

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 2022–23 is 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 2021–22		Median		Change in median from 2021–22 (%)
	High	Low	Increase	Decrease	2021–22	2022–23	
Major	219	135	4	11	157	152	-3%
	WC (Perth)	Logan					
Large	349	130	4	8	185	181	-2%
	P&W (Darwin)	Toowoomba					
Medium	388	108	9	13	166	171	3%
	Lower Murray Water	Eurobodalla					
Small	390	88	8	18	183	180	-2%
	P&W (Alice Springs)	Westernport Water					
All size groups (national)	390	88	25	50	163	169	4%
	P&W (Alice Springs)	Westernport Water					

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

Nationally, there was a 4% increase in the average annual water supplied in 2022–23, driven by a 3% increase in the median for the Medium size group. The changes are small and similar across the different size utility groups. The decrease in the average annual residential water supplied in the Major, Large and Small size groups is consistent with the above to very much above average rainfall across most of the country. However, numerous floods affected water quality negatively, which explains the increased average annual residential water supplied for the Medium size group.

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 50 out of 75 utilities reported a decrease). Water Corporation – Albany (Western Australia) in the Small size group was the only utility that had no change in its average annual residential water supplied compared to the previous year. Bundaberg Regional Council reported the highest decrease percentage (20.5%) in average annual residential water supplied and Ballina Shire Council (New South Wales) reported the highest increase percentage (18.6%).

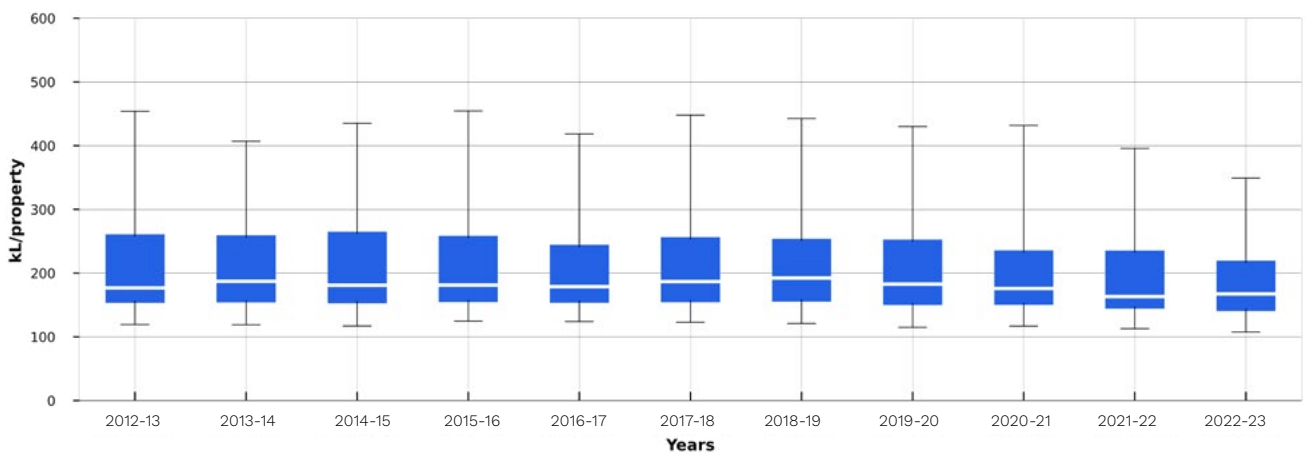


Figure 3.1 Average annual residential water supplied (kL/property)

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 the smallest in the past 11 years due to the above and very much average rainfall received across much of Australia over the last 4 years.

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 from 2018–19 to 2022–23.

Similar to the previous year, the largest average annual volume of water supplied to residential customers was reported by the Water Corporation – Perth and SA Water Corporation regions (219 and 177 kL/property, respectively).

Variations from the previous year ranged from an 8.6% decrease by SA Water Corporation (South Australia) (the highest decrease percentage) to a 1.8% increase by City of Gold Coast (the highest increase percentage).



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

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 2022–23 is presented in Table A2, Appendix A.


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 2021–22		Total		Change in total from 2021–22 (%)
	High	Low	Increase	Decrease	2021–22	2022–23	
Major	41,198	17	8	6	128,581	120,936	-6%
	Sydney Water	Icon Water					
Large	11,898	0	7	4	22,864	25,903	13%
	North East Water	P&W (Darwin)					
Medium	6,492	0	13	8	33,354	37,360	12%
	Albury	Riverina Water (W)					
Small	2,298	0	7	19	16,788	14,852	-12%
	WC (Albany)	Multiple utilities					
All size groups (national)	41,198	0	35	37	201,587	199,051	-1%
	Sydney Water	Multiple utilities					

Note: The total recycled water supplied (ML) is calculated using data from all utilities that reported data for W26 in both the 2021–22 and 2022–23 reporting years.



There has been a slight decrease in the total volume of recycled water supplied on the national scale by 1% in 2022–23. The Large and Medium utility groups showed increases of 13% and 12%, respectively, while the total volume of recycled water supplied decreased by 6% among the Major utility groups and by 12% among the Small utility group.

There was a large range of variation in the changes compared to the previous year, with Unitywater in the Major utility group reporting the highest increase percentage of 148.5% in recycled water supplied (a change from 200 ML in 2021–22 to 497 ML in 2022–23), and Lismore City Council in the Small utility group reporting the highest decrease percentage of 97.9% (a change from 332 ML in 2021–22 to 7 ML in 2022–23).

3.2.2 Results and analysis – Major utility group

In 2022–23, the total volume of recycled water supplied was 199,051 ML, and around 61% of this total was supplied by the Major utility group. Similar to the previous year, Sydney Water Corporation was the largest supplier of recycled water with 41,198 ML. Several utilities in the Large, Medium and Small size groups reported the lowest level (0 ML) this year.