
water
NEW ZEALAND
The New Zealand Water & Wastes Association Waiora Aotearoa
Waitaki
District Council
National Performance Review
2020
2021

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Interpreting information in this report

This report has been developed specifically for your council based on information collected through the National Performance Review. An associated interactive data portal and report on consolidated national information is available from: https://www.waternz.org.nz/Projects/NPR.

Data shown here relates to the 2021 fiscal year (1/7/2020 to 30/6/2021). Definitions for data shown can be identified codes and brackets, and accessed here: https://www.waternz.org.nz/DefinitionsGuide.

Many of the information limitations associated with data are documented in the associated report. As you will be aware, a number of performance outcomes for water services are subject to influences outside of an organisation's control. Influencing variables that should be considered when evaluating performance include:

- Service area characteristics (density of connected properties, the split of residential versus non-residential users)
- Environmental factors (including topography, quality of source water, and receiving environments, and soil types)
- Weather conditions
- Historic design practices

Performance outcomes are also influenced by data collection and reporting systems. Water service management systems range from pen-and-paper-based data collection to comprehensive data management technologies. The robustness of your own data collection will influence how you rank against others. 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.

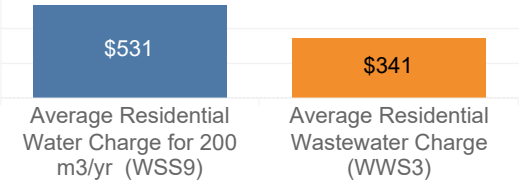
In areas of this report where you think there might be an opportunity to lift your performance to match that of another council, we suggest you reach out. Water New Zealand will be happy to facilitate conversations.

Feedback and enquiries on data in this report are also welcomed. Contact: lesley.smith@waternz.org.nz.

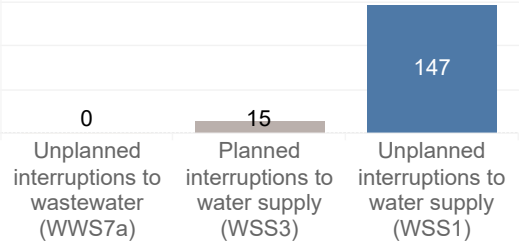
Your Council's data at a glance

This page provides a summary of information that you provided to the National Performance Review.
Trends and comparative performance information are listed in the following pages of the report.

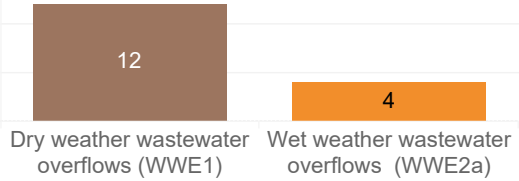
Average charges



Total interruptions



Wastewater overflows



Assets under management

Number of water treatment plants (WSA4)	12
Number of wastewater treatment plants (WWA7)	8
Kilometres of water supply network (WSA1a)	1,689
Kilometres of wastewater network (WWA1a)	202
Kilometres of stormwater network (SWA1a)	57
Average percentage of residential connections with meters (WSA9a/WSB2)	4%
Water Pump Stations (WSA5)	14
Wastewater Pump Stations (WWA5)	28
Stormwater Pump Stations (SWA7)	0

Finances

Annual three waters revenue	$11,424,515
Total CAPEX (SWF17, WWF21, WSF20)	$10,545,814
Total OPEX (WSF12 + WWF13 + SWF9)	$10,235,657
Total value of assets (WWF24b, WSF23b, SWF20, WWF24a, WSF23a)	$254,125,655

Direct employees

25.00

Contracted staff

30.15

Vacancies

9.000

Near miss reports

59

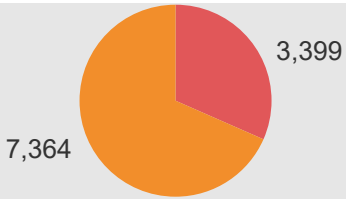
Average peak wet to dry weather flow ratio

3.797

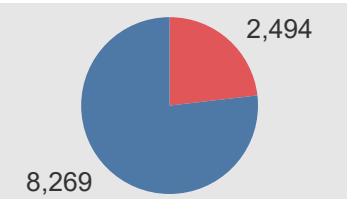
Average percentage water loss

21.2%

Wastewater serviced residential properties



Water serviced residential properties

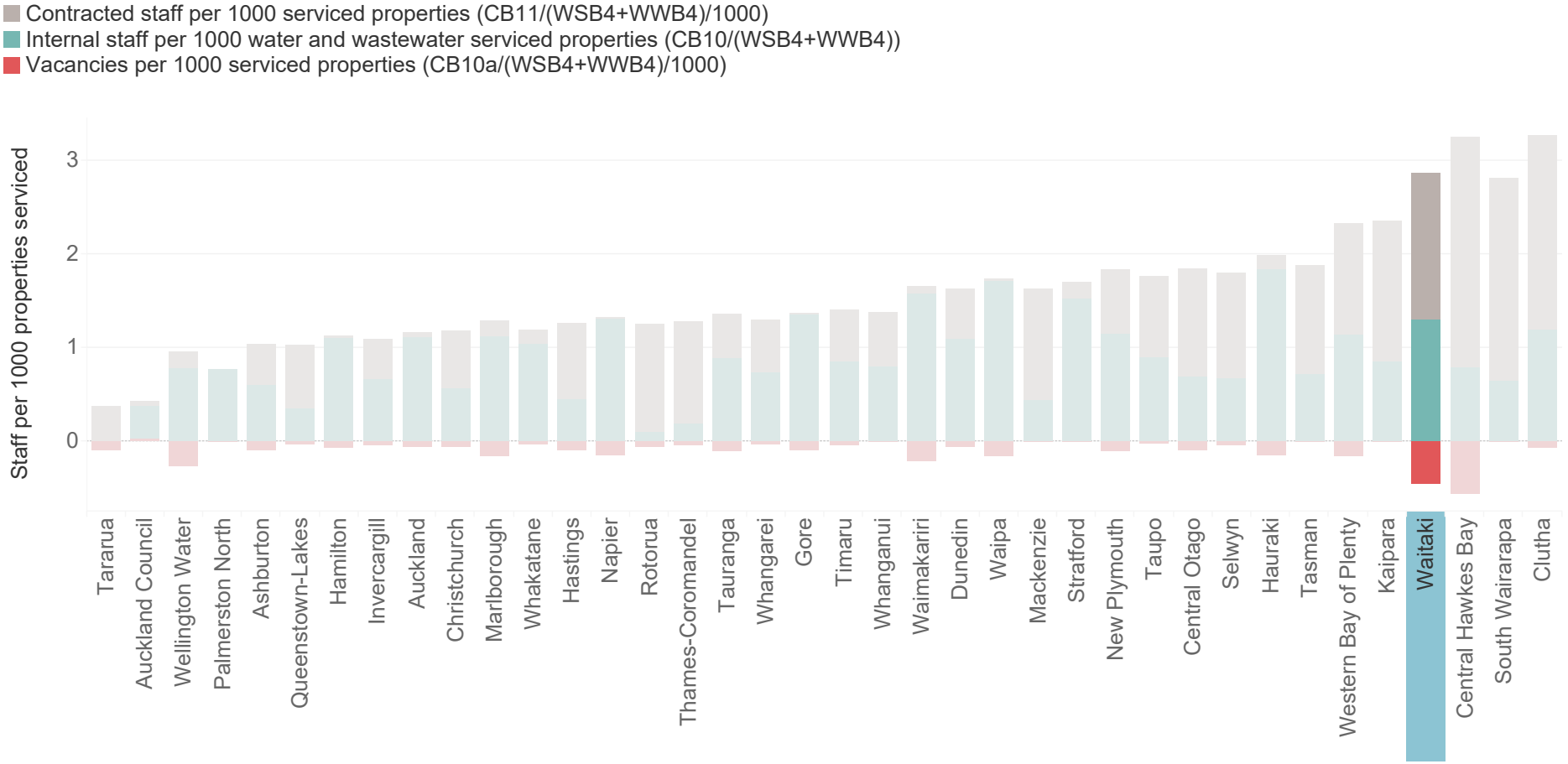


Days off work due to lost time injuries

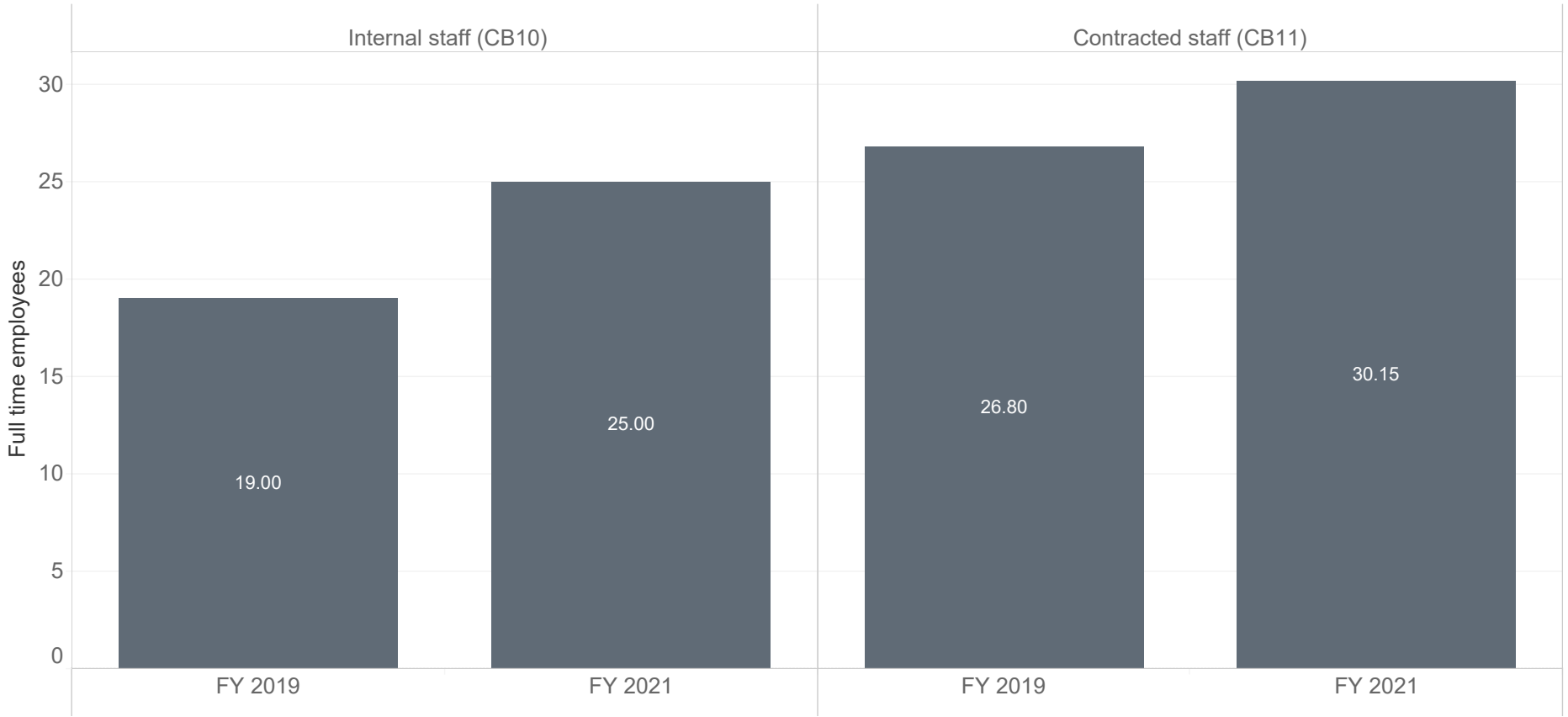
0

Staff numbers

Permanent staff, contracted staff and staff vacancies per 1000 water and wastewater properties serviced (or stormwater properties in the case of Auckland Council). The number of vacancies is shown on the negative axis.

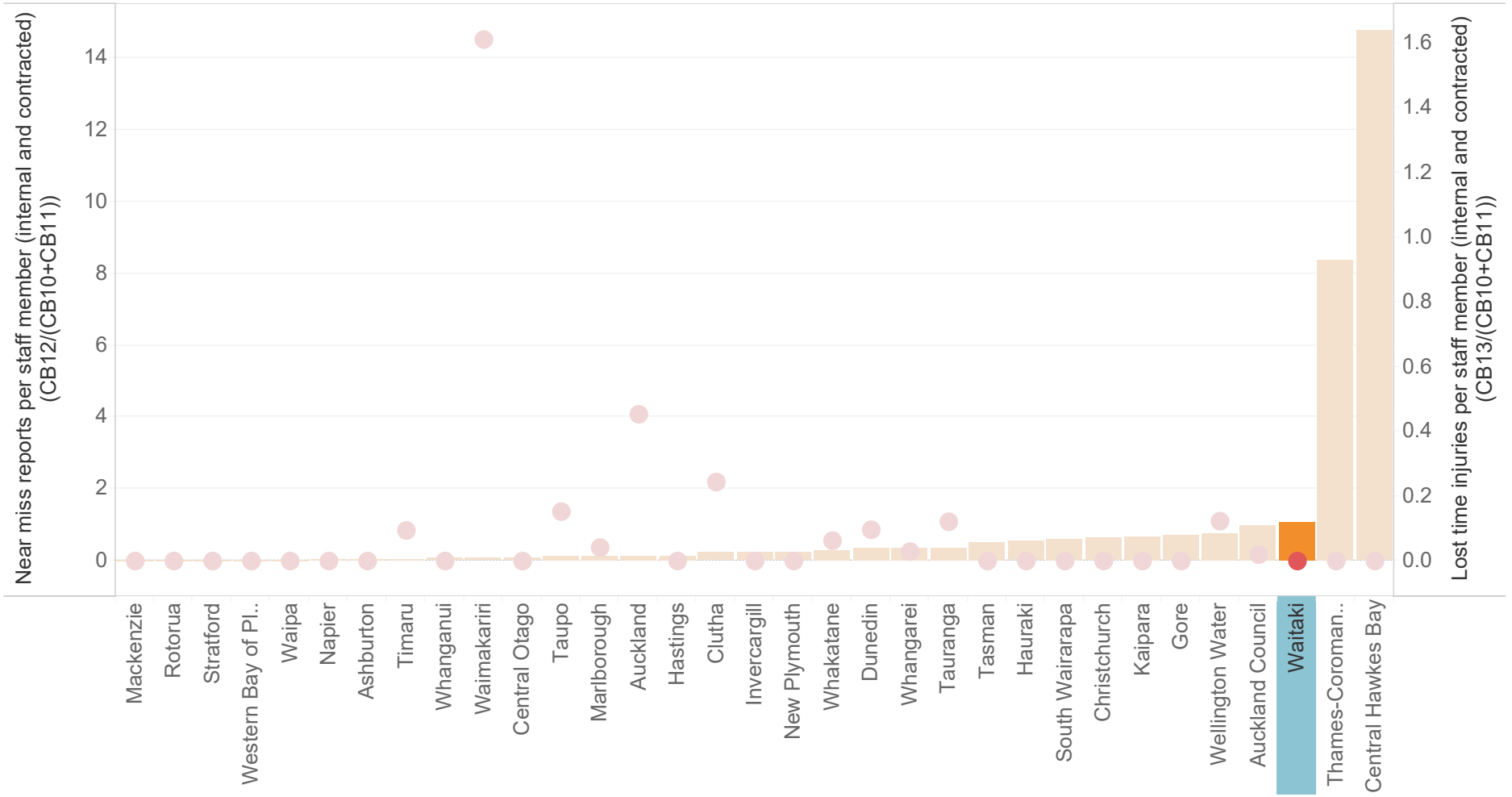


Full-time employees and contractors working in three waters at your Council



Lost time injuries and near misses per staff member

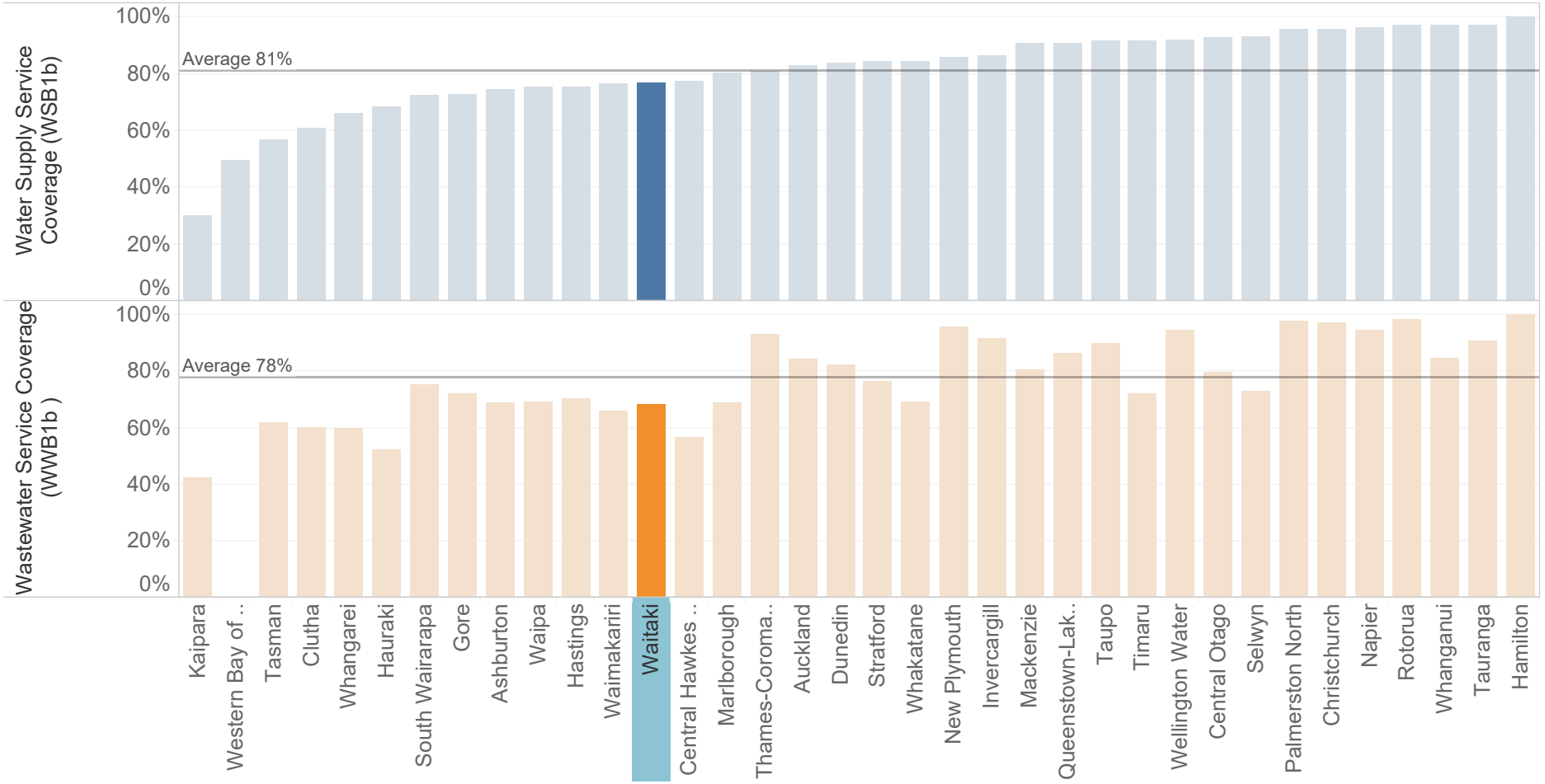
Figure covers both internal and external staff



