

## 3 Water resources

### 3.1 Average annual residential water supplied – W12

The average annual residential water supplied indicator (W12) reports the average volume (kL/property) of metered and estimated non-metered potable and non-potable water supplied to residential properties during the reporting year. It is derived by dividing the total volume of residential water supplied (W8) by the number of connected residential water properties (C2). The average volume is influenced by a number of factors, including:

- climate
- rainfall
- water conservation measures (for example, water restrictions)
- availability of water supply
- housing density
- water prices.

Rainfall is the most influential factor affecting residential consumption. An increase in rainfall should reduce demand, and a decrease in rainfall should increase demand. A decrease in rainfall can result in a significant decrease in runoff into storages and trigger demand-management measures such as water restrictions.

Average annual residential water supply (W12) data for all utilities reporting in 2020–21 are given in Table A1, Appendix A.

#### 3.1.1 Key findings

Table 3.1 presents a summary of the median average annual volume of water supplied to residential customers by utility size group.

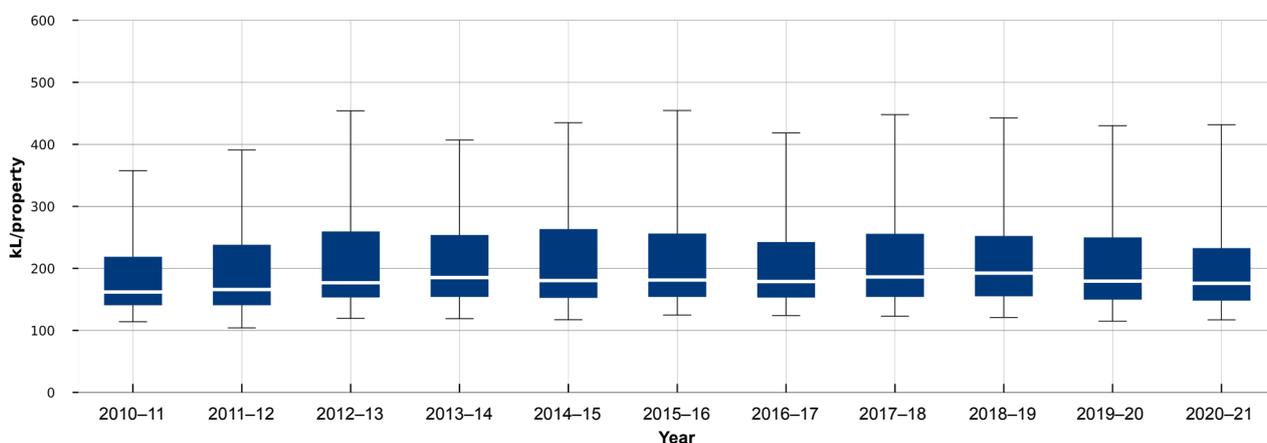
Table 3.1 Overview of results: Average annual residential water supplied (kL/property)

Utility group	Range		No. utilities with increase/decrease from 2019–20		Median		Change in median from 2019–20 (%)
	High	Low	Increase	Decrease	2019–20	2020–21	
Major	227	139	4	10	161	159	-1
	WC (Perth)	Multiple utilities					
Large	360	147	2	9	195	194	-1
	P&W (Darwin)	Multiple utilities					
Medium	477	117	8	14	184	174	-5
	Lower Murray Water	Eurobodalla					
Small	465	93	7	18	201	193	-4
	Central Highlands	Westernport Water					
<b>All size groups (national)</b>	477	93	21	53	180	176	-2
	Lower Murray Water	Westernport Water					

**Note:** The median average annual residential water supplied (kL/property) for each year is calculated using data from all utilities providing water supply services in that reporting year.

Nationally, there was a 2% decrease in the average annual water supplied in 2020–21. The decrease is consistent with the increased rainfall experienced across most of the country.

The number of utilities reporting a decrease in the average annual residential water supplied was higher than the number of utilities reporting an increase in all size groups (overall 51 out of 76 utilities reported a decrease and 4 reported no change). Riverina Water County Council reported the highest percentage decrease (21.9%) in average annual residential water supplied, and Clarence Valley Council reported the highest percentage increase (42.6%).



**Figure 3.1 Average annual residential water supplied (kL/property)**

Figure 3.1 shows a box-and-whisker plot of the average annual volume of residential water supplied for all utilities reporting W12. Across all utilities, the distribution of median residential water supply was smaller when compared to previous years and was similar to that reported in 2016–17, which experienced above-average rainfall nationally.

### 3.1.2 Results and analysis – Major utility group

Figure 3.2 shows a ranked breakdown of the average volume of residential water supplied for each utility in the Major utility group.

The largest volumes supplied to residential customers occurred in the Water Corporation – Perth and SA Water Corporation regions (227 and 192 kL/property, respectively).

Variations ranged from a 12.9% decrease by Icon Water Limited (Canberra) to a 1.9% increase by Central Coast Council.

## 3.2 Total recycled water supplied – W26

Total recycled water supplied (ML) is the sum of all treated sewage effluent used by the utility and its customers. It includes residential, commercial, industrial, agricultural, and environmental use as well as on-site use by the utility.

The volume of recycled water supplied is affected by a number of factors, including:

- availability of potable water
- size of the utility
- the utility’s proximity to potential customers (for example, agricultural users, major industrial customers and recreational facilities)
- fluctuations in sewage received and effluent available for recycling
- government policy.

Total recycled water supplied (W26) data for all utilities reporting in 2020–21 are presented in Table A2, Appendix A.

