

National Performance Review Horowhenua District Council

2019
—
2020

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1. Overview

The National Performance Review (NPR) is an annual assessment of drinking water, wastewater, and stormwater service delivery across New Zealand. This process is coordinated by Water New Zealand, an independent not-for-profit organisation representing water professionals and organisations. This report provides comparisons of water, wastewater and stormwater service delivery for the 2019-20 fiscal year, and trended data where available.

The total number of properties serviced, and the density of property connections can impact on performance outcomes. The service district characteristics section of this report provides information on properties serviced and connection density in these networks which should be considered when interpreting performance outcomes.

Performance outcomes are also influenced by the maturity of data collection and reporting systems, which range from pen-and-paper-based systems to comprehensive data management technologies. This can mean participants with robust data management can rank comparatively poorly against those with less sophisticated methods. For example, a comprehensive customer complaints management system is likely to record more complaints than a pen-and-paper-based system due to more accurate data capture. The robustness of data management systems for data collated in this report is indicated by the quantity and the confidence participants have in their supplied data and is shown in Appendix I.

There are many other influences outside of an organisation's control which affect performance outcomes. These include the customer mix, topography, quality of source water, and receiving environments for discharges. We encourage you to discuss your results with other comparative entities to understand the influence of contextual factors on performance outcomes, as well as explore opportunities for improvement. The performance summary in the next section of the report highlights where we think opportunities may exist based on your data.

Further context is detailed in associated documents at the National Performance Review website: www.waternz.org.nz/NationalPerformanceReview

1.1. Information management

The robustness of data management systems in the review is indicated by participants quantity of data supplied and their confidence in this. A summary of Horowhenua's self-assigned data confidence ratings is shown below.

Highly reliable (1)	Reliable (2)	Less reliable (3)	Uncertain (4)	Very uncertain (5)
150	36	26	3	1

Data in this report is unaudited as no responses were received to audit queries. Large annual variation in energy use and water losses (which in turn impacts on calculated residential water efficiency) suggesting inaccuracies in the underlying data.

Horowhenua supplied all data requested.

A summary of other entities data confidence and completeness is shown in Appendix I.

1.2. Performance measures to celebrate

Customer complaints.

Customer complaints have been trending down. 136 complaints related to stormwater, wastewater and water supply operations were reported in the 2020 fiscal year. This is 20% less than the previous year, and less than half the complaint volumes reported in the 2016 fiscal year.

Non-urgent water supply fault attendance and resolution times.

Average times reported for non-urgent water supply fault and attendance was 4.15 hours, over 2 hours faster than average. Average resolution times reported for responding to non-urgent water supply faults were 9 hours, four times faster than average. Urgent water supply fault and attendance times were also faster than average.

Near miss reports.

Health and safety near miss reporting provides an indication that hazards are being identified prior to accidents occurring. 24 near misses were reported in Horowhenua, over four times more than the previous year, and more than twice the average per staff member.

1.3. Performance measures to reflect upon

Fire hydrant testing frequency.

The Zealand Fire Service Firefighting Water Supplies Code of Practice specifies that all fire hydrants should be tested every five years. In the last five years Horowhenua had not tested any hydrants against the code.

Wastewater overflows.

Horowhenua reported a total of 32 dry weather wastewater overflows, 26 which occurred because of network blockages, and six resulting from equipment failure. Normalised by the number of properties receiving wastewater services this equated to 2.53 overflows per thousand properties, over twice the average. The number of wet weather wastewater overflows reported was also more than twice average on a property basis. Horowhenua reported that there were 12 wet weather-related overflows from the wastewater network in the 2020 fiscal year.

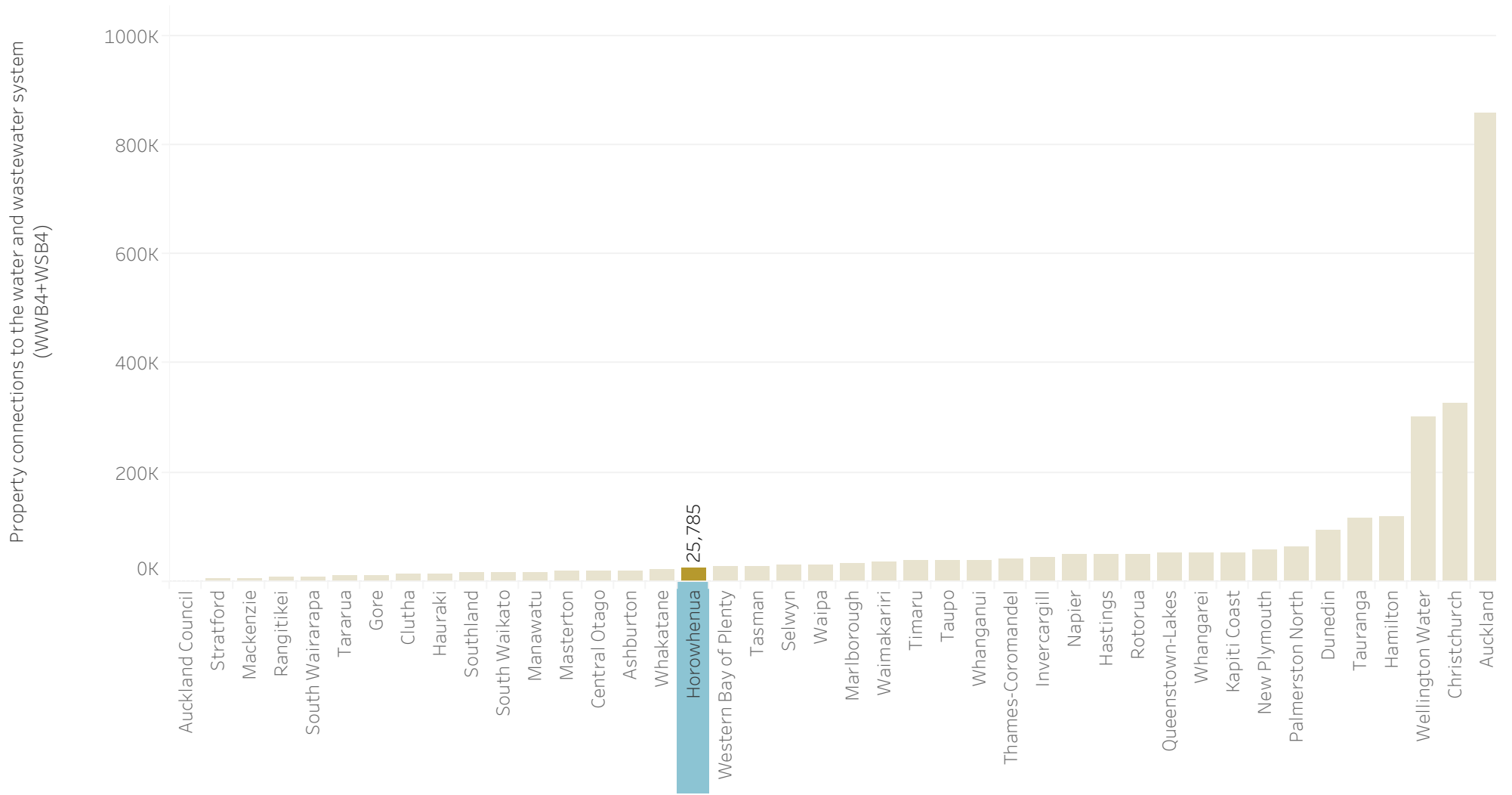
Staffing mix.

10 staff full time employees were reported to be directly employed by Horowhenua in the 2020 fiscal year. On a per property basis this equates to 0.388 staff per 1000 properties and is less than half the average of other service providers. Conversely, the number of employees contracted to provide services was 41, equivalent to 1.59 per thousand properties serviced, more than three times the average.

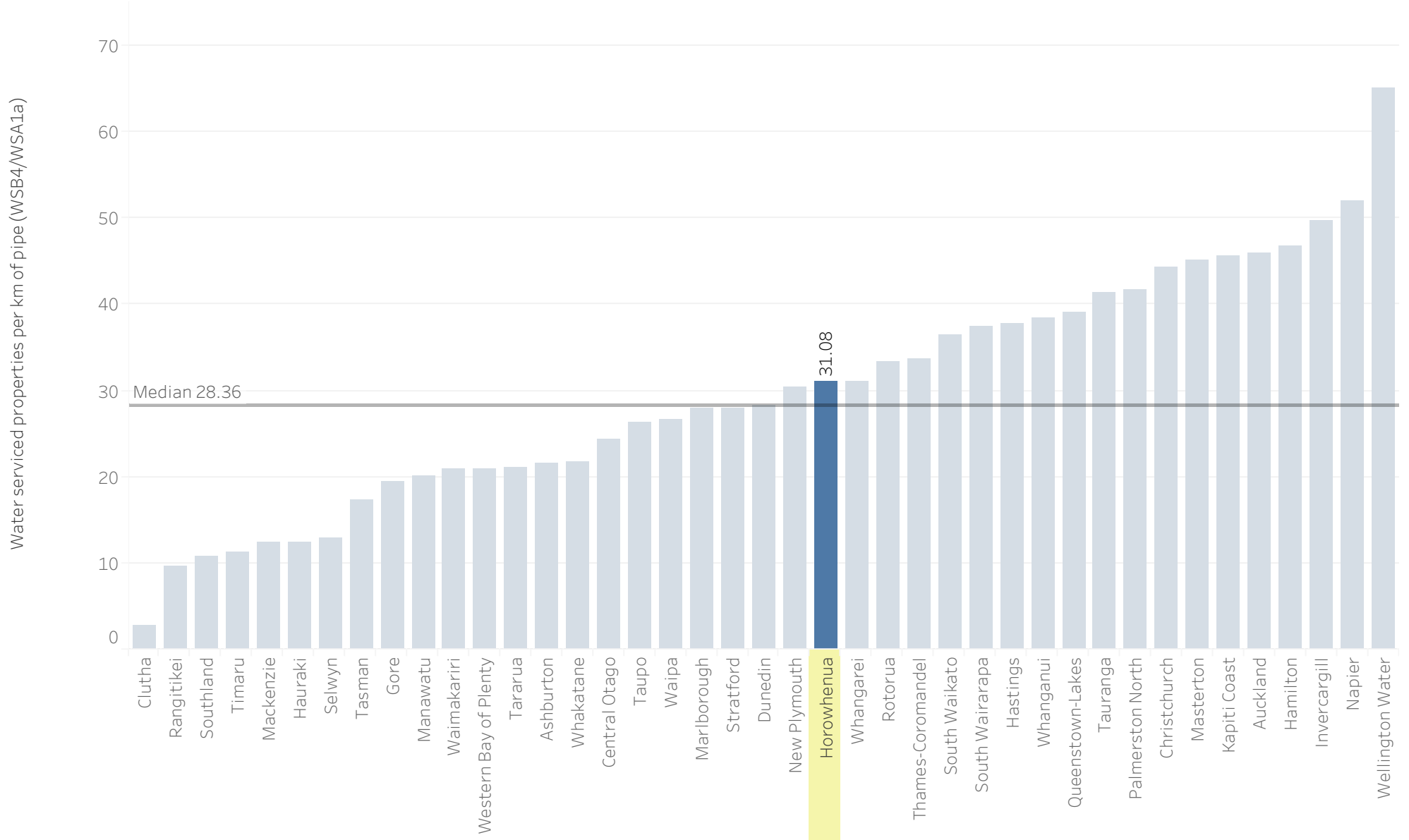
2. Service district characteristics

Number of property connections to water and wastewater systems

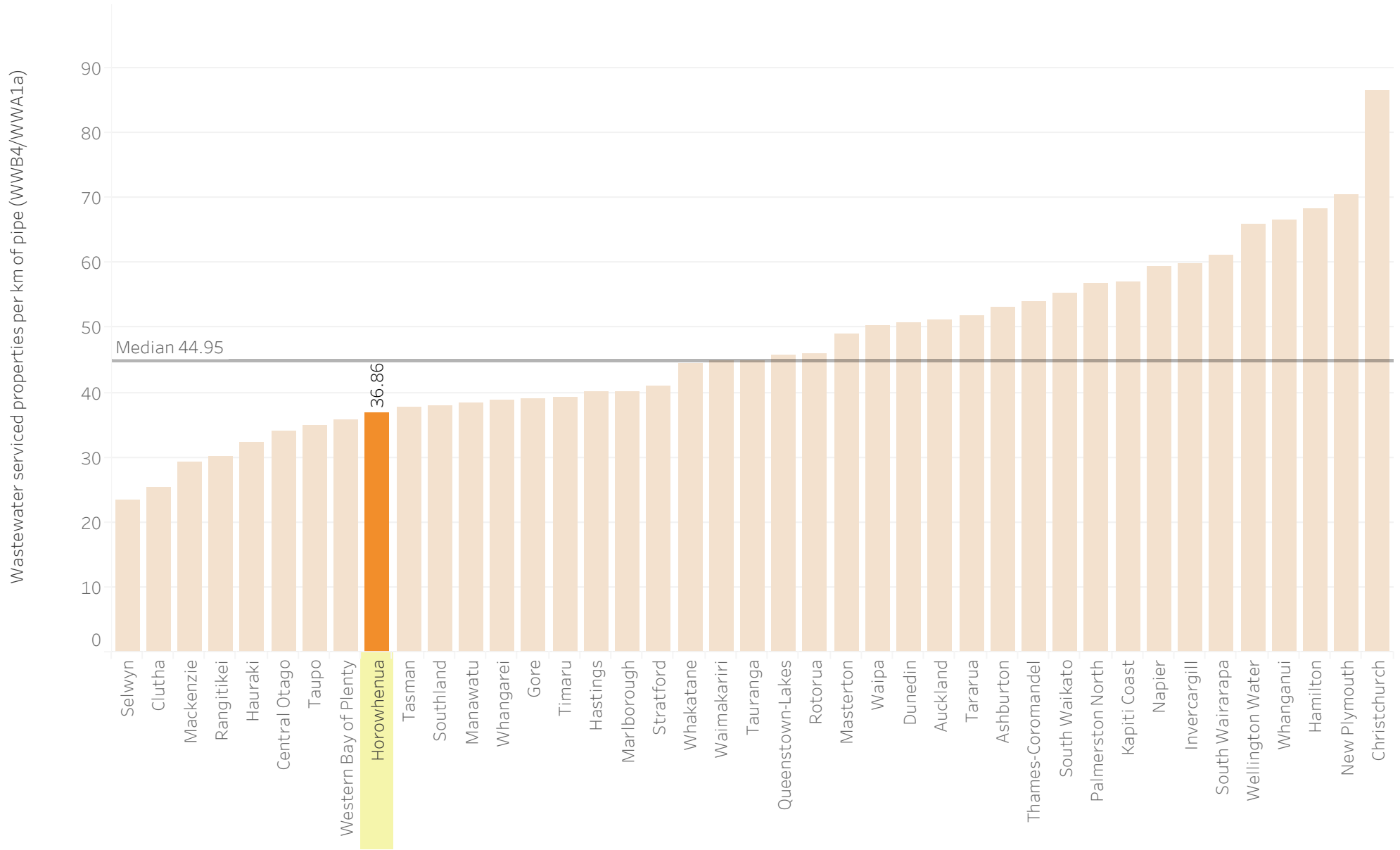
A single property with one connection to water and one connection to wastewater is counted as two.



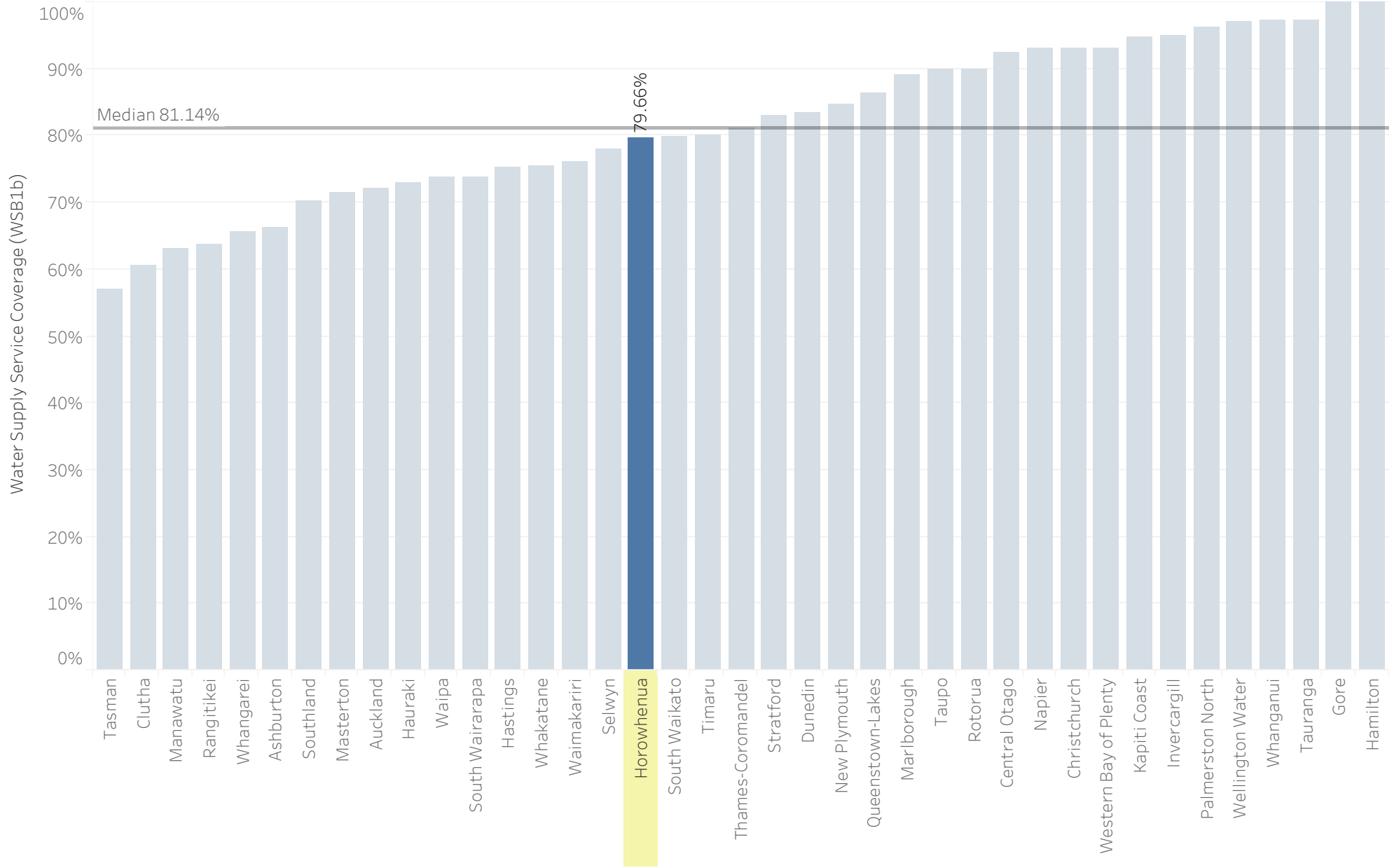
Water serviced properties per kilometre of pipe



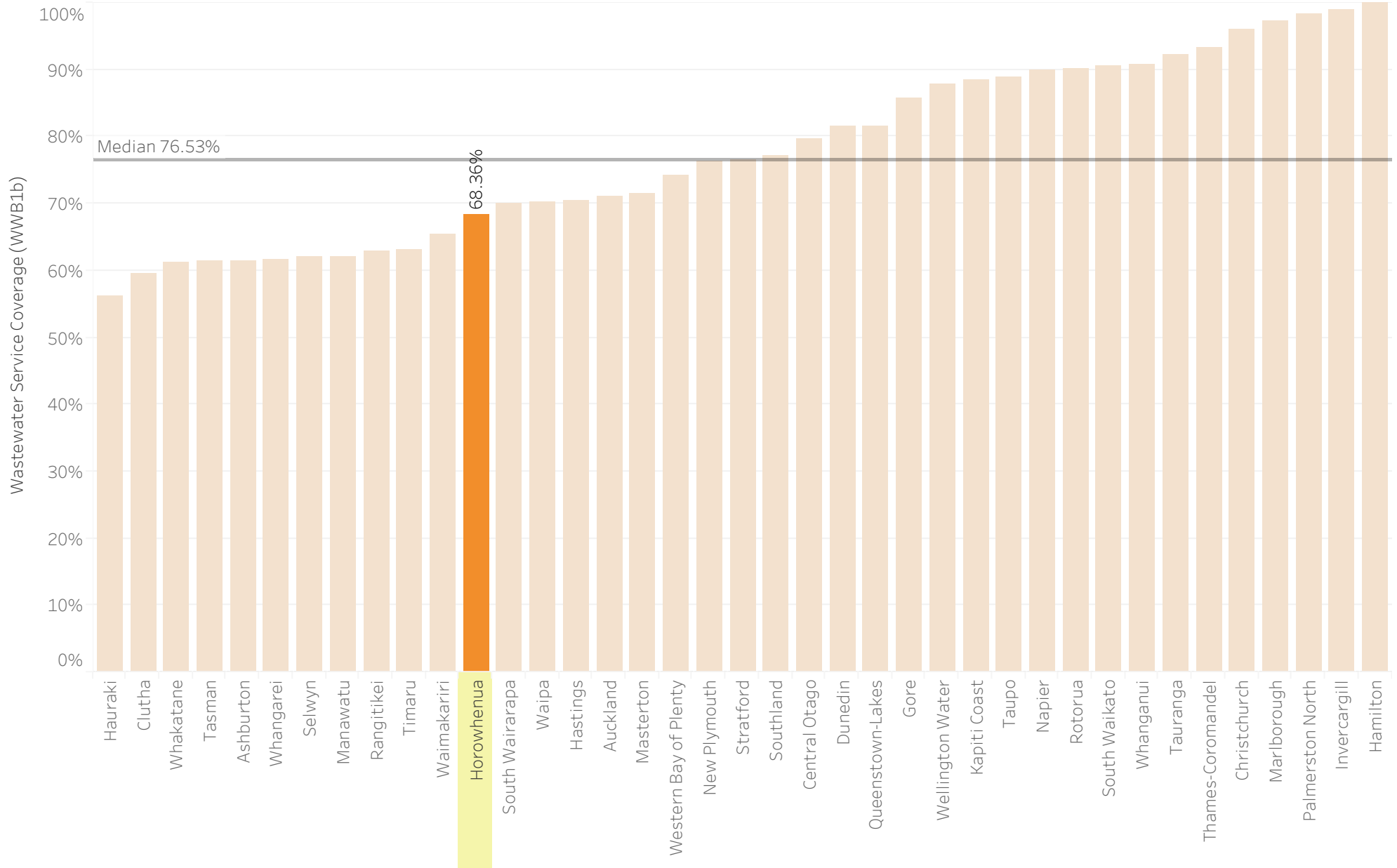
Wastewater serviced properties per kilometre of pipe



Percentage of residential properties connected to the water supply network

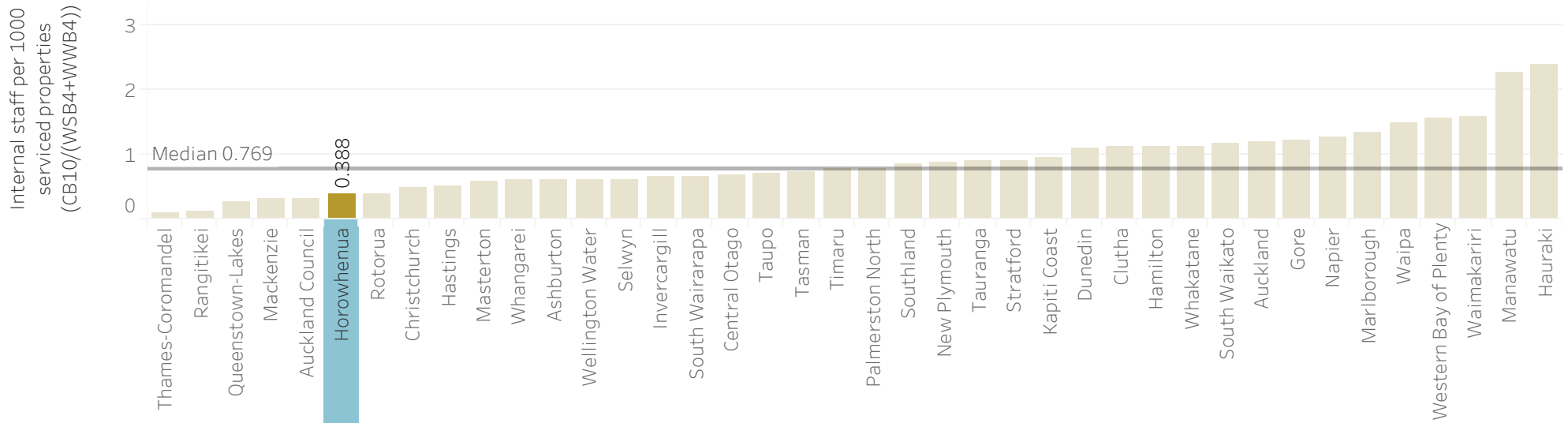


Percentage of residential properties connected to the wastewater network

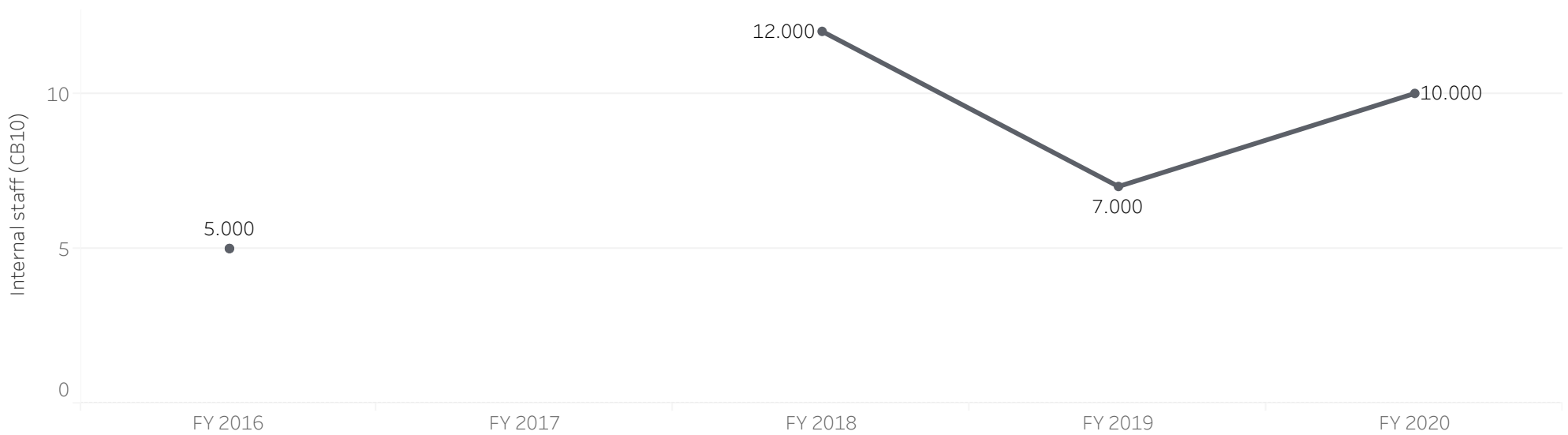


3. Workforce

Full time employees per 1000 water and wastewater properties serviced

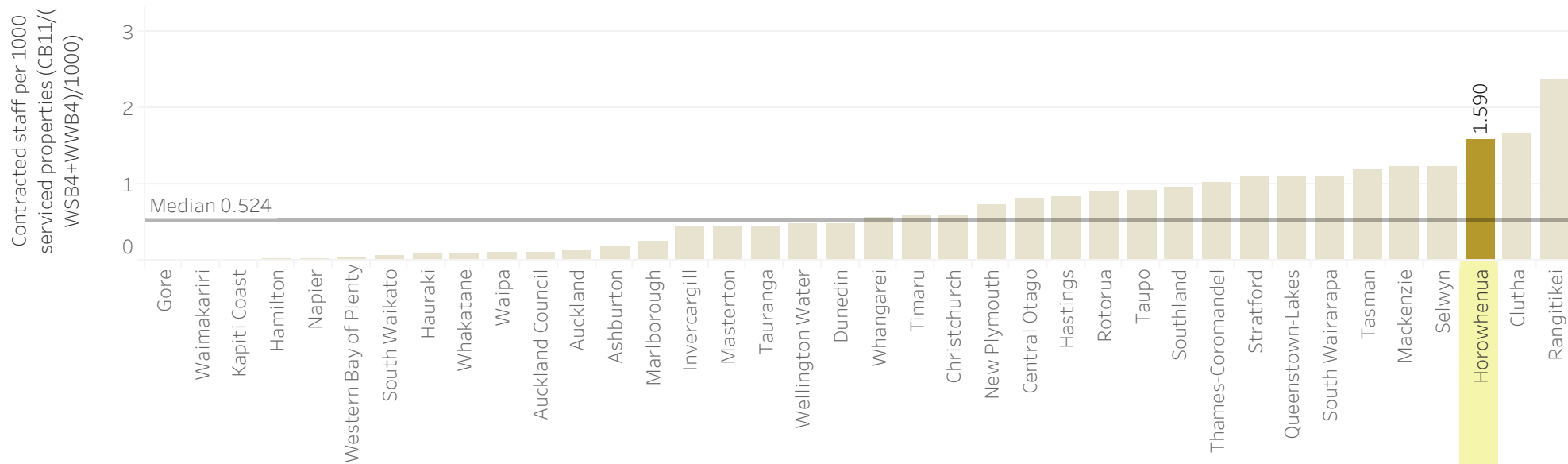


Full time employees



Contracted staff per 1000 water and wastewater properties serviced

The number of full-time employees not on the payroll but exclusively involved in the delivery of 3 waters services.

