

Government of Newfoundland and Labrador Department of Environment and Conservation Water Resources Management Division

Technical Description of South Brook Public Water Supply

The South Brook public water supply intake is located in a dug well encased in concrete. The well is enclosed in the chlorination building which is located directly next to South Brook. The *Permit to Operate* classifies this water supply as "a ground water supply under the influence of surface water via infiltration from South Brook". The location of the intake building is shown in the picture and on the map below.



The actual water intake is located at a depth of approximately 4 m. The full depth of the well is unknown. Water is pumped from the well to a reservoir and then gravity fed to the Town. The flow rate is approximately 24,000 L/day.

The well is influenced by South Brook when the water level of the brook exceeds the water level in the well. On the other hand, when the water level in the well is higher than the brook, this suggests groundwater inflow. The infiltration of water from South Brook is a natural process whereby the ground acts as a physical barrier or filter to help prevent suspended contaminants in the surface water from entering.

At the time of the Gullbridge Dam breach, the water level in the brook at the water supply location was lower than the water level in the well.