

3 Waters Activities

The 3 Waters activities managed by HDC include:



Water Supply

Council provides safe and reliable drinking water to residential, industrial and commercial properties in Levin, Foxton, Foxton Beach, Shannon and Tokomaru. Council also provides water for fire fighting capability.



Wastewater

Council collects wastewater from residential, industrial and commercial properties in Levin, Foxton, Foxton Beach, Shannon, Tokomaru and Waitāre Beach. Council then treats the wastewater at treatment plants and discharges the treated wastewater onto land for the majority or into watercourses.



Stormwater

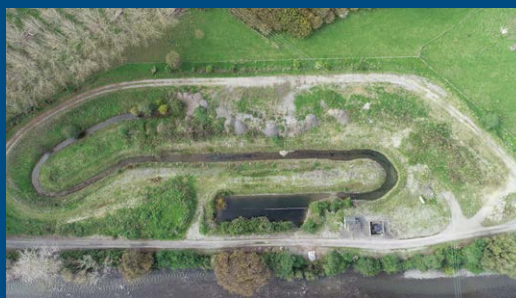
Council collects stormwater from roads, berms and hardstanding areas in any connected residential and commercial properties and discharges it to piped stormwater drainage systems and open and culverted watercourses. Council services Levin, Foxton, Foxton Beach, Shannon, Tokomaru and Waitāre Beach.

A snapshot of the water supply assets that Council owns and operates is set out below.

Water Supply



Asset Type - **Intake structure and associated equipment**



Quantity: 9

Purpose of asset

Required to abstract water from the source (river or bore).



Asset Type - **Reticulated supplies**

Quantity: 7.3km

Purpose of asset

Used to convey abstracted water (untreated) from the source to the treatment plant.



Asset Type - **Treatment Plants**



Quantity: 5

Purpose of asset

Treats the raw water to the acceptable quality as required by the Drinking-water Standards for New Zealand.



Asset Type - **Storage tank (Reservoirs)**



Quantity: 11

Purpose of asset

The purpose of the storage tank is two-fold. Firstly, it is used to achieve adequate contact time for disinfection purposes and secondly it is used to store treated water for emergency purposes such as fire fighting.



Asset Type - **Treated water trunk main (only within the Reticulated supplies not within the water races)**

Quantity: 319.3km

Purpose of asset

Used to convey treated water from the treatment plant and or storage reservoir to the distribution network.



Asset Type - **Distribution (Network)**

Quantity: 319.3km

Purpose of asset

Used to convey the treated water to different areas of the community.



Asset Type - Hydrants



Quantity: 1515

Purpose of asset

As part of the fire service code of practice, hydrants are required to be installed on the main lines of urban reticulated supplies at intervals of 90 – 135m. As well as providing a point where the fire service can access the supply, the hydrants also serve as flushing points for the supply as and when required.



Asset Type - Zone Meters

Quantity: 51

Purpose of asset

Meters are generally placed along the main to measure and monitor demand within a zone and also on individual connections such as commercial properties to measure property consumption.



Asset Type - Service Meter

**Quantity:
4485**

Purpose of asset

Meters are generally placed along the main to measure and monitor demand within a zone and also on individual connections such as commercial properties to measure property consumption.



Asset Type - Valves



Quantity: 1859

Purpose of asset

There are different valves within the network which are used for various purposes such as isolating mains when repairs are being carried out and to demarcate boundaries between zones (in which case, it prevents water flowing from one zone to another). Reducing pressure valves are used to manage pressure within the zone etc.



Asset Type - Laterals



Quantity: 104.2km

Purpose of asset

Small diameter mains used to provide individual properties with water. Some larger customers are fitted with larger diameter laterals.

A snapshot of the wastewater assets that Council owns and operates is set out below.

Wastewater Assets



Asset Type - **Laterals - Number of connections**

Quantity: 13,183

Purpose of asset

Collect and convey wastewater from households, industrial and commercial premises to the mains.



Asset Type - **Laterals - length**

Quantity: 98.9km

Purpose of asset

Collect and convey wastewater from households, industrial and commercial premises to the mains.



Asset Type - **Total Pipe Length**

Quantity: 243.7km

Purpose of asset

Main line used to collect and convey wastewater after leaving individual premises.



Asset Type - **Manholes**



Quantity: 2796

Purpose of asset

Installed in the reticulation system where there is a change in direction, gradient or pipe size and generally at distances not exceeding 120m. All manhole chambers within the various schemes are constructed from concrete.



Asset Type - **Rodding (cleaning eye)**

Quantity: 67

Purpose of asset

Rodding/cleaning eye is an access that has no upstream connections and is used as an entry point to clear blockages within the main.



Asset Type - **Lateral Cleaning Eye (LCE)**



Quantity: 1,441

Purpose of asset

Used as an entry point to clear blockages between the property boundary and the main sewer line.



Asset Type - **Air Valves**

Quantity: 40

Purpose of asset

Installed on high points within a pumping line.



Asset Type - **Pump stations**



Quantity: 52

Purpose of asset

Pump Stations are installed to lift sewage from one location to another and are normally constructed to reduce the depth at which the gravity sewer lines are constructed.



Asset Type - **Treatment & Disposal systems**



Quantity: 6

Purpose of asset

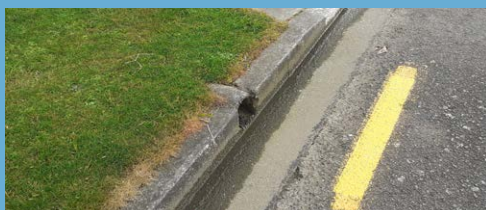
Treatment plants are designed in the system to treat wastewater to compliance standards in order to maintain a healthy environment.

A snapshot of the stormwater assets that Council owns and operates is shown below. This service closely aligns in both location and function with the Land Transport group of activities, in particular the roading network.

Stormwater Assets



Asset Type - **Stormwater Property Connection**



Normal practice is onsite soakage. Connections to the kerb only allowed on a rare occasion.



Asset Type - **Piped Stormwater Network**



Gravity and pressure mains.



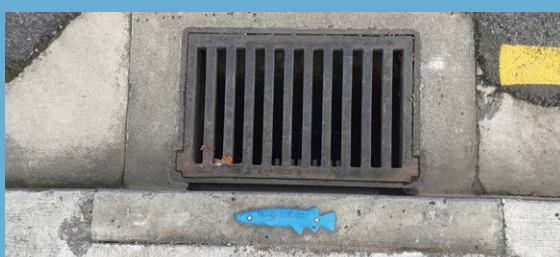
Asset Type - **Stormwater Manhole**



Asset Type - **Stormwater Open Channel**



Asset Type - **Stormwater Kerb side Inlets**



Roading team is responsible



Asset Type - **Stormwater Culverts**



Roading team is responsible