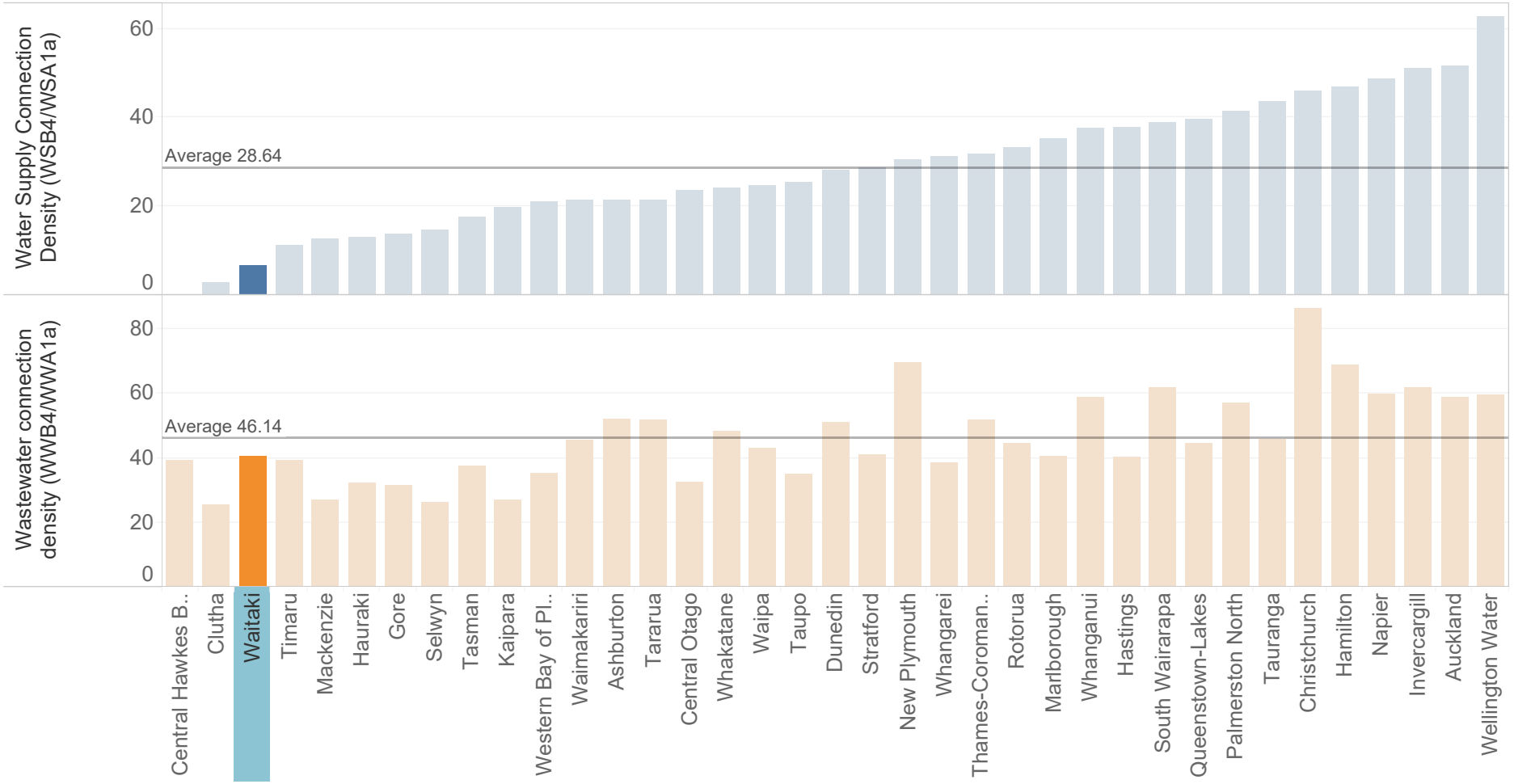
Lost time injuries at your Council

Near misses reported at your Council

Service coverage levels

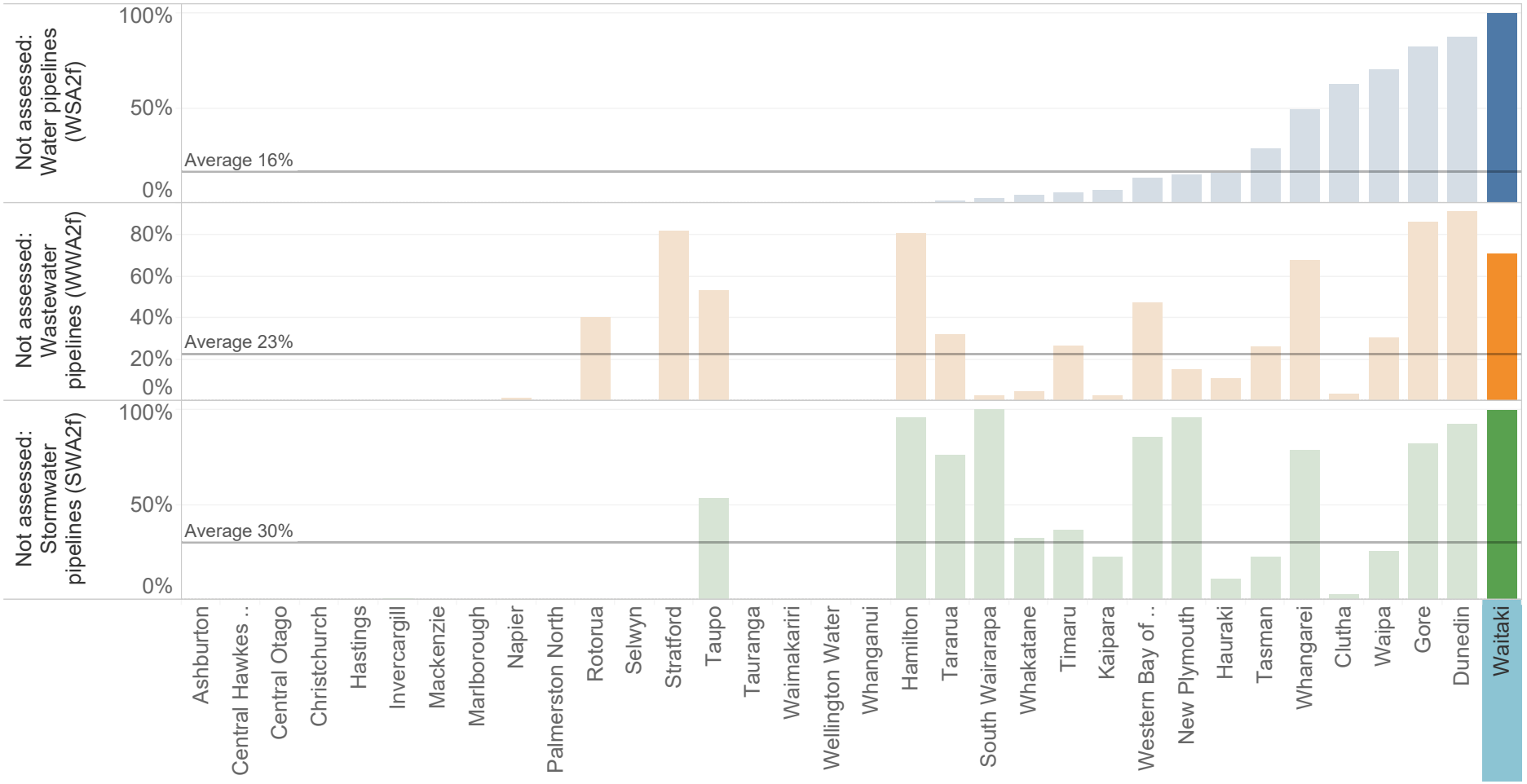


Serviced properties per kilometre of pipe



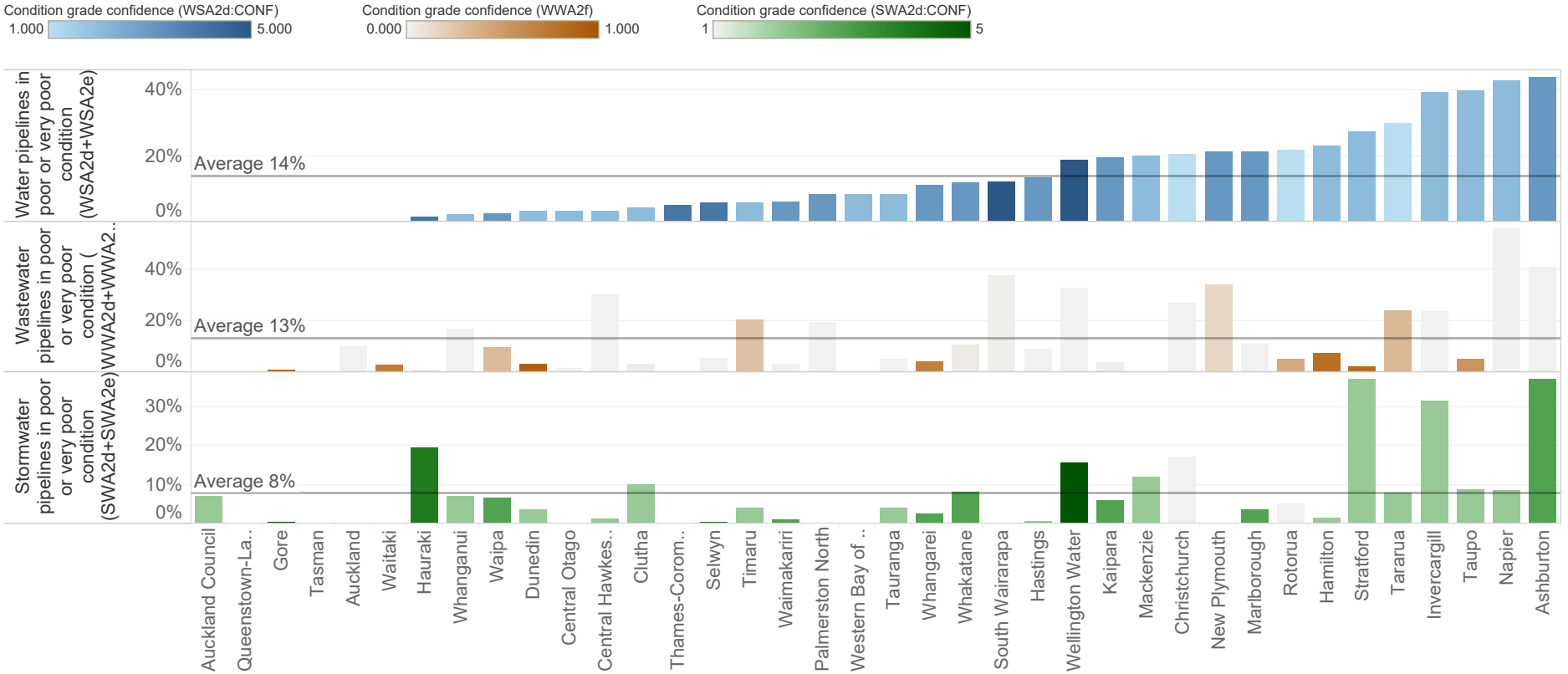
Percentage of pipelines that have not recieved a condition grading

Available for water supply (WSA2f), wastewater (WWA2f) and stormwater (SWA2f)



Percentage of pipelines assessed in poor or very poor condition

Determined by the proportion of pipelines assigned a condition grades 4 and 5.
Not all pipelines are assessed using the same condition grading approach, limiting the comparability of data.
Not all pipelines have recieved a condition grading. Pipelines that have yet to recieve a condition grading are illustrated in the previous figure.
Colour gradings illustrate confidence in data provided.

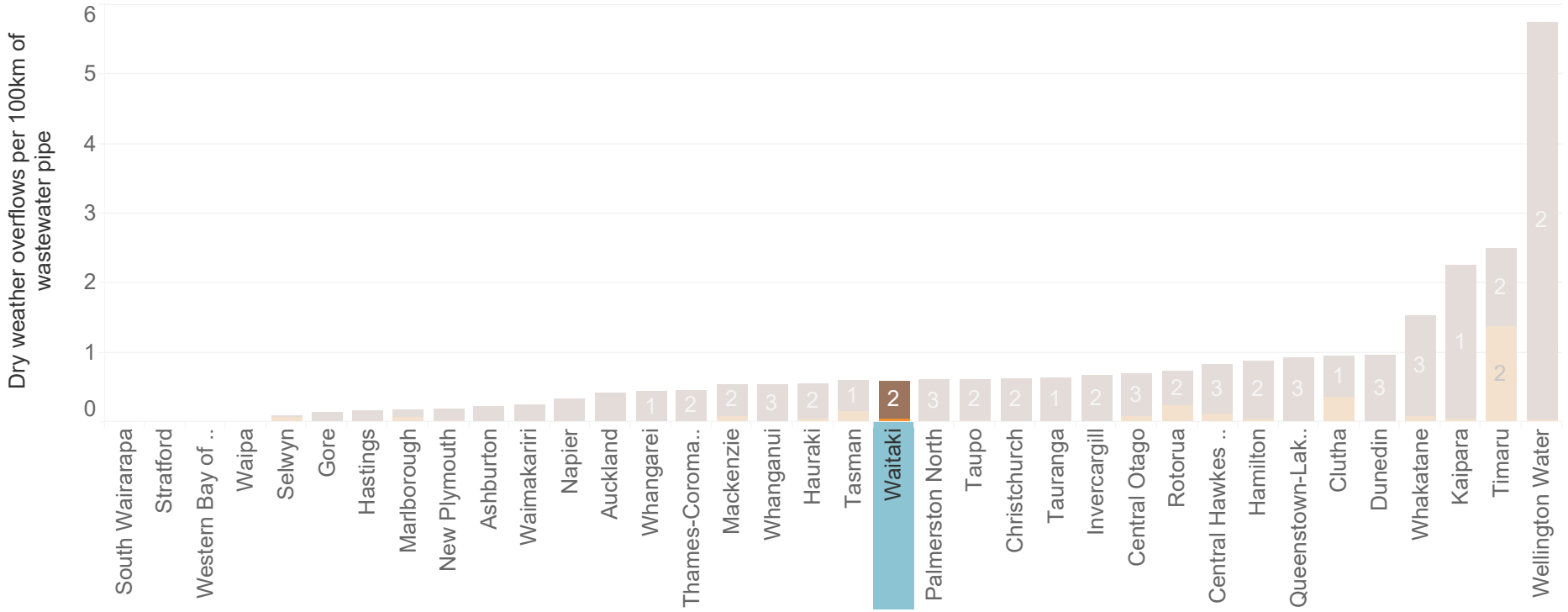


Dry weather wastewater overflows

The graph shows wastewater overflows per 10km of wastewater pipe. It distinguishes between dry weather overflows caused by blockages and those caused by plant failures (including power outages). Where it was not possible to dissagregate these have been assigned to blockages.

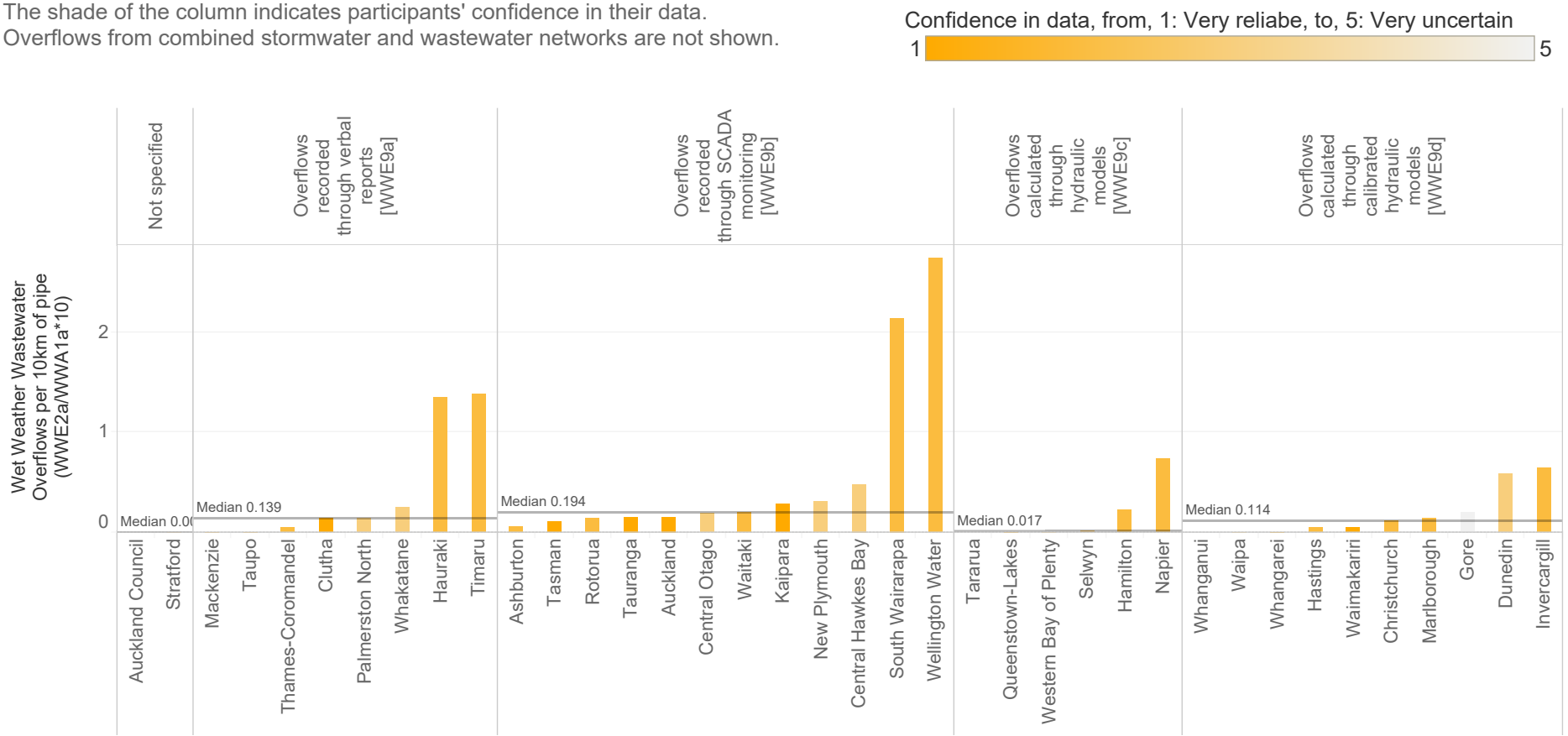
Confidence in data
1 = Highly reliable
2 = Reliable
3 = Less reliable
4 = Uncertain
5 = Highly uncertain

Overflows caused by blockages (WWE1a/WWA1a)
Overflows caused by plant failures (WWE1b/WWA1a)