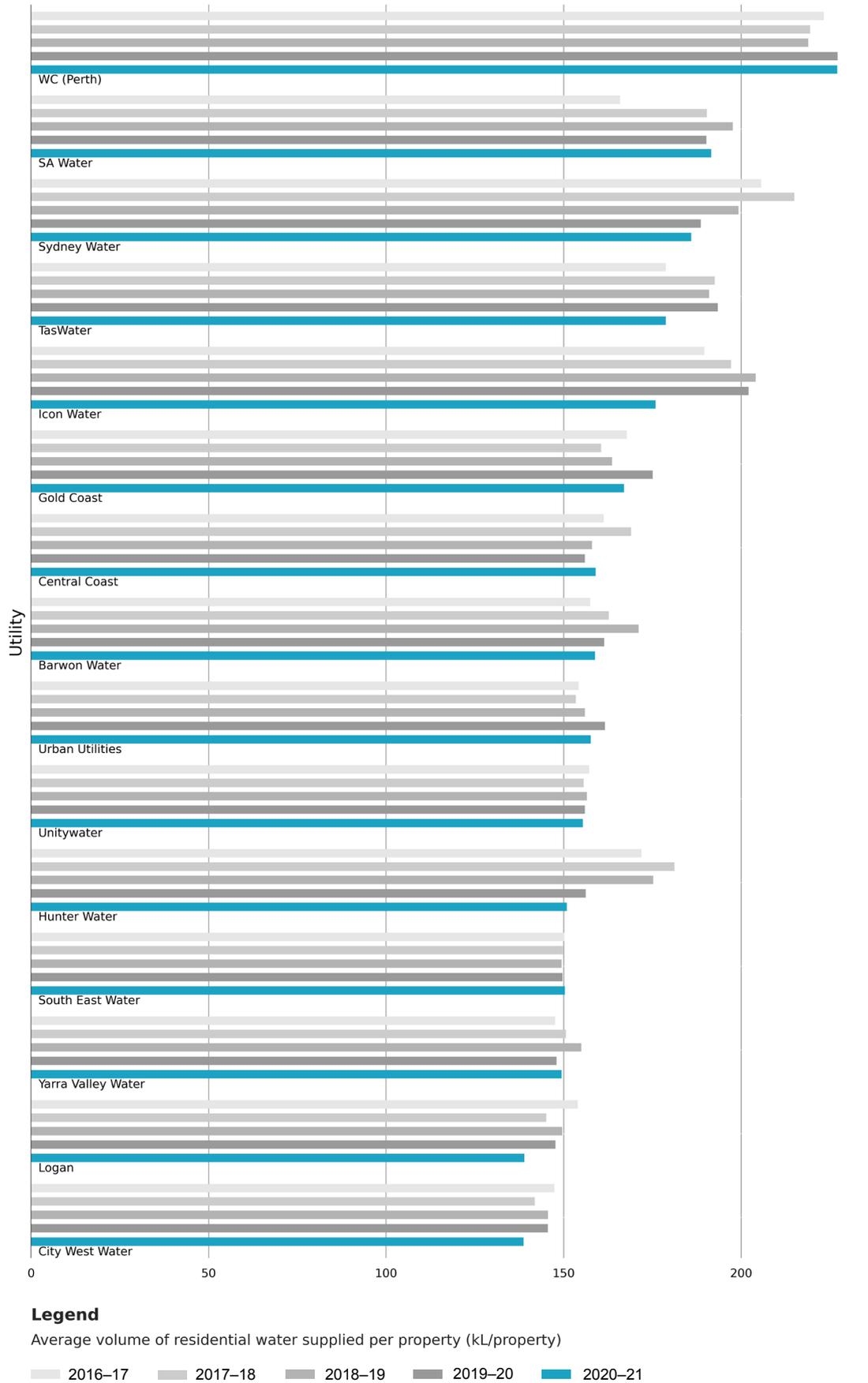


Figure 3.2 Average annual residential water supplied (kL/property – Major utility group)

### 3.2.1 Key findings

Table 3.2 presents a summary of the total recycled water supplied by utility size group.

Table 3.2 Overview of results: Total recycled water supplied (ML)

Utility group	Range		No. utilities with increase/decrease from 2019–20		Total		Change in total from 2019–20 (%)
	High	Low	Increase	Decrease	2019–20	2020–21	
Major	37,669	27	4	11	136,429	125,598	-8
	Sydney Water	Icon Water					
Large	8,443	0	5	7	27,736	26,086	-6
	North East Water	P&W (Darwin)					
Medium	5,188	86	9	13	37,213	33,852	-9
	Wagga Wagga (S)	Wingecarribee					
Small	2,677	21	12	12	18,242	17,467	-4
	Orange	Lismore					
<b>All size groups (national)</b>	37,669	0	30	43	219,620	203,003	-8
	Sydney Water	P&W (Darwin)					

**Note:** The total recycled water supplied (ML) is calculated using data from all utilities that reported data for W26 in both the 2019–20 and 2020–21 reporting years.

Nationally, the total volume of recycled water supplied decreased by 8% in 2020–21 with all utility groups reporting a decrease.

There was a large variation in the changes between reporting periods, with Queanbeyan–Palerang Regional Council increasing production by 437.1% while Mackay Regional Council decreased by 88.9%.

### 3.2.2 Results and analysis – Major utility group

In 2020–21, the total volume of recycled water supplied was 203,003 ML, and over half of this was supplied by the Major utility group (62%). Sydney Water Corporation was the largest supplier of recycled water with 37,669 ML, and Icon Water Limited reported the lowest level (27 ML) of utilities which provided recycle water.