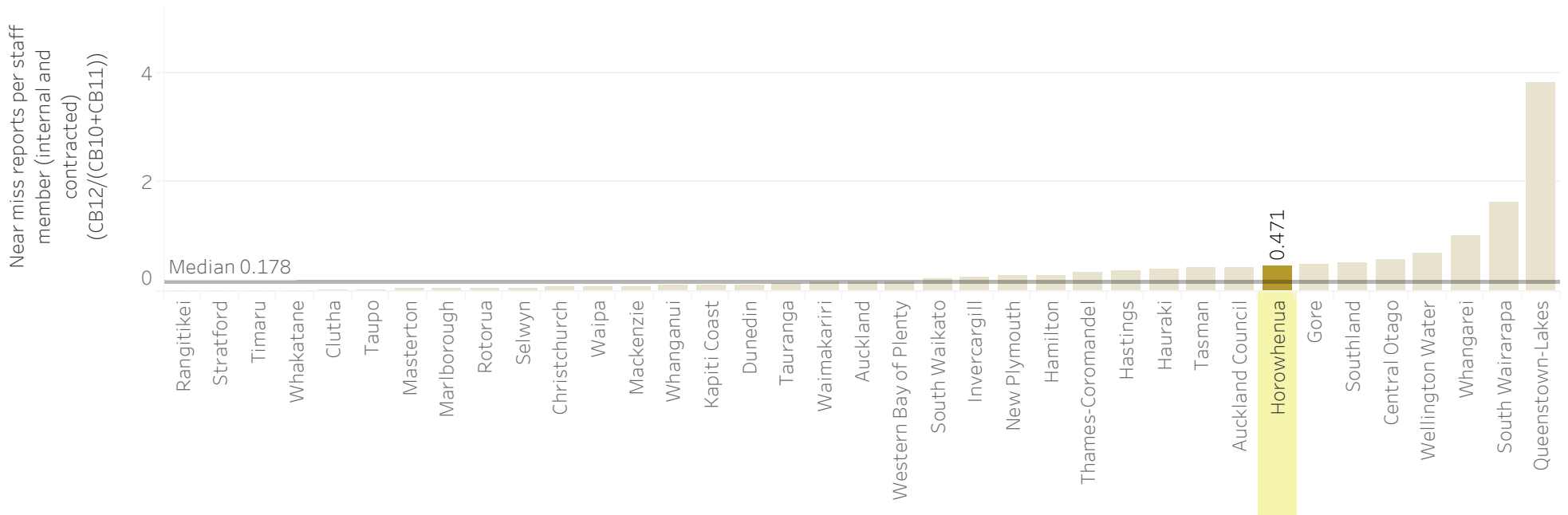


Contracted staff

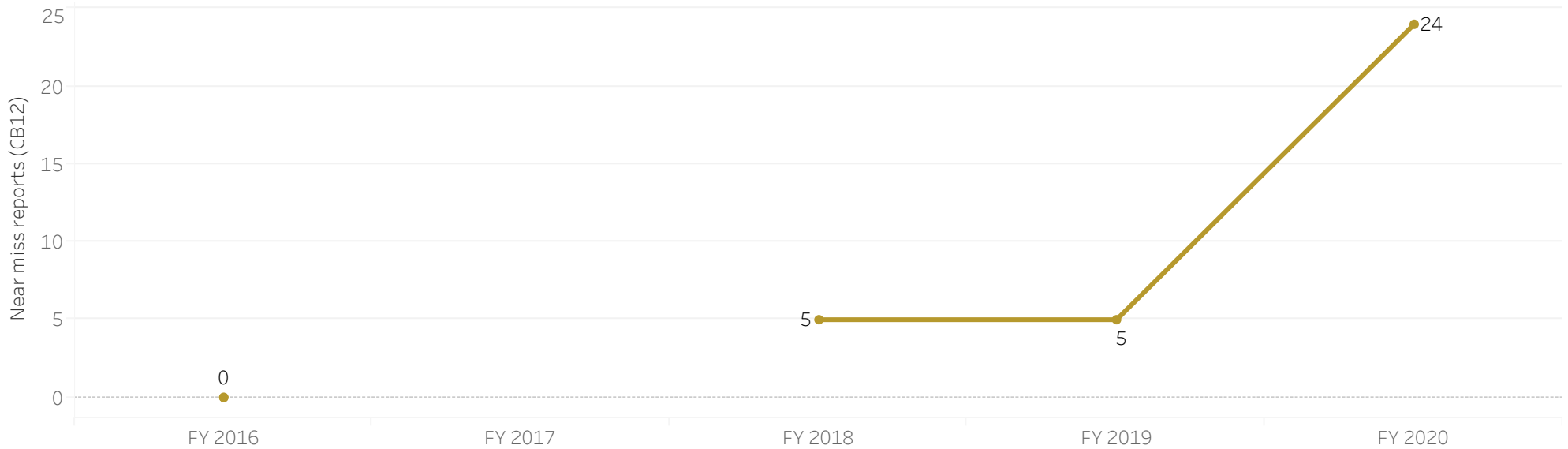


Near miss reports per staff member

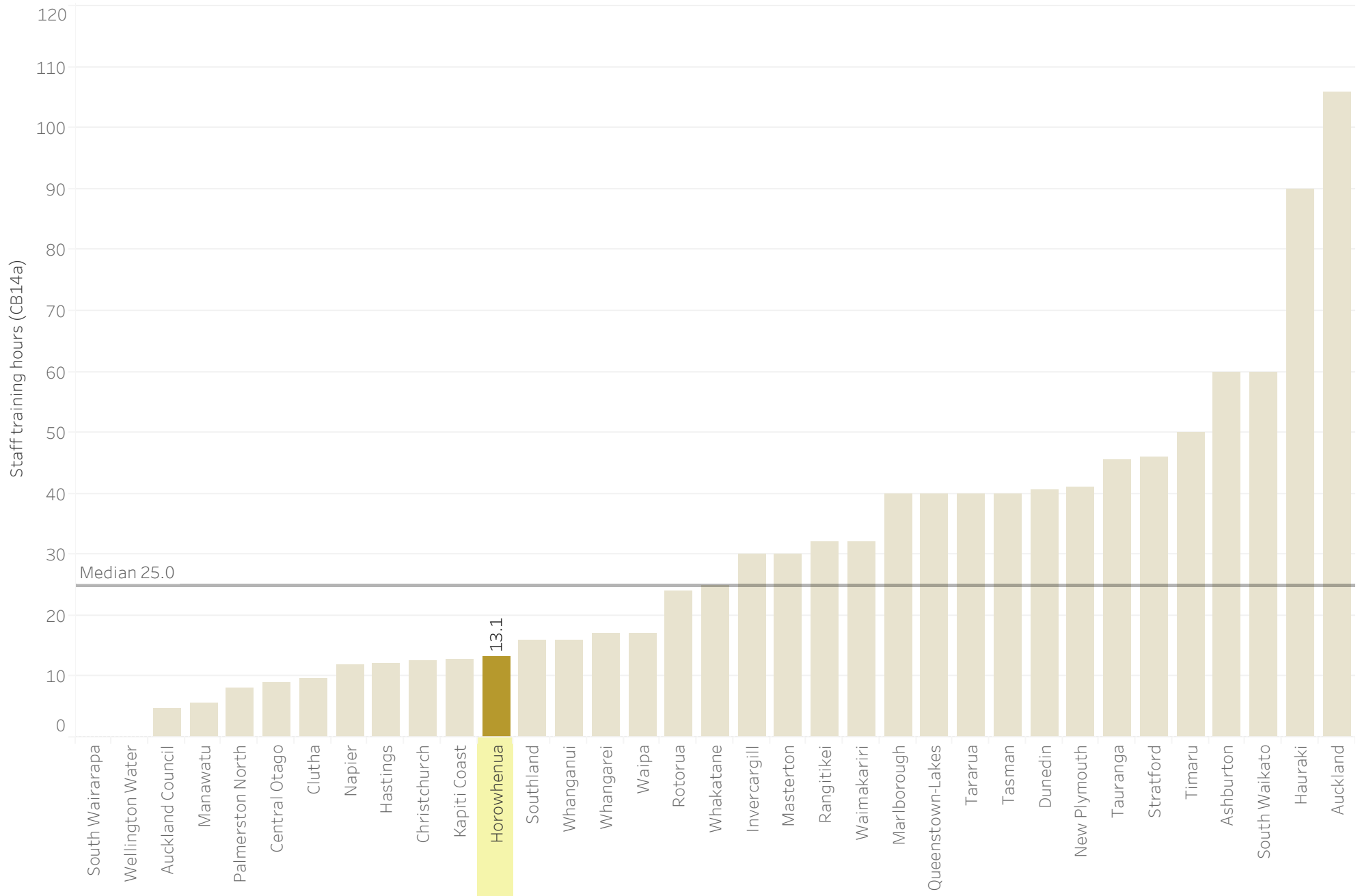
Includes both internal and contracted staff.



Number of near misses reported

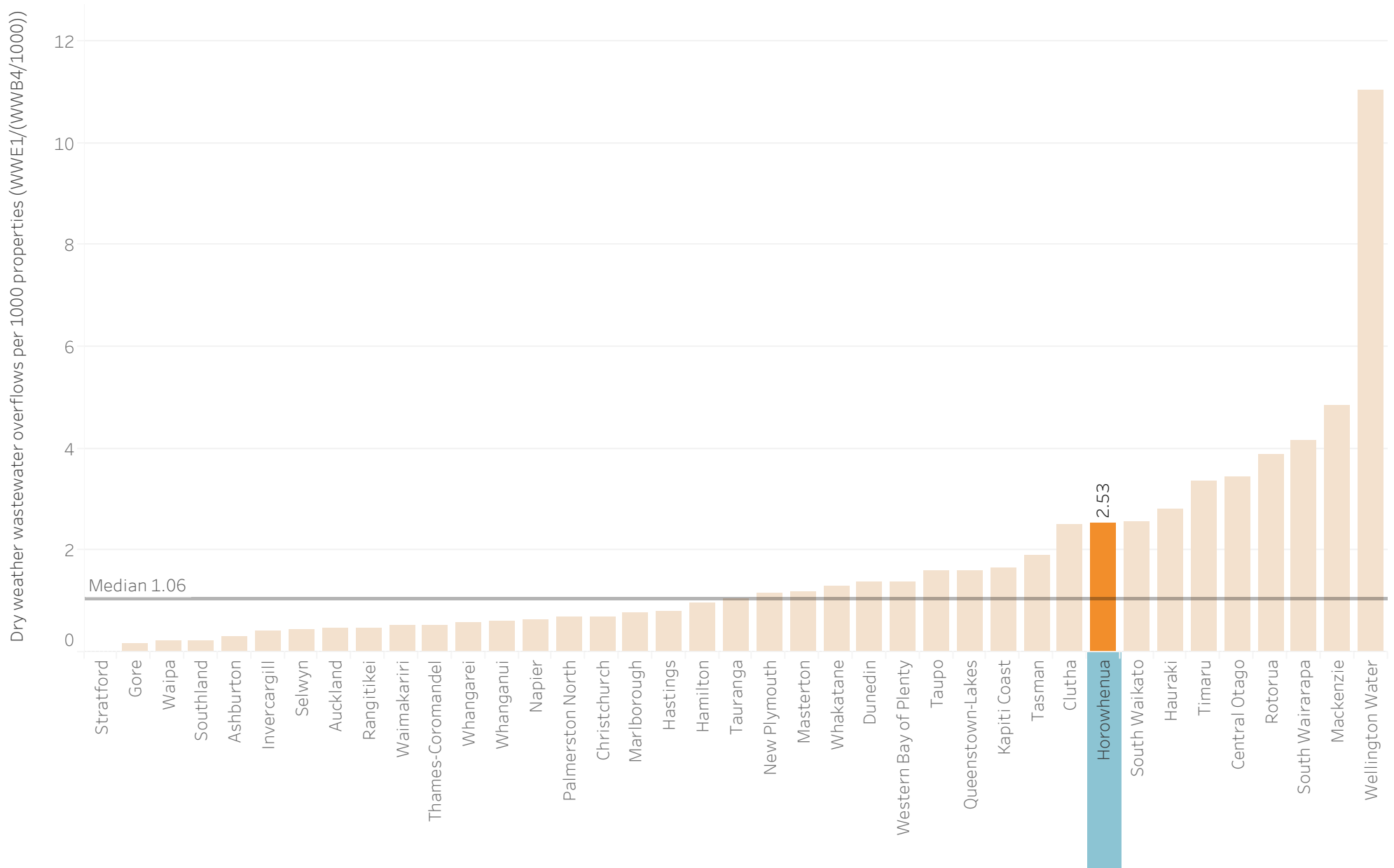


Annual training hours per staff member



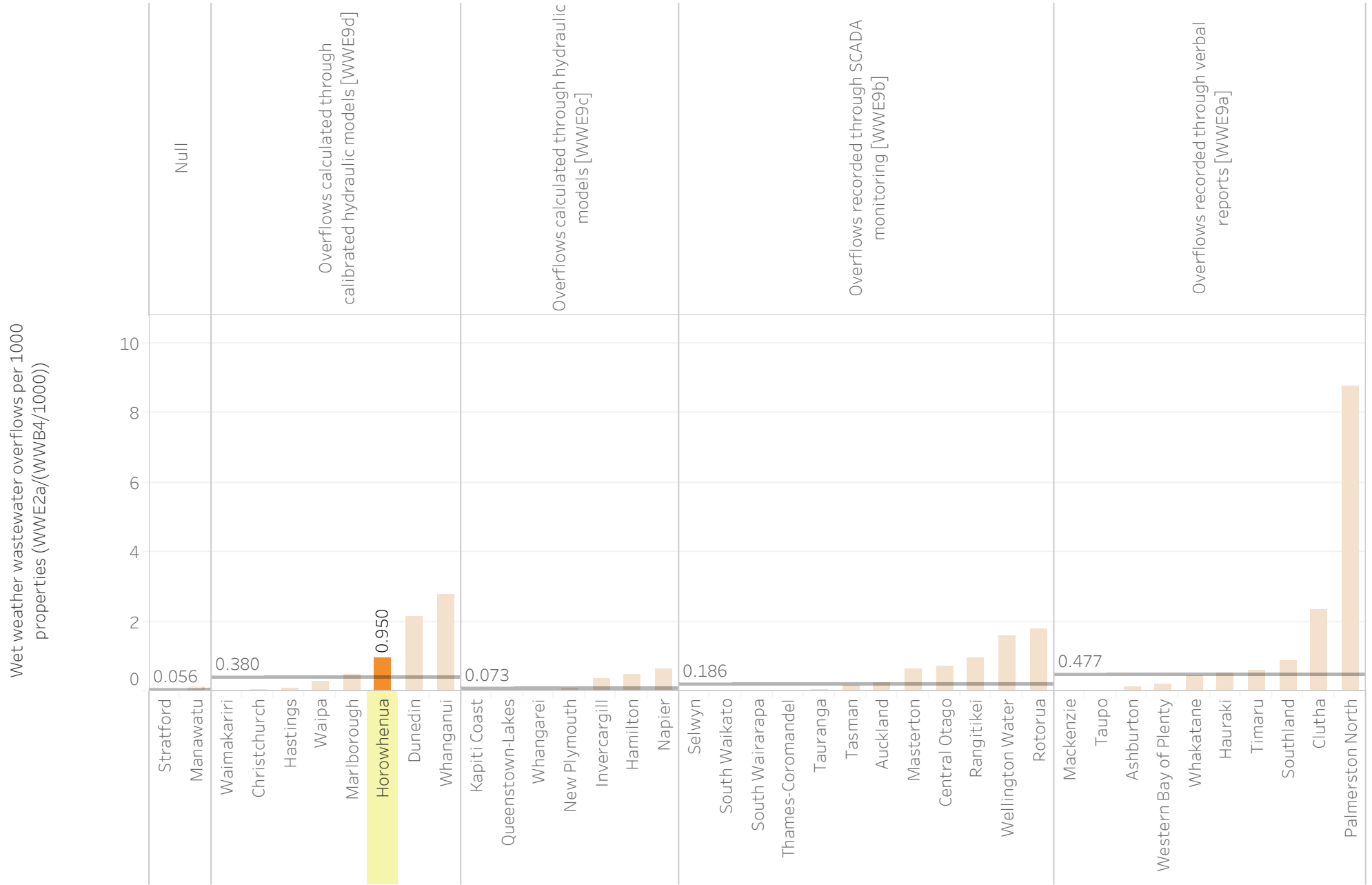
4. Public health and environmental protection

Dry weather overflows per 1000 wastewater properties serviced



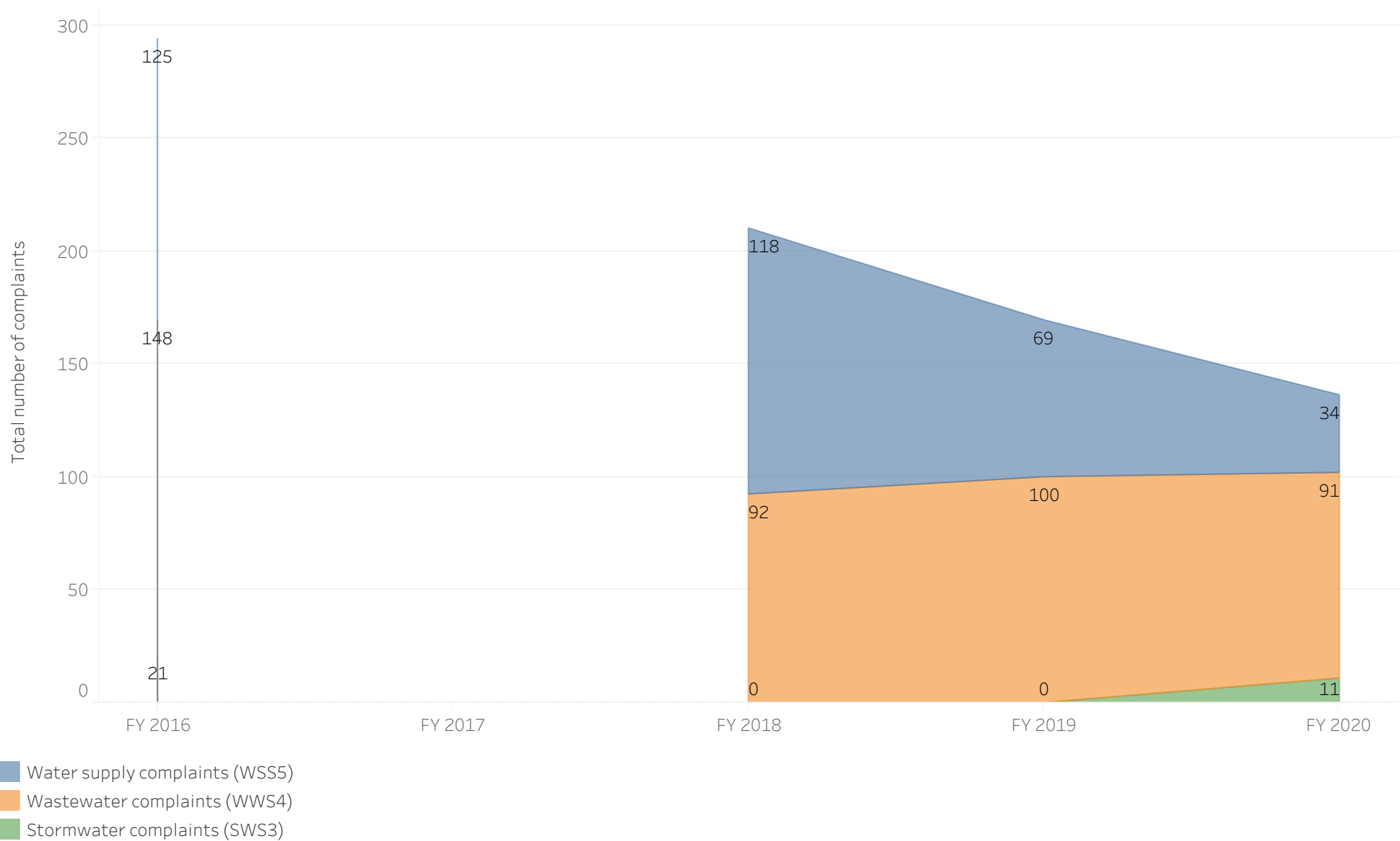
Wet weather overflows per 1000 connections to the wastewater network

Categorised by the approach in place to record wet weather overflows.

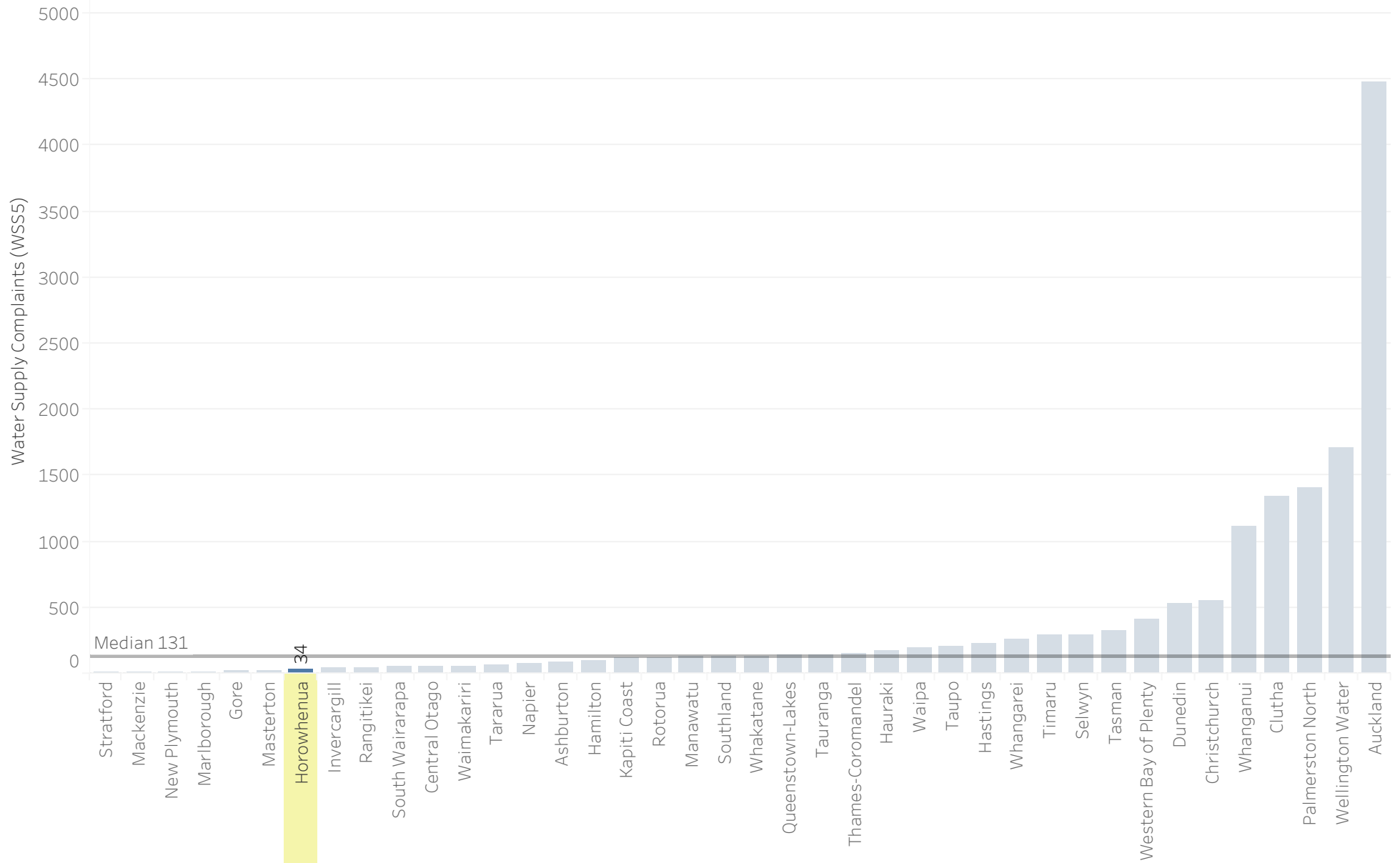


5. Customer focus

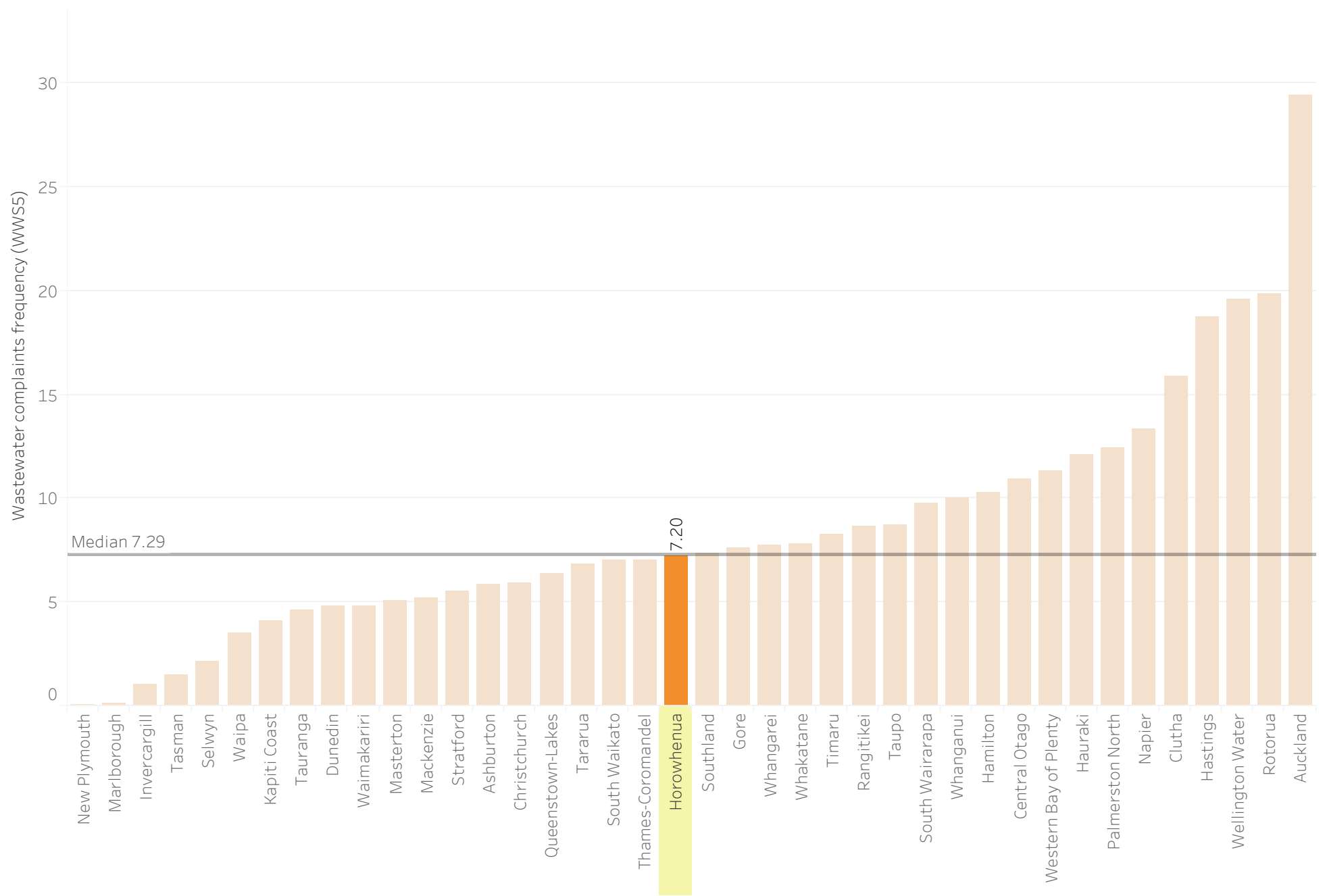
Number of complaints recorded



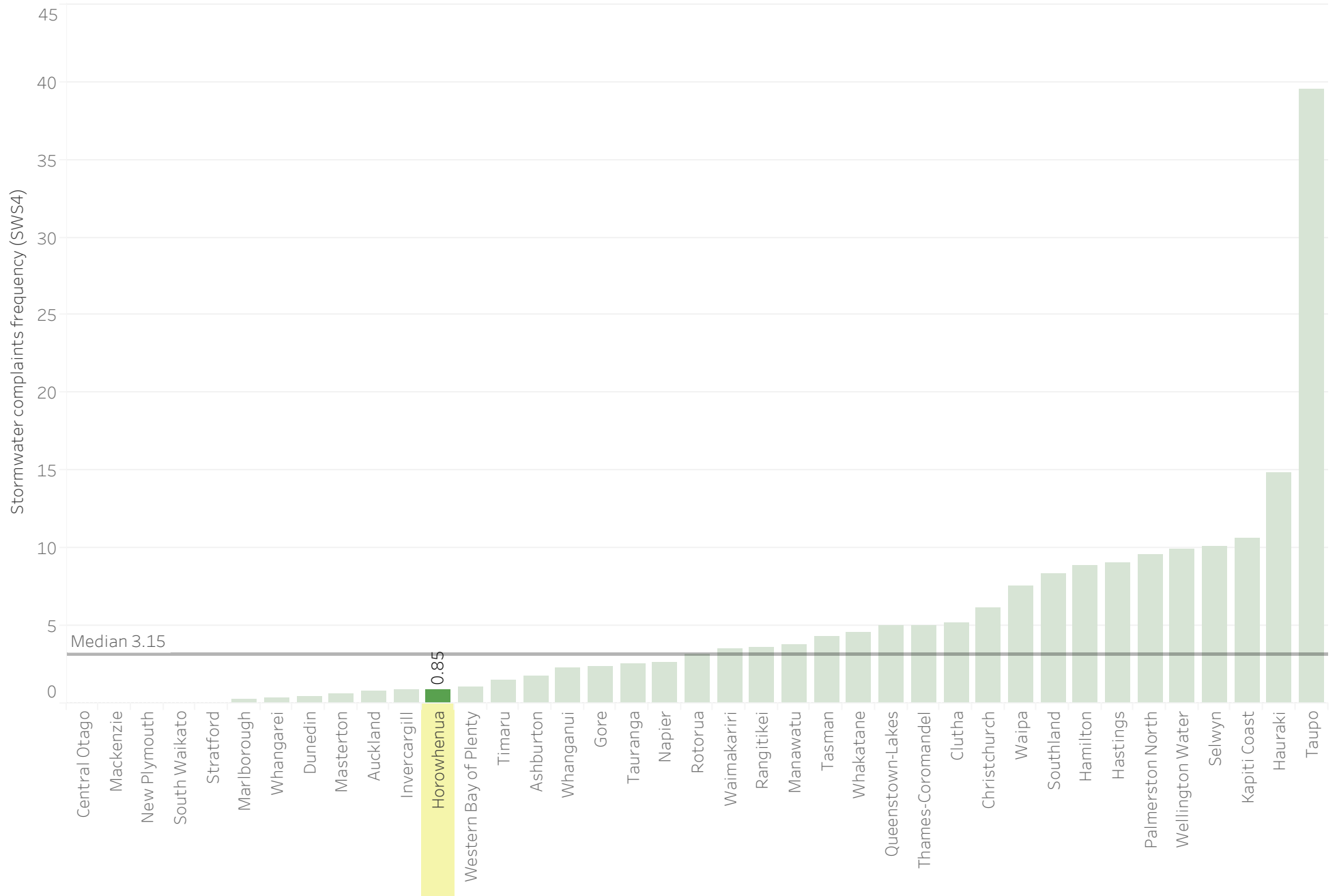
Water supply complaints per 1000 properties serviced



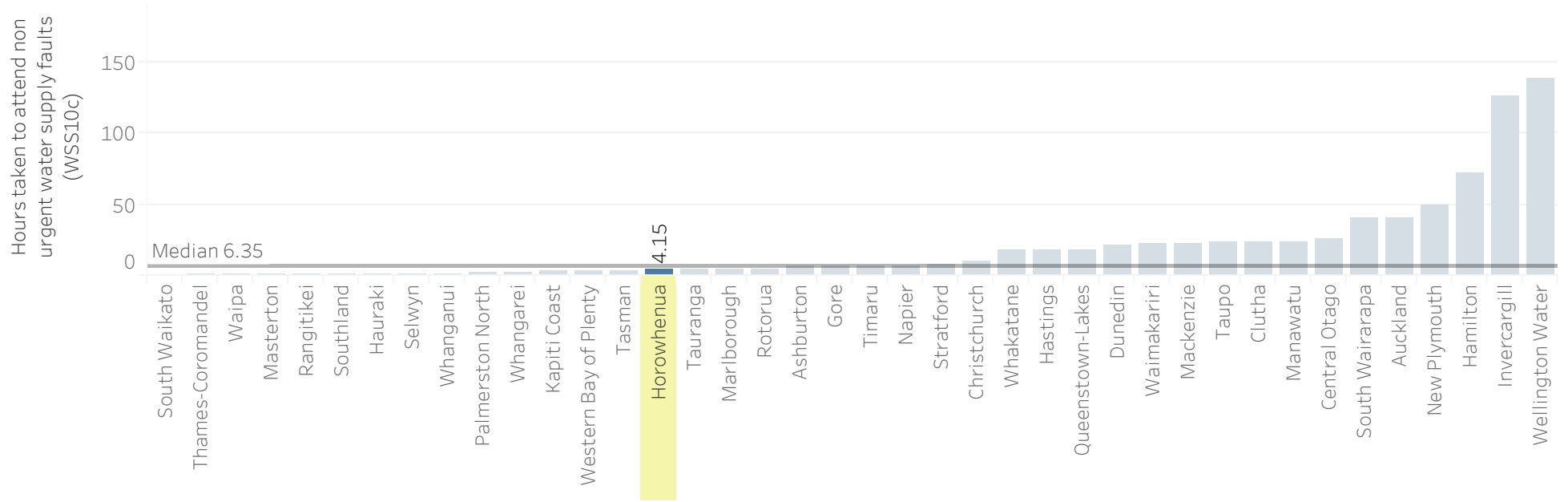
Wastewater complaints per 1000 properties serviced