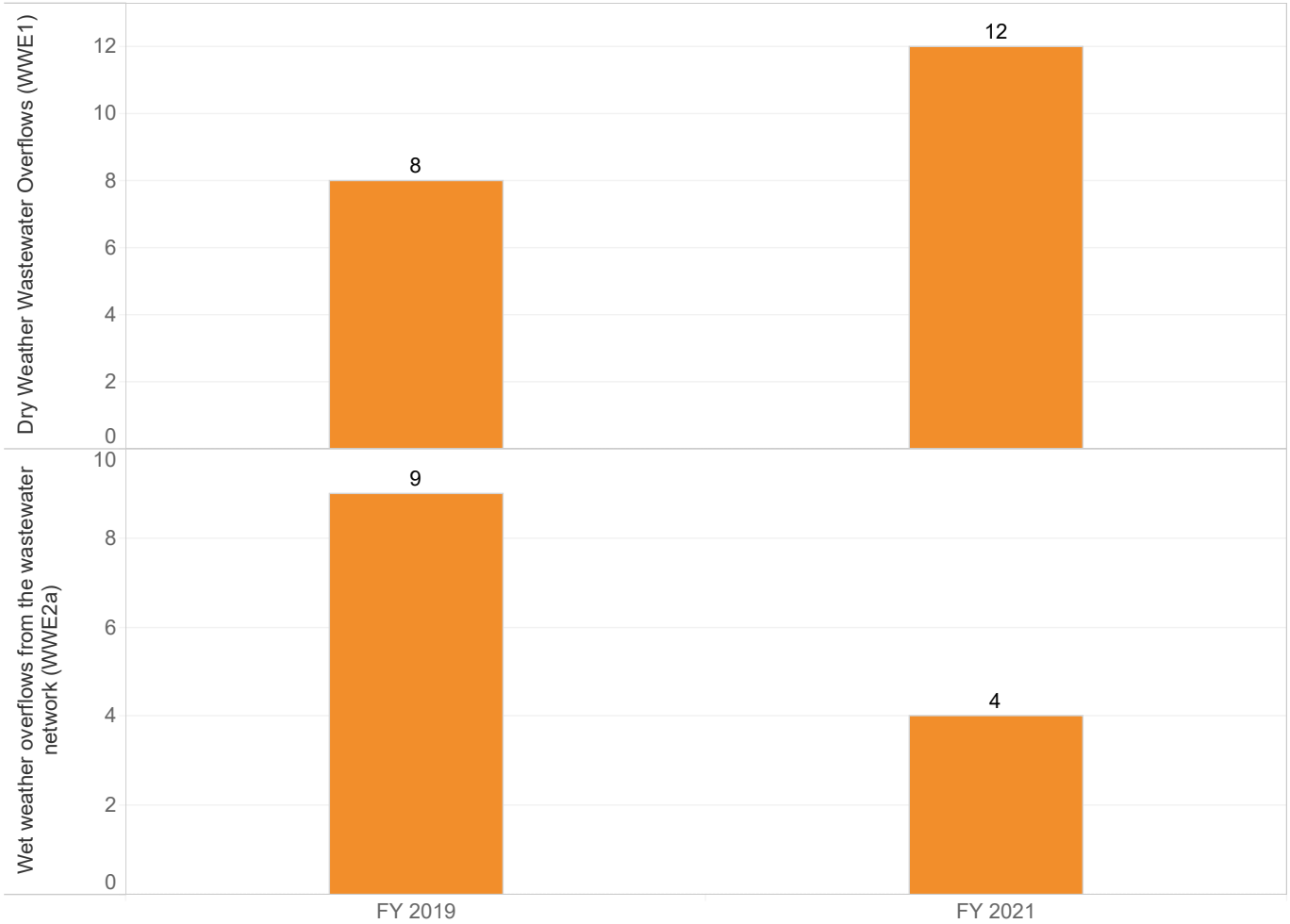


Wet weather overflows per 10km of wastewater pipe

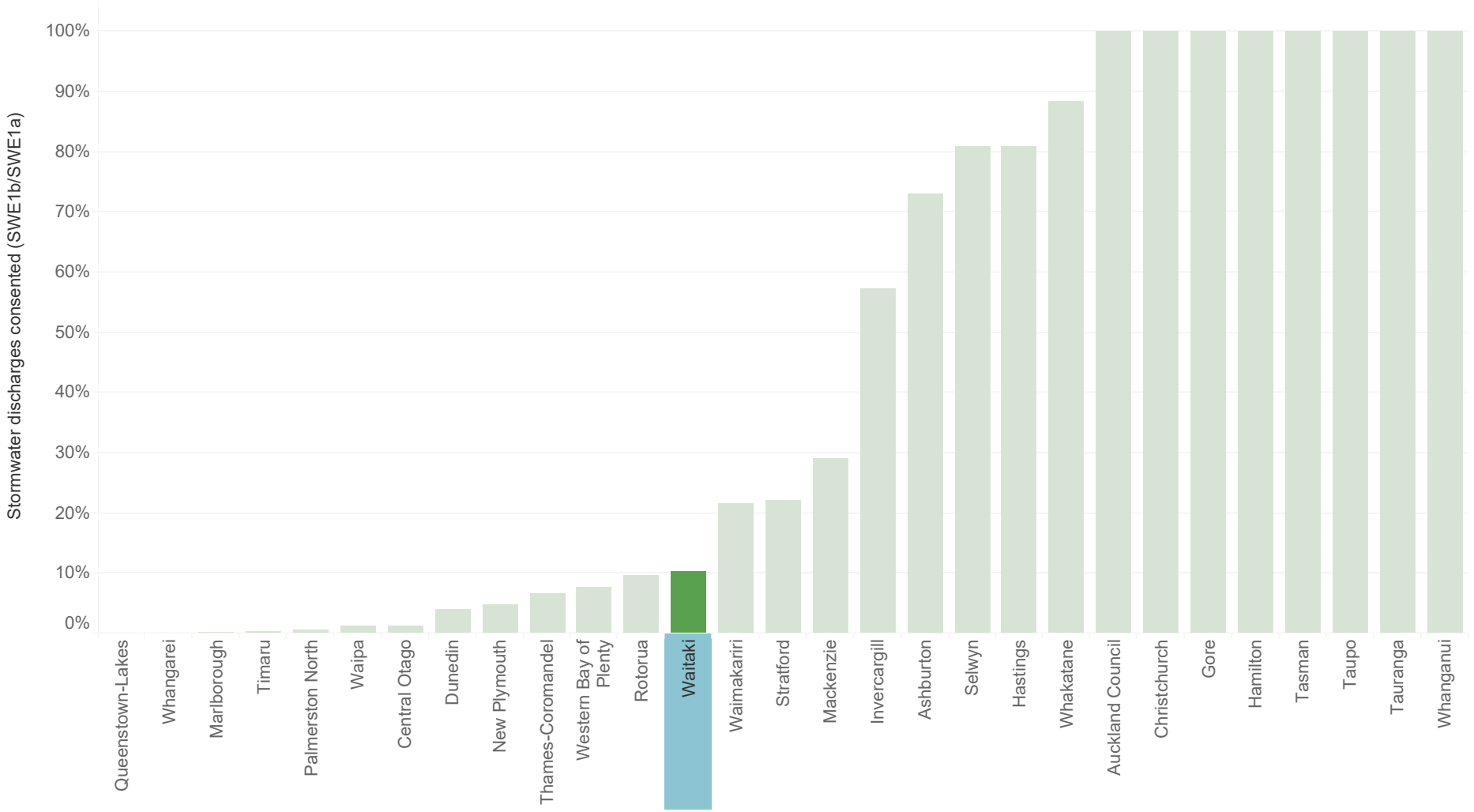
Categorised by the most sophisticated approach in place to record wet weather overflows. Participants with higher order approaches (i.e. overflow determination through use of calibrated hydraulic models) generally employ lower order overflow monitoring techniques concurrently (i.e. verbal reports and SCADA monitoring).
The shade of the column indicates participants' confidence in their data.
Overflows from combined stormwater and wastewater networks are not shown.



Overflows per year for your Council

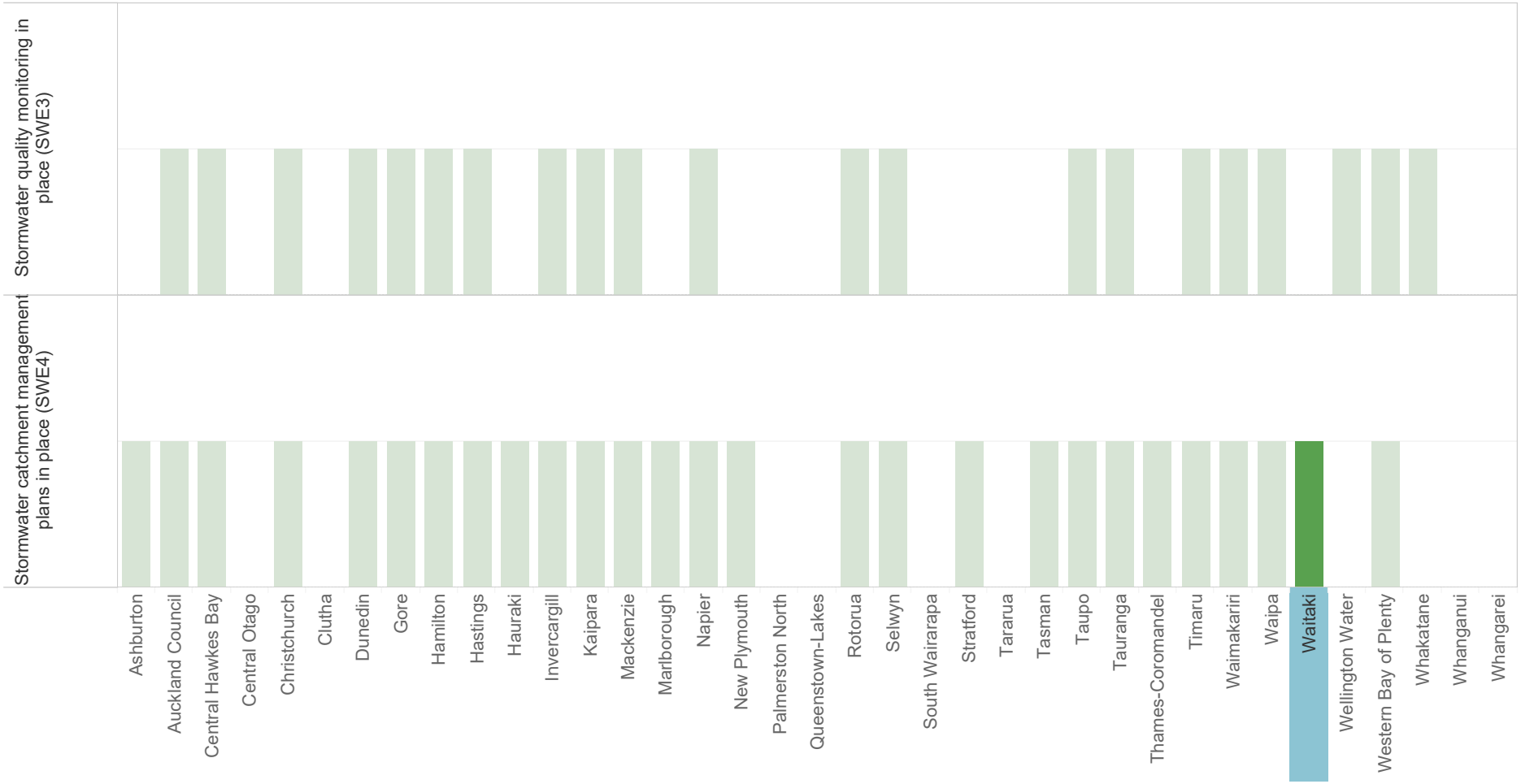


Proportion of stormwater discharges covered by a resource consent



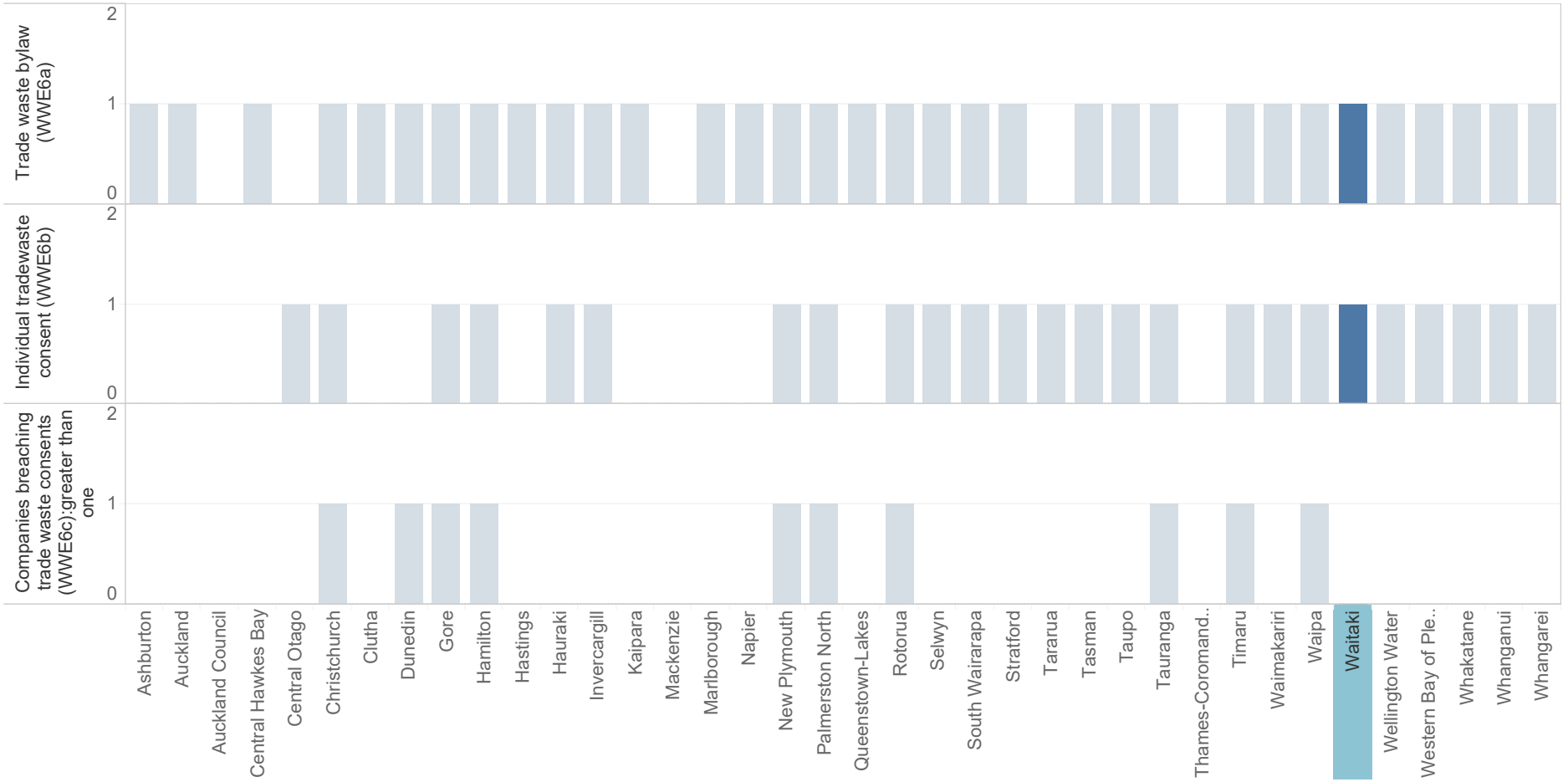
Stormwater quality management actions in place

Rectangles illustrate organisations that have in place stormwater quality management plans and/or stormwater monitoring.



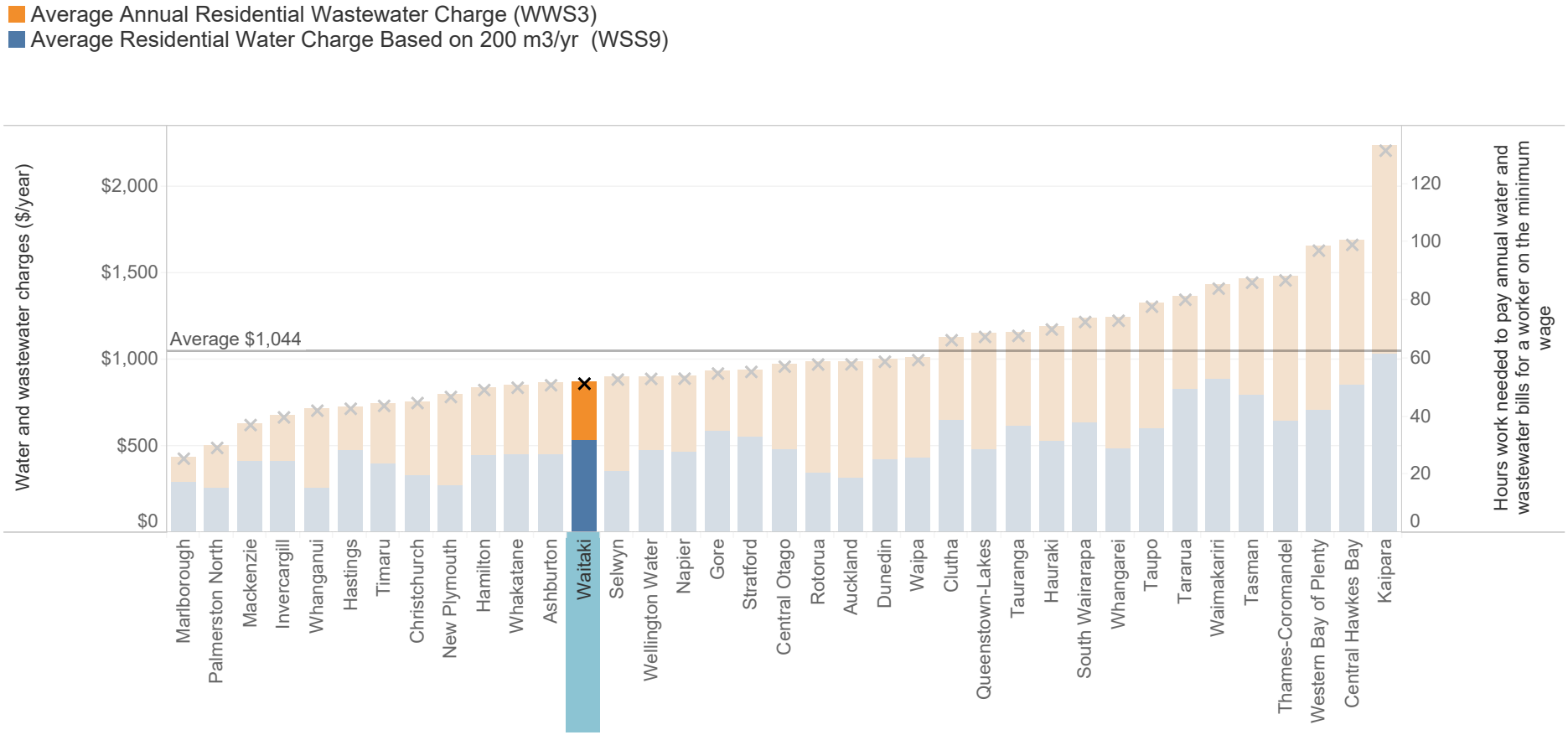
Trade waste consents

Rectangles illustrate organisations that have in place trade waste management enforced through by laws and/or individual trade waste consents. It also shows if one or more companies have breach trade waste agreements.



