SOUTH PENDER HARBOUR WATER SYSTEM BACKGROUNDER

CONTEXT

The South Pender Harbour (SPH) Water System is located within the Electoral Area A (Egmont/Pender Harbour) and provides water to the communities of Madeira Park, Francis Peninsula, and Kleindale. This water system is located on the traditional territory of the shíshálh Nation. The SCRD assumed ownership of the SPH Water System in 2008 to increase water quality for this system.

The SPH Water System is a separate Water Service Area with its own budget and water rates. It is one of nine independent water systems within the SCRD, and is not connected to any other water systems.

WATER SOURCE

McNeill Lake is the primary water source for the system. McNeill Lake is a dammed natural lake that is 18 hectares with an average depth of 4 meters (m). The SCRD holds three water licences for McNeill Lake, totaling 663 million litres per year (L/yr), as well as 250acre storage.

Harris Lake is upstream of McNeill Lake and is also a dammed natural lake. The lake is licensed for water storage and is only used for emergency supply during periods of drought. The water licence for Harris Lake is 150- acre storage. The total daily permitted use from this sources is 1.8 million L/day – the equivalent of less than one Olympic-size swimming pool. The SCRD owns and operates dams on both McNeill Lake and Harris Lake within the McNeill Lake Watershed.

SUPPLY INFRASTRUCTURE

The SPH Water System provides potable water to approximately 917 service connections, including residents, businesses, farms and institutions. The system consists of one water treatment plant, one chlorination station, 32 kms of watermains, three reservoirs, and hydrants. Every water connection within the South Pender Harbour system is water metered as of 2015, which allows for both public and private leaks to be found and resolved quickly, improving system efficiency. Water from the intake in McNeill Lake is treated at the SPH Water Treatment Plant. Treated water is then gravity fed to three reservoirs that have a total of 1.4 million L of storage capacity, before it is distributed to water users. The SPH Water Treatment Plant treated 358 million L of water in 2021, the equivalent of 143 Olympic-size swimming pools. The Water Treatment Plant was completed in 2014, and has an operational life of about 30 years. Infrastructure, such as water mains, are actively being replaced which increases user fees. Since the construction of the SPH Water Treatment Plant in 2014, all provincial and federal drinking water legislation have been met.

FUNCTIONALITY

Generally, the SPH Water System is currently working below its designed capacity. Water supply issues have arisen in times of high summer water demand, where the daily water use exceeded the current water licence. The current water licence permits 663 million L/year, or 1.8 million L/day. In 2021, this permitted amount was exceeded for 17 days. Water use exceeded the per day licenced amount and thus caused Stage 2 Water Conservation Regulations to be applied for the first time in the SPH Water System in 2021.



FAST FACTS

Primary Water Source: McNeill Lake

Number of Connections: 917

Total Water Distributed: 358 million L/year

SCRD.CA/WATER