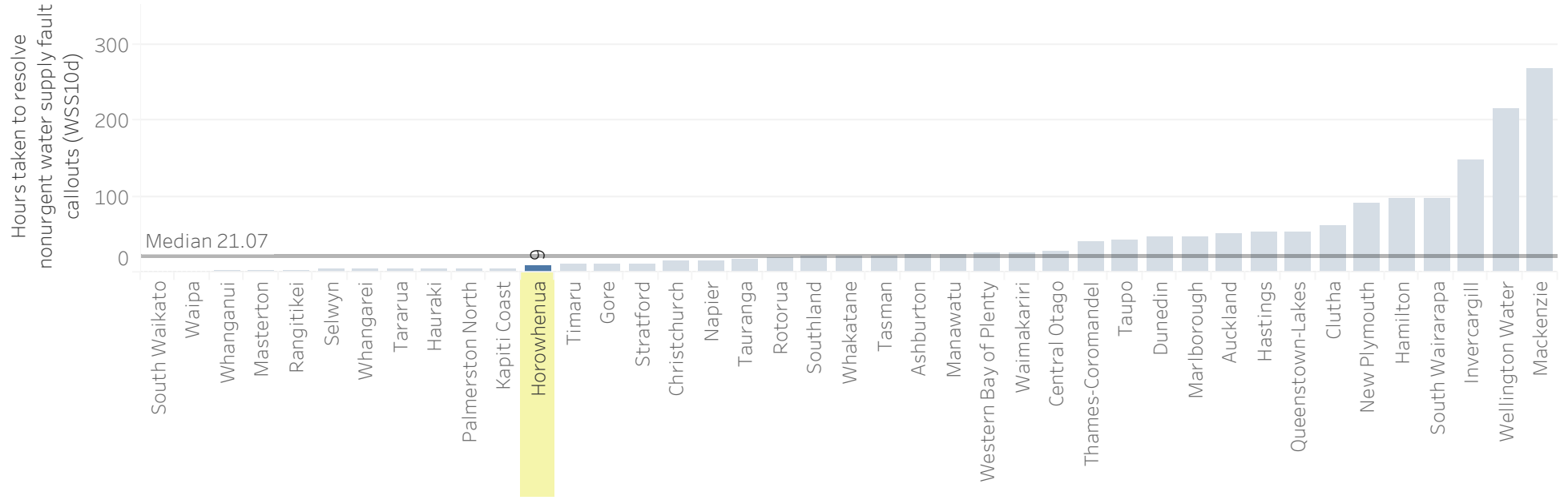
Stormwater complaints per 1000 properties serviced



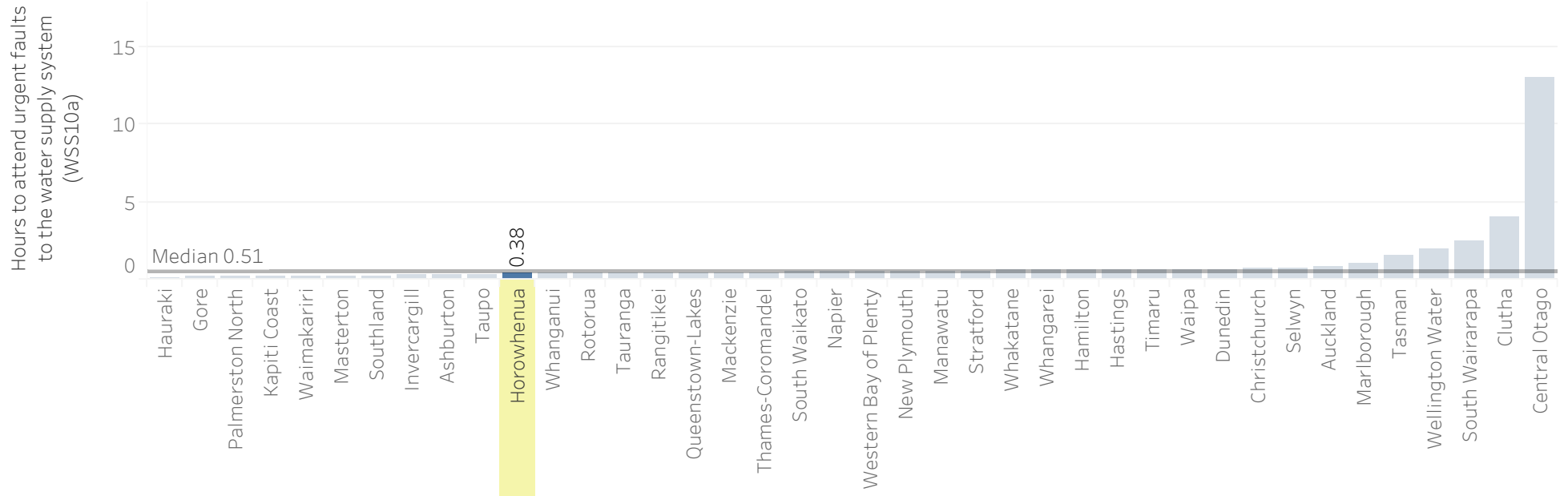
Non-urgent water supply fault attendance times (in hours)



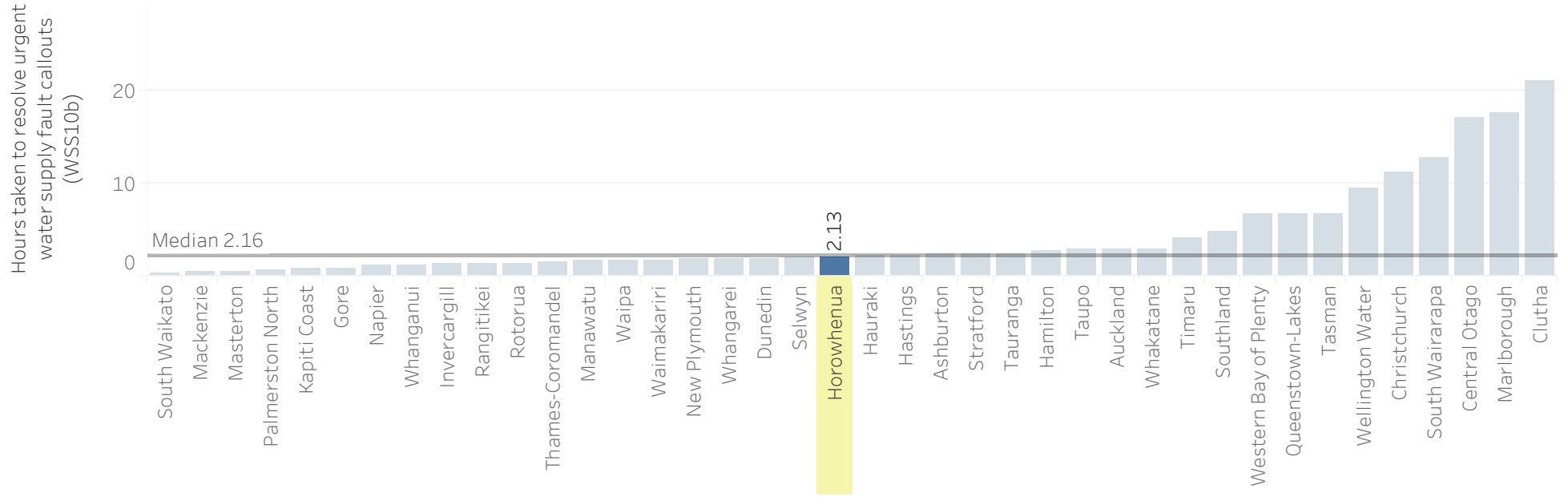
Non-urgent water supply fault resolution times (in hours)



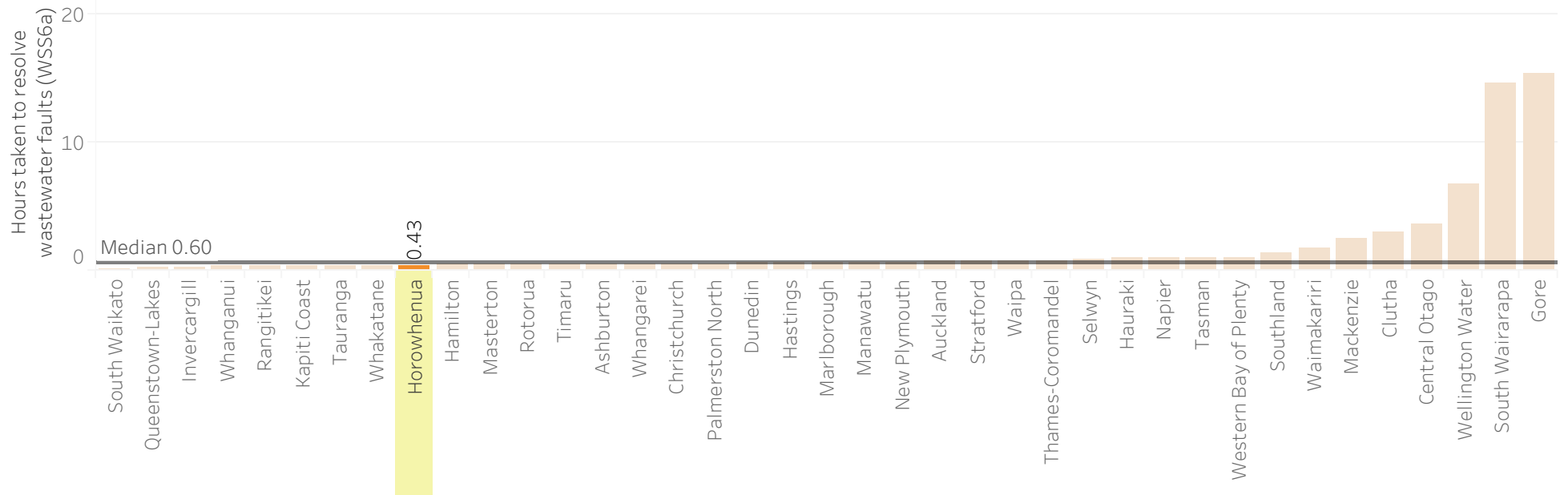
Urgent water supply fault attendance times (in hours)



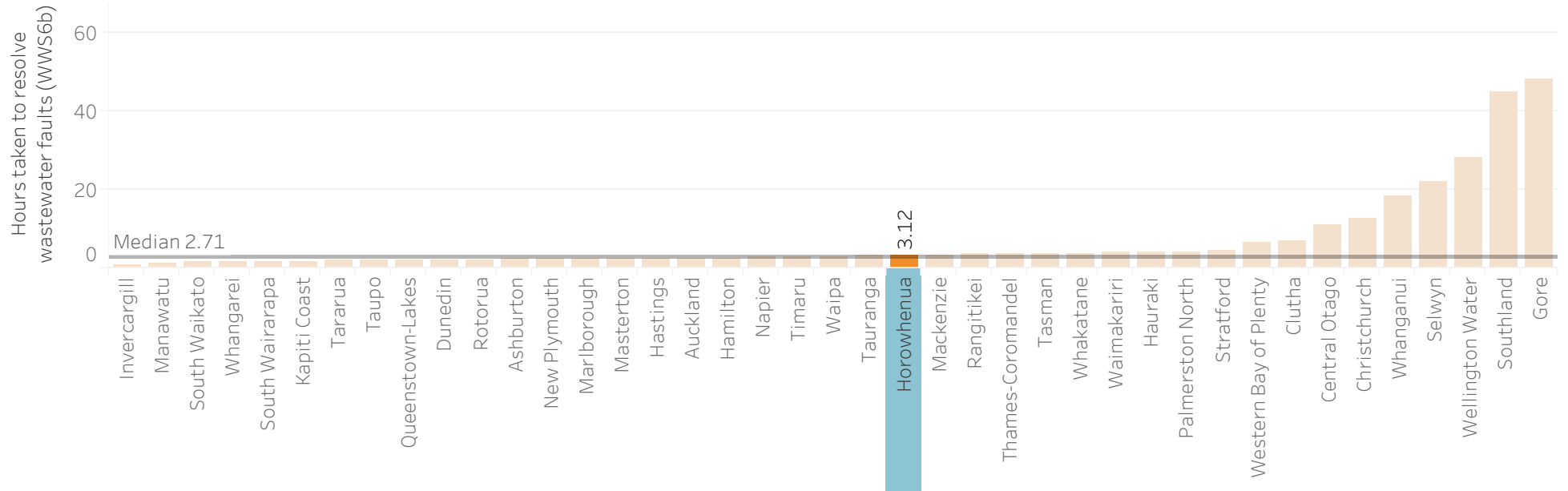
Urgent water supply fault resolution times (in hours)



Wastewater fault attendance times (in hours)

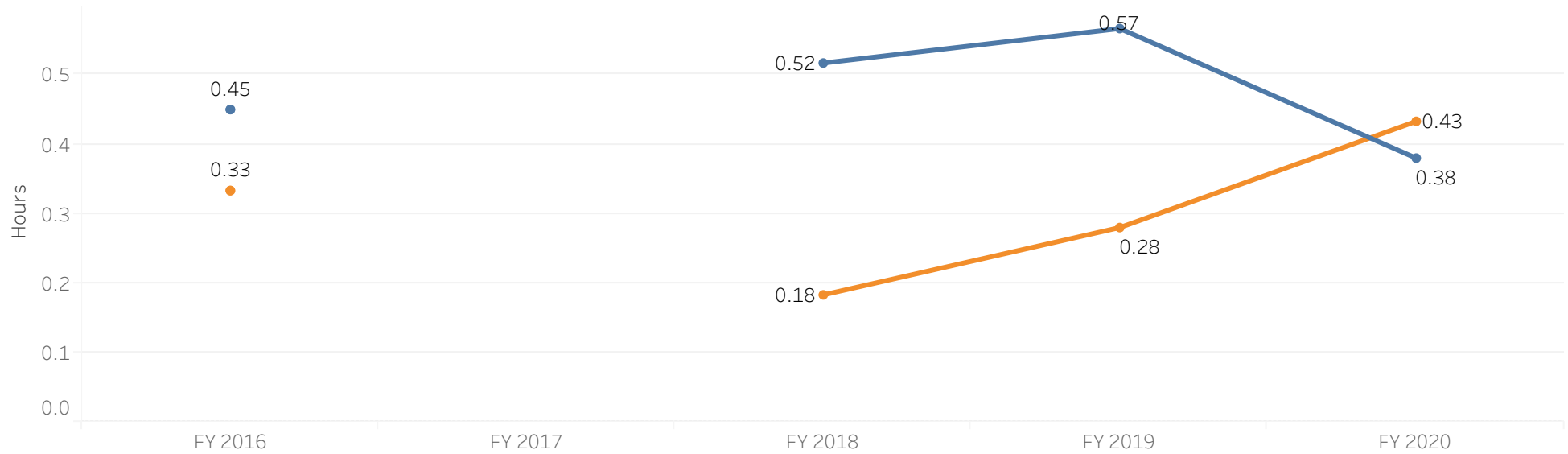


Wastewater fault resolution time (in hours)

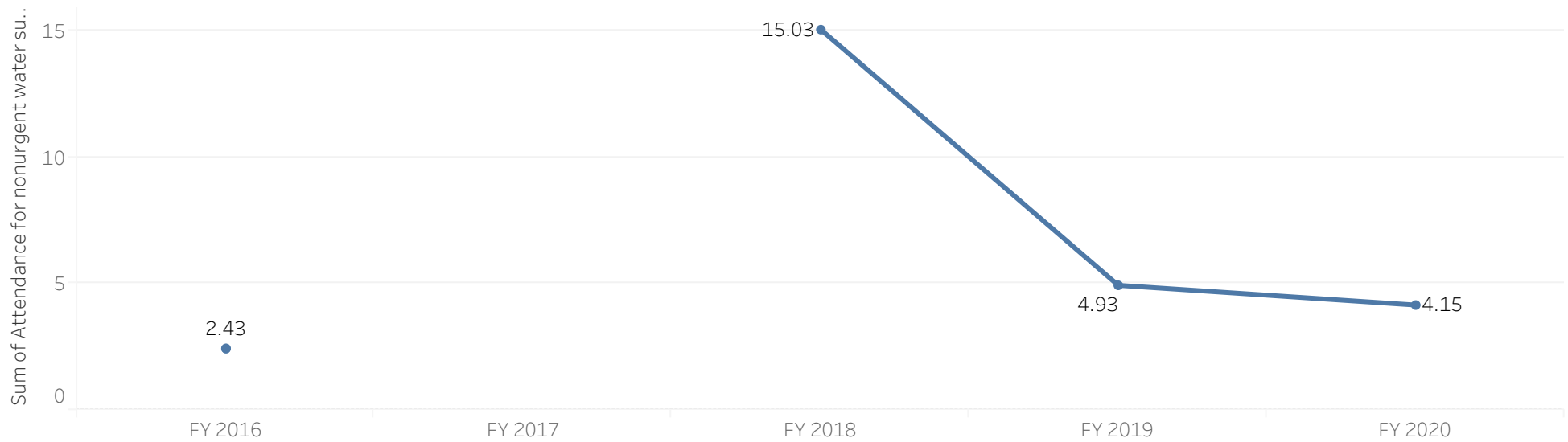


Time taken to attend water and wastewater faults (in hours)

- Attendance for urgent water supply fault callouts (WSS10a)
- Wastewater fault attendance time (WWS6a)

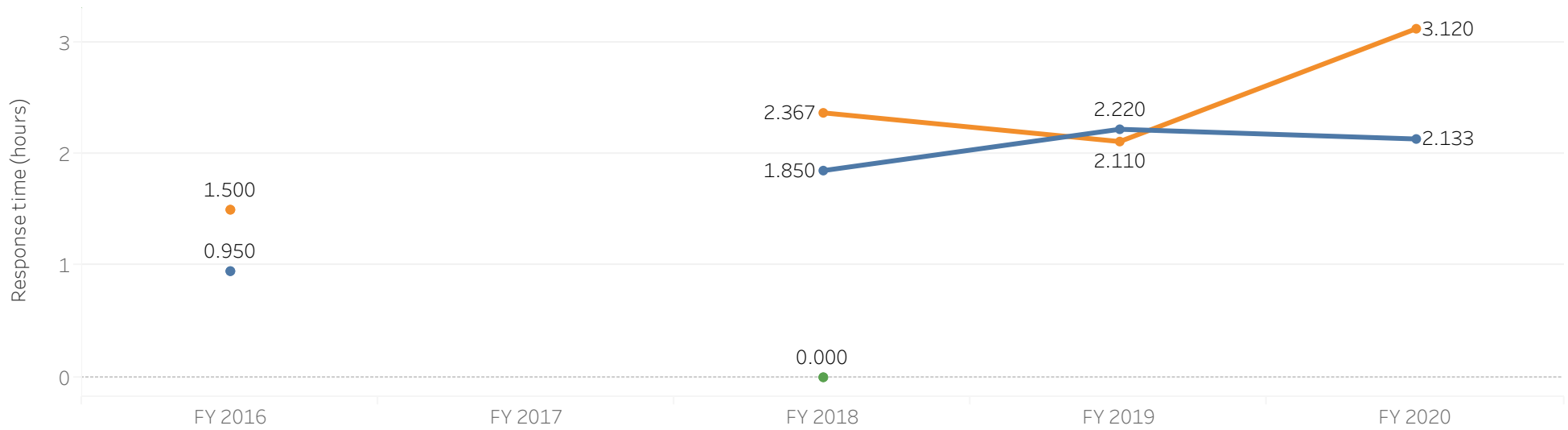


Time taken to attend non-urgent water supply faults (in hours)

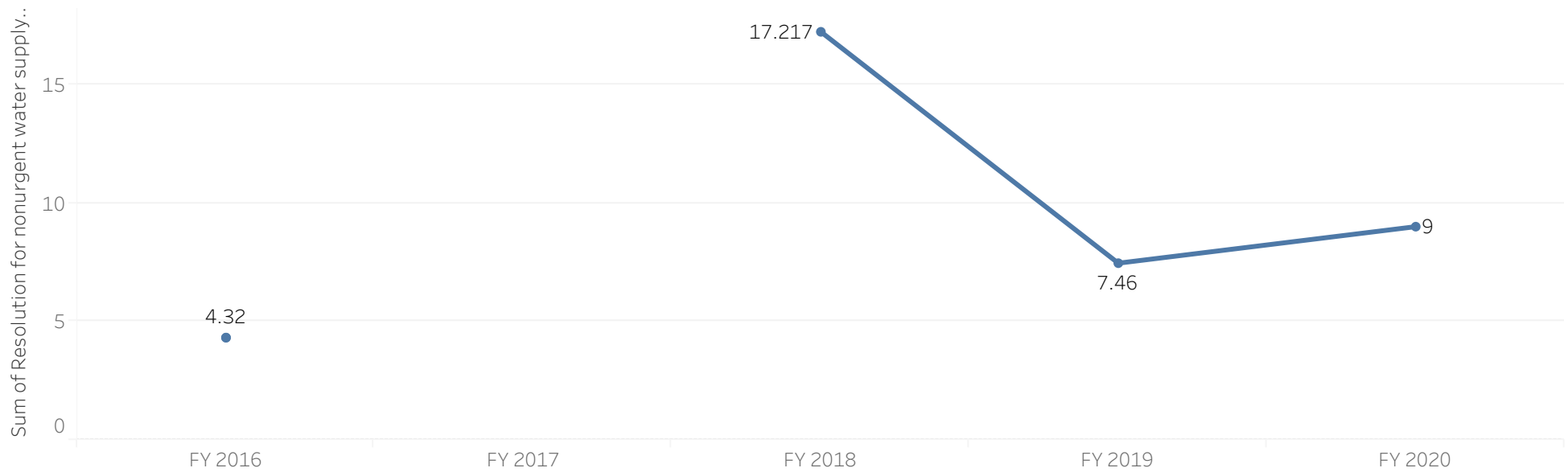


Time taken to resolve water and wastewater faults and respond to flooding related callouts (in hours)

- Flooding Response Time (SWS6)
- Resolution for urgent water supply fault callouts (WSS10b)
- Wastewater fault resolution time (WWS6b)



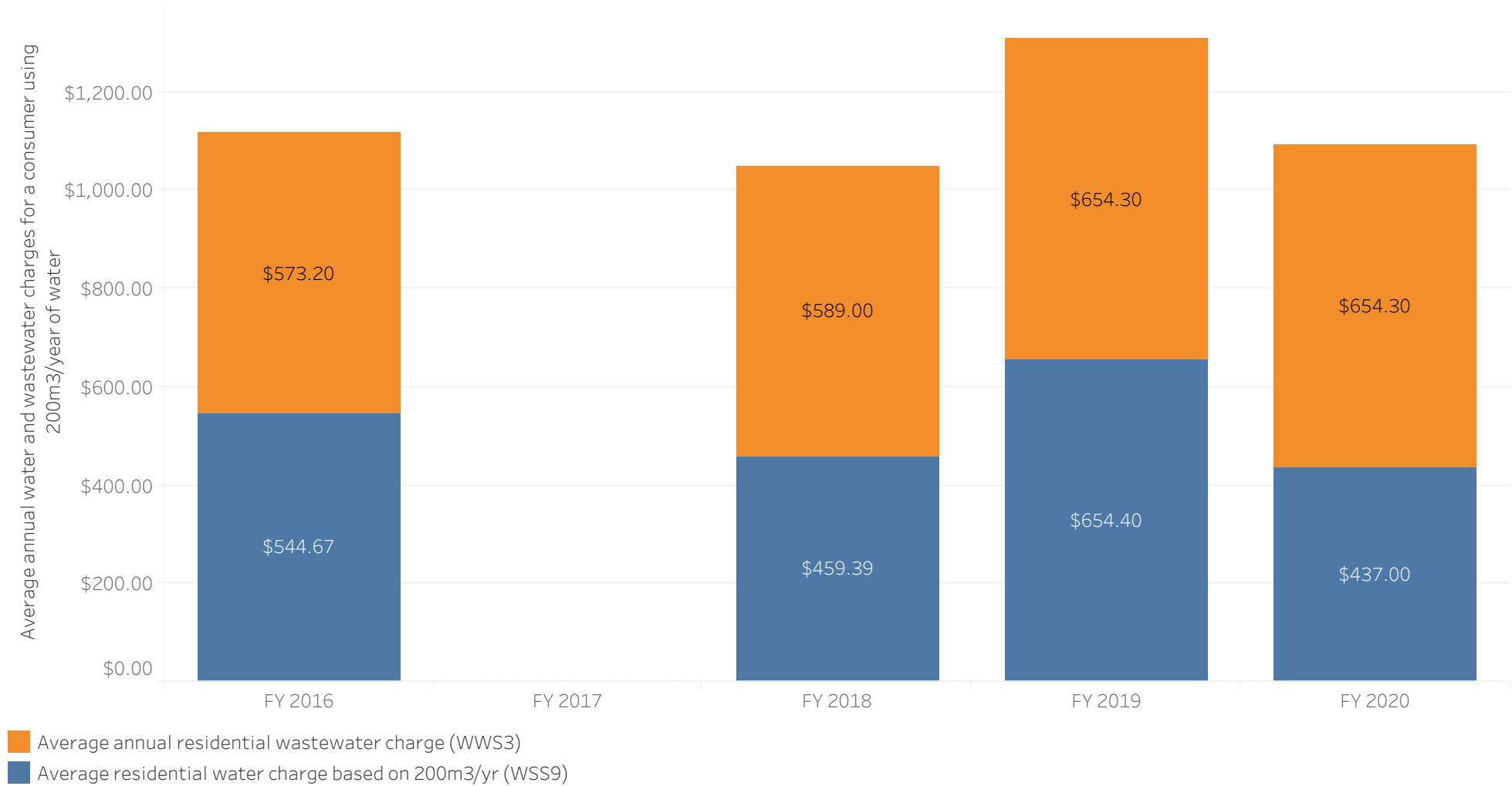
Time taken to resolve non-urgent water supply faults (in hours)



Water and wastewater bill affordability

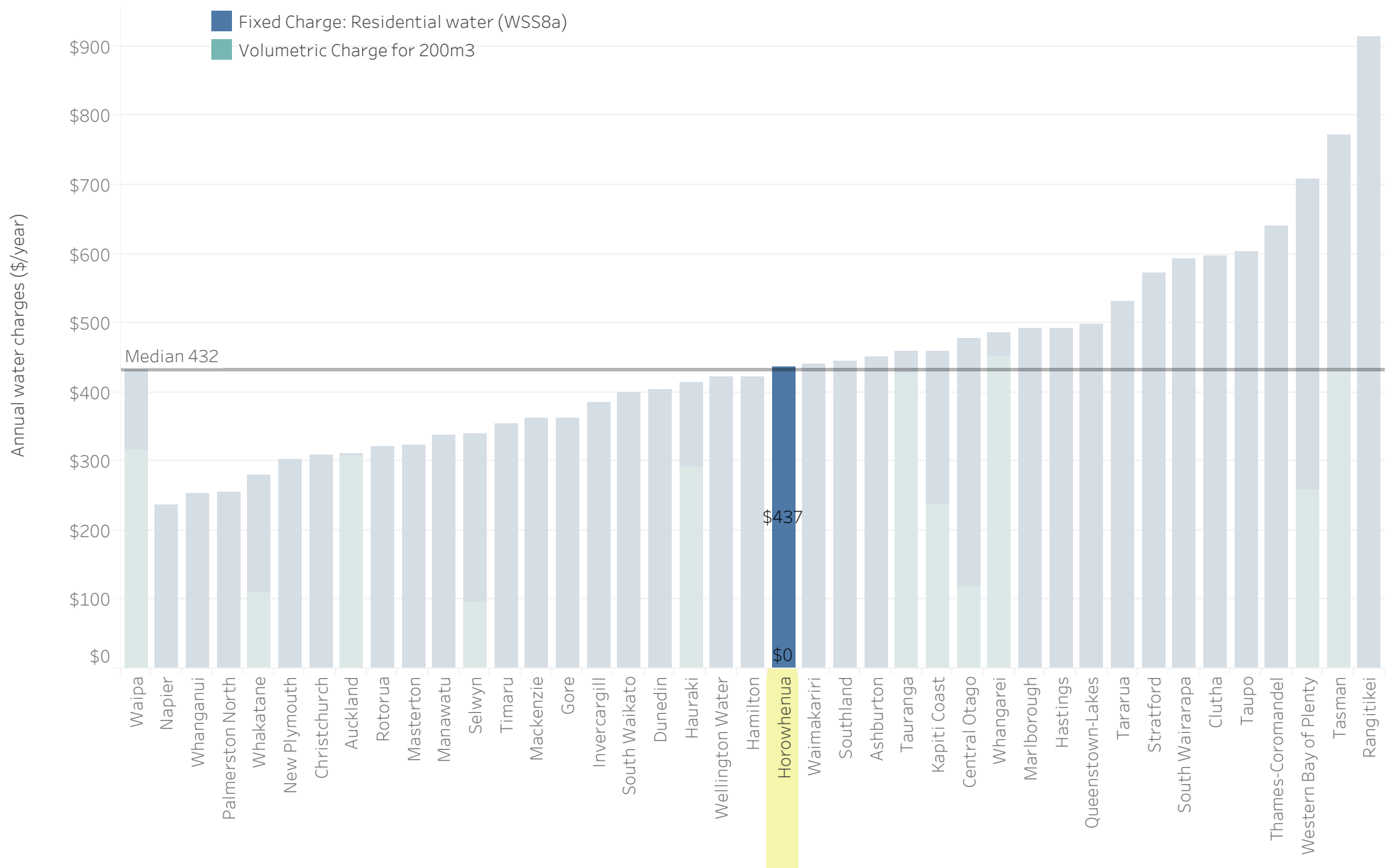
Hours to pay water and wastewater bill for a worker on minimum wage	72.08
Water and wastewater bill as a proportion of NZ government superannuation	5.11%
Water and wastewater bill as a proportion of the sole parent benefit	6.18%

Average combined water and wastewater charge (\$/year)



Average annual residential charges for 200 cubic metres of water use (\$/year)

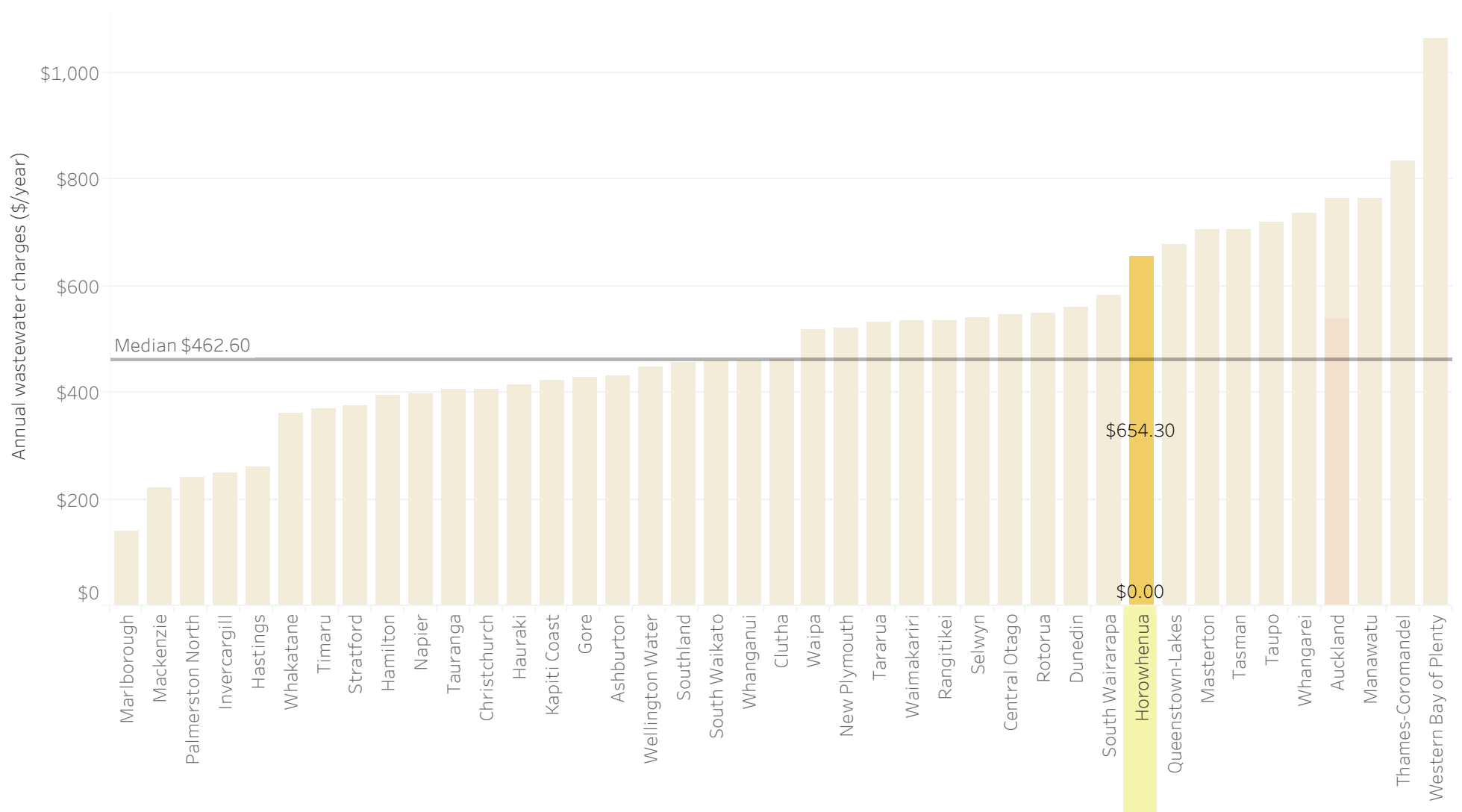
Many authorities have multiple charging regimes in their district. Bars show values that represent average charges in the district (mean or modal rates depending on the best representation of the district).