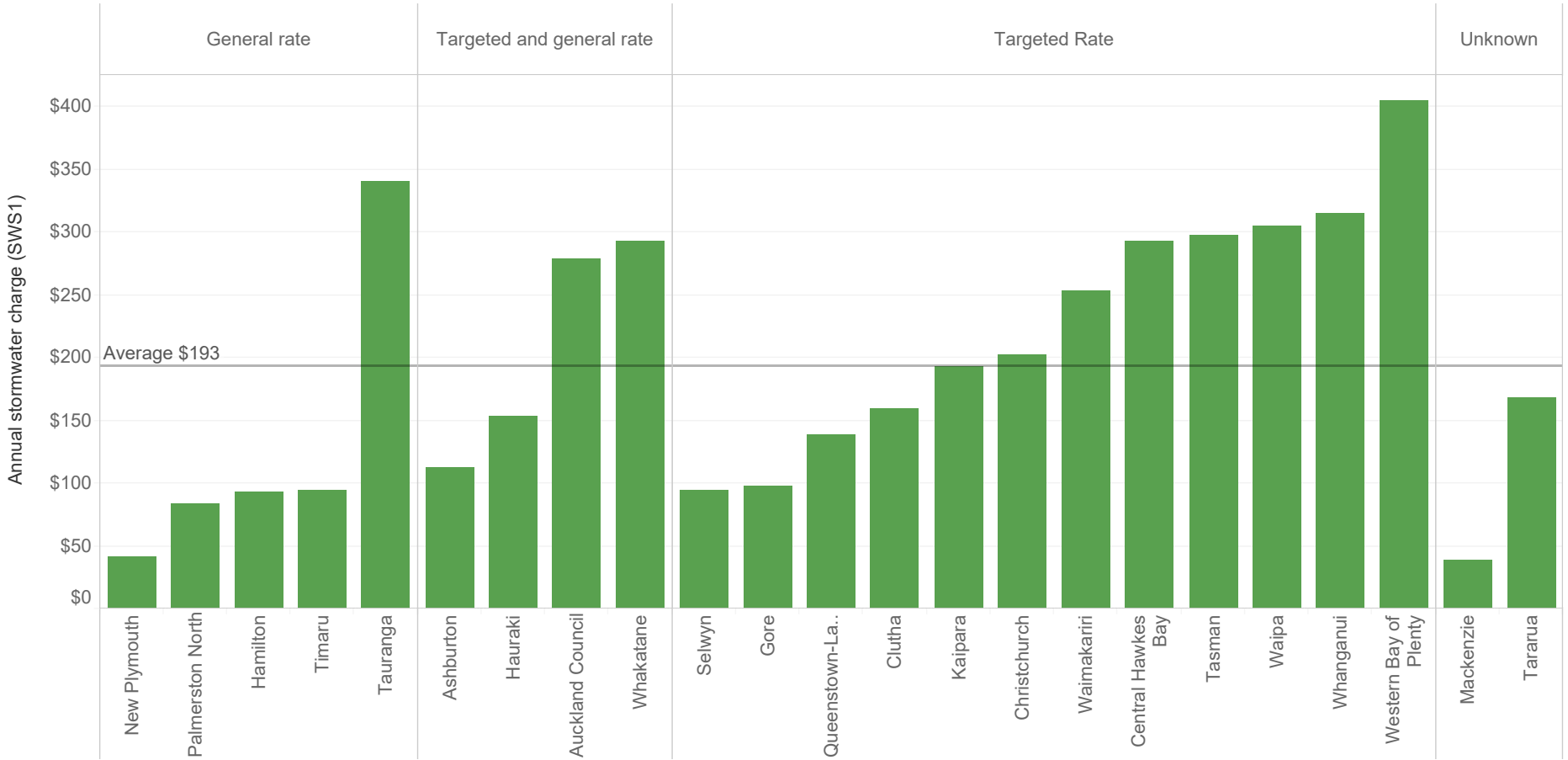
Water and wastewater charges

Average annual residential water and wastewater charges for water usage of 200 cubic meters are shown on the primary axis.
The number of hours worked on a minimum wage to finance those charges is shown on the secondary axis, and illustrated by a x.



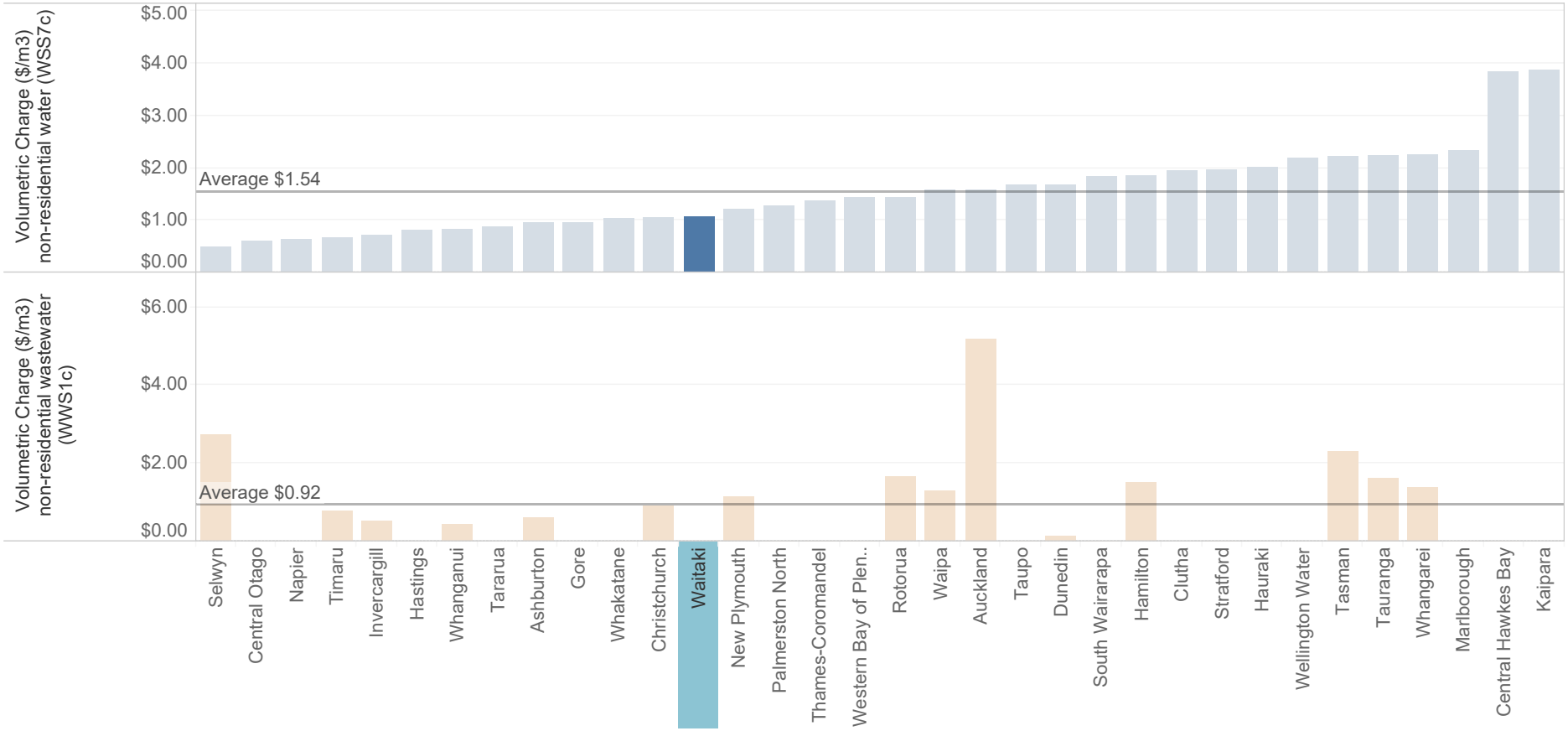
Stormwater charge

Waitaki District Council's stormwater charges are included as part of the ammenity rate. Where Council's have been able to separate stormwater charges have been categorised by the rating apporach used (SWS2). Where stormwater charges are based on property values average property values for the district as of January 2021 have been used to calculate the average charge.



Volumetric charges for non-residential customers

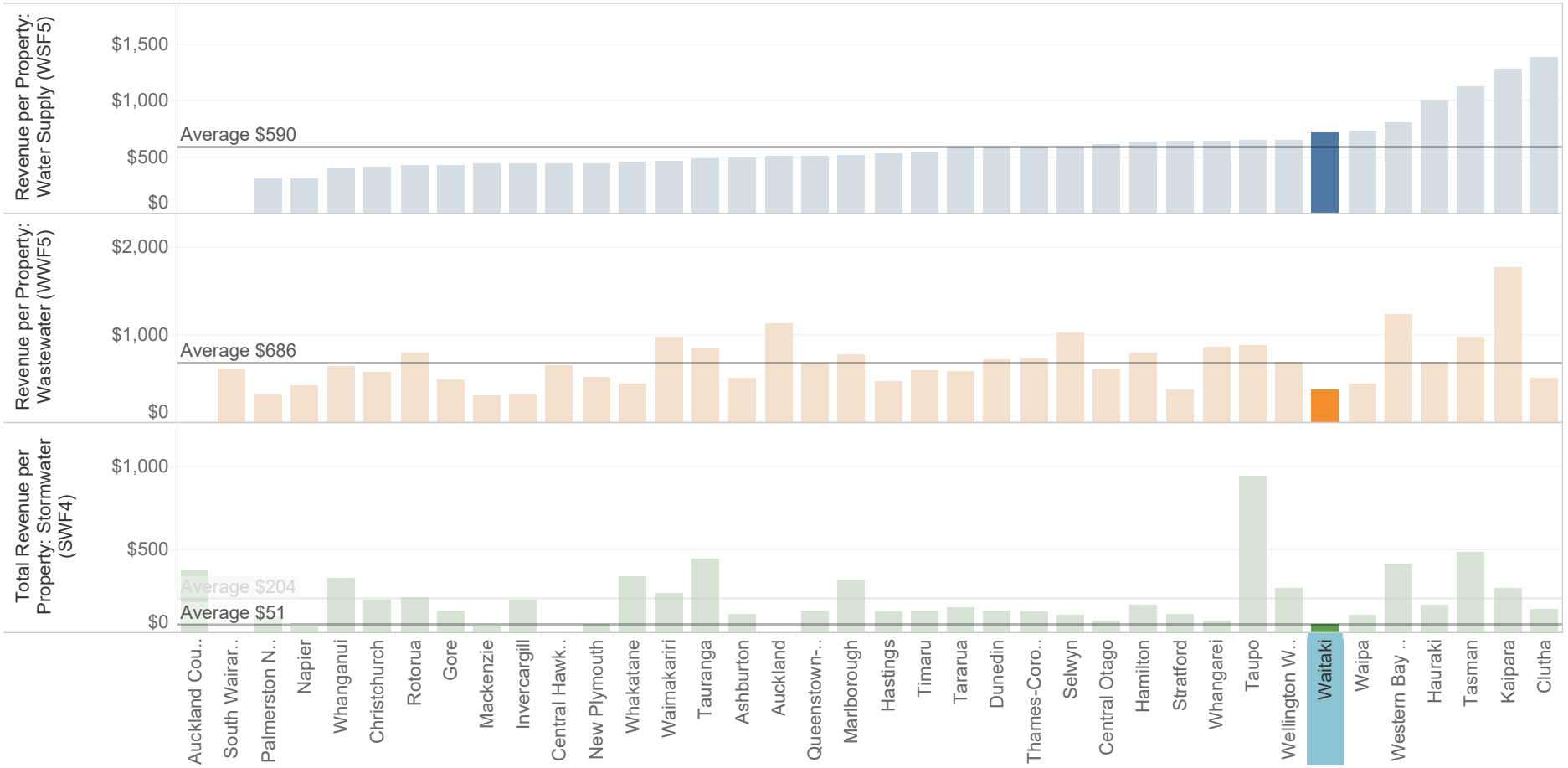
In Waimakariri and some other regions of New Zealand only a fixed price charge applies for non-residential customers. Fixed price components of charges for non-residential customers are not included here. Wastewater volumetric rates do not include contaminant-based charges. In some regions, volumetric charges vary across the district. In those instances, the most commonly applied charge has been selected.



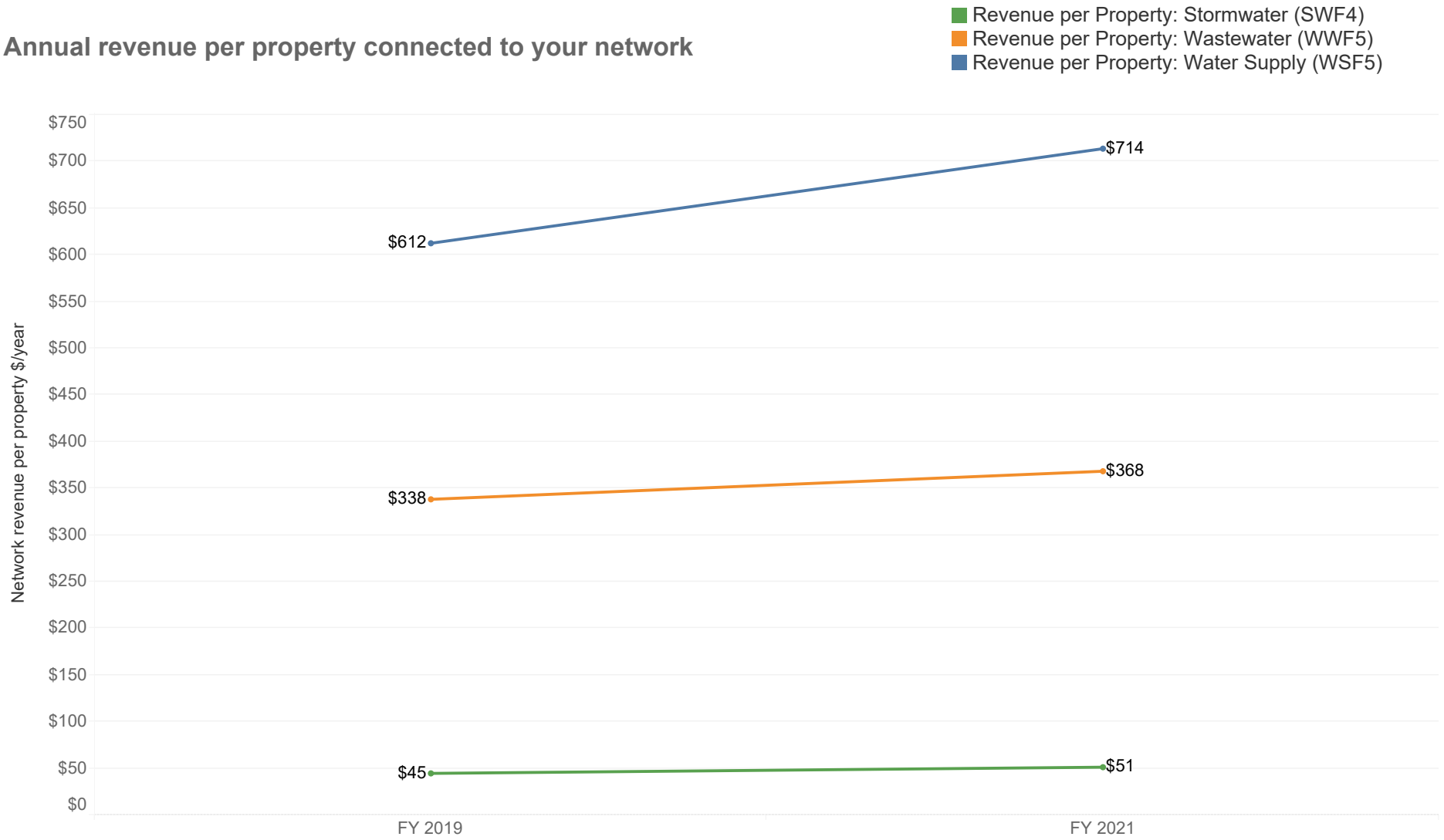
Water, wastewater and stormwater complaints at your Council

Annual revenue per property connected to the network

Per-property revenue is skewed in areas where a high proportion of volume is attributable to non-residential customers.

