

Friday, 14 October 2022

OIA IRO-304, 305, 306 & 309

Email: @motu.org.nz

Kia ora

Official information request on Urban Water Pricing.

I write regarding your official information request dated Monday 19 September 2022. Your request was transferred to us, in part, on 19 September, 20 September, 22 September and 27 September 2022 by Southern Wairarapa District Council (SWDC), Wellington City Council (WCC), Porirua City Council (PCC) and Upper Hutt City Council (UHCC) respectively.

In your request, there were four key areas of interest: Water Supply; Water Demand; Metering; and Water Charges and Pricing. Wellington Water accepted part transfers for eight questions, six from Water Supply and two Water Demand:

- 1. Water Supply: What type and number of water sources used, for example storage dams, river extraction, groundwater aquifers etc.
- 2. Water Supply: The number of households serviced from each source.
- 3. Water Supply: The Population serviced from each source.
- 4. Water Supply: The Volume of water available/produced at each source.
- 5. Water Supply: The Storage capacity where storage is used.
- 6. Water Supply: The proportion of leakage if any (loss in transit from suppliers to water consumers).
- 7. Water Demand: What is the volume of water consumption from each source for household, industry, and commercial use.
- 8. Water Demand: Information on the dates and restrictions imposed on households during any recent periods of low supply or drought (especially how much water restrictions could reduce the consumption).

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We have considered your request in accordance with the Local Government Official Information and Meetings Act 1987 and determined that we are able to grant your request in full.

Our response to the above questions can be found in the Appendix of this letter with reference to supporting information enclosed in our email response to you.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Ngā mihi

Manager, Customer Experience Wellington Water Ltd

Appendix

Question One – Water Supply: What type and number of water sources used, for example storage dams, river extraction, groundwater aquifers etc.

Answer...

This information is available via our website: Wellington Region Water Supply - Wellington Water

Question Two – Water Supply: The number of households serviced from each source.

Answer...

Pipe Length and Household Connections.

From 2020/21 onwards, pipe length data has been sourced from the Info Asset system, and household connections sourced from each of our client councils. Pipe lengths and connections data is collected annually in July. They should be used for all reporting in that financial year (e.g., extracted in July 2021, used for the period 1 July 2021 to 30 June 2022). Further information about each data, can be found in the Authoritative Data – Household Connections document attached with this letter.

Voor	Council	Comico Tuno	Dor Tuno	Value	Data Course	Commonts
Year	Council	Service Type	Per Type	Value	Data Source	Comments
2021/22	2 GWRC	Water Supply	Connections	156,840	Council	Total of the 5 Councils
2021/22	2 HCC	Water Supply	Connections	42,293	Council	Total Connections
2021/22	2 PCC	Water Supply	Connections	19,177	Council	Total Connections
2021/22	2 SWDC	Water Supply	Connections	4,233	Council	Total Connections
2021/22	2 UHCC	Water Supply	Connections	17,370	Council	Total Connections
2021/22	2 WCC	Water Supply	Connections	74,748	Council	Calc method unknown

Question Three – Water Supply: The Population serviced from each source.

Answer...

Stats NZ population estimates, and Wellington Water future estimates worksheet attached with this letter.

Question Four – Water Supply: The Volume of water available/produced at each source.

Answer...

Monthly Bulk Water Consumption worksheet attached with this letter.

Question Five – Water Supply: The Storage capacity where storage is used.

Answer...

This information is available under the same website as question one: Wellington Region Water Supply - Wellington Water

Question Six – Water Supply: The proportion of leakage if any (loss in transit from suppliers to water consumers).

Answer...

Annual City Water Loss worksheet attached with this letter.

Column 'J' is the estimated unaccounted for water usage. Difference between the quantity of water supplied and the metered quantity of water used and an assessment of non-metered legitimate consumption.

Question Seven – Water Demand: What is the volume of water consumption from each source for household, industry, and commercial use.

Answer...

Annual City Water Loss worksheet attached with this letter.

Note - the water supply sources water from all four treatment plants (Te Marua, Gear Island, Wainuiomata and Waterloo) and three water sources. Volume supplied to each area from each source is not recorded.

- Column 'H' is total commercial consumption (includes metered commercial usage from commercial meter readings and the estimated unmetered commercial consumption) for each of cities.
- Column 'I' is the estimated residential consumption for each of cities.
- Column 'J' is the estimated unaccounted for water usage. Difference between the quantity of water supplied and the metered quantity of water used and an assessment of non-metered legitimate consumption.
- Column F is gross bulk water consumption for each of cities.
- Column F = H +I +J

Note - SWDC only has data going back to 2019. SWDC joined Wellington Water in October 2019.