Average annual residential charges for wastewater (\$/year)

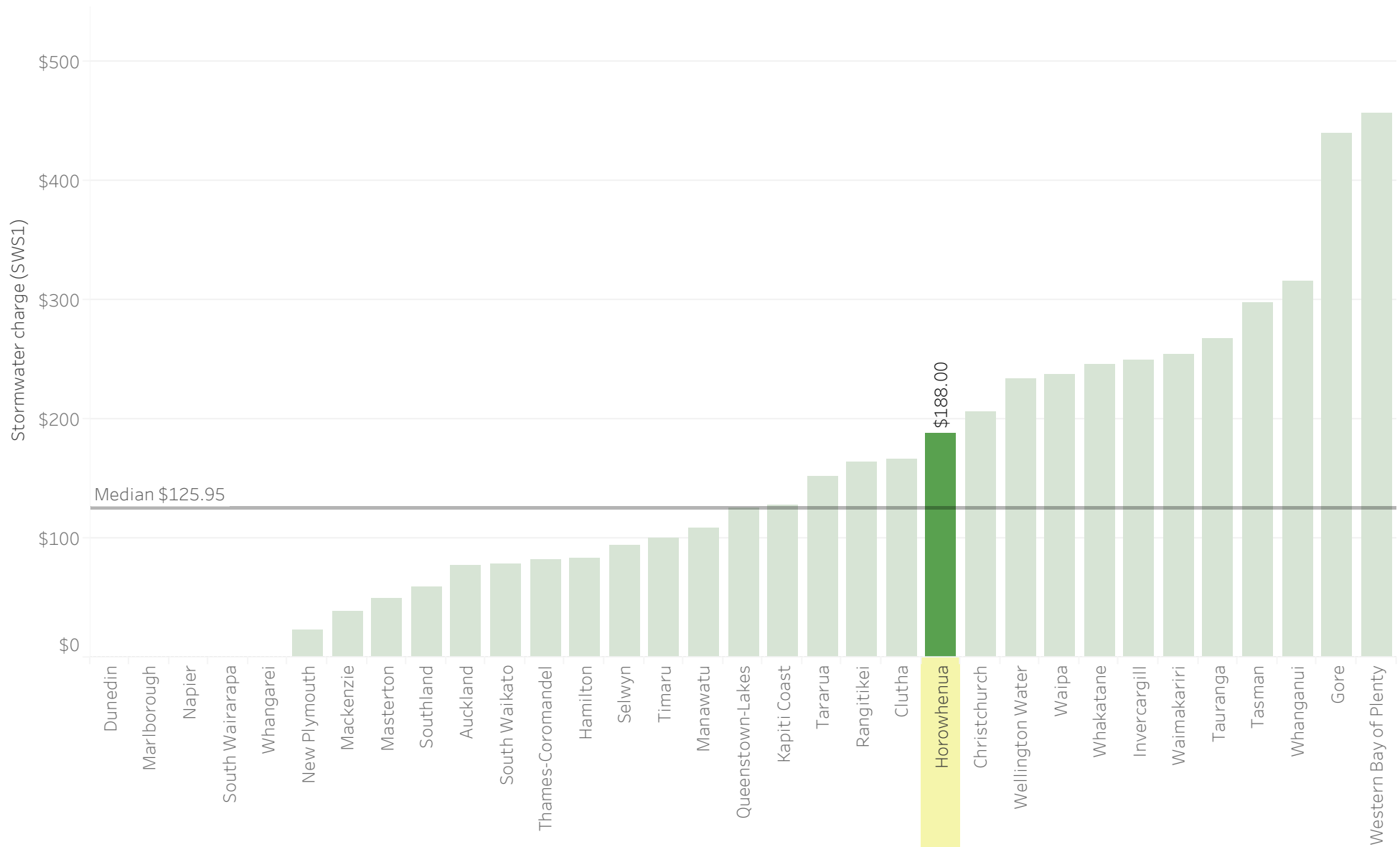
Only Auckland's residential wastewater services use volumetric rates. The volumetric rate shown is for an average residential household consuming 200 cubic metres of water a year. Residential wastewater volume is calculated at 78.5% of the incoming water volume as measured by the water meter.

- Fixed charge: residential wastewater (WWS2a)
- Volumetric residential wastewater charge based on 200 m³/yr water use (WSS9*200)



Average annual residential charges for stormwater (\$/year)

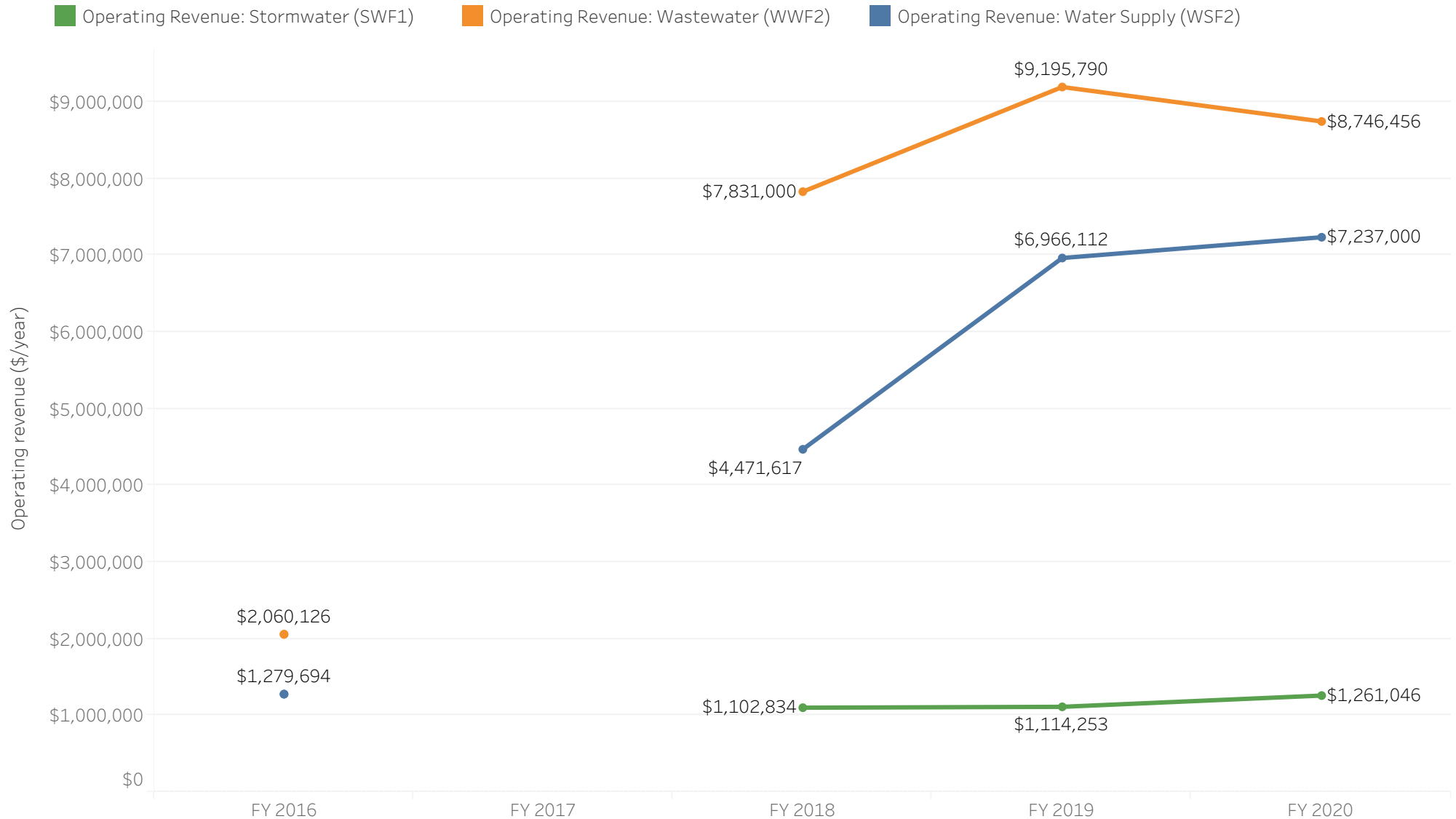
Many participants charge for stormwater services as part of other rates charges (such as urban amenity or roading rates). Where stormwater charges were able to be separated these are shown. Stormwater charges that are a proportion of general rates have been determined based on average property values in the relevant district.



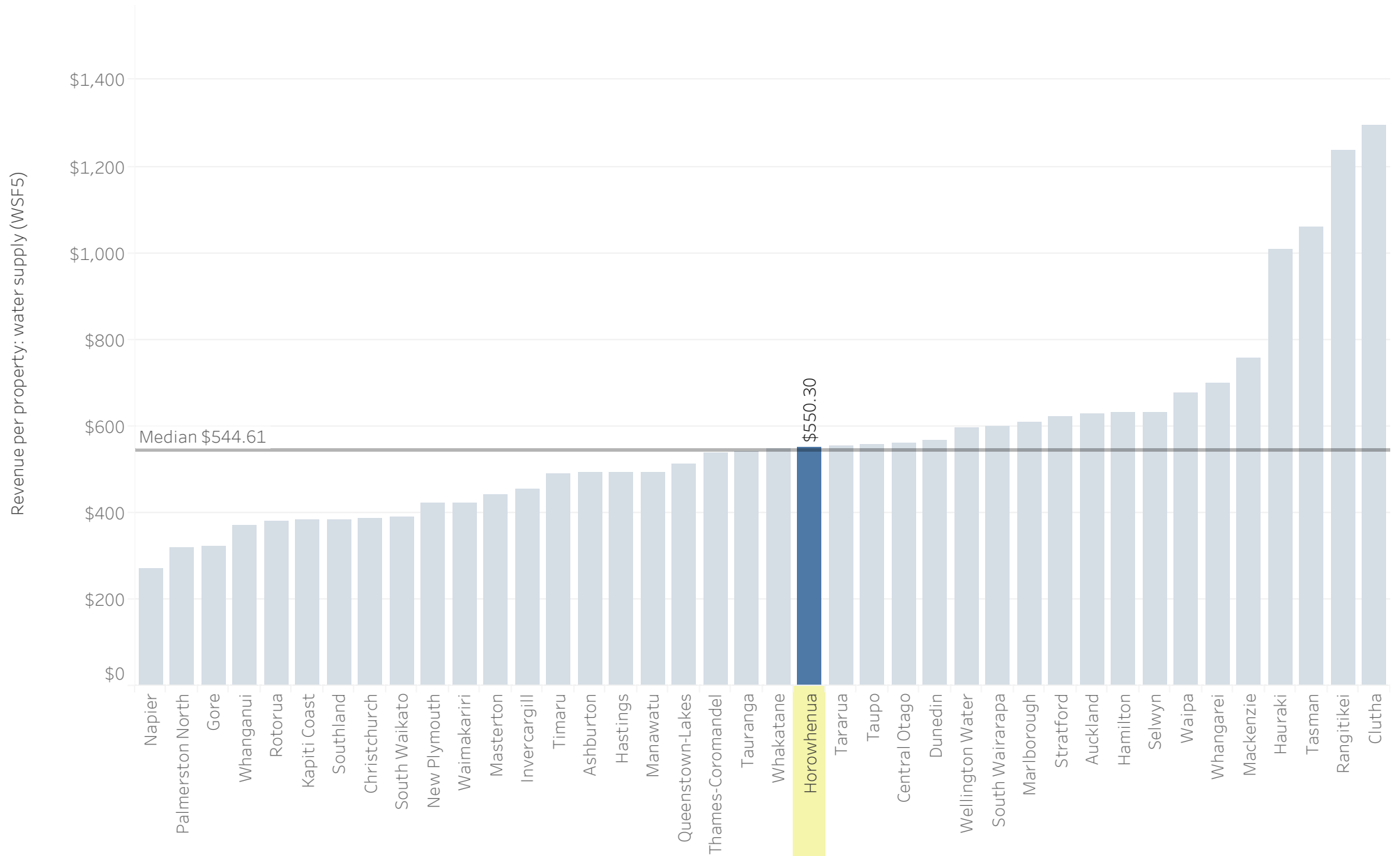
6. Economic sustainability

Annual revenue

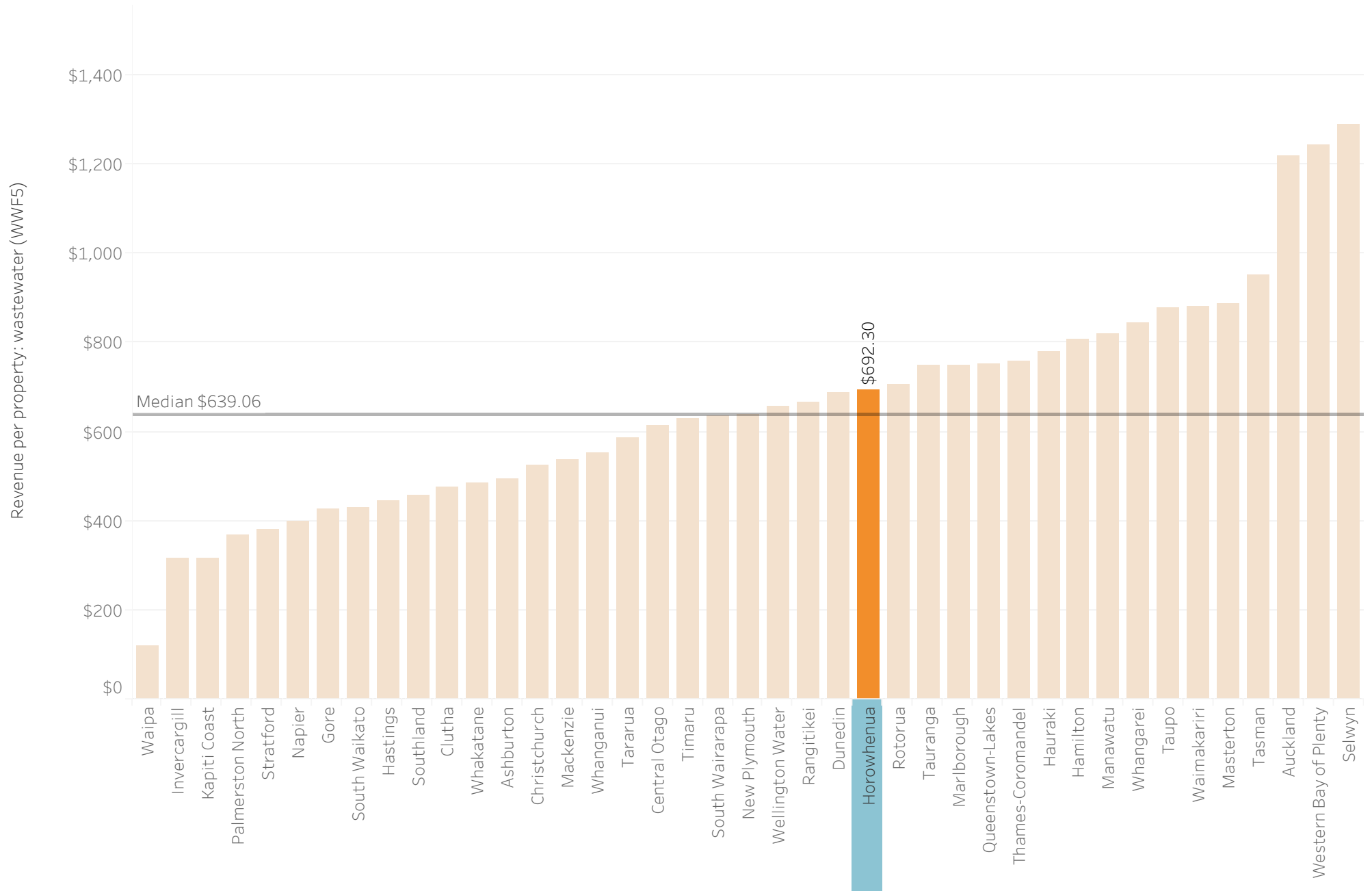
Does not include revenue from developer contributions or supply of services to neighbouring authorities.



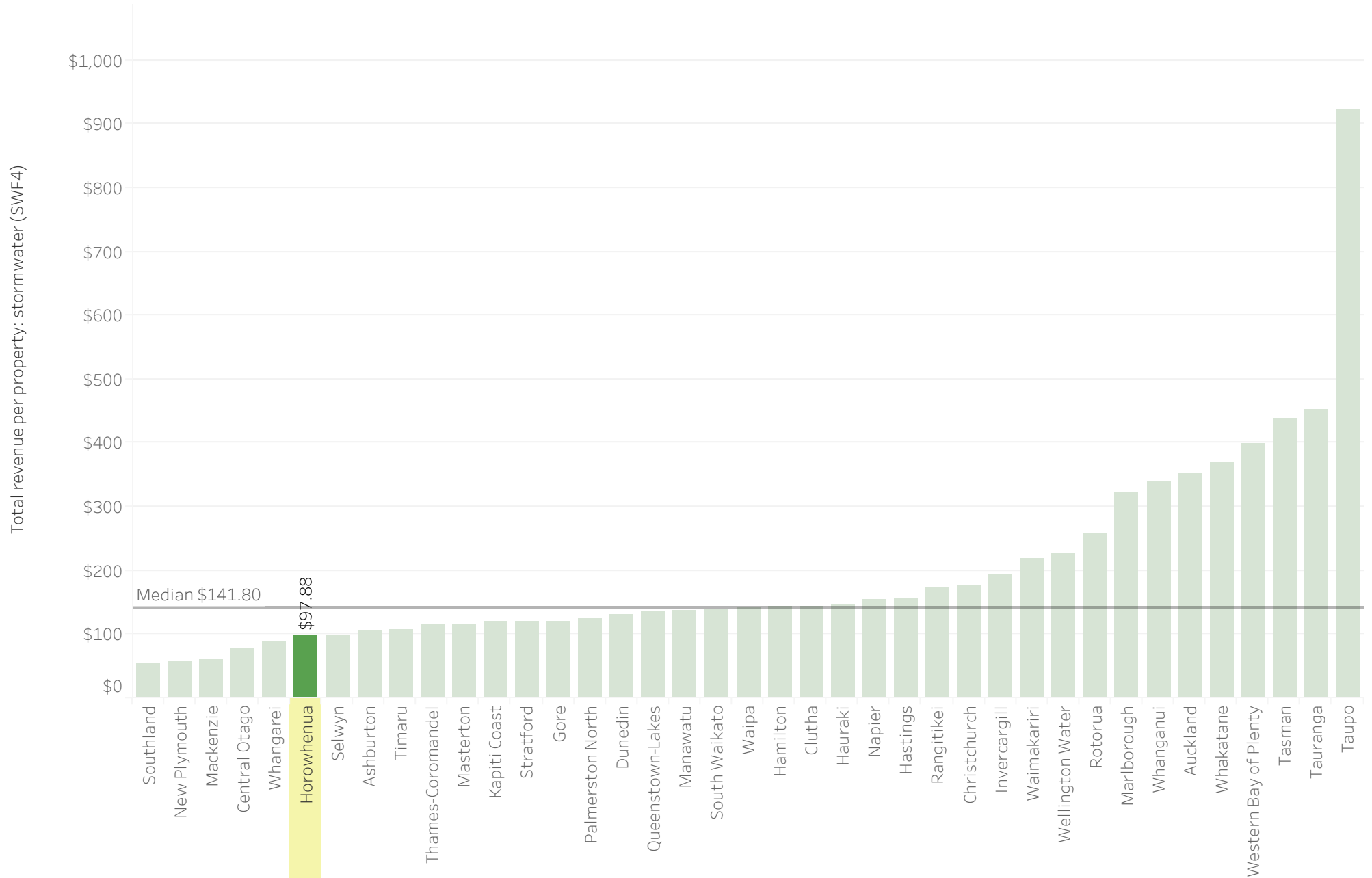
Annual water supply revenue per property connected to the network



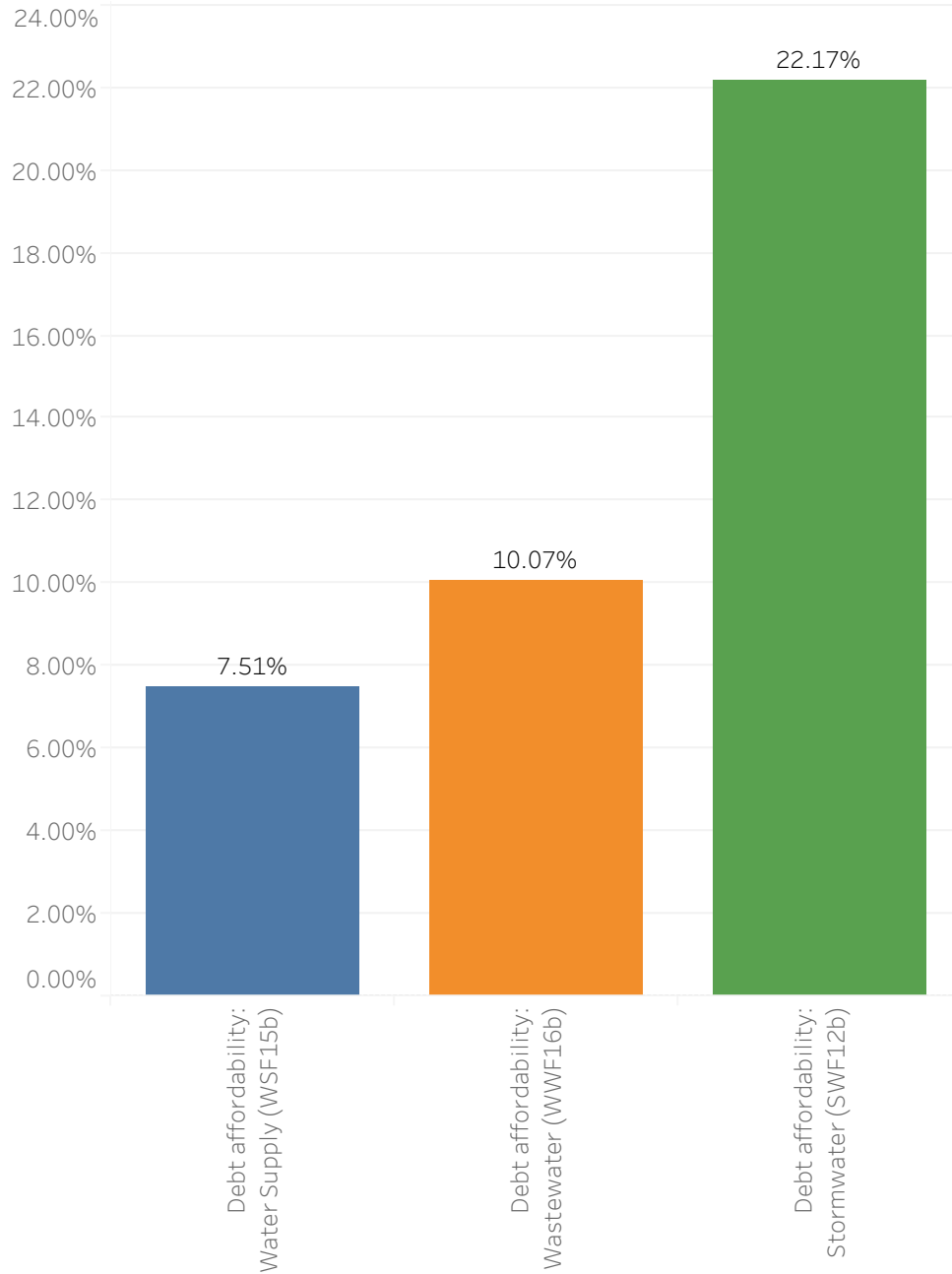
Annual wastewater revenue per property connected to the network



Annual stormwater revenue per property serviced

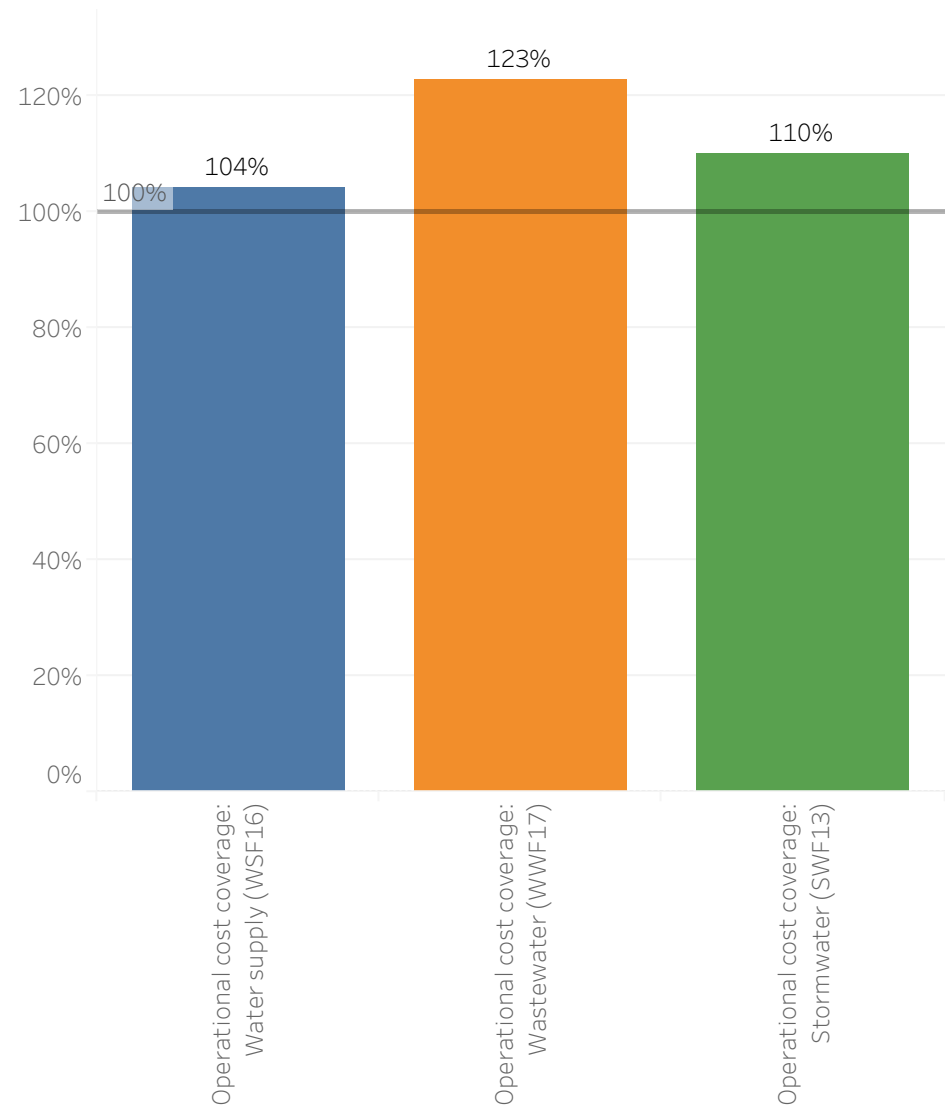


Interest as a proportion of revenue



Cost coverage

Revenue (excluding revenue from developer contributions/infrastructure growth charges) over operational costs including interest payments and depreciation. Costs related to capital expenditure have not been included. A value less than 100% implies revenue is insufficient to meet costs and depreciation.