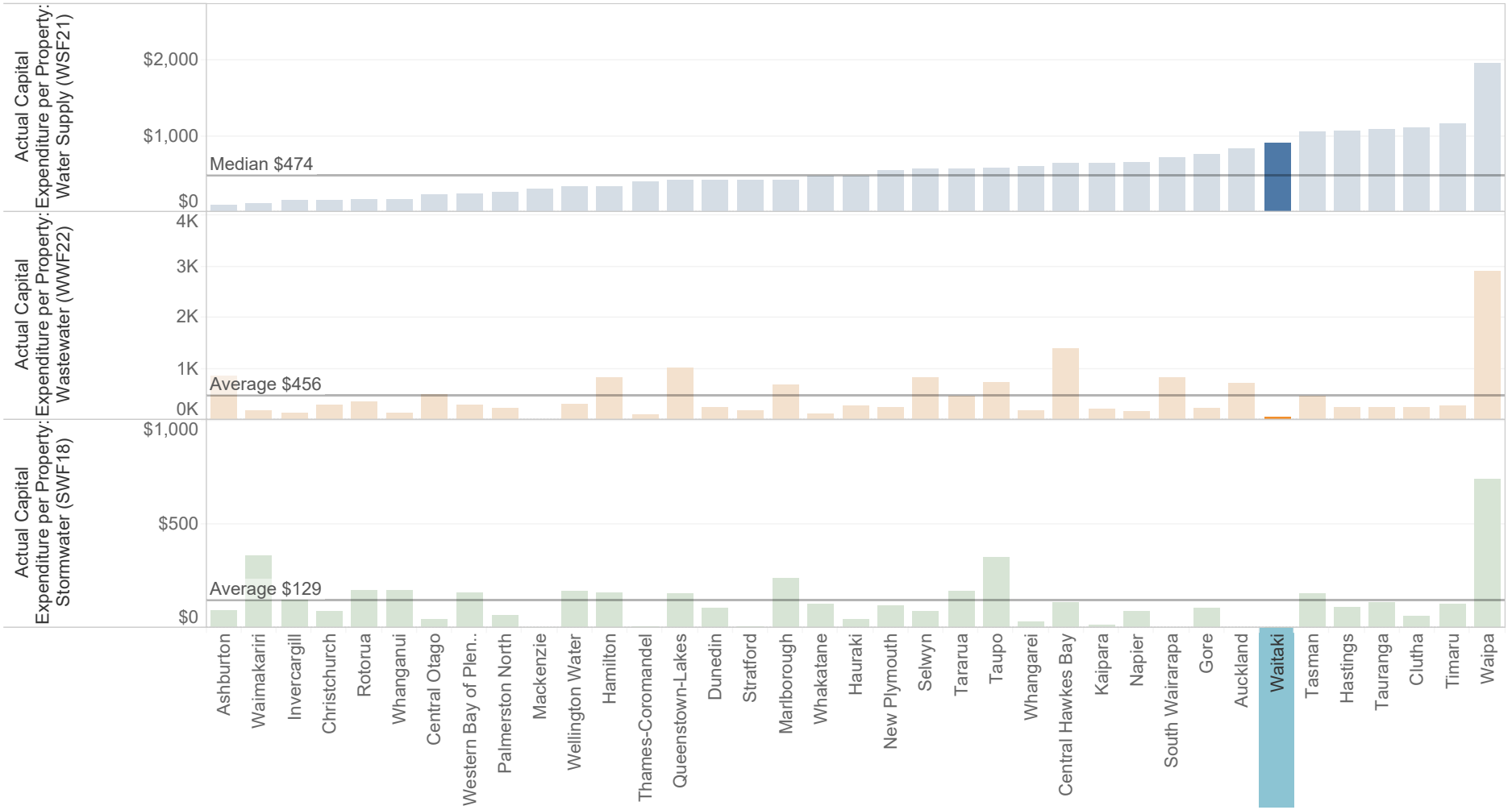


Annual revenue per property connected to your network

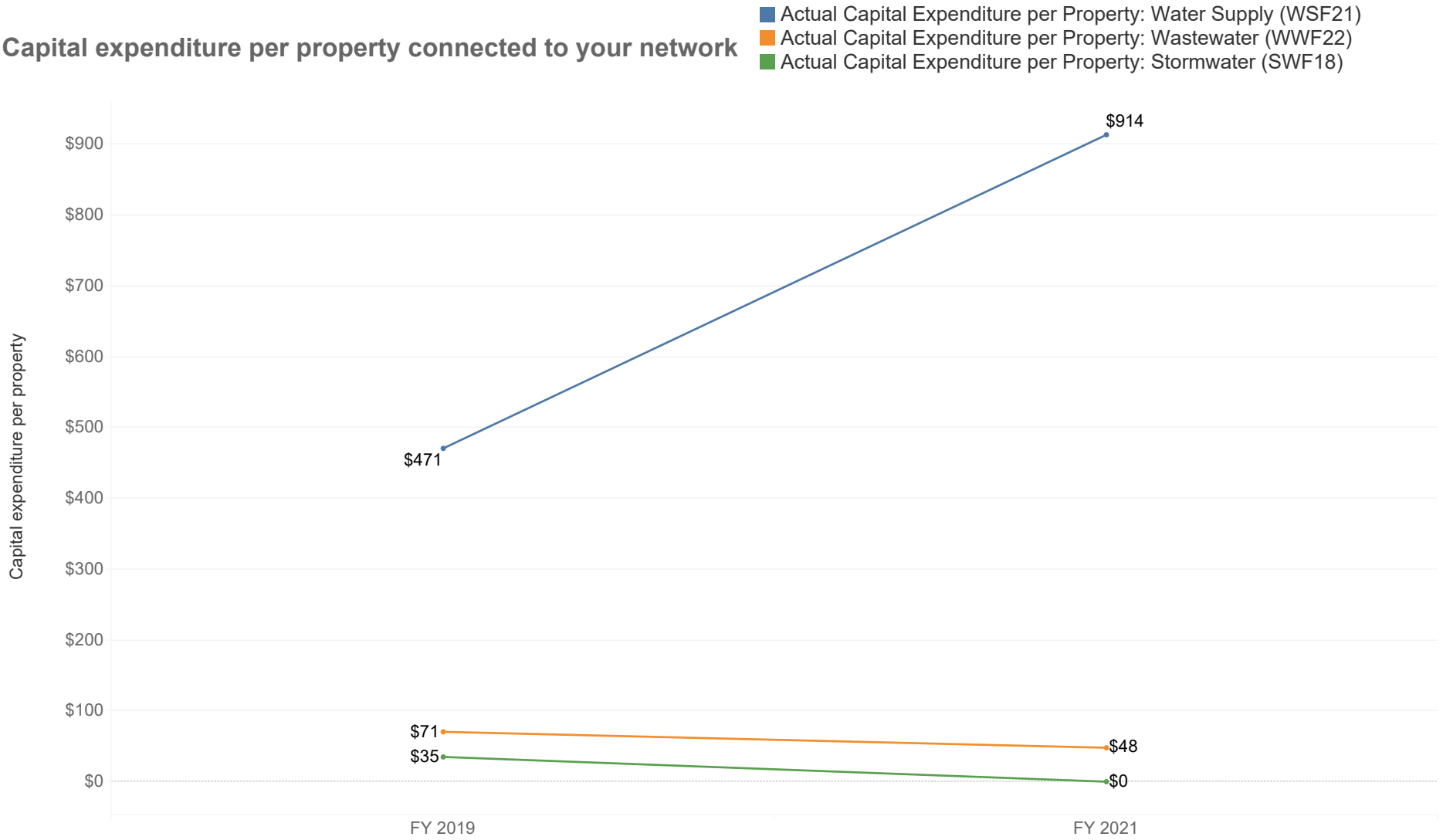


5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42

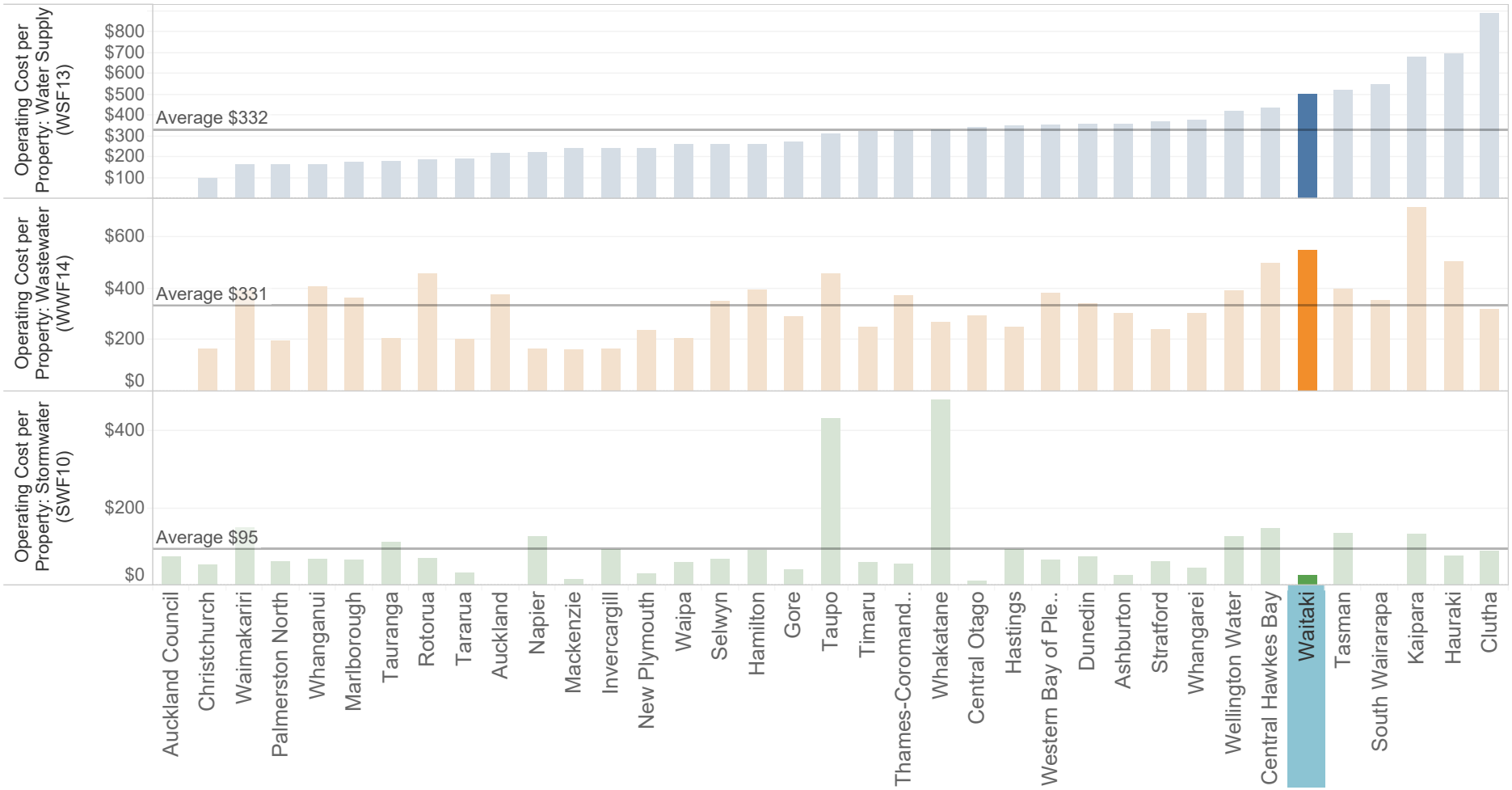
Capital expenditure per property connected to the network



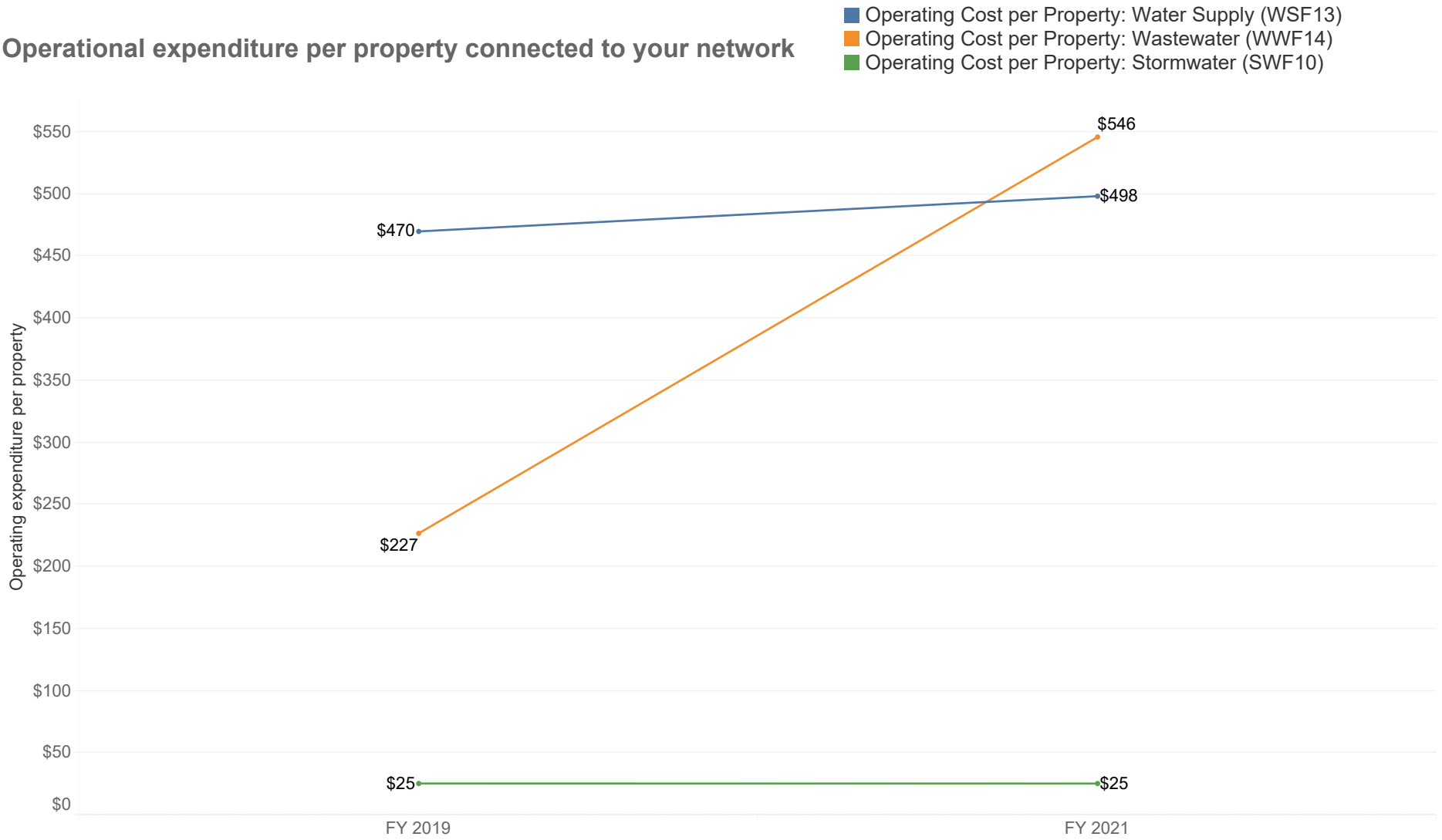
Capital expenditure per property connected to your network



Operational expenditure per property connected to the network



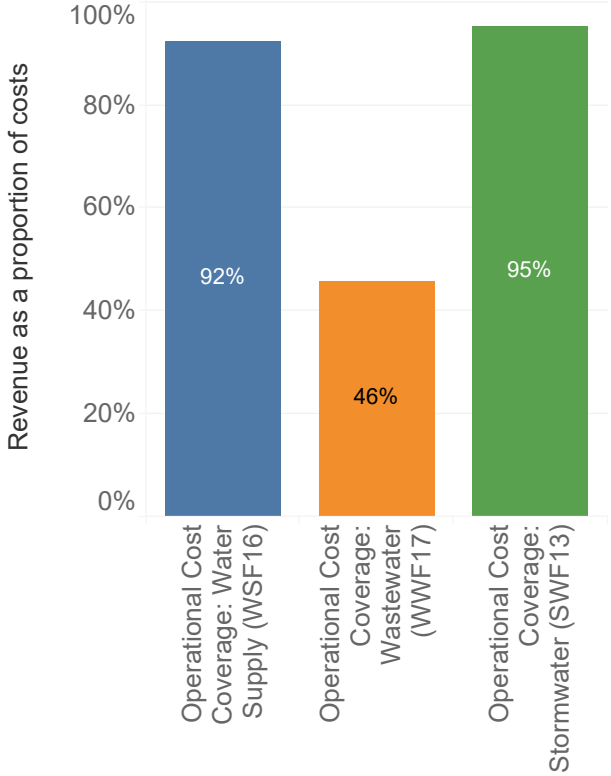
Operational expenditure per property connected to your network



Financial benchmarks for your Council's water services

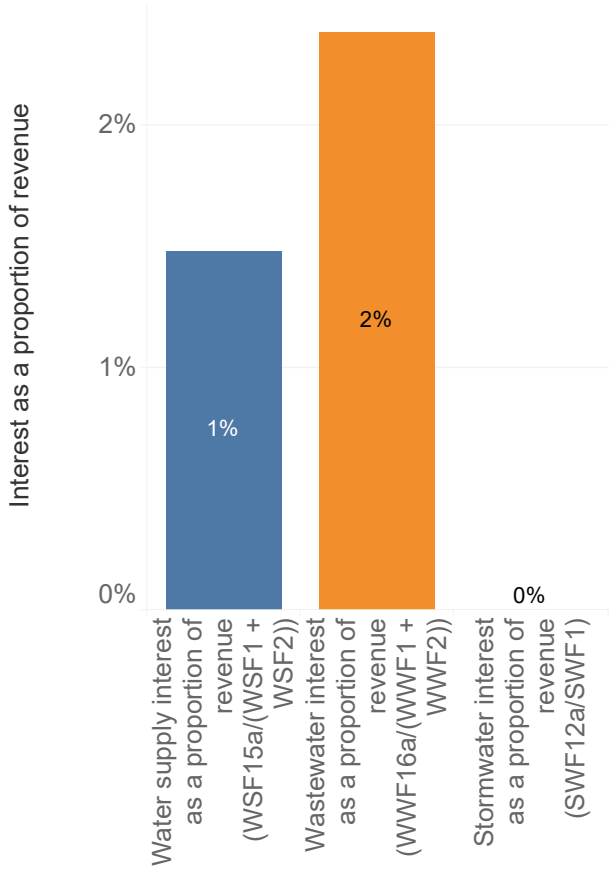
Cost coverage

Revenue over operational costs including interest payments and depreciation. Costs related to capital expenditure have not been included.

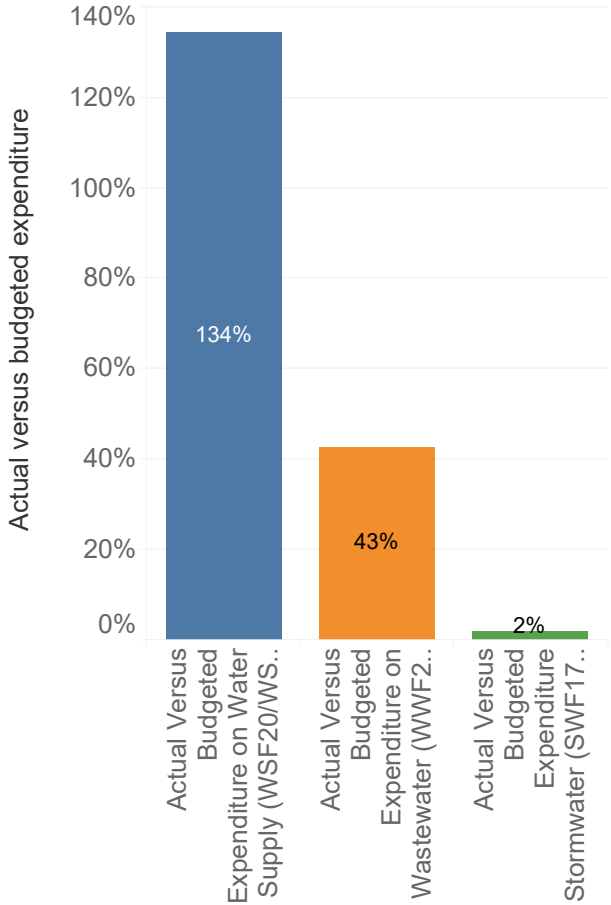


Debt Servicing

Interest as a proportion of revenue

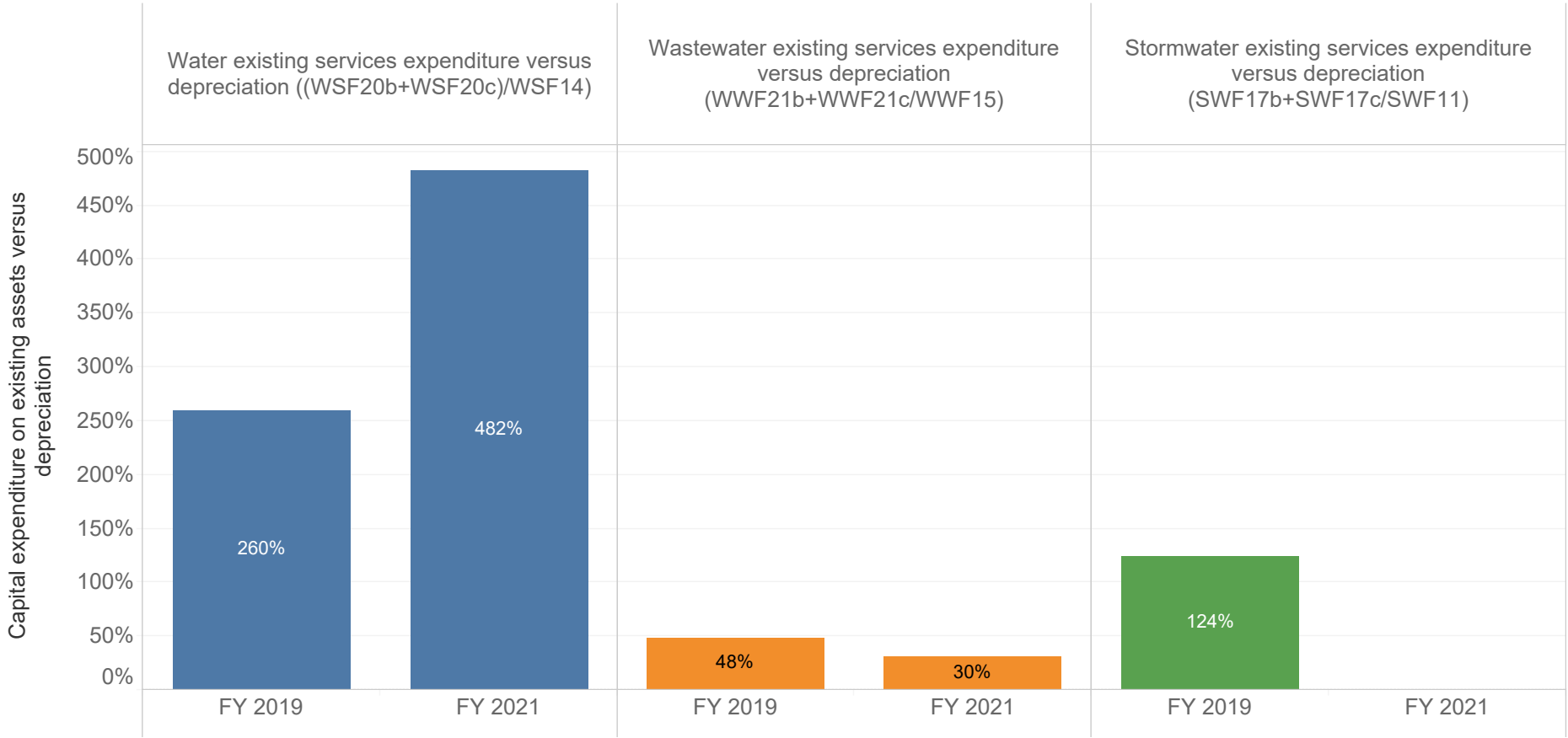


Actual versus budgeted expenditure



Capital expenditure to replace existing assets as a proportion of depreciation at your Council

