



## High-performing infrastructure

### Unplanned wastewater interruptions

The number of unplanned wastewater network interruptions caused by bursts and chokes is a measure of the integrity of the system. We aim to have fewer than 10 for every 1000 properties. The result for the year was 8.3 for the Auckland region.

### Dry-weather overflows

Dry-weather overflows are generally caused by incorrect disposal of fats, oils and grease down the wastewater network which leads to blockages in the pipes and causes wastewater overflows.

The number of wastewater overflows from our retail network during dry weather is a measure of the network's capability to meet current demand. The result for the year was 0.59 dry-weather overflows per 1000 connections, which is well under the target of 10 or fewer.

### Wet-weather overflows

Wet-weather overflows are caused by heavy rain and are a mixture of stormwater (rainwater run-off from roofs and roads) and wastewater. In heavy rain, the stormwater that drains from the average roof is equivalent to the wastewater flows from more than 40 households.

The number of wet-weather overflows for the transmission network (bulk mains) per number of discharge locations was 1.2, which is within the target of two or fewer overflows.

We have a number of projects underway or close to completion that will add capacity to the wastewater network, protect the environment from overflows and cater for growth. These include: the Central Interceptor wastewater tunnel, Grey Lynn Tunnel, Franklin Road wastewater and stormwater separation and Glen Innes wastewater upgrades.

## Effective asset management

### Water loss

Water loss is the difference between the volume of water produced and the volume of water sold, allowing for a percentage of water produced for operational and fire-fighting purposes.

Watercare did not meet this target, with water loss over (13.1%) the specified target (13%).

Unbilled water use falls into three categories: operational usage (pipeline flushing, fire-fighting etc.); meter under-recording; and unauthorised usage. While leaks are one of the sources of water loss, we have evidence that water is being taken from our network illegally, through hydrants. A taskforce has been established to further investigate unauthorised usage and take all necessary steps to address this issue.

We continue to focus on improving the accuracy of measuring total volume of water produced, as detailed in our 2017/18 Annual Report. We are continuing to improve the accuracy of our bulk supply points (BSP) and other opportunities to improve granularity of water supply data. We plan to establish district metered areas, which are discrete areas of a water distribution network. This will allow us to measure water consumption at a suburb level and enable more accurate total volume of water analysis, and better identification of unbilled uses.