Annual operational expenditure

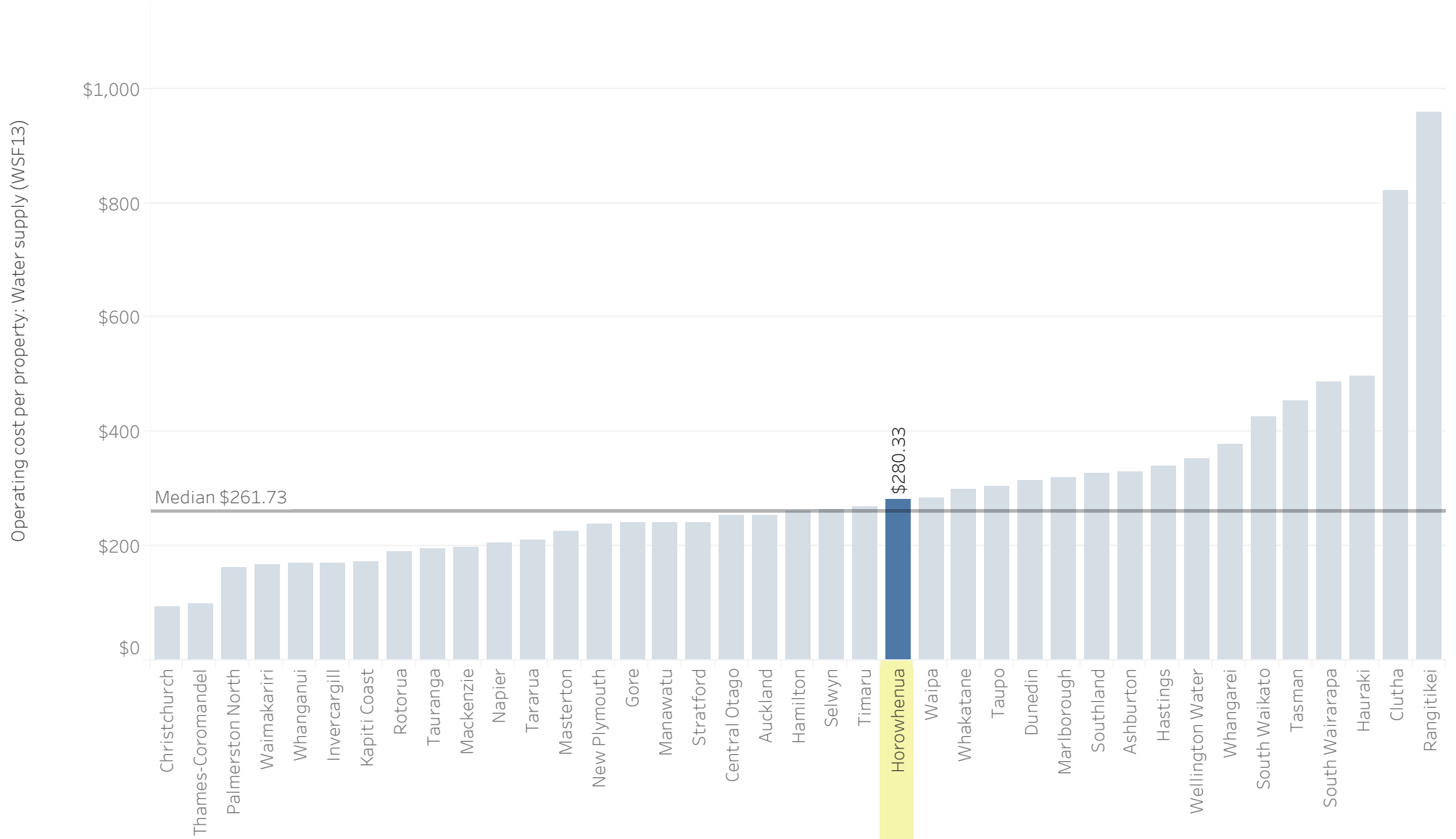
■ Operating Cost: Stormwater (SWF9)

■ Operating Cost: Wastewater (WWF13)

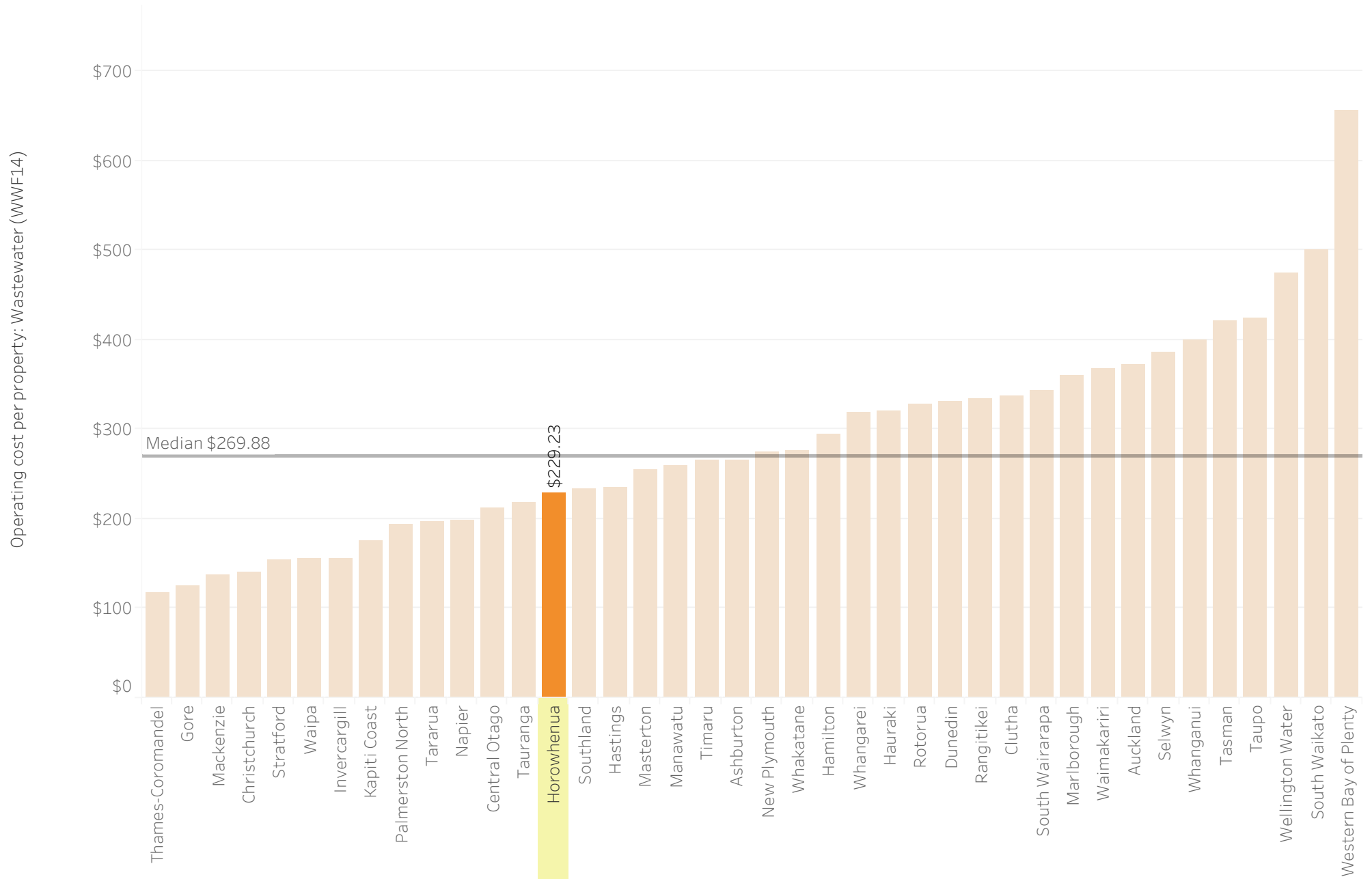
■ Operating Cost: Water Supply (WSF12)



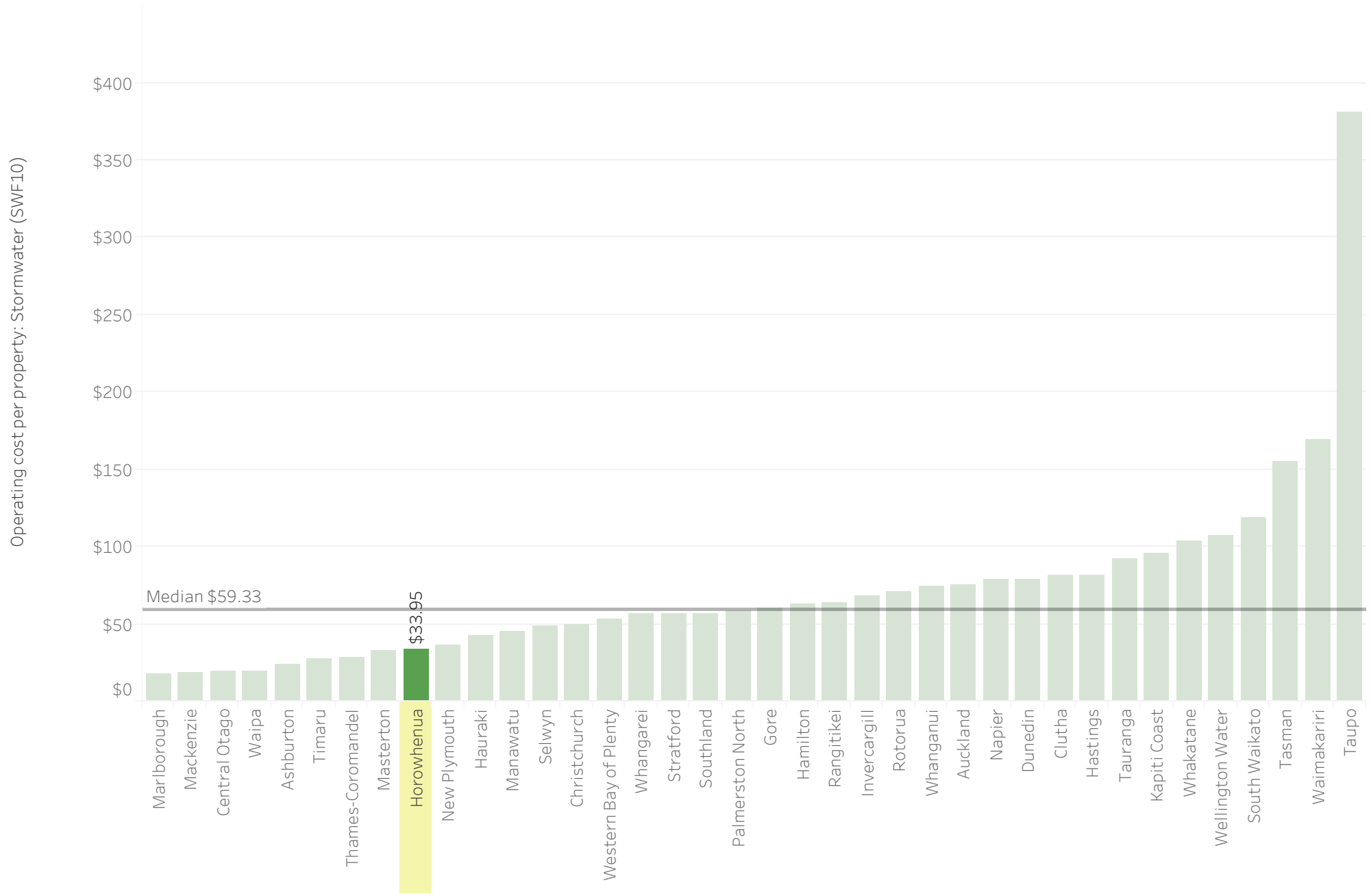
Water supply operational expenditure per property



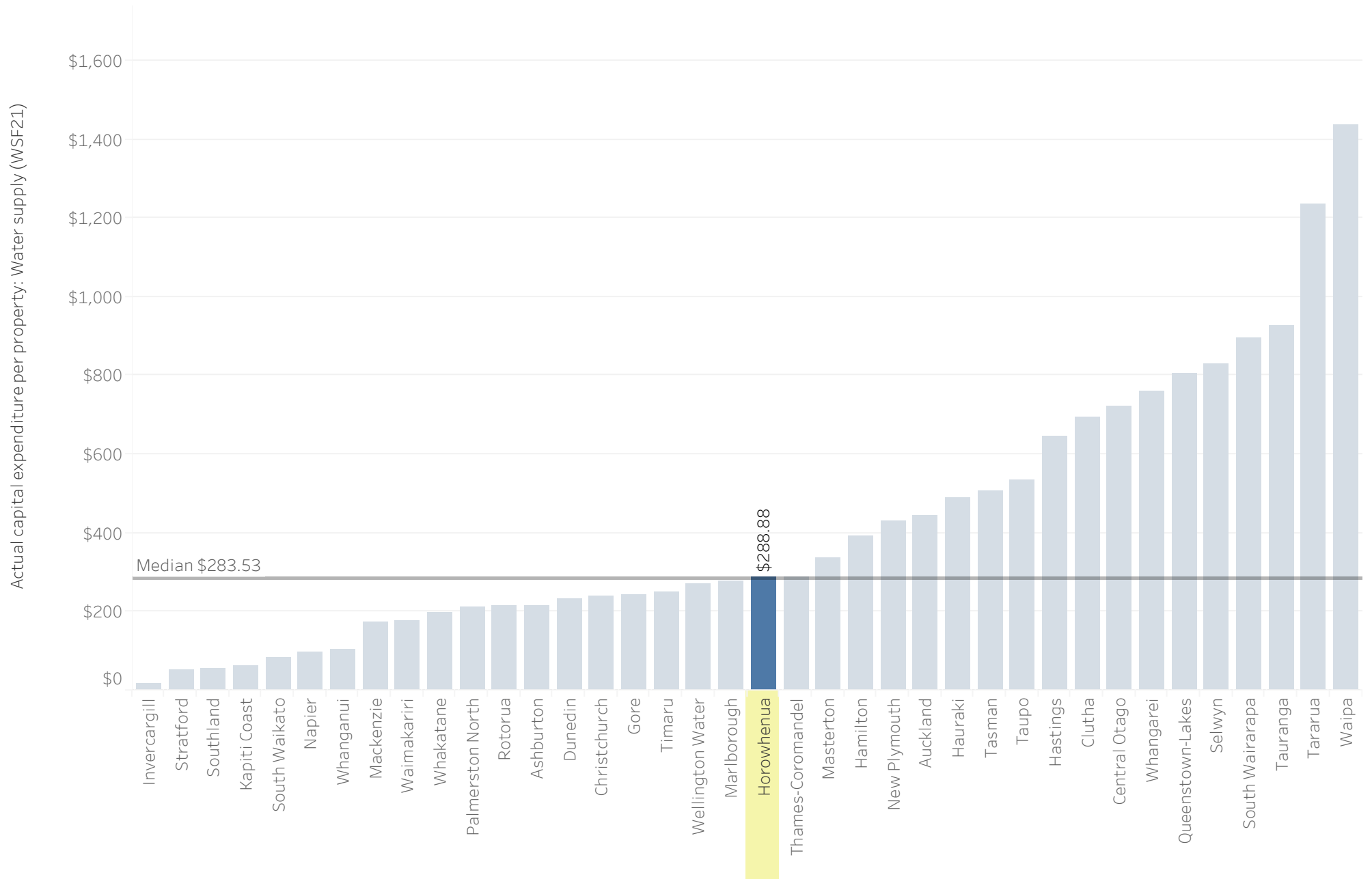
Wastewater operational expenditure per property



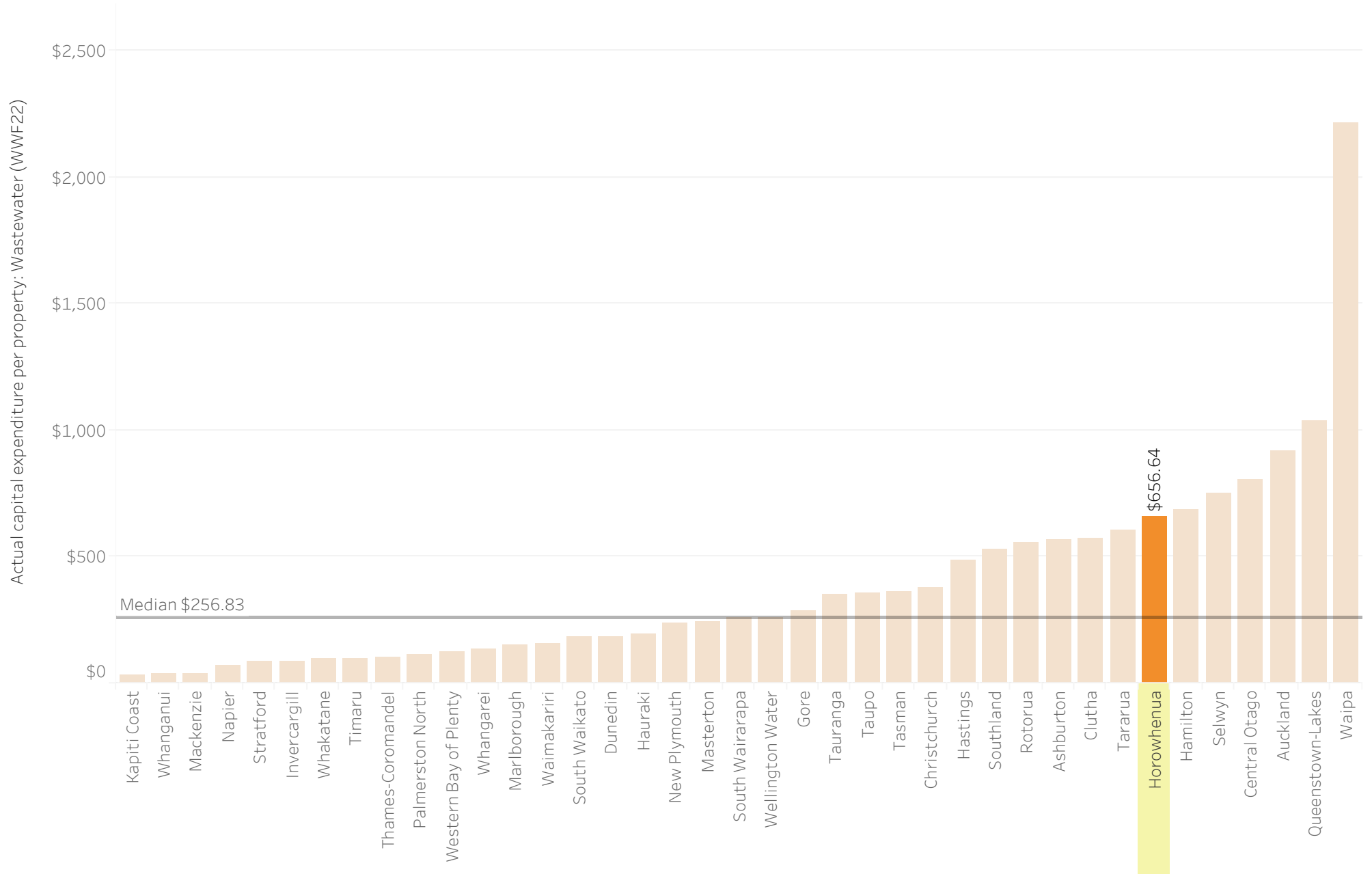
Stormwater operational expenditure per property



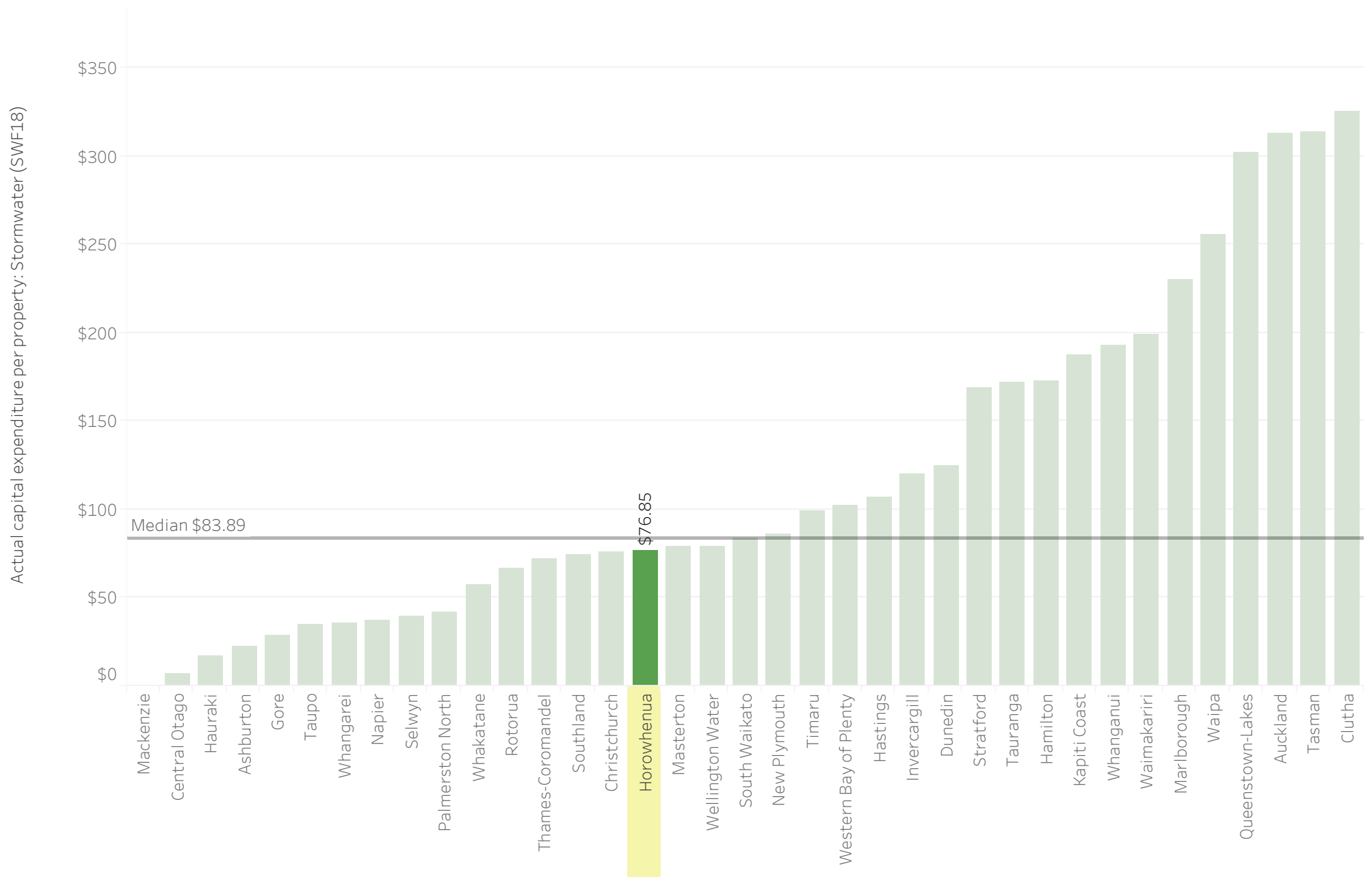
Water supply capital expenditure per property



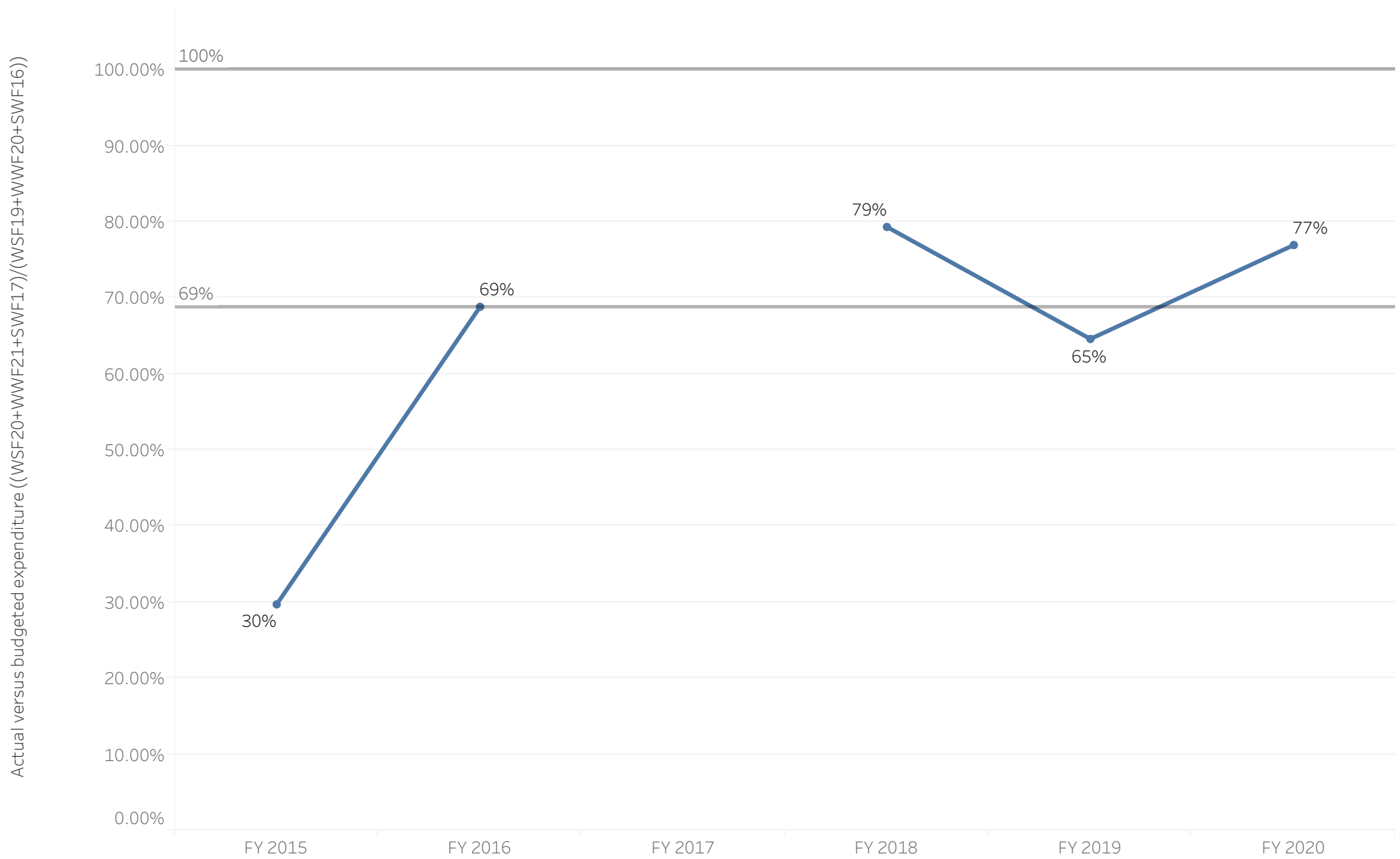
Wastewater capital expenditure per property



Stormwater capital expenditure per property

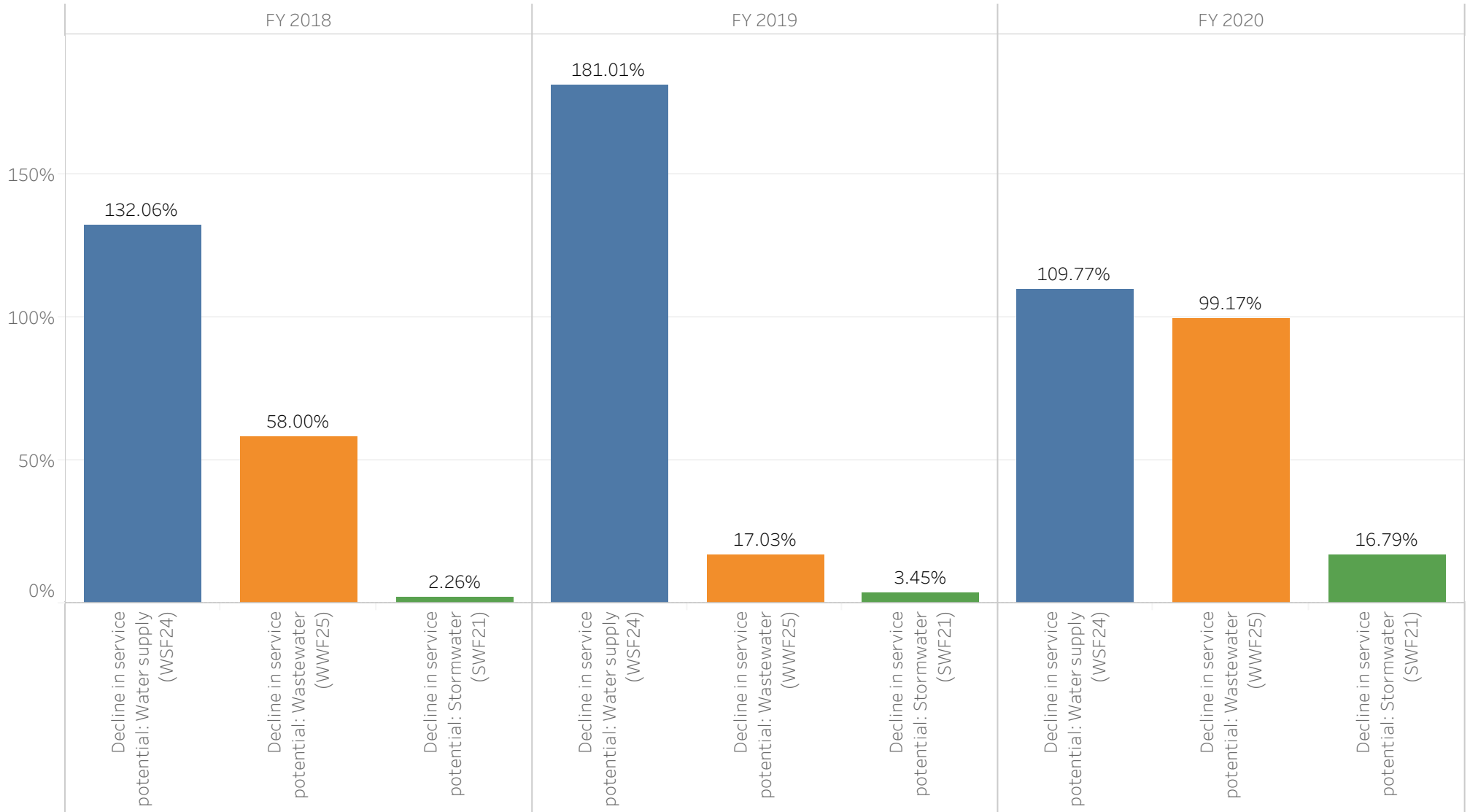


Actual capital expenditure as a proportion of budgeted capital expenditure



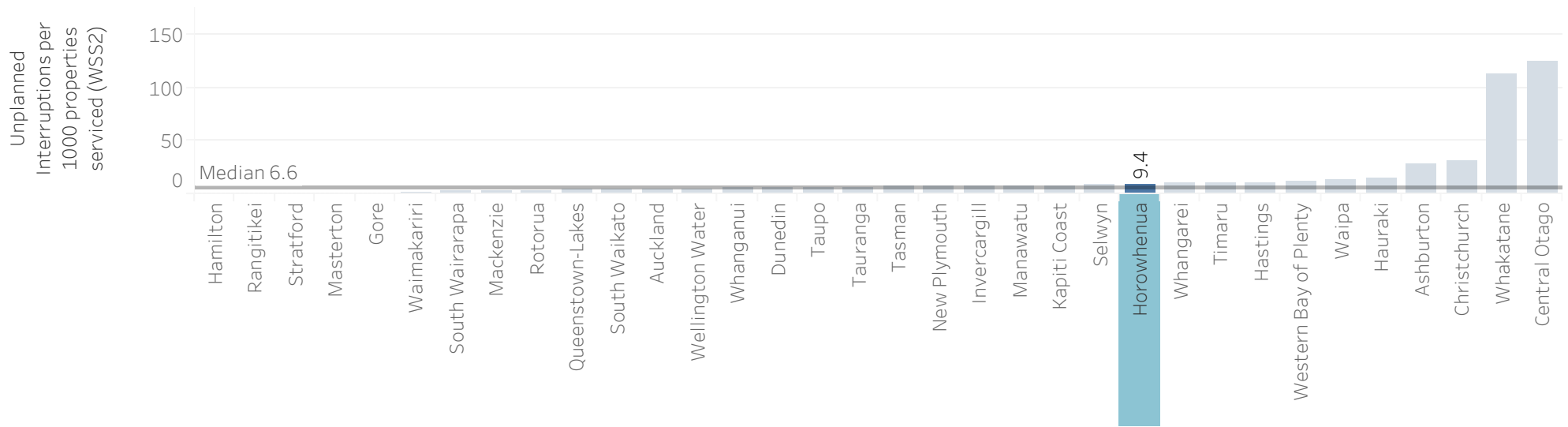
Capital expenditure as a proportion of depreciation over the last three years

Capital expenditure to replace existing assets should equal depreciation over time (i.e. 100%) for service levels to be maintained. Over time where capital expenditure on the replacement of existing assets consistently exceeds depreciation costs (i.e. greater than 100%) service levels would be expected to improve, whereas where it is consistently less than depreciation service levels would be expected to decrease (i.e. less than 100%). Given the variable nature of capital expenditure the two year period shown here may not be indicative of the long term trend.