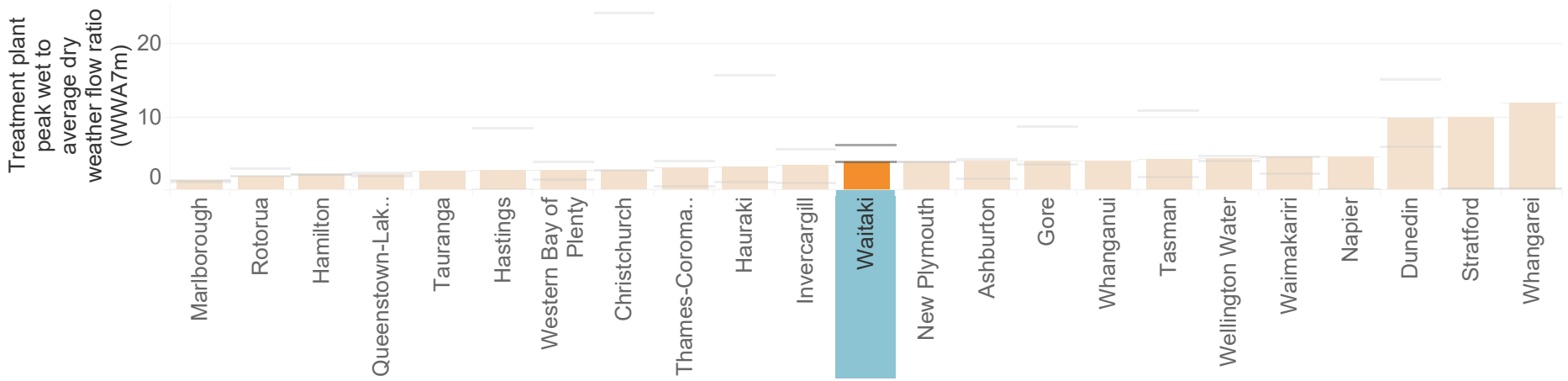
Capital expenditure on existing assets should equal depreciation over time (i.e. 100%) for service levels to be maintained. Theoretically if capital expenditure on the replacement of existing assets consistently exceeds depreciation costs (i.e. greater than 100%), service levels would be expected to improve. Conversely, where capital expenditure is consistantly less than depreciation (i.e. less than 100%) service levels would be expected to decrease.



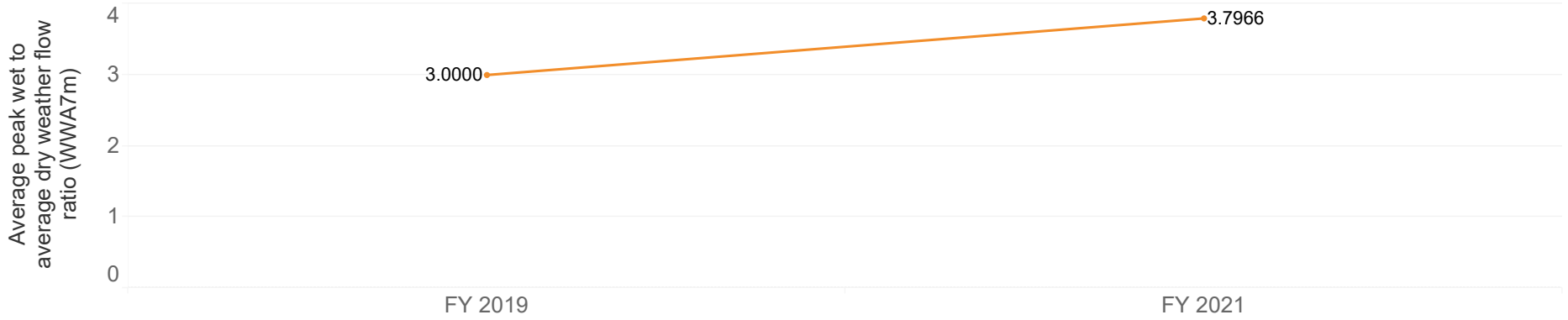
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

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

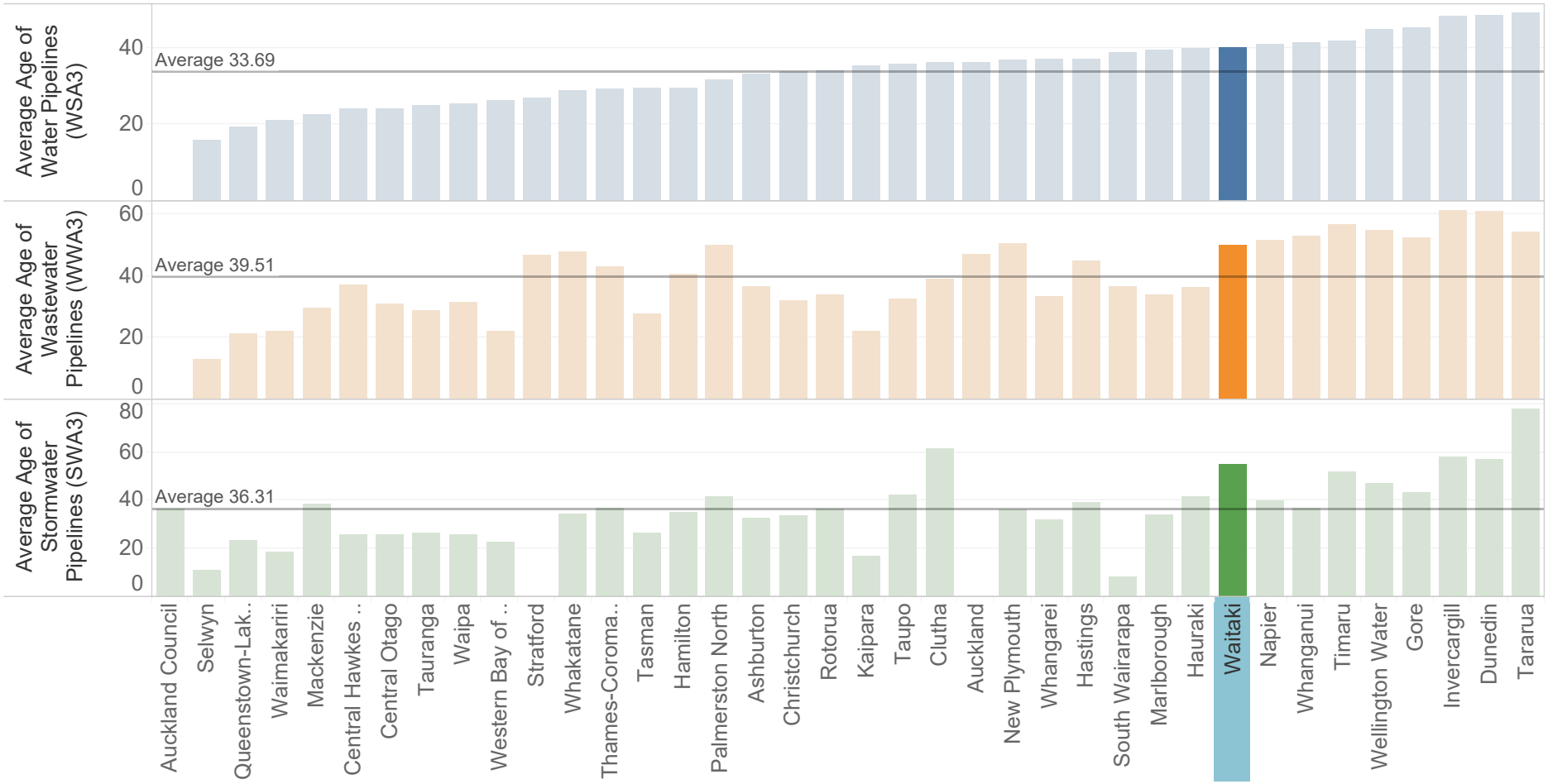
Bars show the flow weighted average for across districts with multiple treatment plants. The grey dashes show maximum and minimum values.



Average peak wet to average dry weather across your Council's treatment plants



Average pipe age (years)



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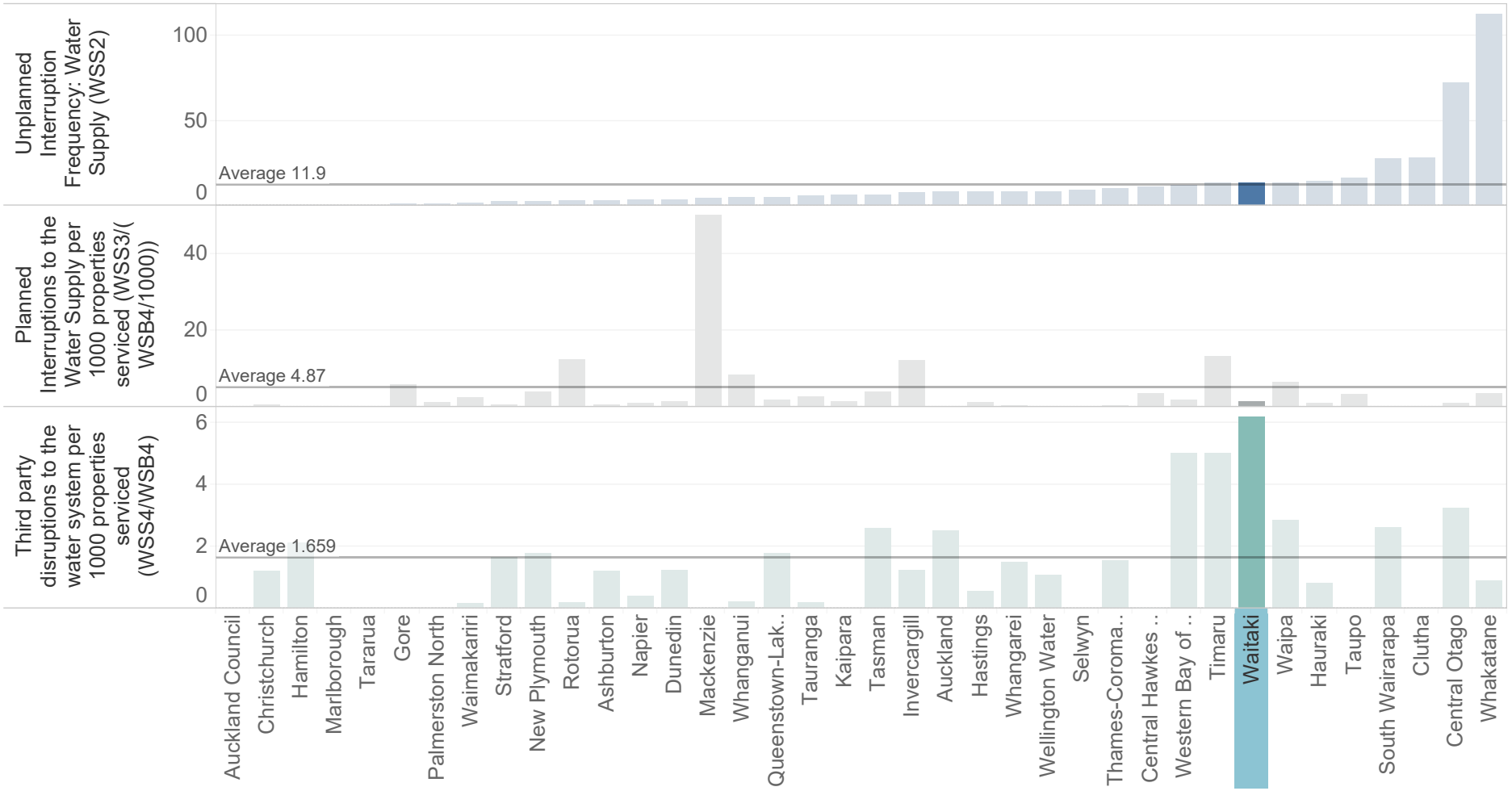
Water supply interruptions per 1000 serviced properties



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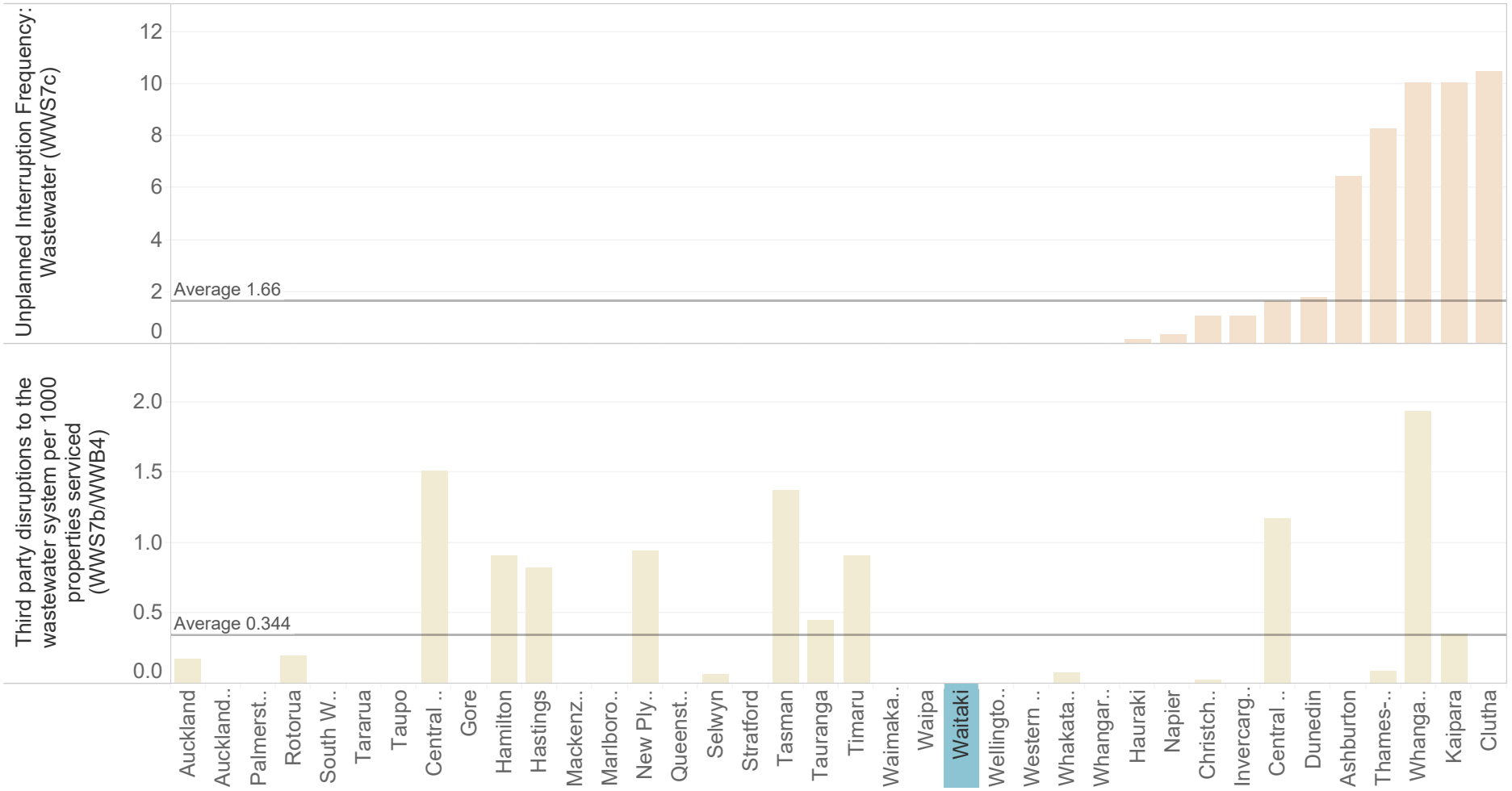
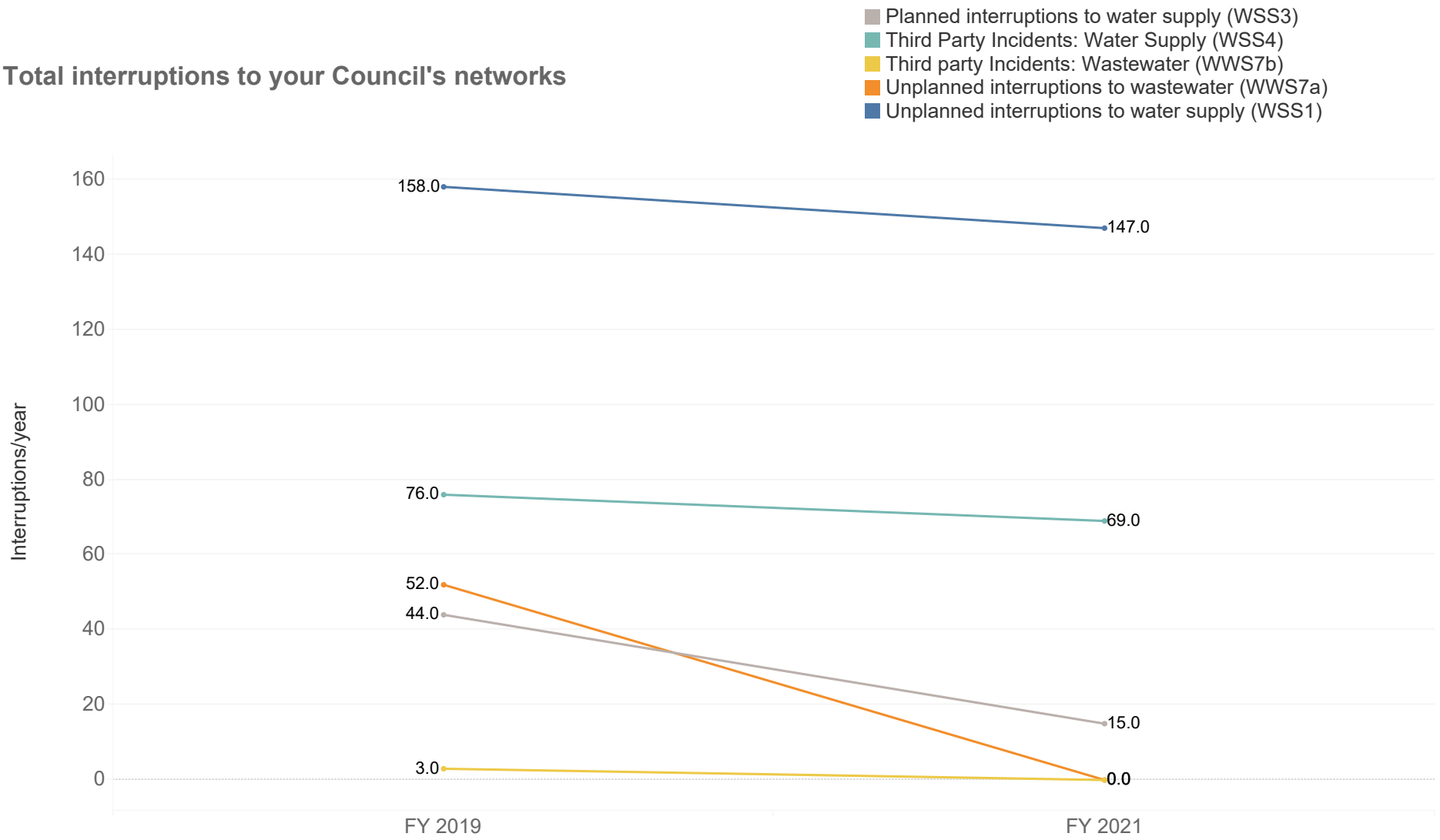
Wastewater interruptions per 1000 serviced properties



