer months. To address this, each property serviced by the Eastbourne Water System is equipped with a water meter, flow restrictor and a storage tank

to help ration treated water during these low supply periods. In addition, there are two community reservoirs on Esplanade Road that fill when water is available. These reservoirs are 7,500 L and 15,000 L in size, for a cumulative storage volume of 22,500 L.

## FUNCTIONALITY

Seasonal Water Conservation Regulations, including a ban on outdoor watering (Stage 4) occur annually within the Eastbourne Water System during the dry summer months however, there is generally adequate water supply between November and April each year. The Eastbourne Water System is not built to provide fire flow protection. This is due to the size of the current distribution mains, limited storage capacity at the water treatment plant, and absence of a fire pump.

The SCRD is actively pursuing new water sources, including drilling two new test wells in 2022-2023. The SCRD recognizes the tremendous effort by residents to ration and conserve water.



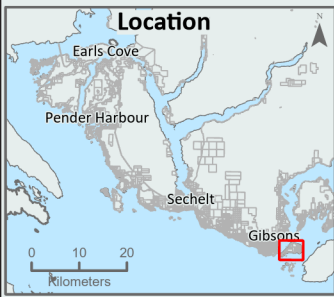
## FAST FACTS

**Primary Water Source:**  
Aquifer 547 and 548

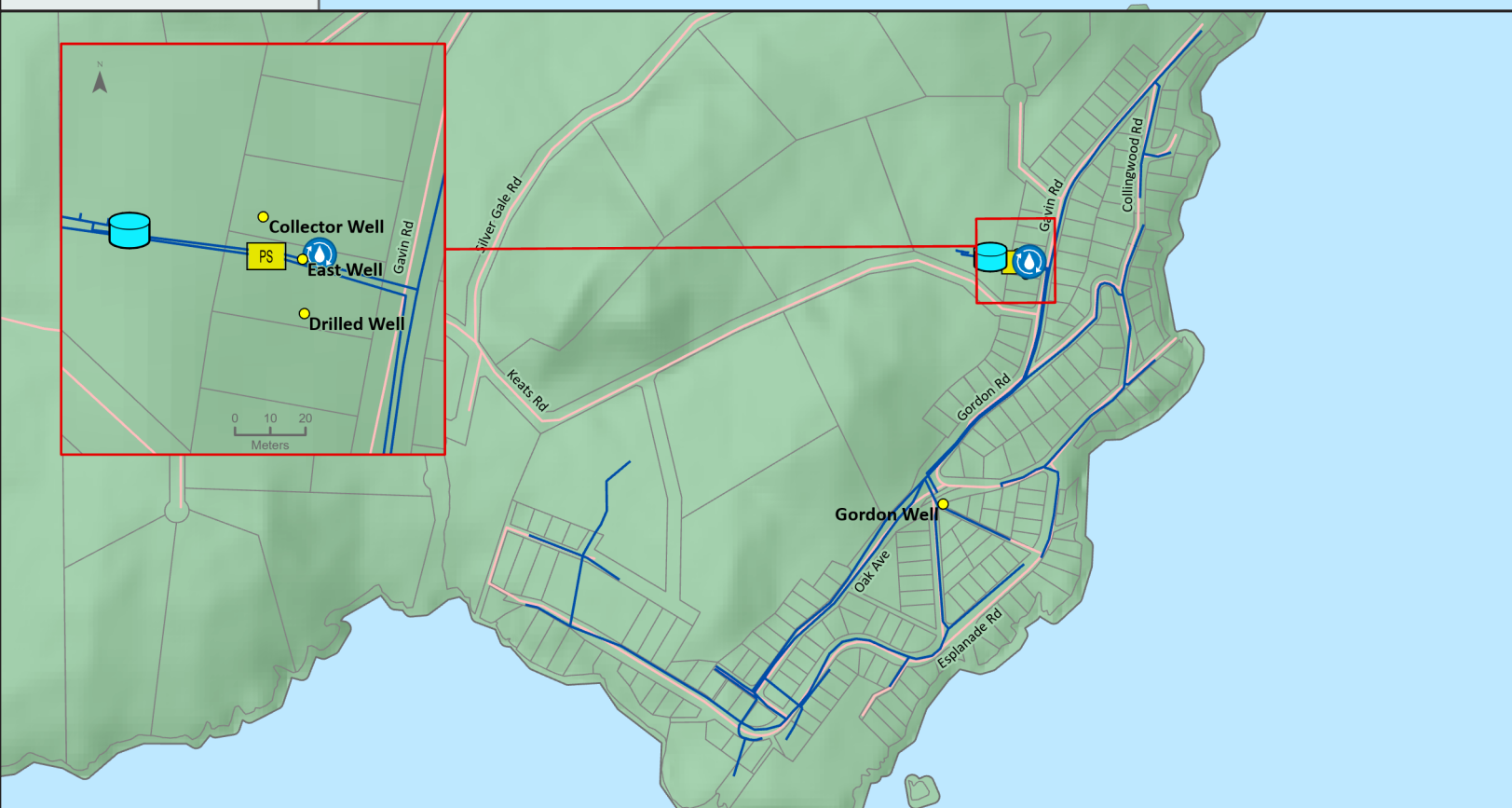
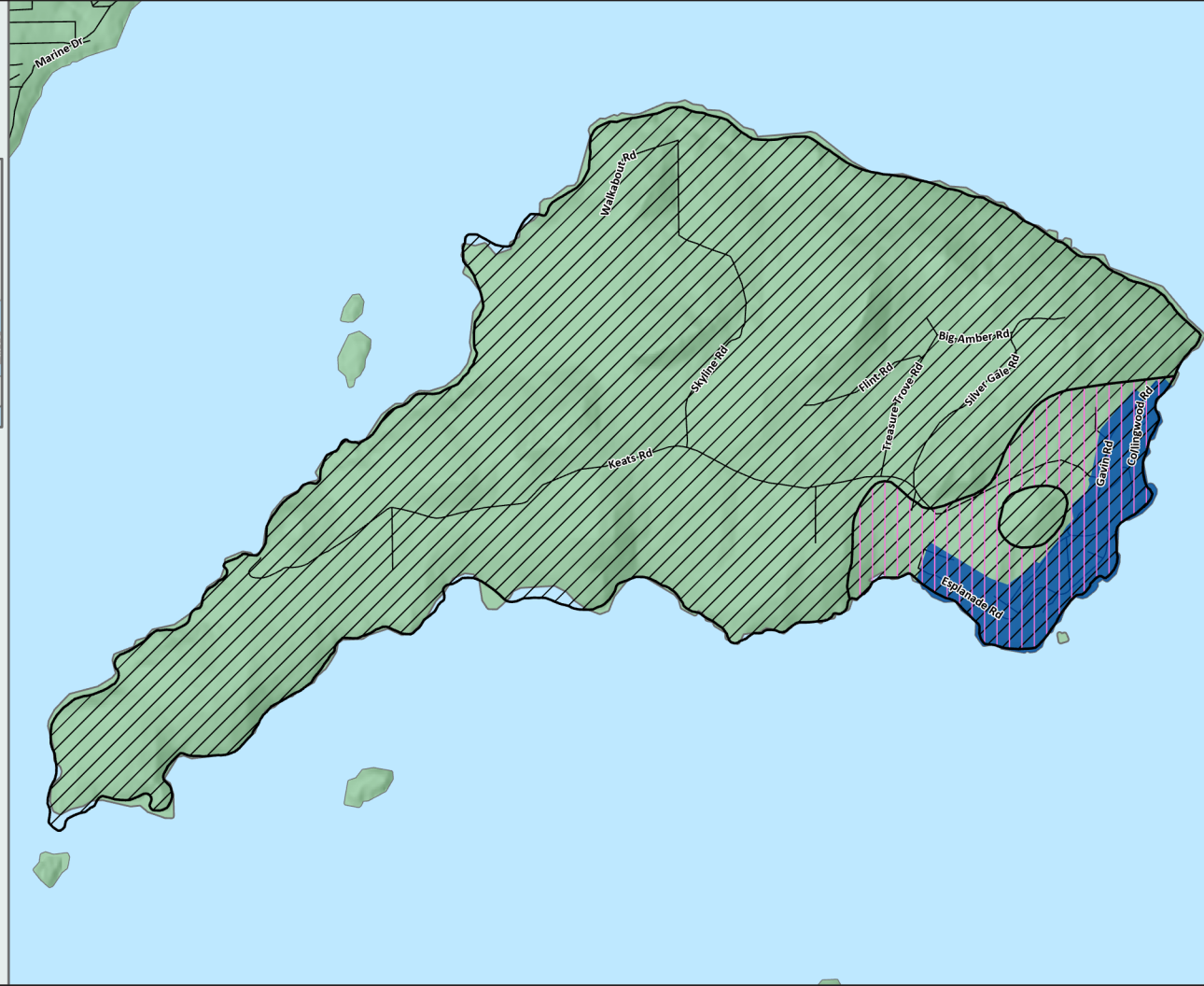
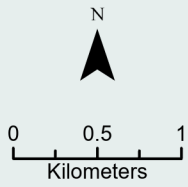
**Number of Active Connections:**  
175

**Total Water Distributed:**  
6.8 million litres/year

# Context Map Eastbourne



- Eastbourne Water Service Area
- #547 Aquifer
- #548 Aquifer
- Roads



- Pump Station
- Well
- Road
- Property Boundary
- Reservoir
- Water Main
- Water Treatment Plant