7. Reliability

Unplanned water supply interruptions per 1000 properties serviced



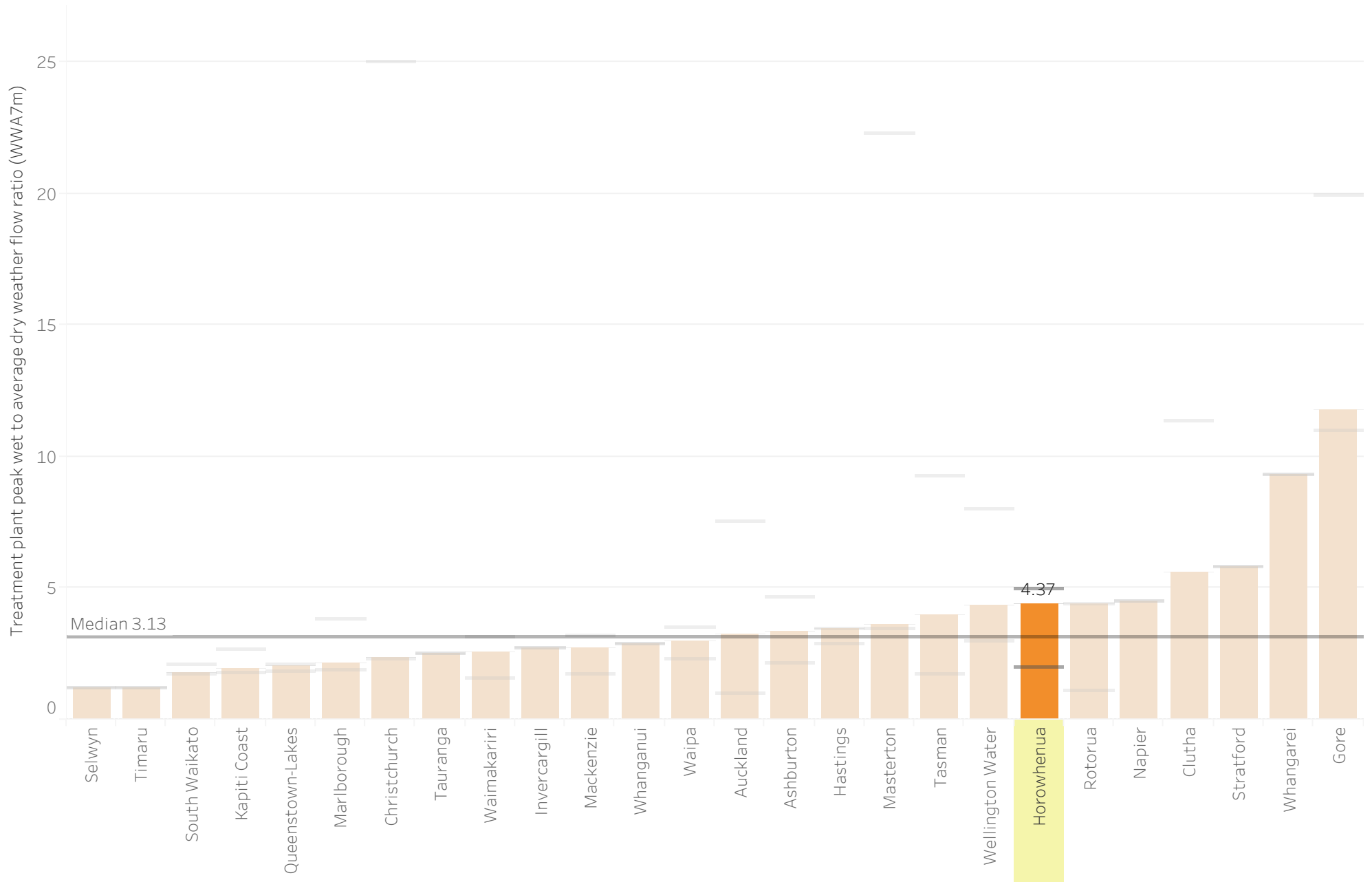
Interruptions to water supply

- Sum of Third Party Incidents: Water Supply (WSS4)
- Unplanned Total Interruptions: Water Supply (WSS1)
- Sum of Planned Interruptions: Water Supply (WSS3)



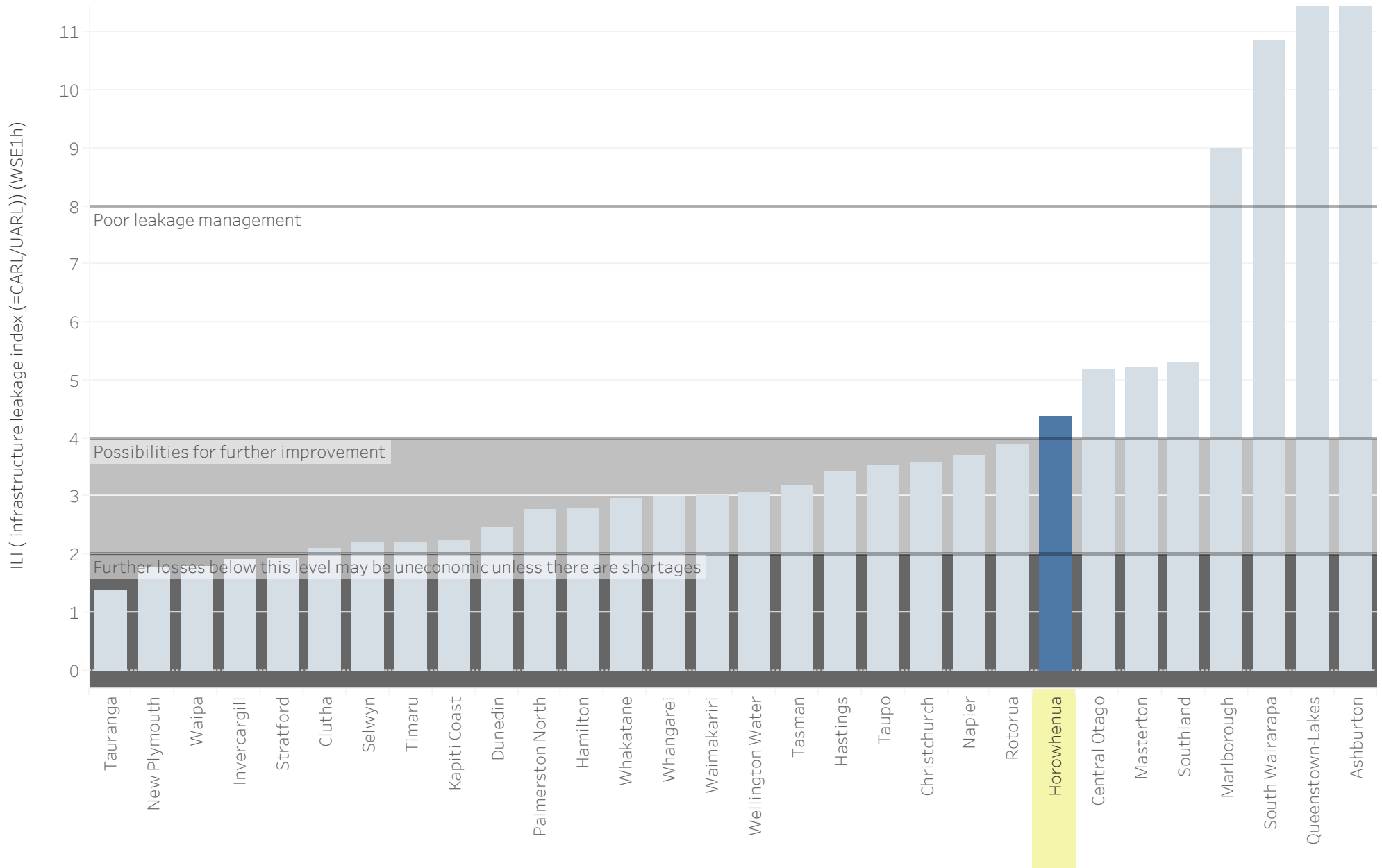
Peak wet to average dry weather flow ratio at wastewater treatment plants

The bars show the flow weighted average for participants with multiple treatment plants. The grey dashes show maximum and minimum values.

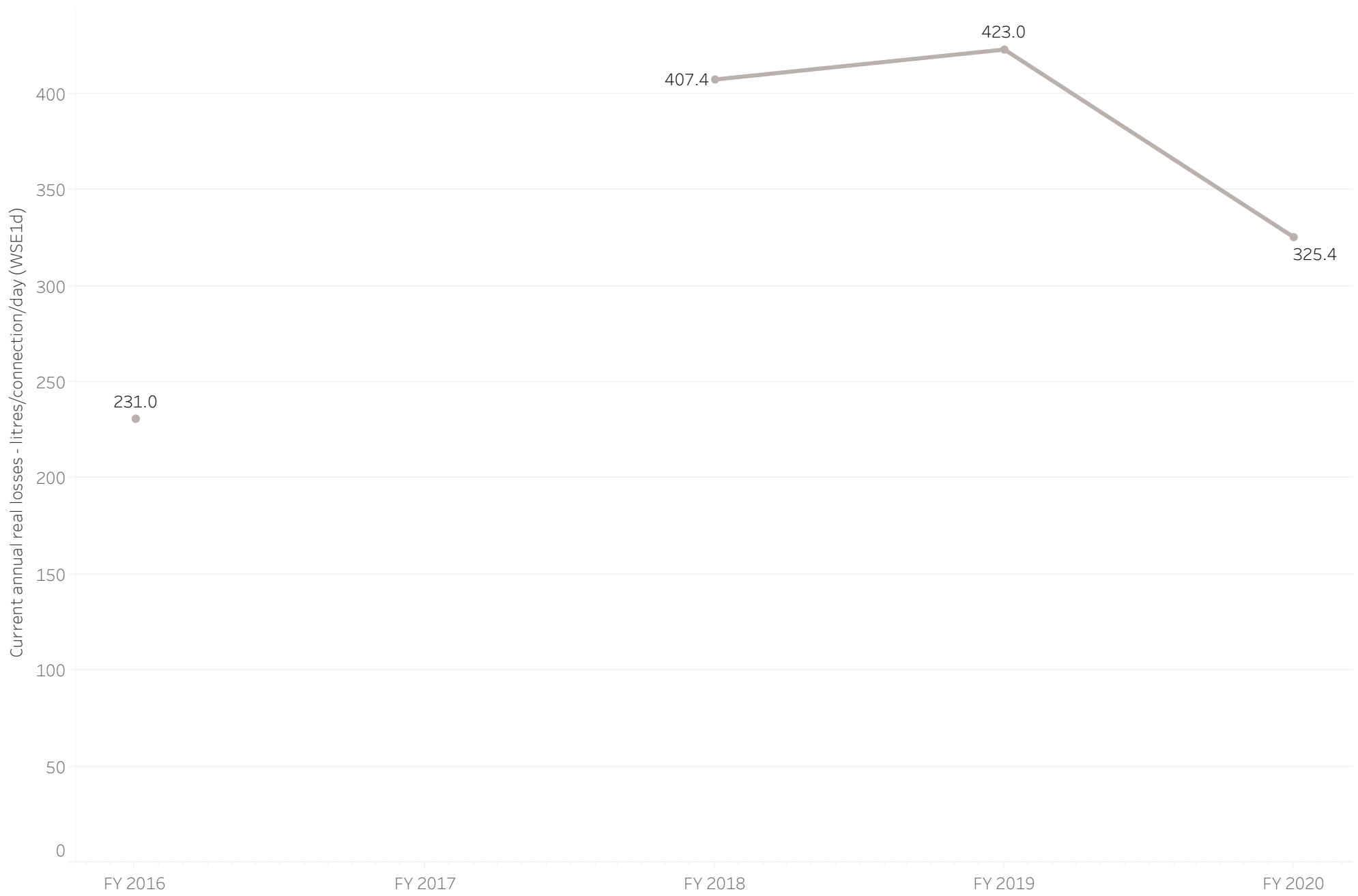


Infrastructure leakage index

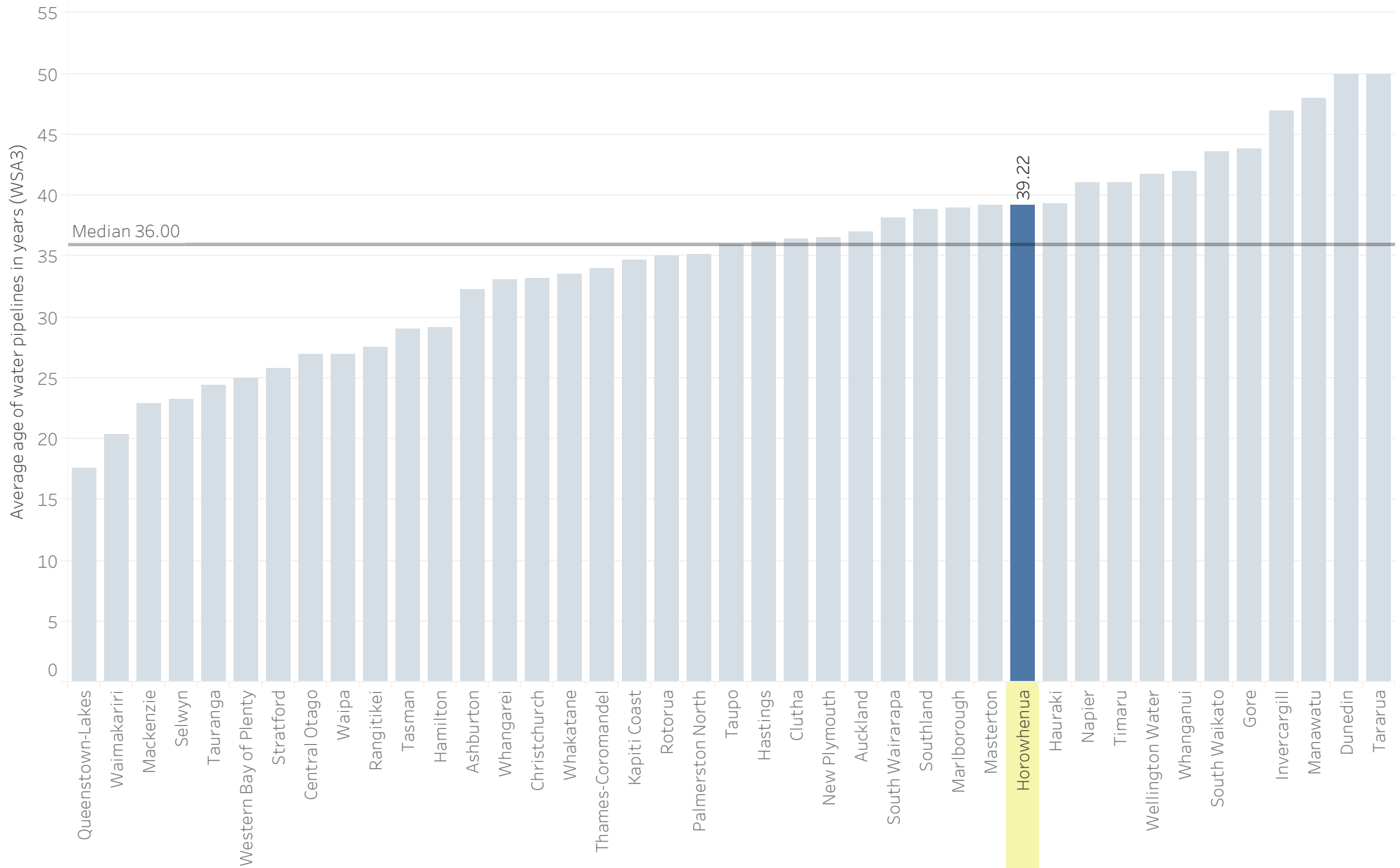
The Infrastructure leakage index shows the ratio of *Current Annual Real Losses* to *Unavailable Annual Real Losses*. Corresponding performance bands, contained in *Water New Zealand, Water Loss Guidelines, 2010* are shown on the figure.



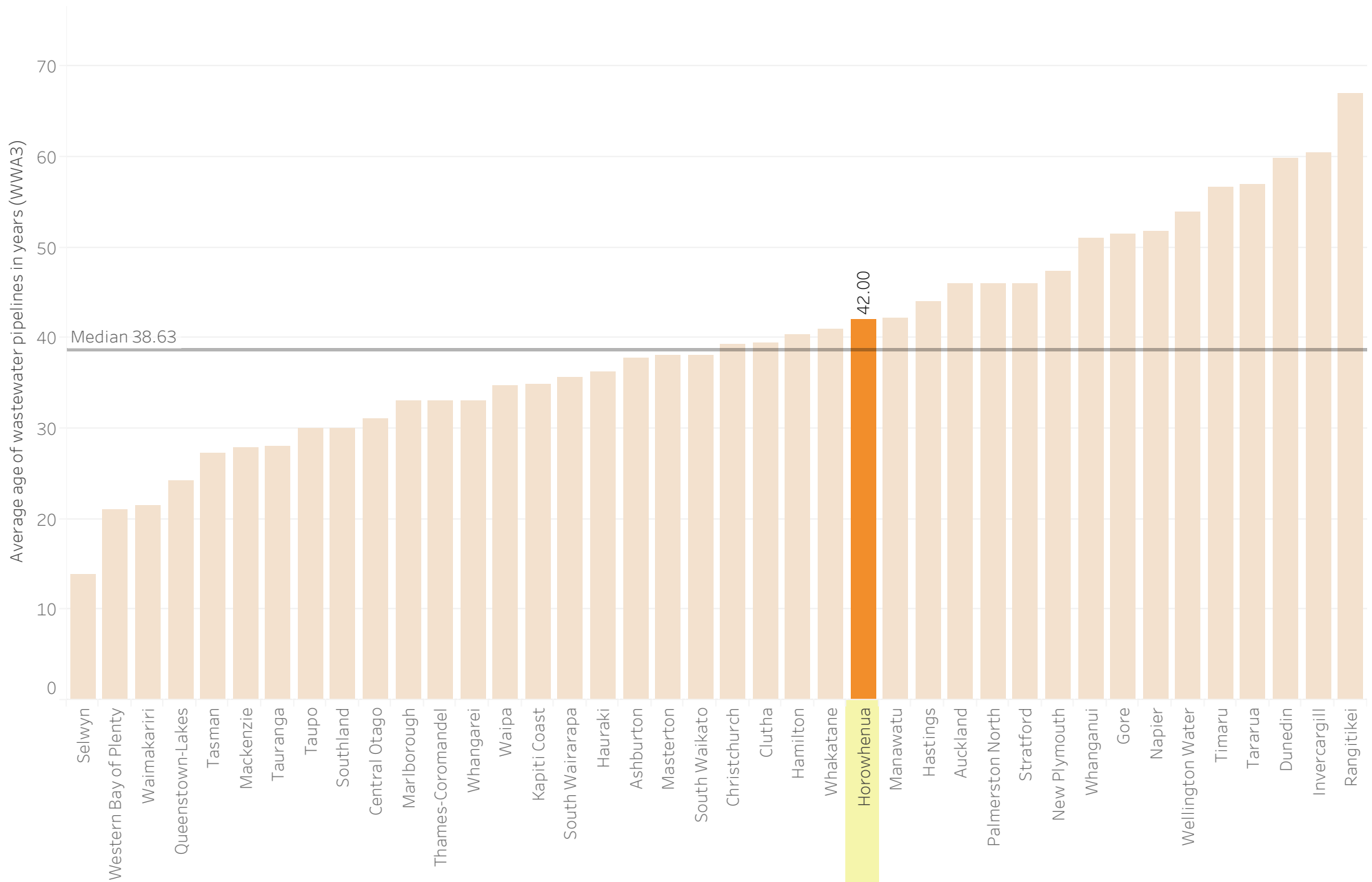
Current annual real losses (litres/property/day)



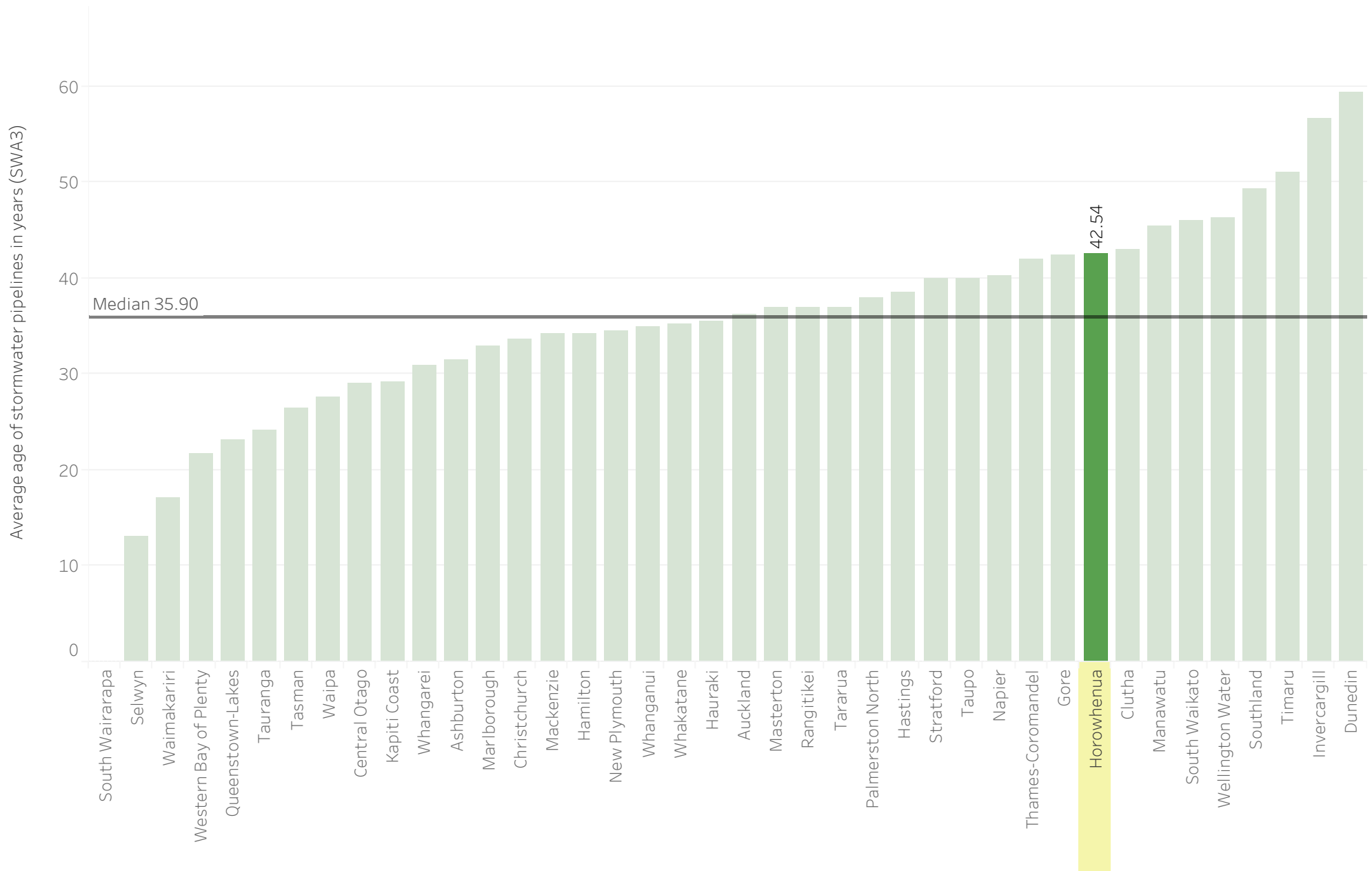
Average age of water pipelines (years)



Average age of wastewater pipelines (years)

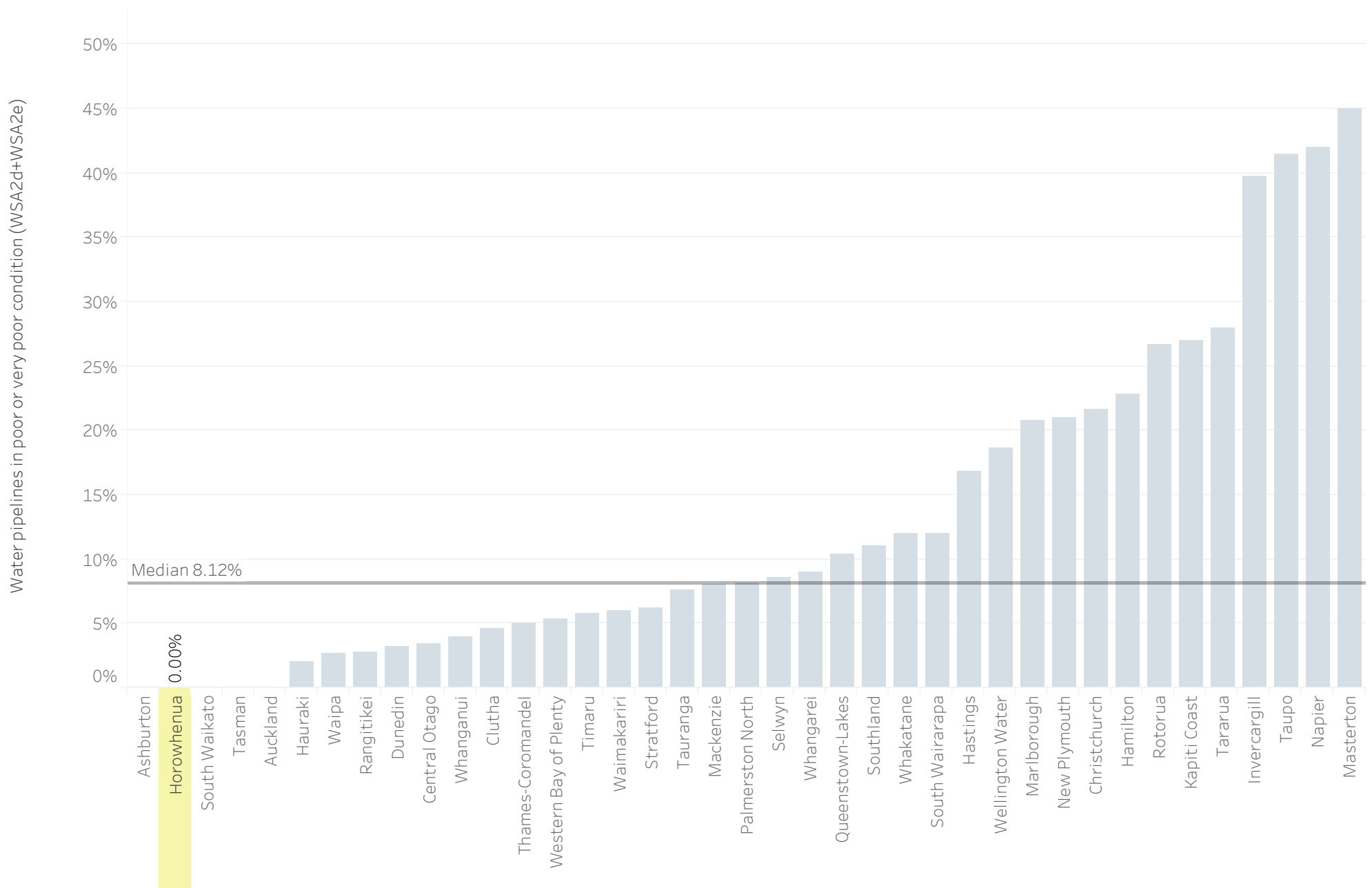


Average age of stormwater pipelines (years)



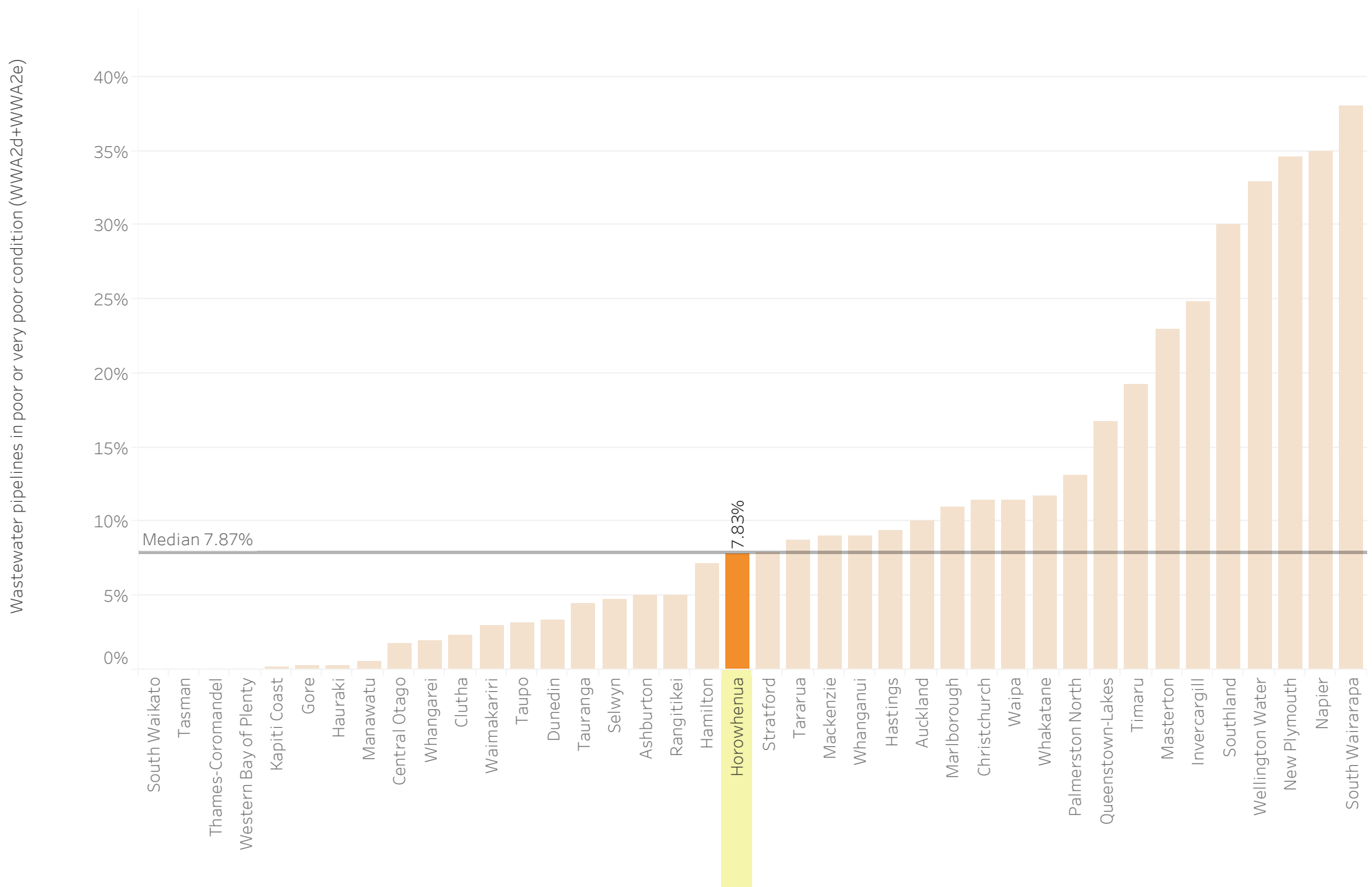
Percentage of water pipelines assessed as poor or very poor condition

Determined by the proportion of water supply pipelines assigned a condition grade of 4 and 5.