Total interruptions to your Council's networks

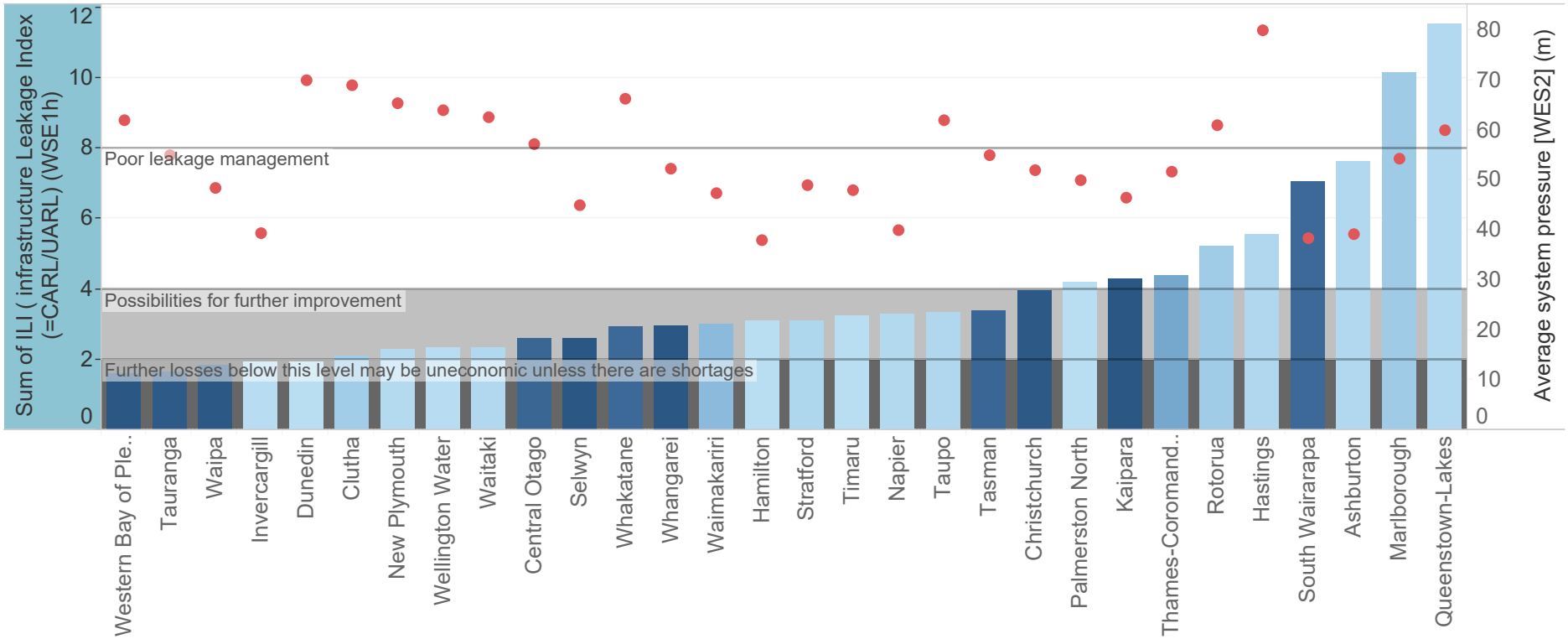


Water loss indiciated by the Infrastructure Leakage Index

Percentage of residential connections with meters (WSA9a/WSB2)
0% 100%

The Infrastructure leakage index is a non-dimensional performance indicator used for comparing the operational management of real water losses. It is 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.

Infrastructure leakage indicators, shown on bars, have been colour scaled based on levels of residential metering, as this affects the accuracy of water loss calculations. Average system pressure, in m head, is indicated using the red dots, as this has a large bearing on water loss.



Water loss indicated by current annual real losses (litres/property/day)

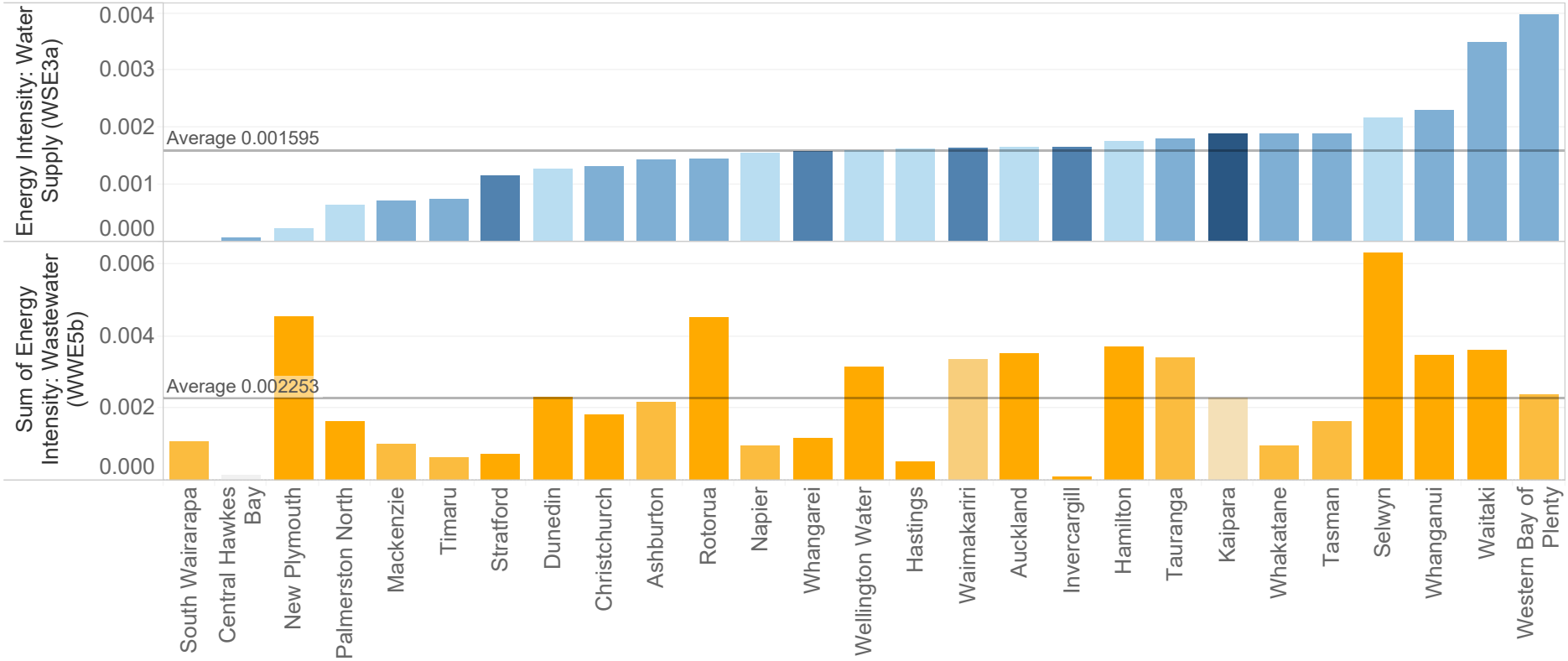
This is a measure of water losses resulting from mains leakage, leakage and overflows at service resevoirs and leakage on service connections up the street boundary.

Energy intensity of water and wastewater networks

Gigajoules per megalitre of water supplied (WSE3a) or wastewater collected (WWE5b).
Colour scales illustrate confidence in data provided.

Confidence in water supply energy use data (WSE3)
1: Very reliable 4: Uncertain
1 4

Confidence in wastewater energy use data (WWE5a)
1: Very reliable 5: Very uncertain
1 5



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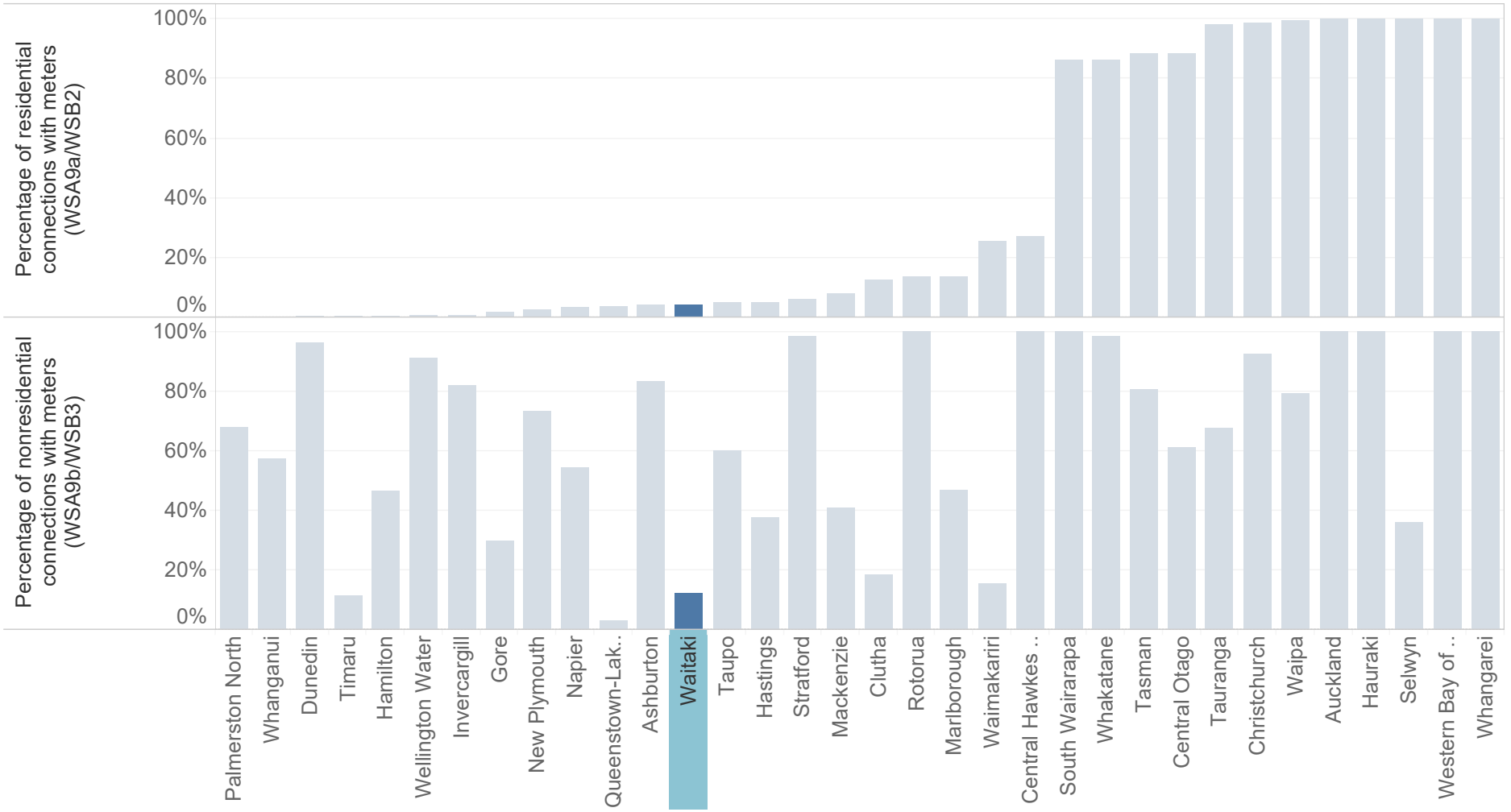
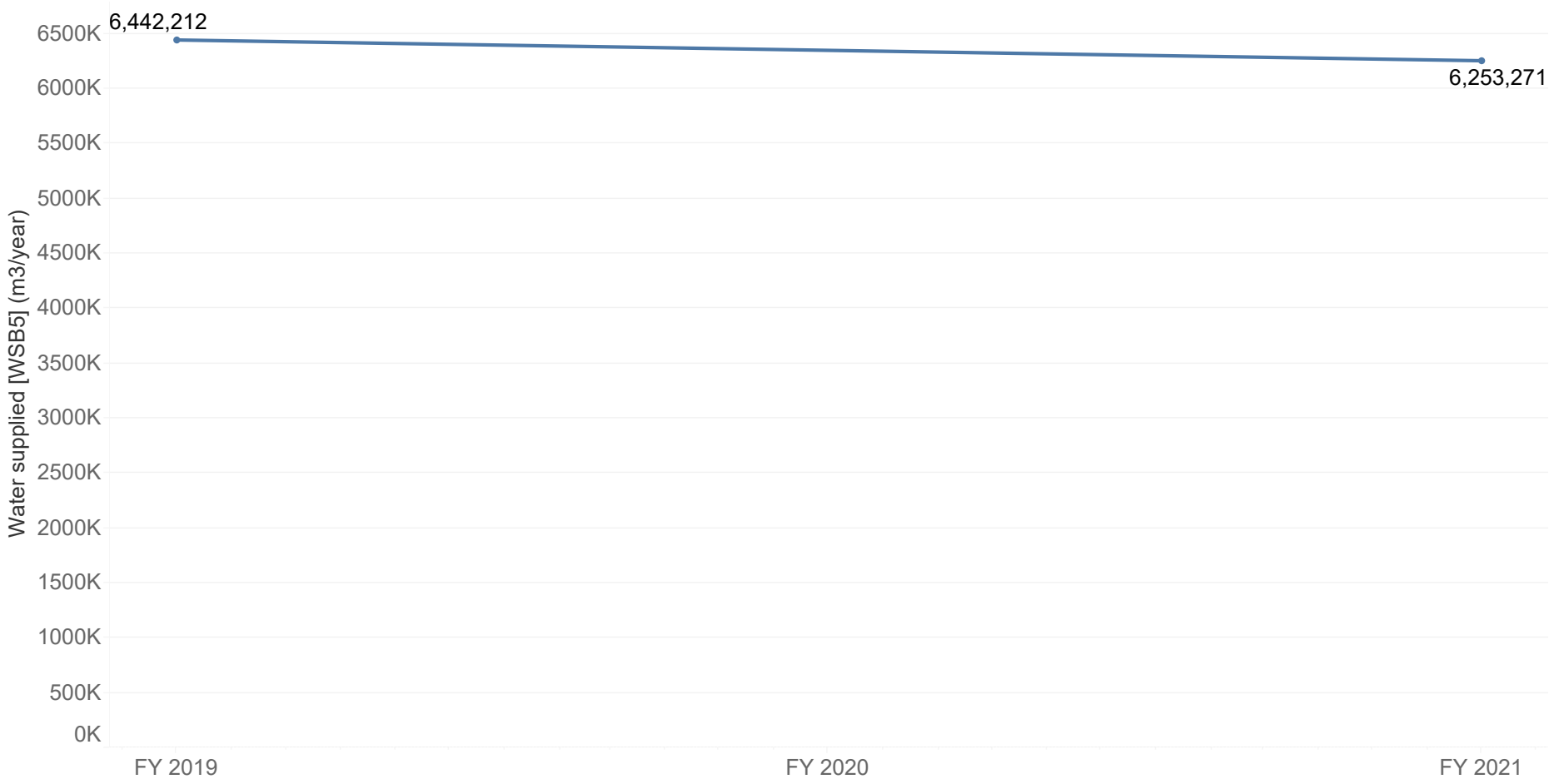
Percentage of residential properties with water meters