Question Eight – Water Demand: Information on the dates and restrictions imposed on households during any recent periods of low supply or drought (especially how much water restrictions could reduce the consumption).

Answer...

A record of water use restriction data for the Wellington Metropolitan area and SWDC has been provided and can be found attached with this letter.

The expected impact of the different water restriction levels is set out in Table 6-1 of Wellington Water's Drought Management Plan. This Plan is available at https://www.wellingtonwater.co.nz/search-results/document/864/



Household Connections

DPS authoritative data source

Document owner: (Digital Products and Services)

Date: 06/10/2021 Version: 2.0

1. Introduction

Wellington Water, its client councils and external stakeholders often request household connection information for reporting and various analysis activities. This document provides details of how DPS has sourced household connection figures for the purposes of quarterly performance reporting.

These same figures should be used for household connection reporting across the organisation. They are set annually by each council in July and should be used for all reporting for the financial year they relate to (e.g. FY22 figures used for all reporting between 1 July 2021 and 30 June 2022.

2. Source and contacts

Household Connection figures are managed by each client council, Wellington Water does not master this information. Figures are sourced by DPS annually after each council has completed their annual rates process.

Water	Council Contact	Alternate Contact(s)	Frequency
wcc	rates@wcc.govt.nz	@wcc.govt.nz @wcc.govt.nz rates@wcc.govt.nz	Annually (July)
нсс	@huttcity.govt.nz	@huttcity.govt.nz	Annually (July)
UHCC	rates@uhcc.govt.nz	@uhcc.govt.nz	Annually (July)
PCC	@poriruacity.govt.nz	@poriruacity.govt.nz @poriruacity.govt.nz	Annually (July)
SWDC	rates@swdc.govt.nz	@swdc.govt.nz @swdc.govt.nz	Annually (July)
GWRC	N/A – no connections		,

3. Method, assumptions, and limitations

General Calculation Method

Across all water types, councils can determine household connection figures either by counting the number of *households*, or counting the number of individual *connections* (i.e. there may be more than one connection per house). At present, each council uses the following methods:



Camad	Potable Water		Wastewater		Stormwater	
Council	Households	Connections	Households	Connections	Households	Connections
wcc	TBC	ТВС	ТВС	TBC	ТВС	ТВС
нсс	Υ	Y	Y	Υ	Υ	N
UHCC	Υ	Υ	Υ	Υ	Υ	N
PCC	Υ	Υ	Y	Υ	Υ	N
SWDC	N	Y	N	Υ	N/A¹	N/A¹

Given the above:

- Potable Water / Wastewater: All councils use the connection method.
- Stormwater: All councils use the household method.

Wastewater Connections Calculation Method

For wastewater, there are two ways in which wastewater connections can be calculated:

- 1. Whole method: Count every individual connection as 1 (i.e. 6 connections = 6)
- 2. Partial method: Count the first connection as 1, each additional as 0.5, and round the resulting calculation down (i.e. 6 connections = $1 + (5 \times 0.5)$, then round down = 3.

At present, each council uses the following method:

Council	Wastewater Connections				
Council	Whole Method	Partial Method			
wcc	TBC	ТВС			
нсс	N	Υ			
UHCC	N	Υ			
PCC	Υ	Υ			
SWDC	Y	N			

As noted above, all councils apart from SWDC use the partial method. If we were to use the supplied SWDC figure, then it would be over-stated in relation to the other councils.

To account for this, we have determined the difference between the whole method and partial method for PCC and applied that adjustment to the SWDC figure (for FY22 the adjustment for SWDC is -20%).

Potable Water Connections Calculation Method

For potable water, there is only one way in which potable water connections are calculated by each council – that is to count every individual connection (i.e. 6 connections = 6).

¹ SWDC do not have any properties connected stormwater network.



Further context notes

- The household connection figures do not include half water connections (water supplied to vacant land).
- PCC and HCC do not charge for stormwater separately in their rates process. These councils
 instead assume the stormwater household count is the same as the potable water household
 count.
- SWDC do not have any properties connected to the stormwater network.
- The household and connections figures from each council include residential, commercial, rural and other property types (e.g. churches, schools, clubs).
- GWRC potable water connection numbers are a combination of the potable water numbers
 from all the other five councils. It is not intended to represent the potable water connections
 of the whole GWRC area (as Wellington Water do not manage three waters services for all
 councils in the GWRC area).

4. Document control

Version	Update Date	Updates Made
v1.0	02/03/2021	Initial document creation based on details supplied for quarterly performance reporting and various benchmarking surveys in 2020.
v1.1	14/07/2021	Updated contacts at each council, inclusion of more detailed limitations and assumptions section.
v2.0	06/10/2021	Large update to reflect change in assumptions and counting methods to be consistent across all councils.