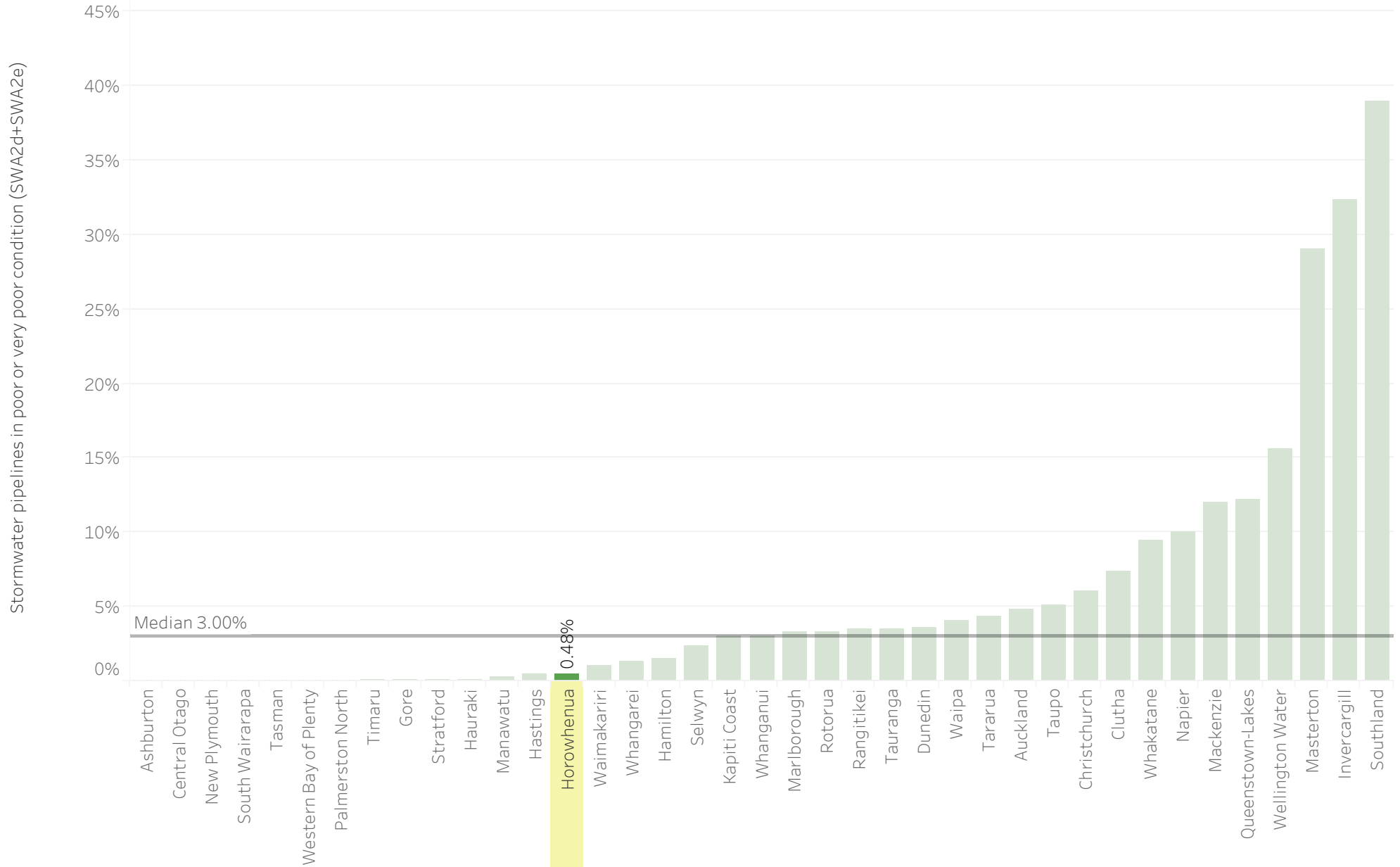
Percentage of wastewater pipelines assessed as poor or very poor condition

Determined by the proportion of wastewater pipelines assigned a condition grade of 4 and 5.

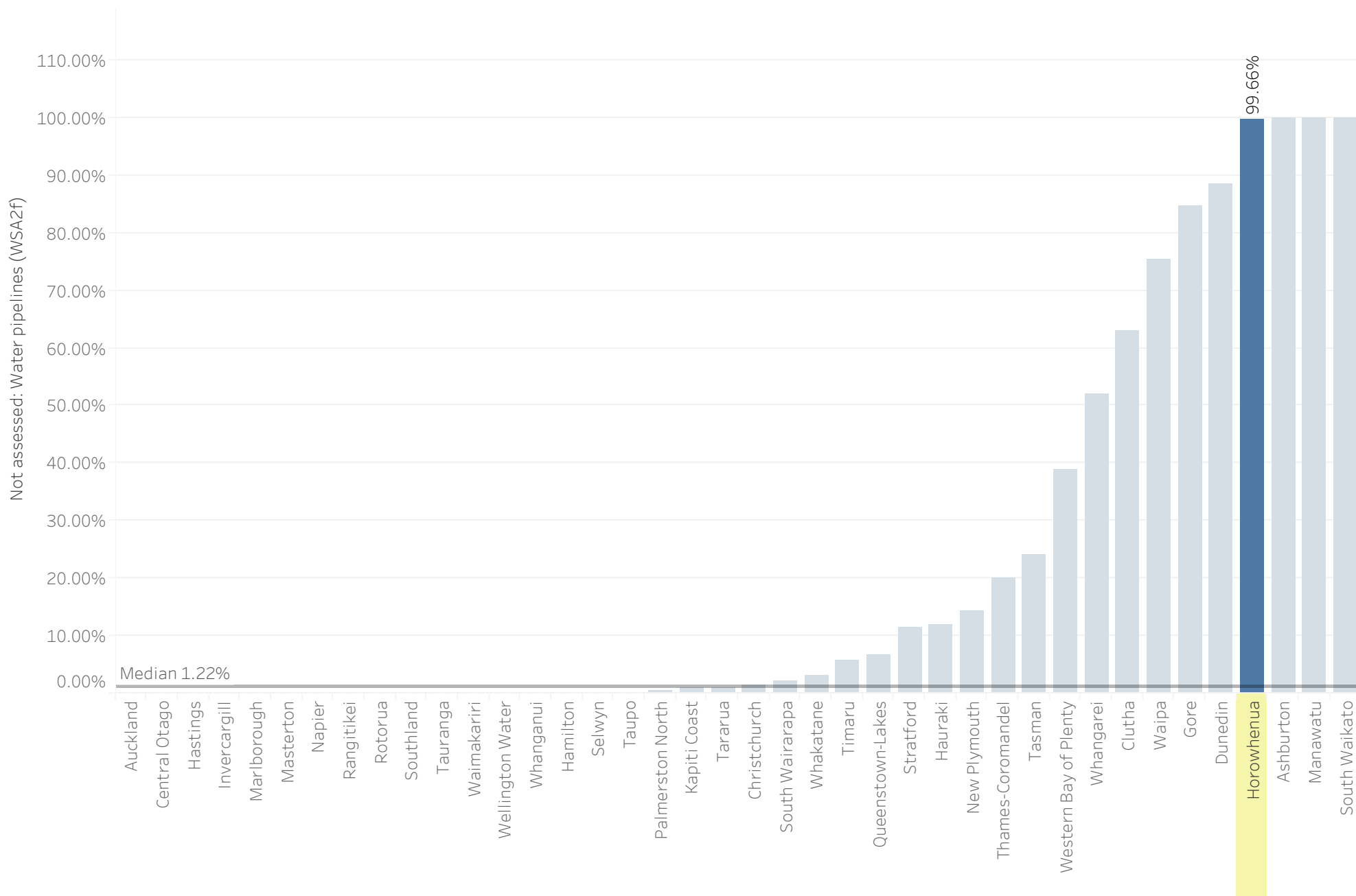


Percentage of stormwater pipelines assessed as poor or very poor condition

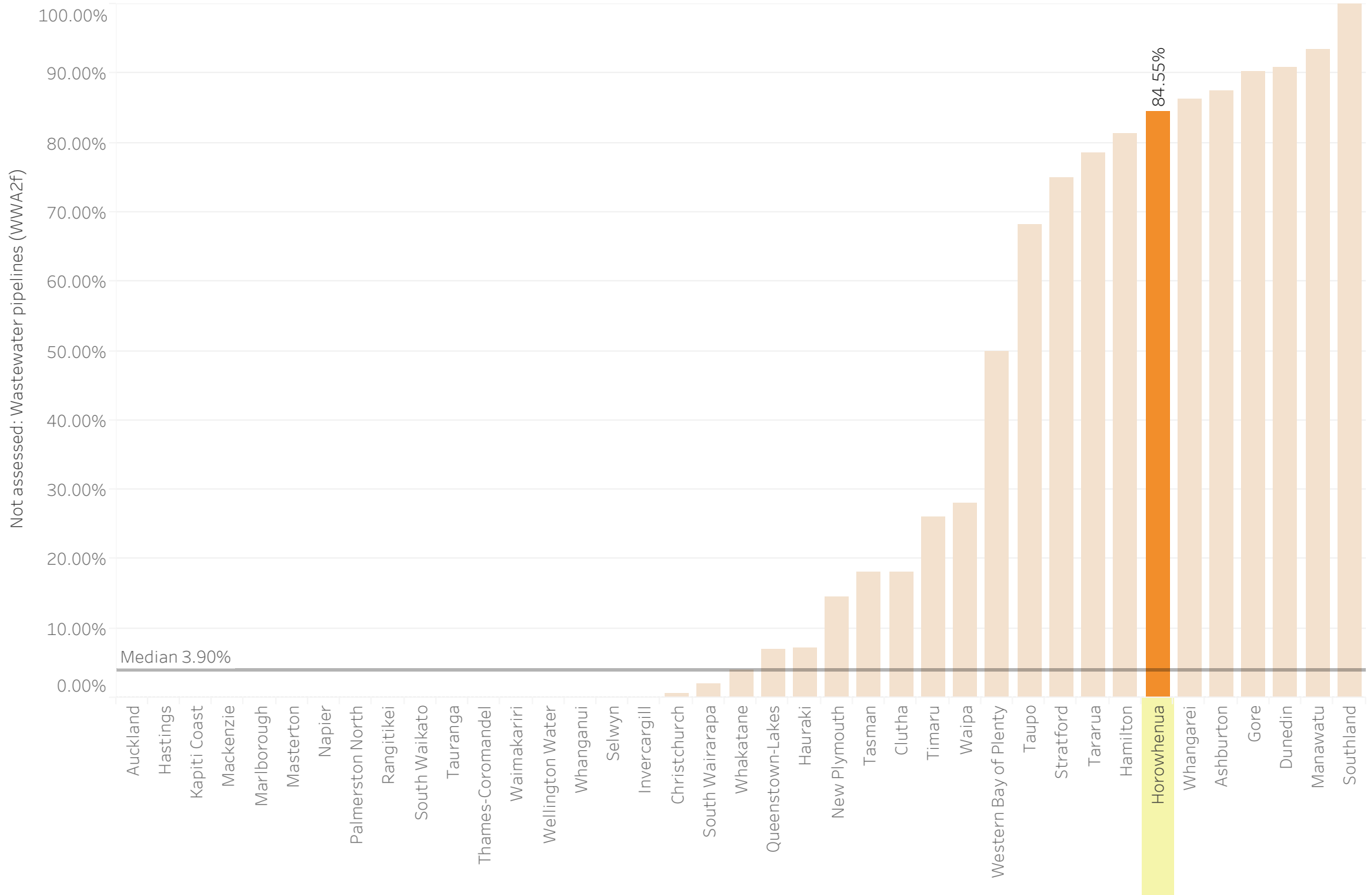
Determined by the proportion of stormwater pipelines assigned a condition grade of 4 and 5.



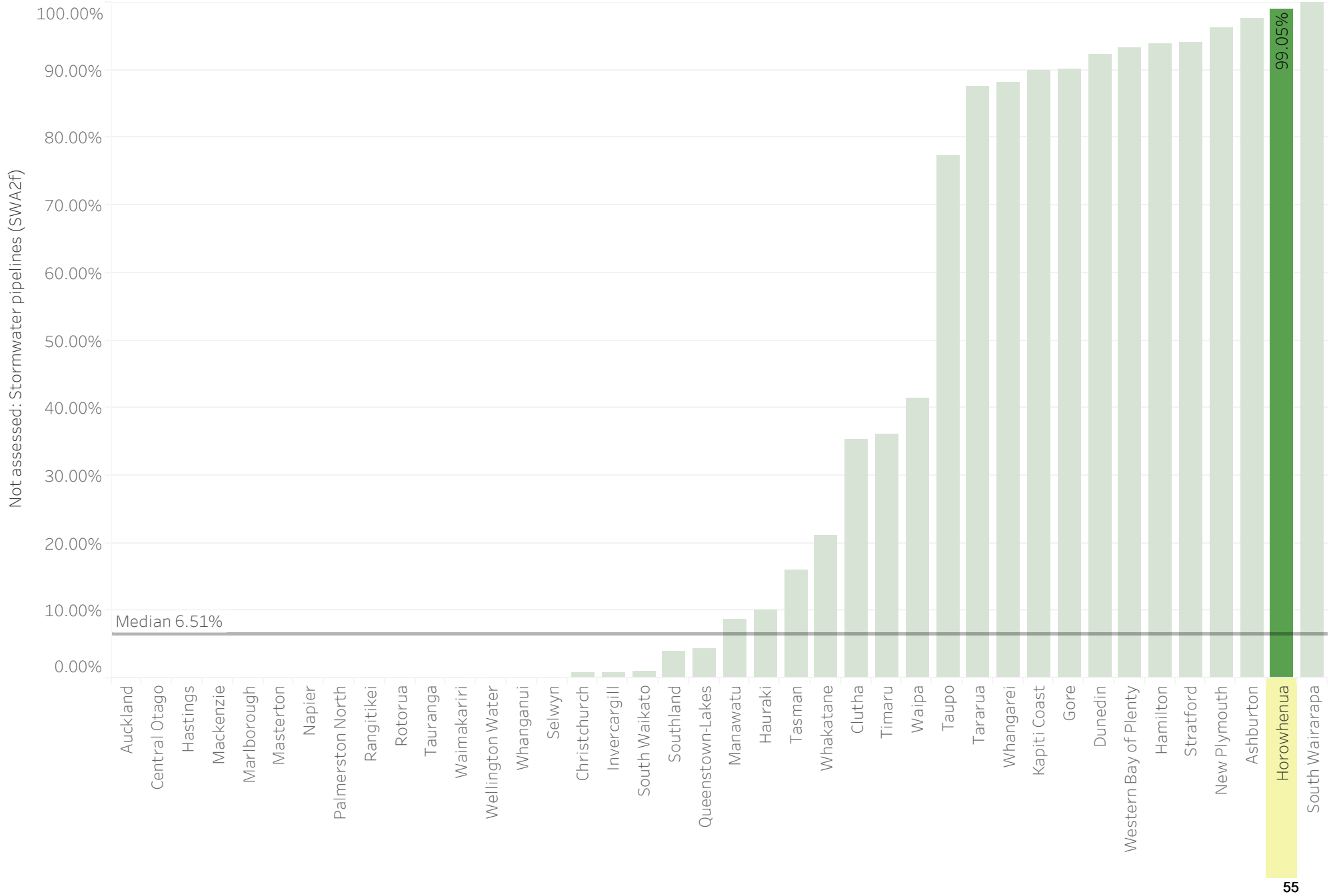
Proportion of water supply network not yet assigned a condition grading



Proportion of wastewater network not yet assigned a condition grading

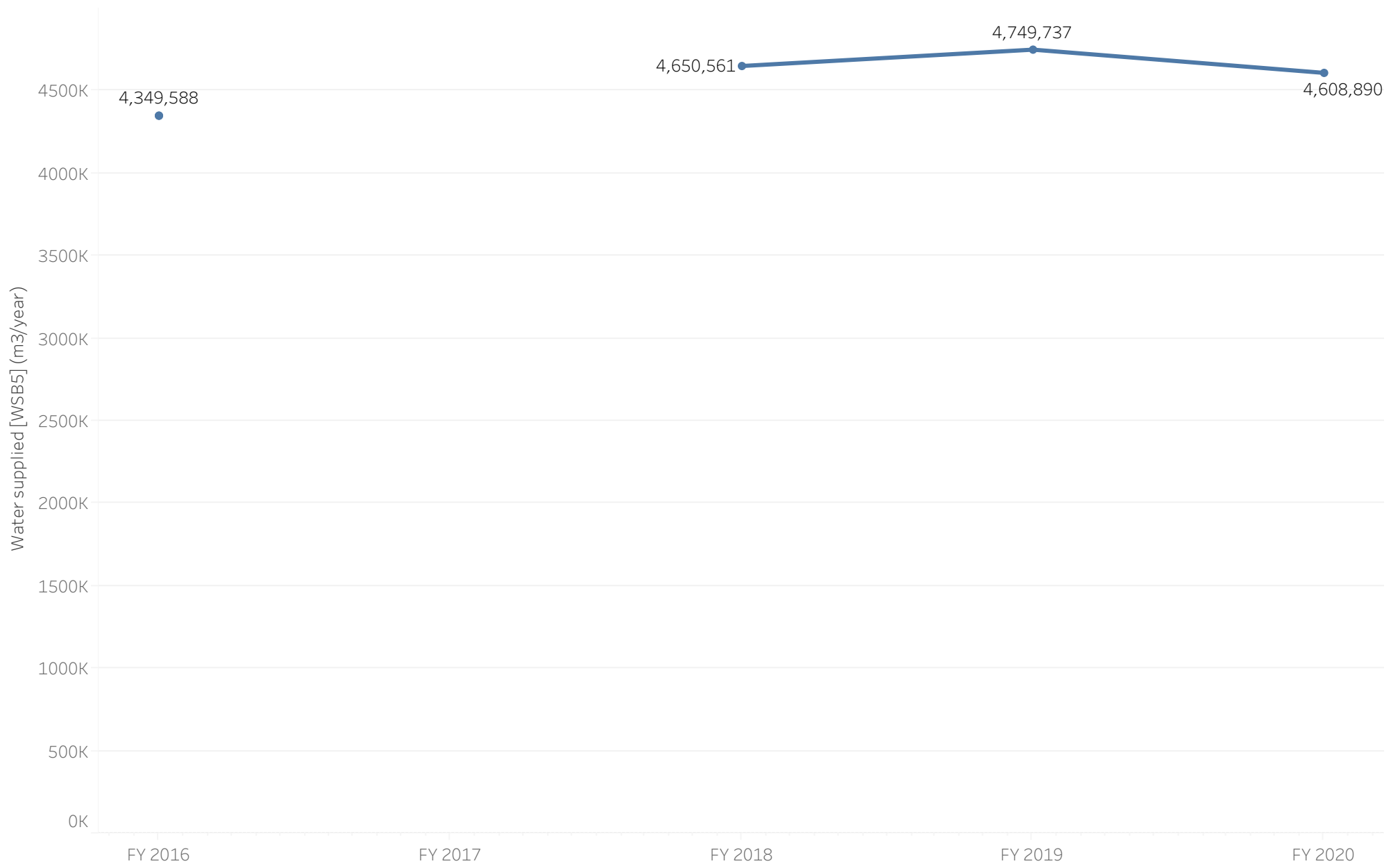


Proportion of stormwater network not yet assigned a condition grading



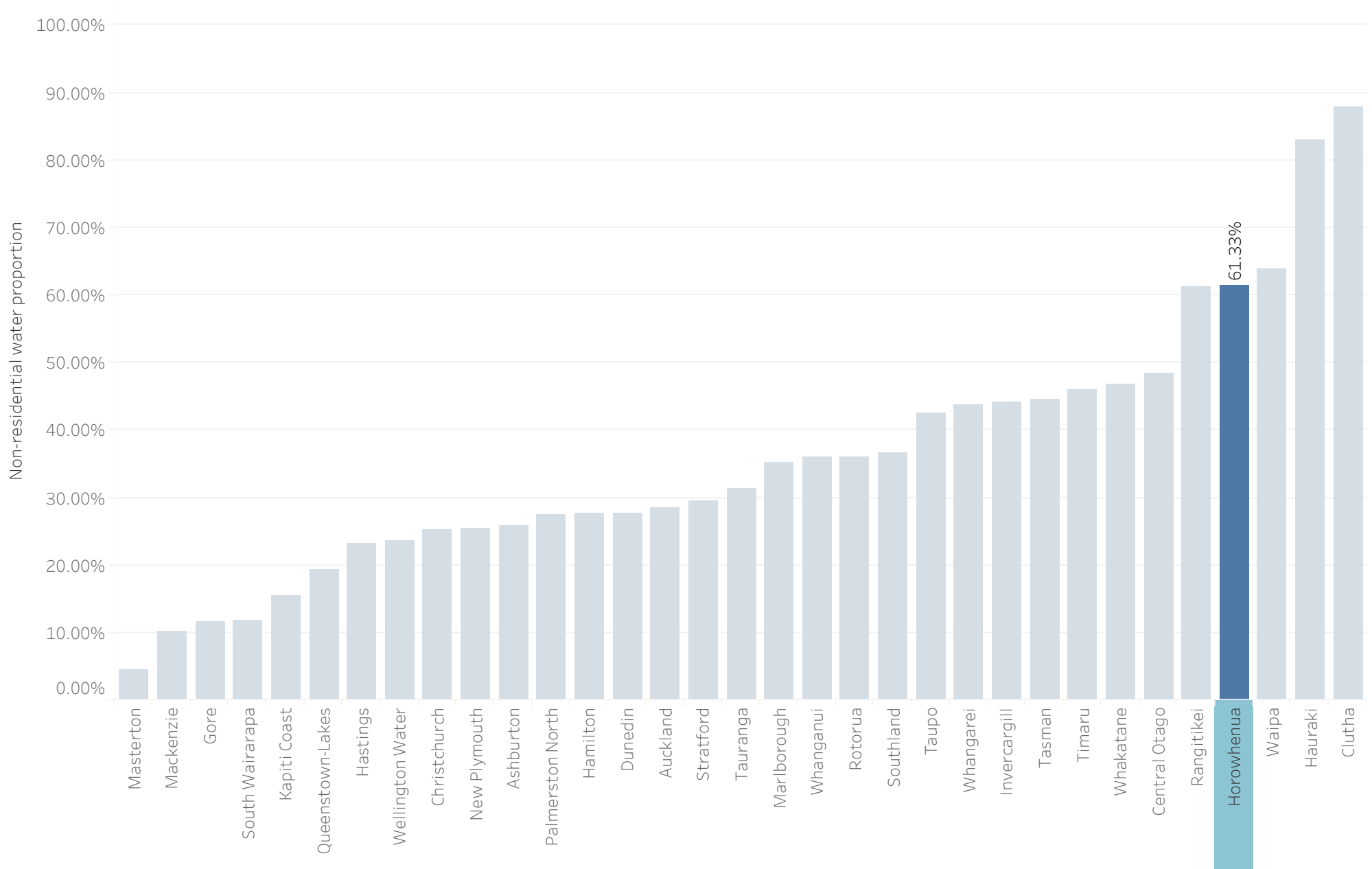
8. Resource efficiency

Water supplied to network (cubic meters/year)



Non-residential water as a proportion of total water supplies

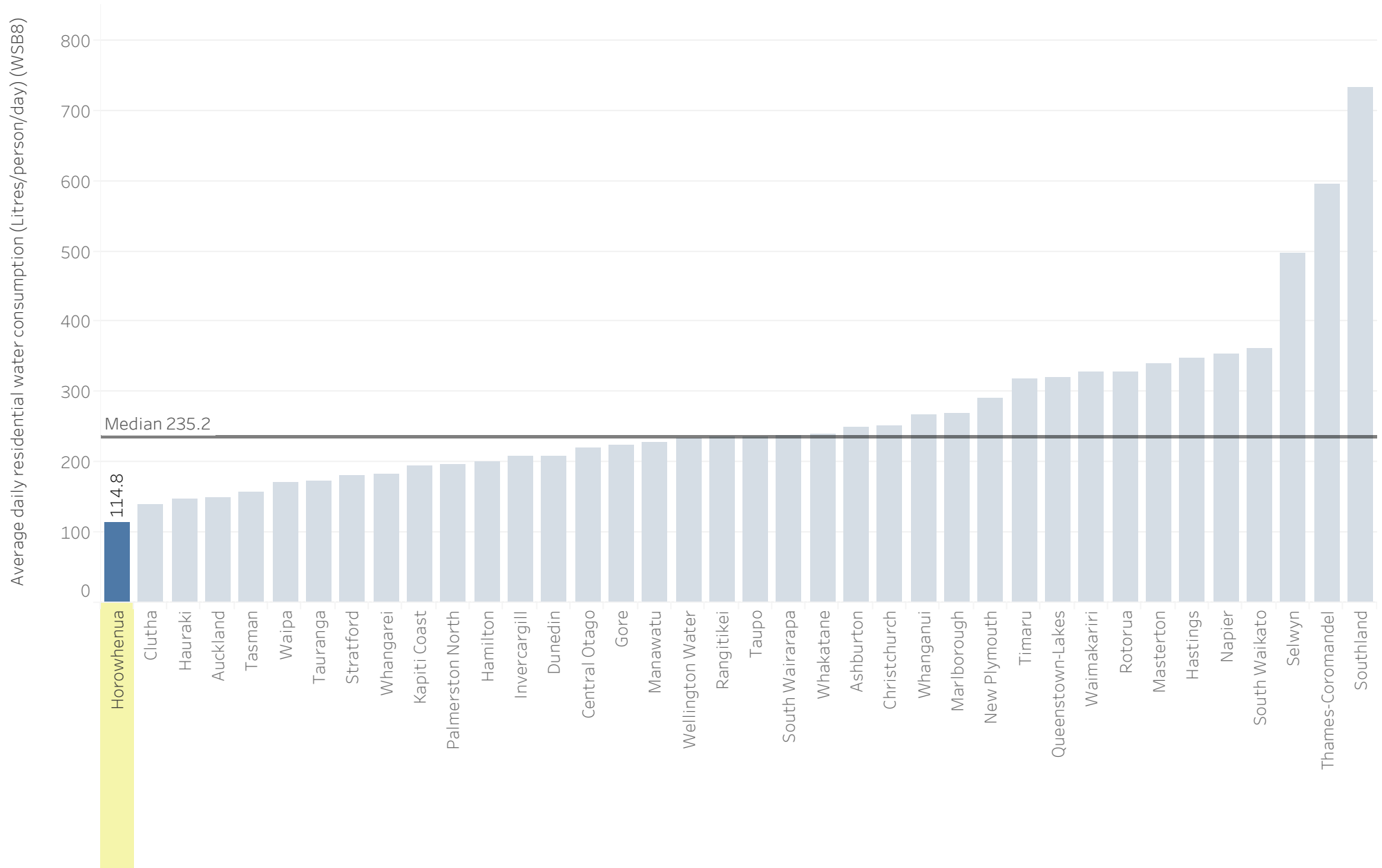
Total water supplied excludes water loss



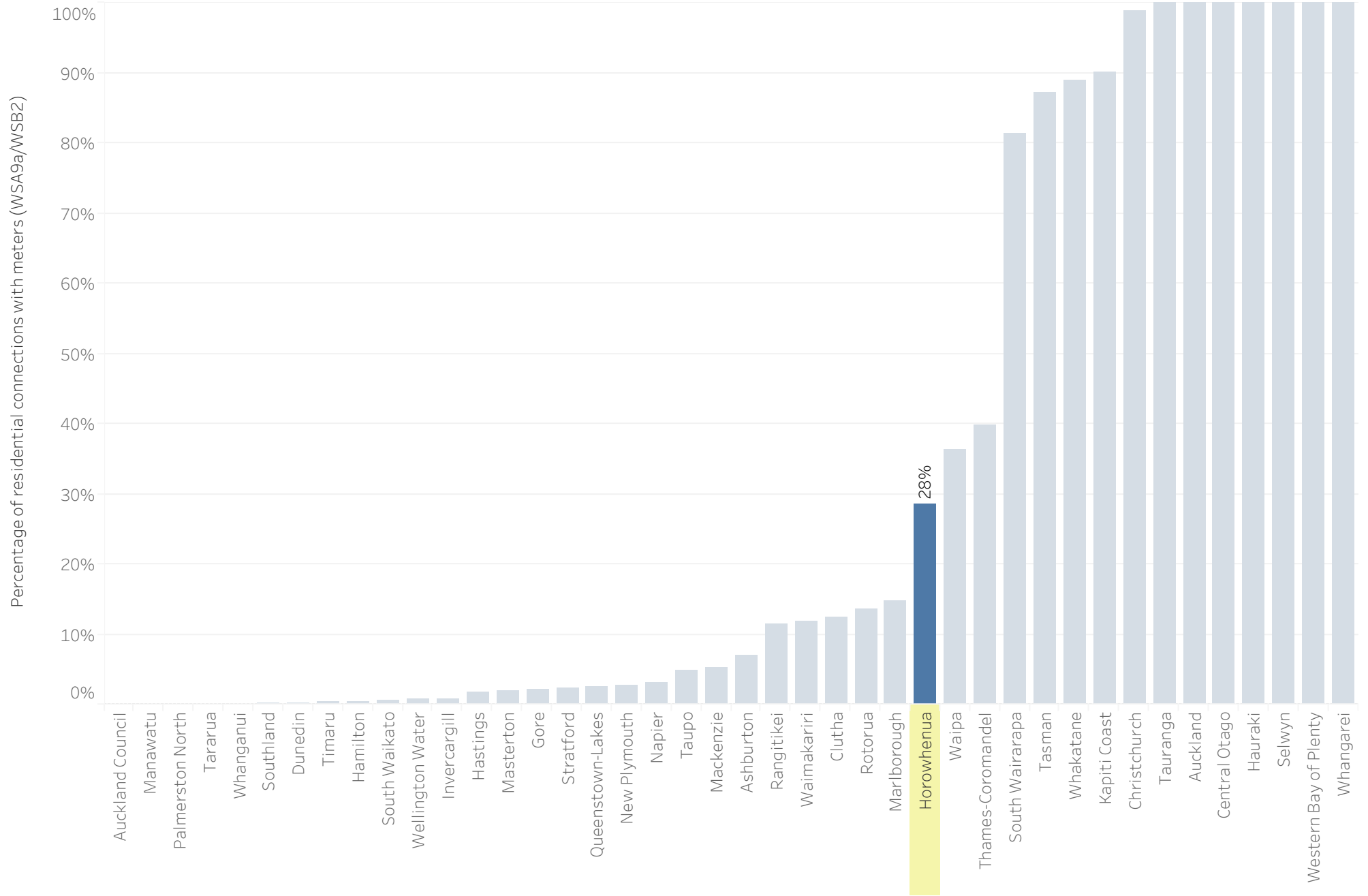
Average daily residential water use (L/person/day)



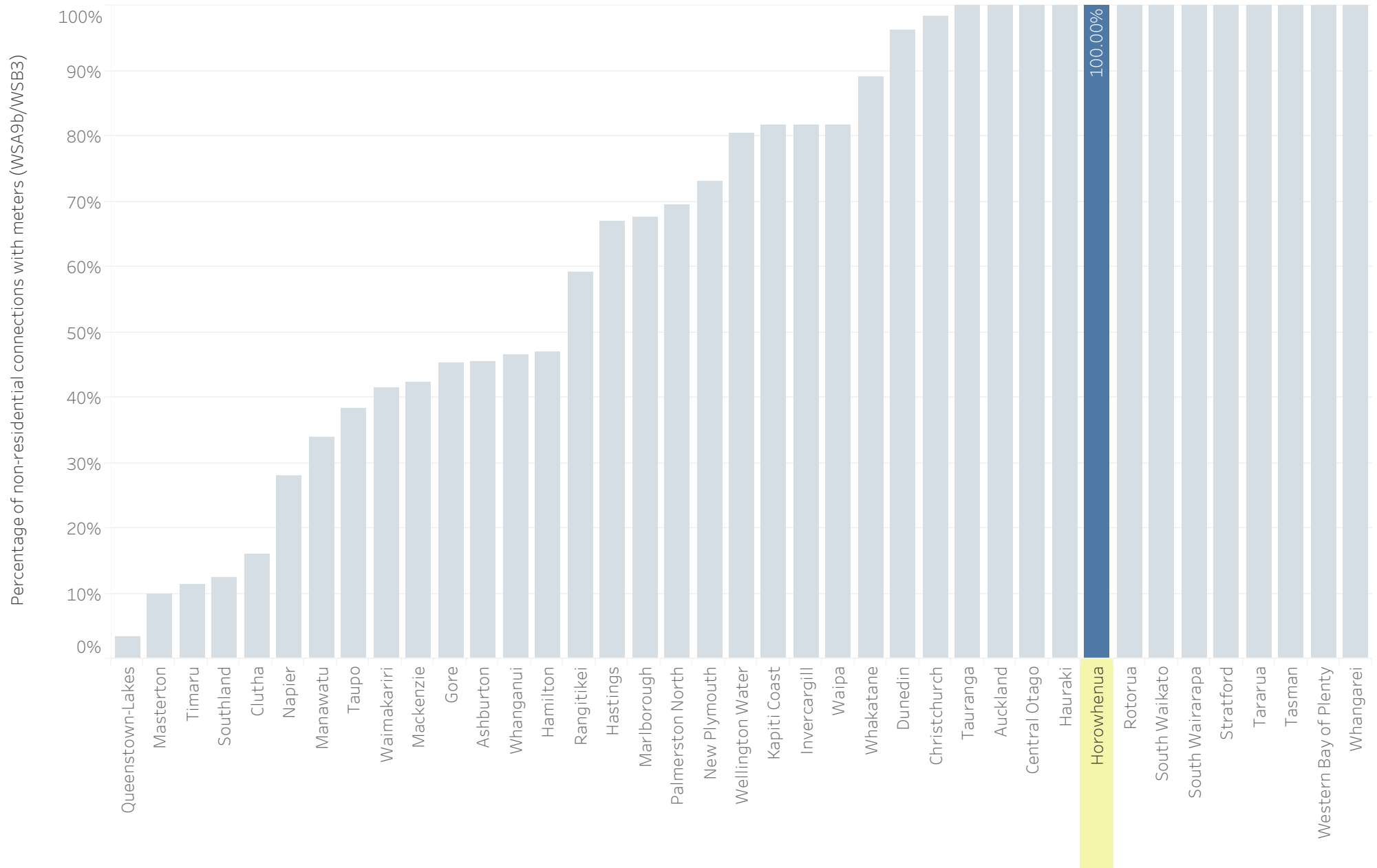
Average daily residential water use (Litres/person/day)