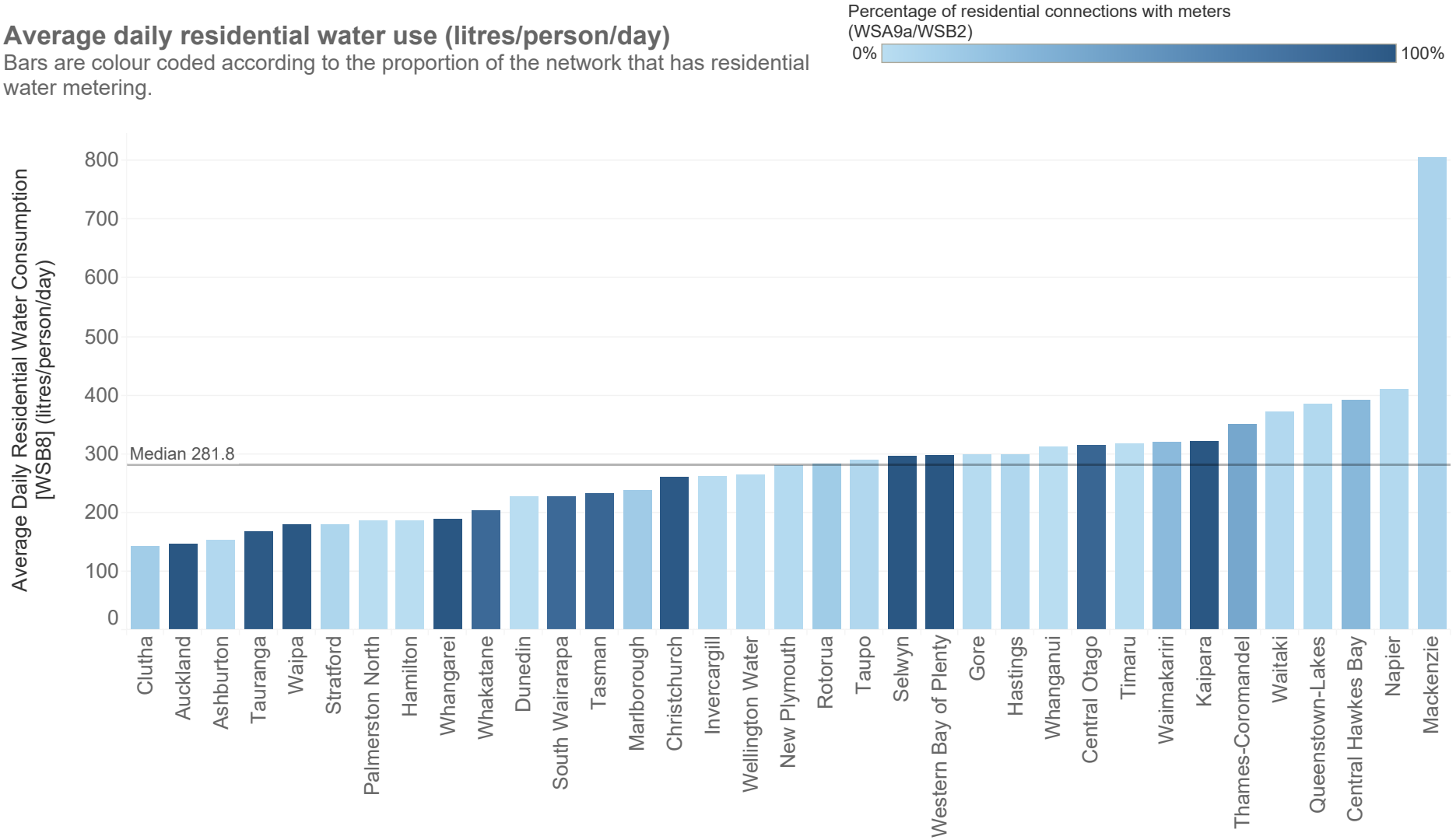


Water supplied to your network in cubic meters

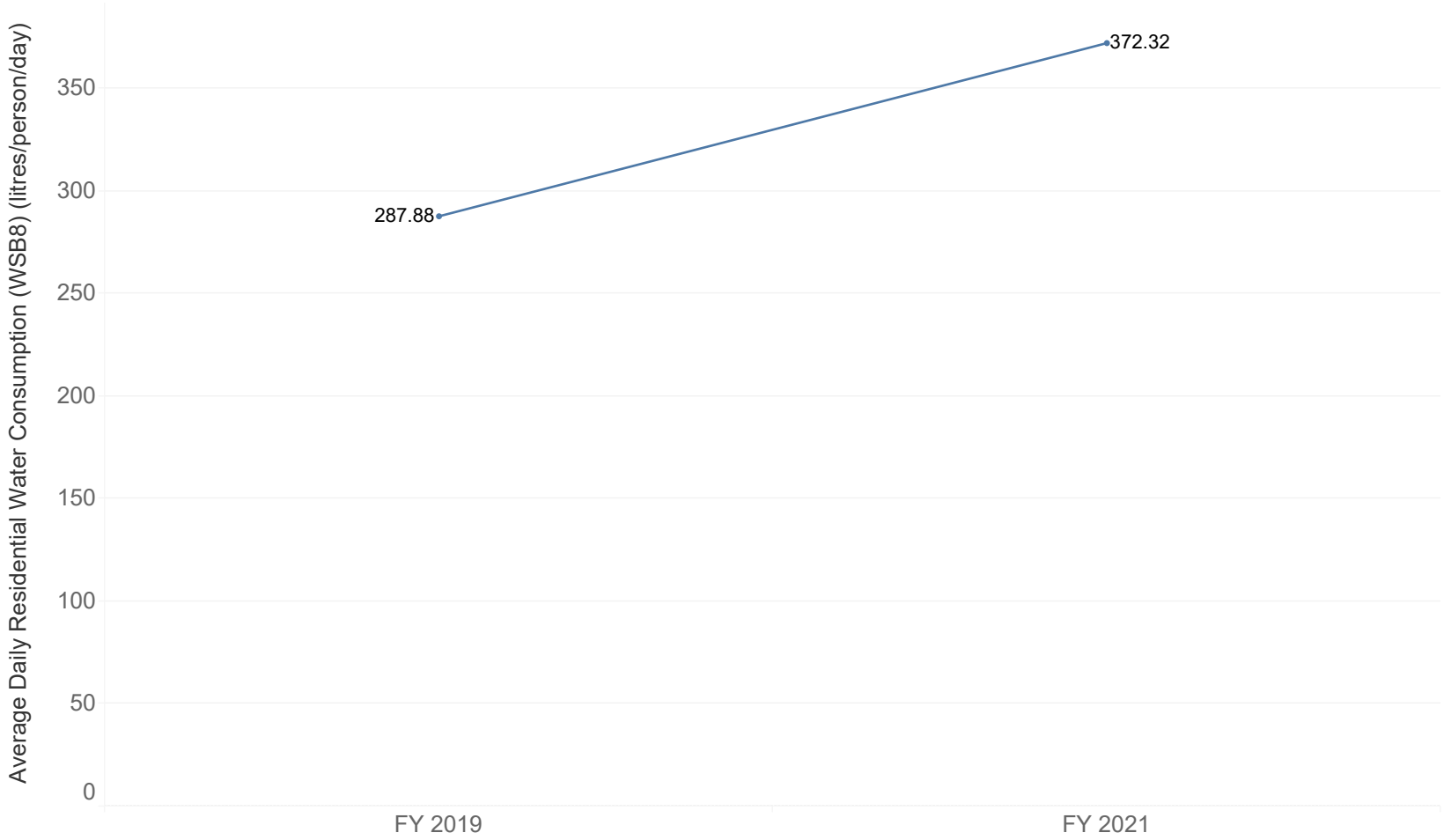


Average daily residential water use (litres/person/day)

Bars are colour coded according to the proportion of the network that has residential water metering.

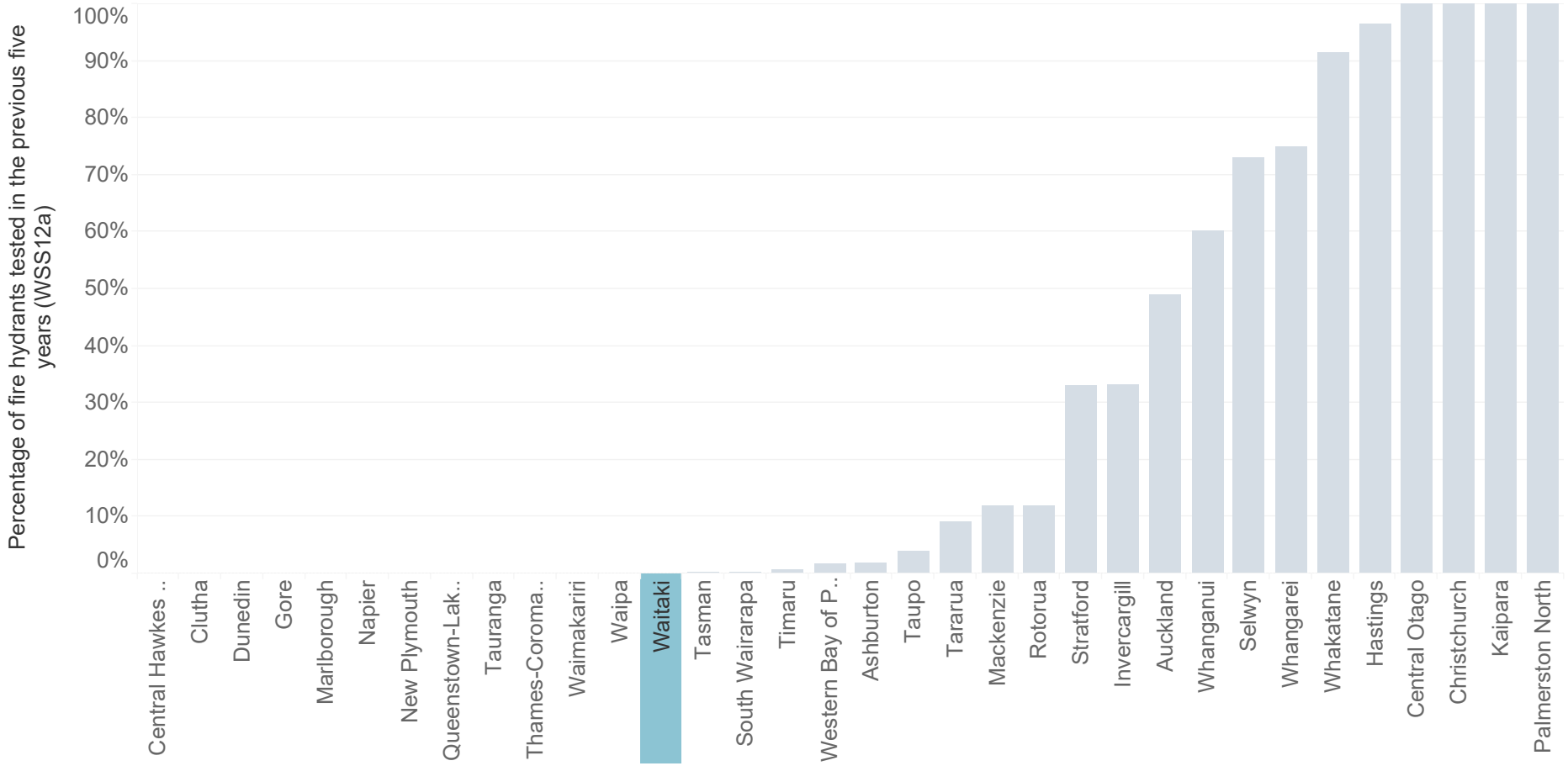


Average daily residential water consumption trend in your district

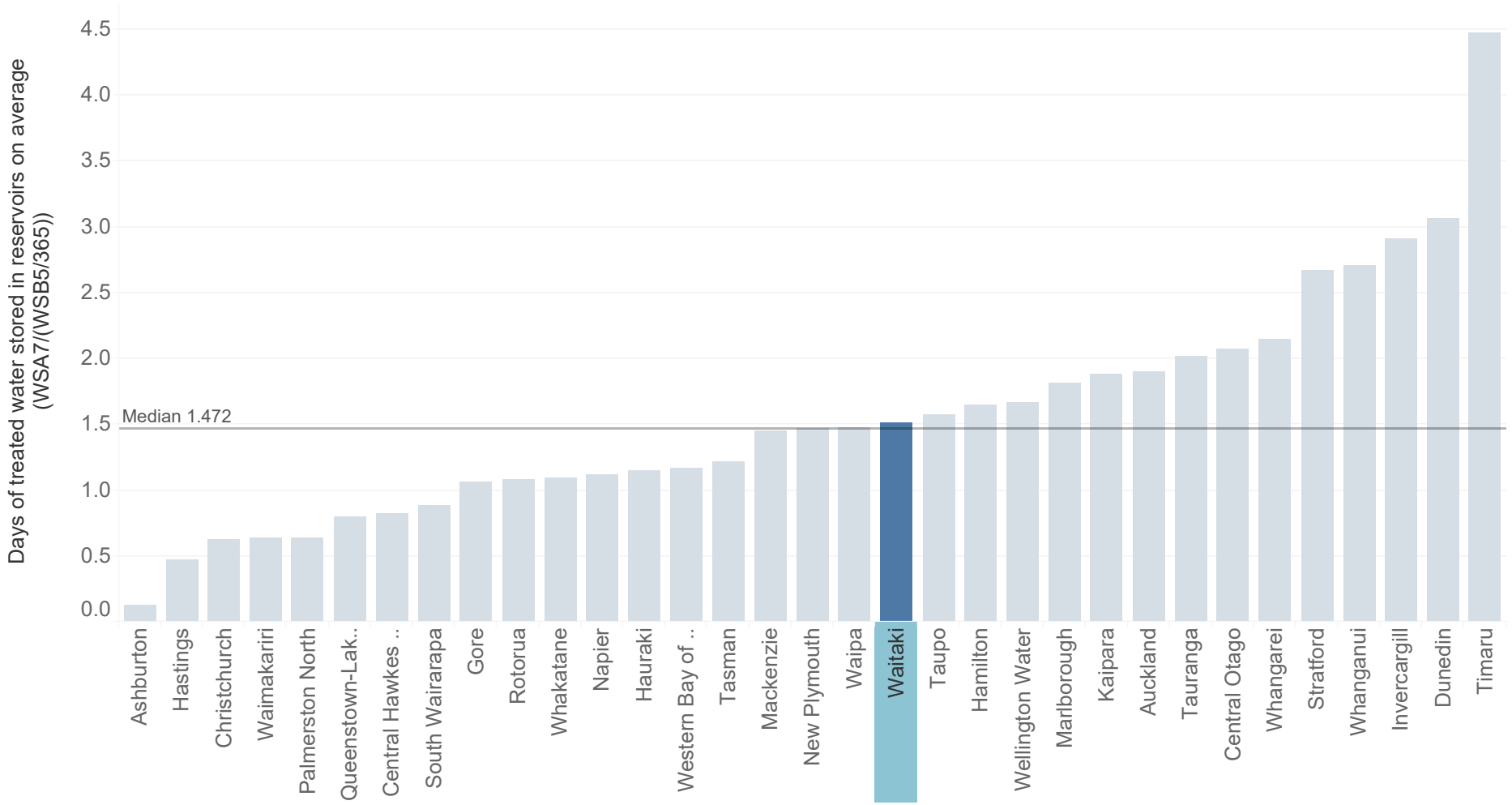


Proportion of fire hydrants tested over five years against the *New Zealand Fire Service Firefighting Water Supplies Code of Practice*

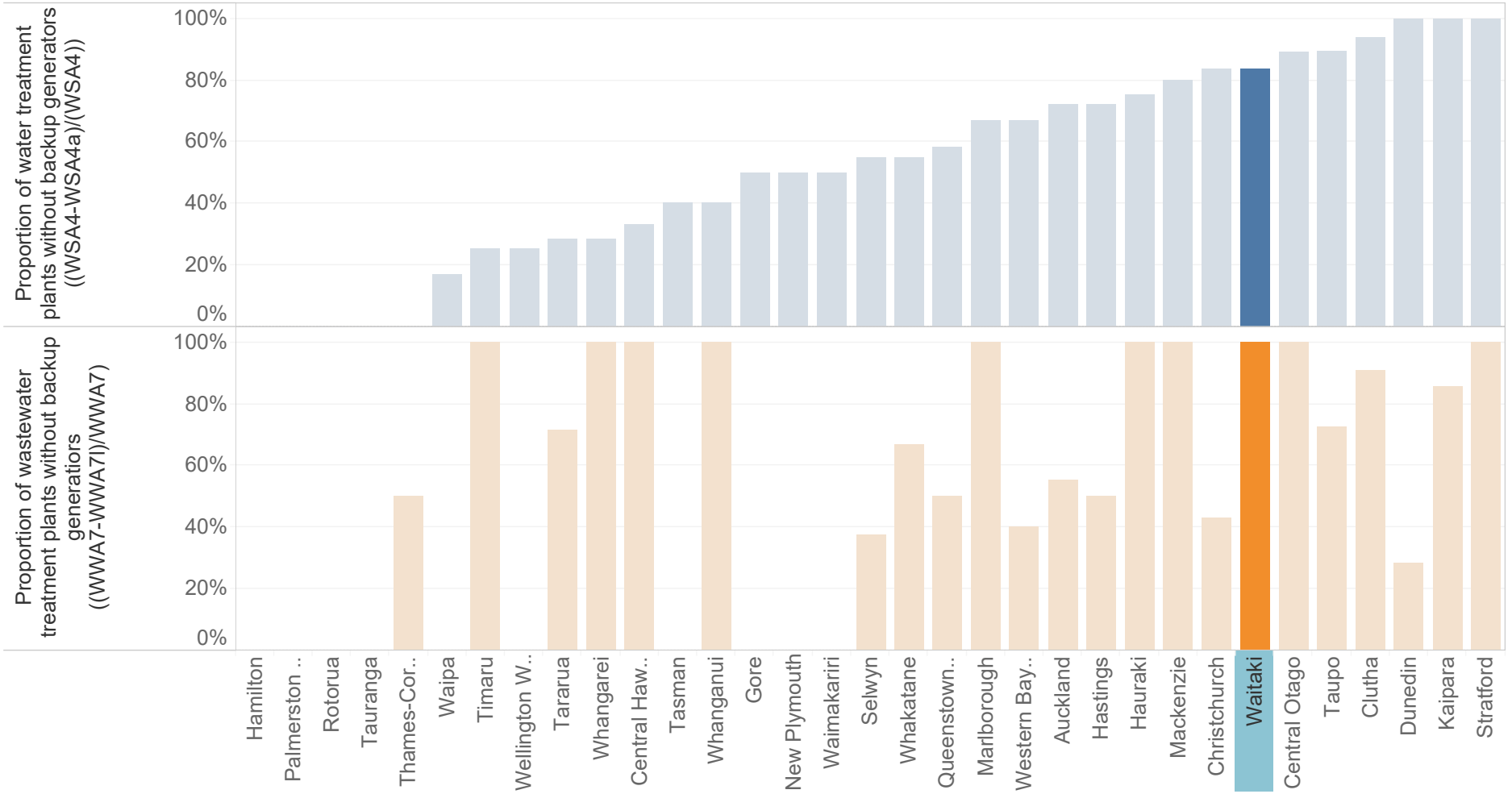
The Code specifies that all hydrants should be inspected and flushed every five years by an approved tester.



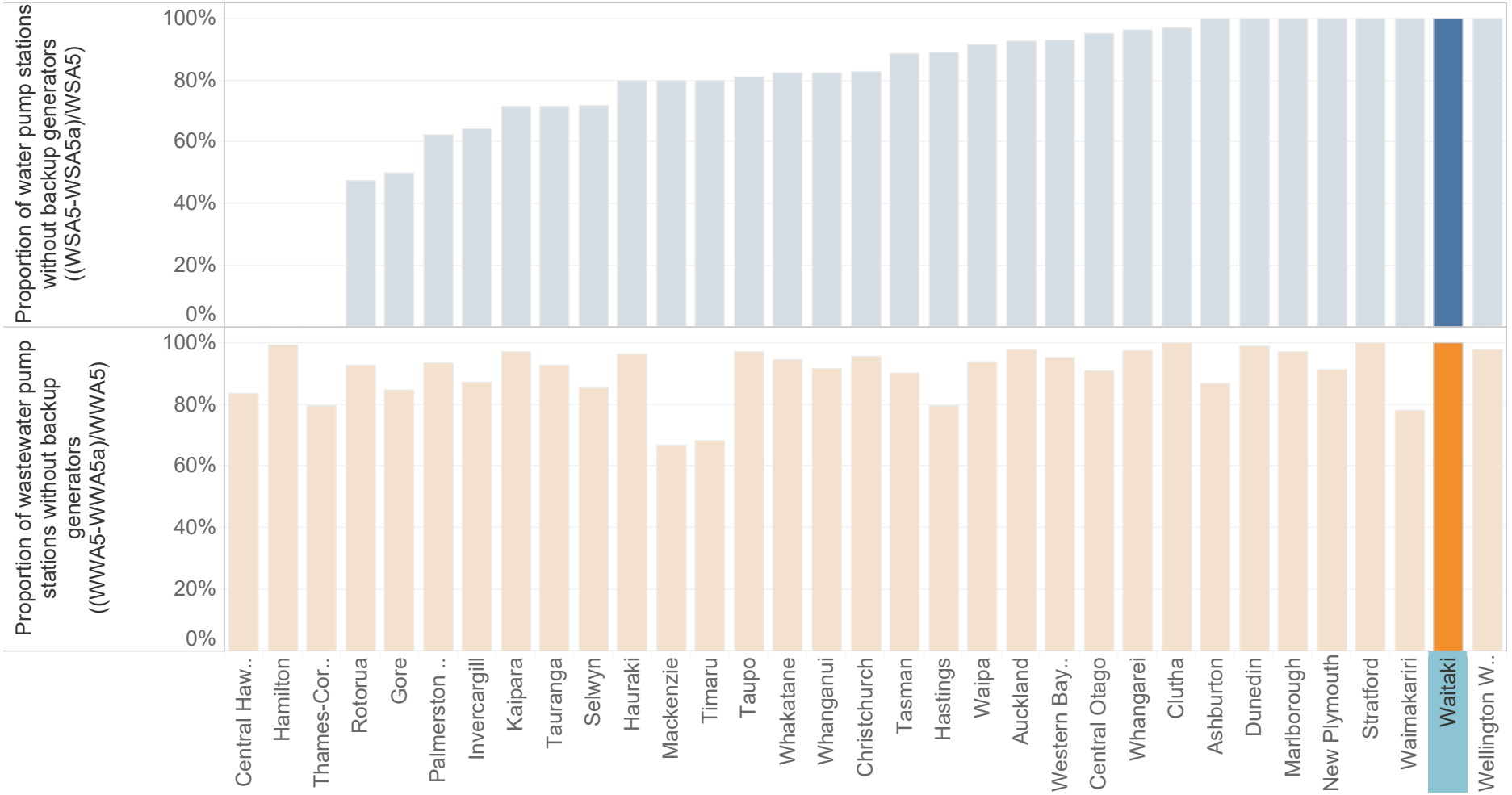
Average number of days worth of treated drinking water stored in reservoirs



Treatment plants without backup generation



Pump stations without backup generation



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