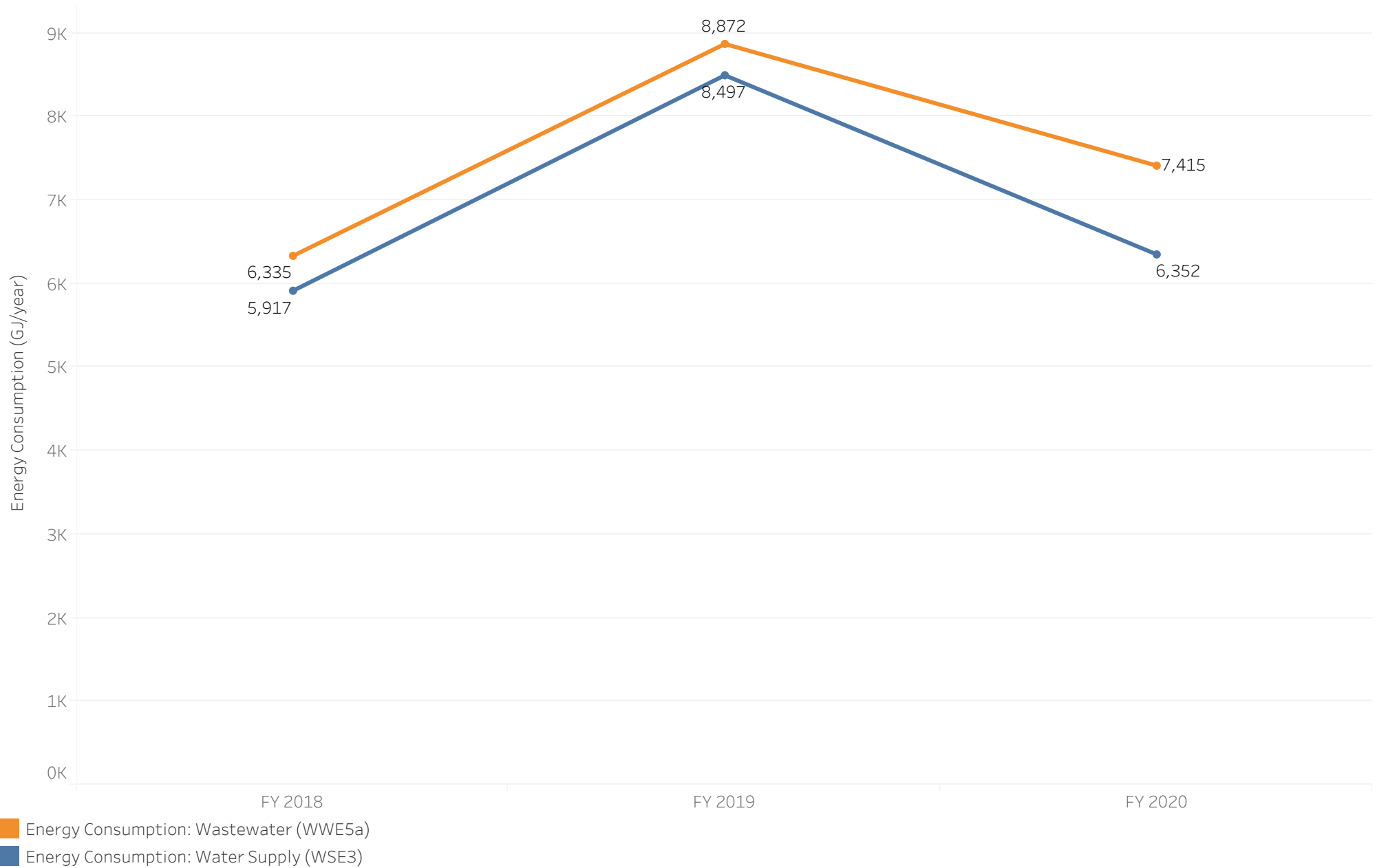
Percentage of residential properties with water meters



Percentage of non-residential properties with water meters

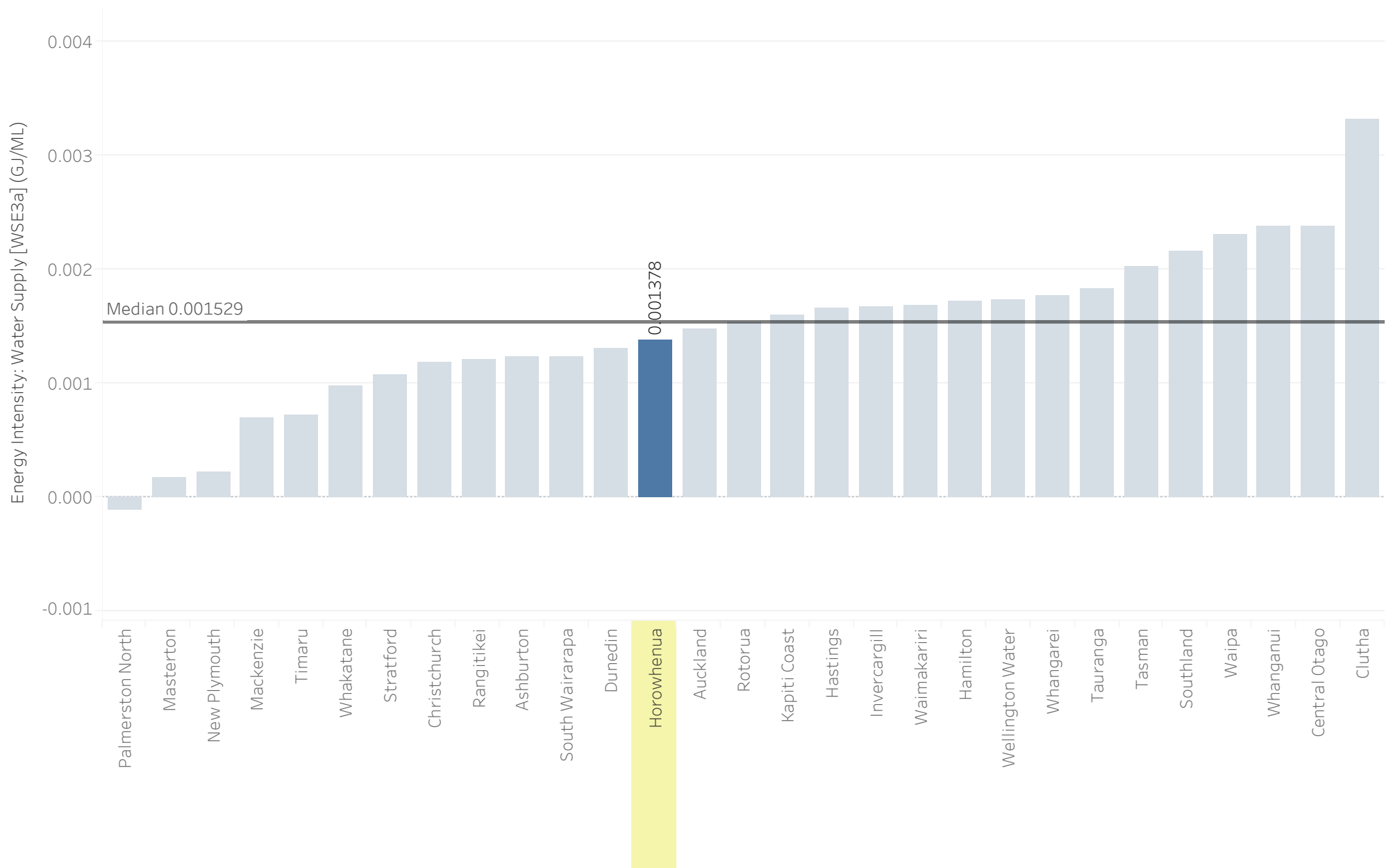


Energy consumption

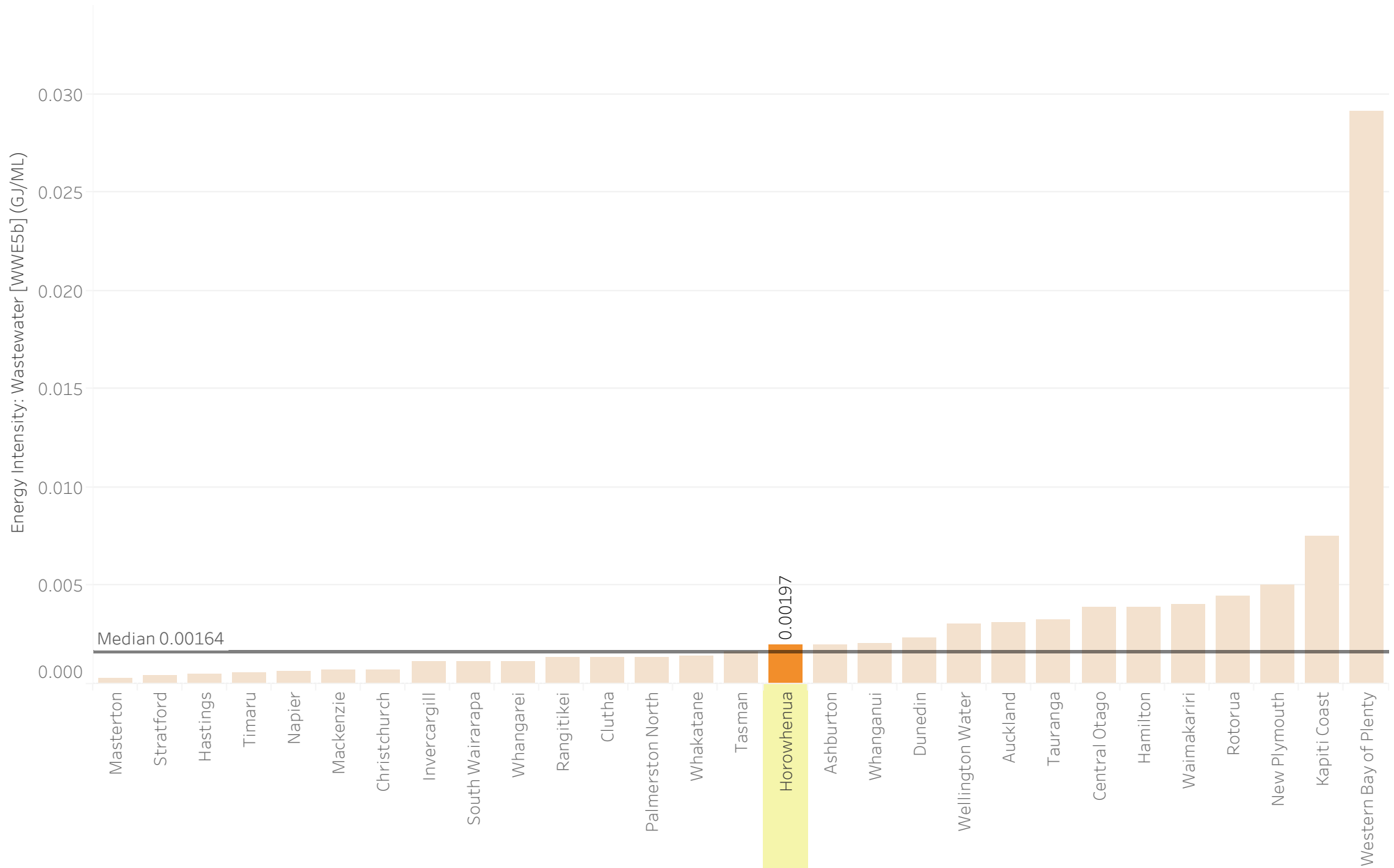


Energy intensity of water supply (GJ/ML)

The negative number in Palmerston North represents net energy returned to the grid from mini-hydro generation.

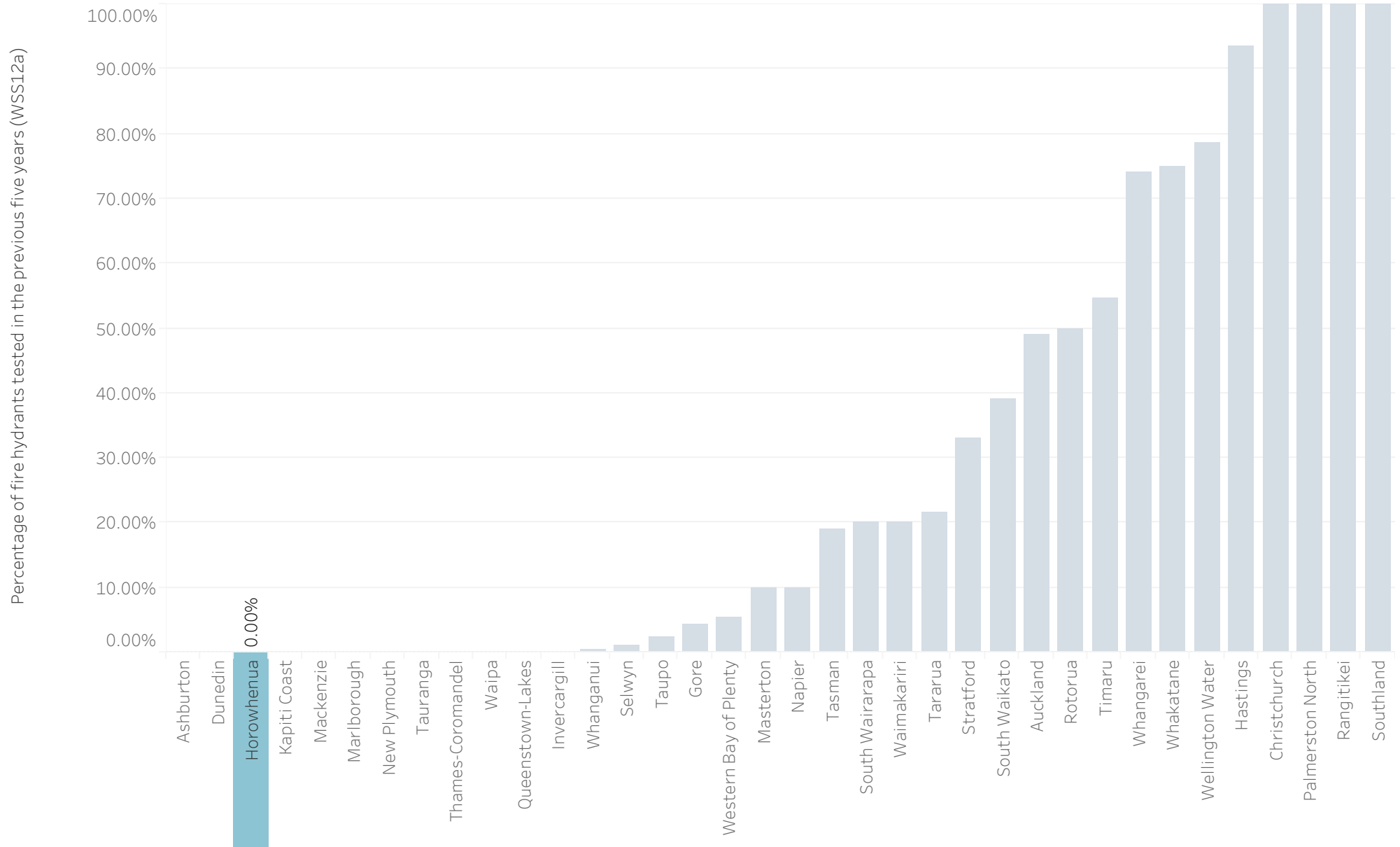


Energy intensity of wastewater (GJ/ML)

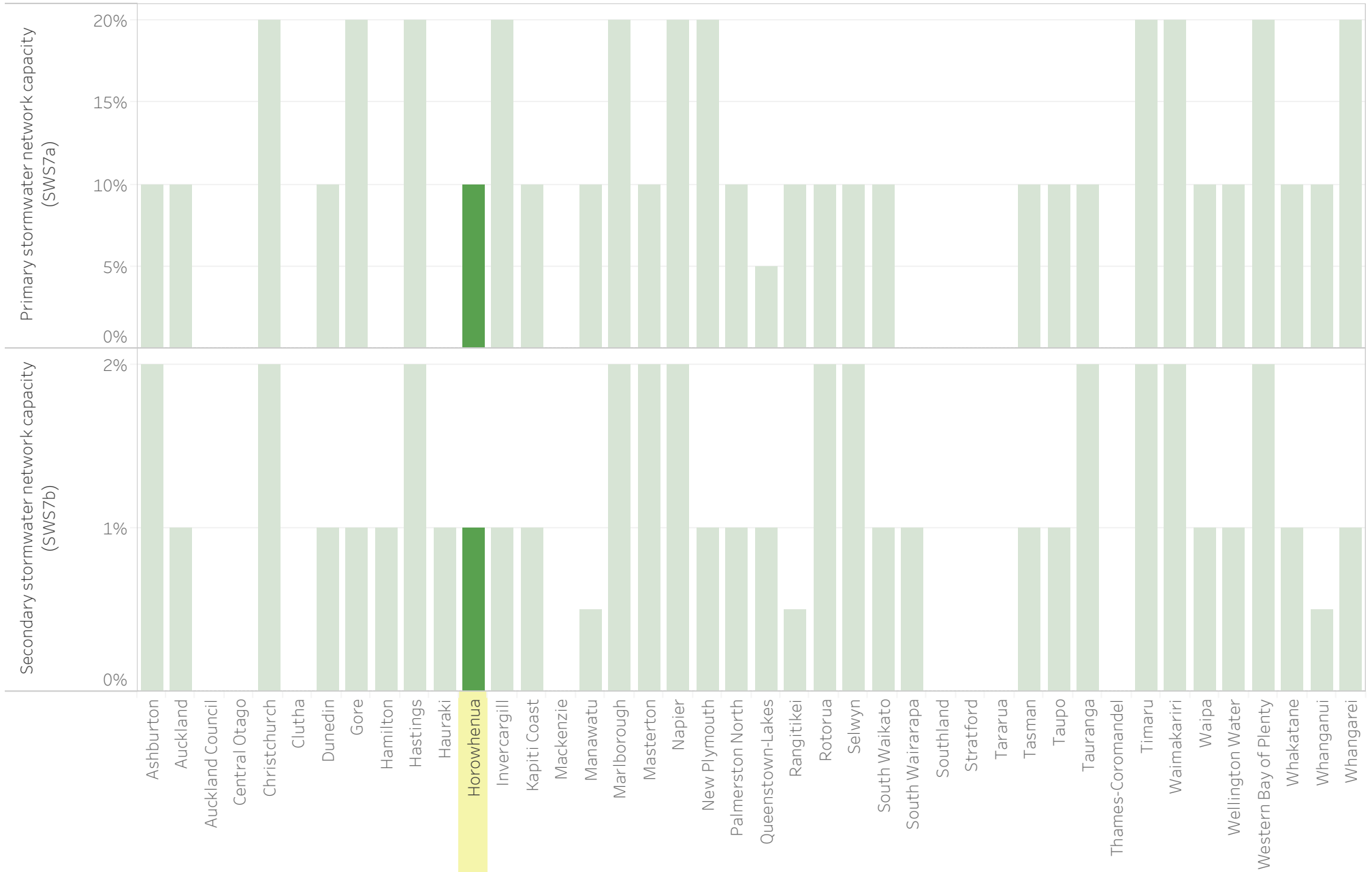


9. Resilience

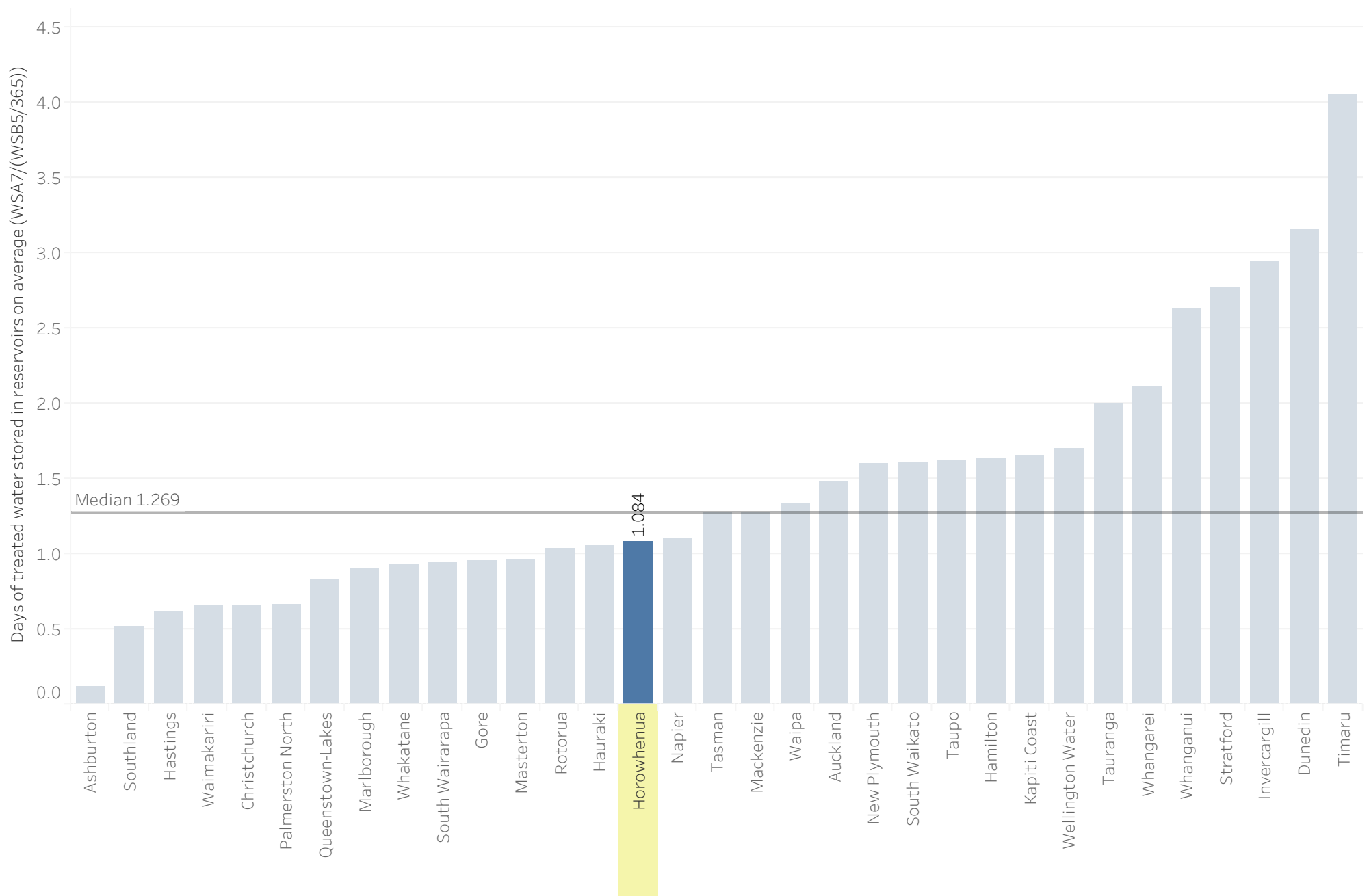
Proportion of fire hydrants tested over five years against the *New Zealand Fire Service Firefighting Water Supplies Code of Practice*



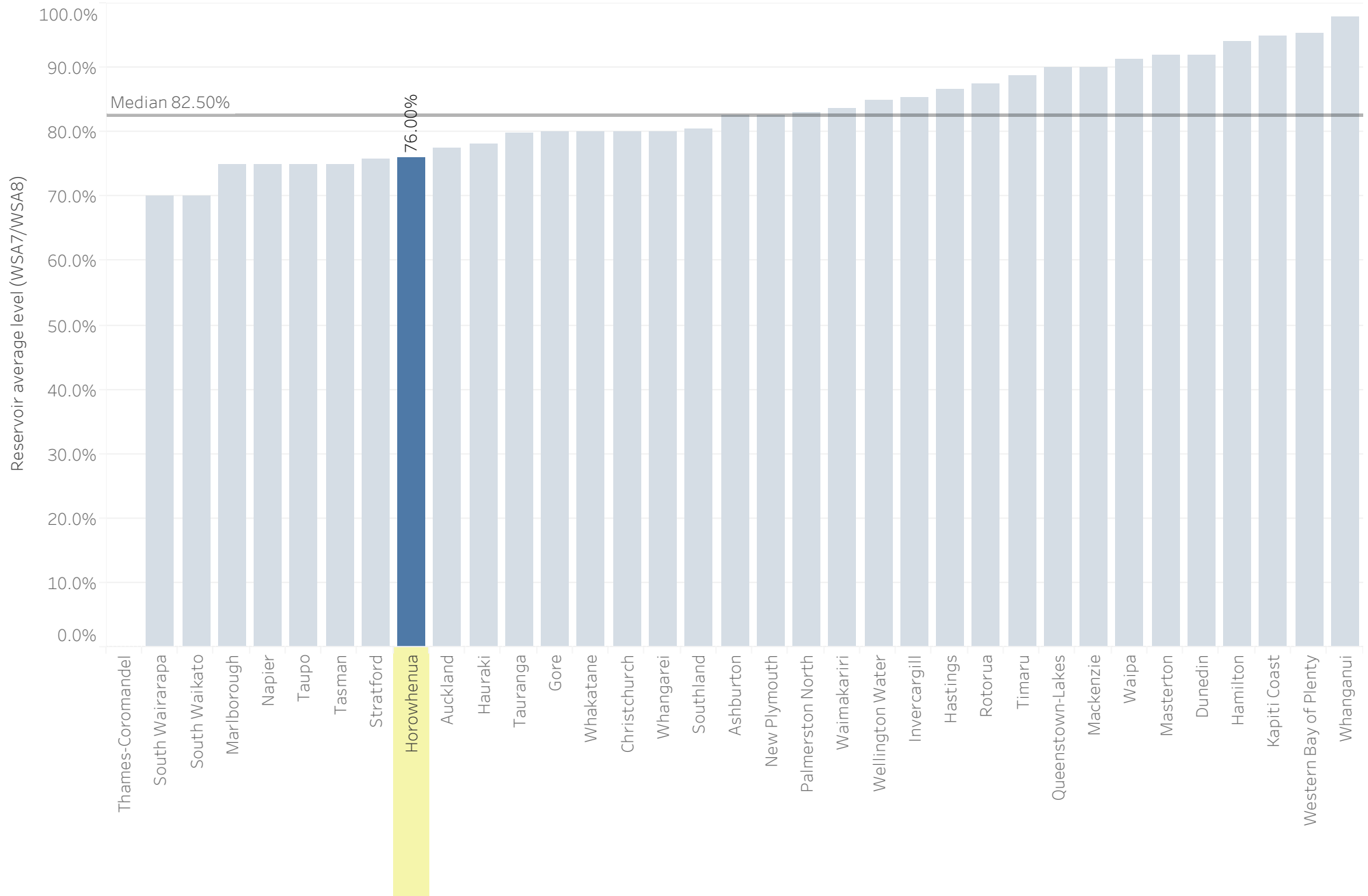
The annual exceedance probability targeted during the design of the primary and secondary stormwater network



Average number of days storage in water reservoirs



Average level of water in reservoirs



Appendix I: Data confidence and completeness of entities in this report

Service provider	Report reference	Data completeness	Average data confidence	Audit status
Ashburton District Council	Ashburton	Mostly complete	2.12	WNZ audit complete
Watercare Services Ltd	Auckland	Mostly complete	1.88	WNZ audit complete
Auckland Council	Auckland Council	Partially complete	1.76	Audit queries not returned
Central Otago District Council	Central Otago	Mostly complete	1.72	WNZ audit complete
Christchurch City Council	Christchurch	Mostly complete	1.74	Onsite external audit
Clutha District Council	Clutha	Mostly complete	1.03	WNZ audit complete
Tauranga City Council	Tauranga	Mostly complete	1.54	AECOM audit complete
Gore District Council	Gore	Mostly complete	1.83	WNZ audit complete
Hamilton City Council	Hamilton	Mostly complete	1.56	Audit queries not returned
Hastings District Council	Hastings	Mostly complete	1.52	WNZ audit complete
Hauraki District Council	Hauraki	Mostly complete	1.80	WNZ audit complete
Horowhenua District Council	Horowhenua	Mostly complete	1.47	Audit queries not returned
Invercargill City Council	Invercargill	Mostly complete	1.53	WNZ audit complete
Kapiti Coast District Council	Kapiti Coast	Mostly complete	1.34	WNZ audit complete
Mackenzie District Council	Mackenzie	Mostly complete	1.31	Audit queries not returned
Manawatu District Council	Manawatu	Partially complete	1.89	Audit queries not returned
Marlborough District Council	Marlborough	Mostly complete	1.80	AECOM audit complete
Masterton District Council	Masterton	Mostly complete	1.42	WNZ audit complete
New Plymouth District Council	New Plymouth	Mostly complete	1.80	AECOM audit complete
Palmerston North City Council	Palmerston North	Mostly complete	1.82	WNZ audit complete
Napier City Council	Napier	Mostly complete	1.82	WNZ audit complete
Queenstown Lakes District Council	Queenstown-Lakes	Mostly complete	2.14	AECOM audit complete
Rangitikei District Council	Rangitikei	Mostly complete	2.27	WNZ audit complete
Rotorua District Council	Rotorua	Mostly complete	1.56	AECOM partially audited
Selwyn District Council	Selwyn	Mostly complete	2.51	Audit queries not returned

South Waikato District Council	South Waikato	Mostly complete	1.80	AECOM partially audited
South Wairarapa District Council	South Wairarapa	Mostly complete	2.22	Audit queries not returned
Southland District Council	Southland	Mostly complete	2.51	WNZ audit complete
Stratford District Council	Stratford	Mostly complete	1.87	WNZ audit complete
Tararua District Council	Tararua	Partially complete	2.06	AECOM partially audited
Tasman District Council	Tasman	Mostly complete	1.55	WNZ audit complete
Taupo District Council	Taupo	Mostly complete	1.72	Audit queries not returned
Dunedin City Council	Dunedin	Mostly complete	1.85	WNZ audit complete
Thames - Coromandel District Council	Thames-Coromandel	Mostly complete	1.98	AECOM audit complete
Timaru District Council	Timaru	Mostly complete	1.47	WNZ audit complete
Waimakariri District Council	Waimakariri	Mostly complete	2.09	AECOM audit complete
Waipa District Council	Waipa	Mostly complete	2.01	WNZ audit complete
Wellington Water	Wellington Water	Mostly complete	2.06	Audit queries not returned
Western Bay of Plenty District Council	Western Bay of Plenty	Partially complete	2.04	Audit queries not returned
Whakatane District Council	Whakatane	Mostly complete	2.21	WNZ audit complete
Whanganui District Council	Whanganui	Mostly complete	1.74	WNZ audit complete
Whangarei District Council	Whangarei	Mostly complete	1.59	WNZ audit complete