2. Major urban centres

This chapter provides comparative tables and figures for a selection of key indicators for major urban centres. The figures and tables are compiled using data supplied by the service providers detailed in Table 2.1.

The structure of service providers varies, so the figures in this chapter should be treated with some caution and read in conjunction with the notes for each table. For example, to provide figures that represent Sydney and South East Queensland, it may be necessary to aggregate the numbers for both bulk water authorities and service providers servicing those areas. Melbourne (urban centre) data from the 2021–22 reporting year onward is not comparable with pre-2021–22 reporting years due to the creation of Greater Western Water. This resulted in the service area previously managed by Western Water being included in the calculations for Melbourne from the 2021–22 reporting year onward.

The historical values for all financial indicators have been adjusted using the consumer price index (CPI) value to facilitate comparisons in real terms.

Table 2.1 Data sources for capital city analyses

Major urban centre	Service provider (B denotes bulk supplier)
Perth	Water Corporation – Perth
Adelaide	SA Water Corporation
Canberra	Icon Water Limited
South East Queensland	Queensland Bulk Water Supply Authority (Seqwater) (B), Urban Utilities, Unitywater, City of Gold Coast, Redland City Council, Logan City Council
Sydney	WaterNSW (B), Sydney Water Corporation
Melbourne	Melbourne Water (B), Greater Western Water, South East Water Corporation, Yarra Valley Water Corporation
Hobart	No data – TasWater services this area; performance data are available only on an aggregated basis for the entire state of Tasmania
Darwin	Power and Water – Darwin

2.1. Water resources

2.1.1. Volume of water sources – W1, W2, W3.1, W26

Table 2.2 presents the volume (ML) of water sourced from surface water (W1), groundwater (W2), desalinated marine water (W3.1) and recycled water (W26) for each city. Following the 2020 NPR Framework Indicator Review, from 2024–25 (Table 1.1):

- W1 includes self-sourced harvested stormwater for drinking and non–drinking water supply (not for supply as recycled water). This clarification did not result any material changes to the data.
- No material changes have been applied on W2 and W3.1.
- The derivation formula for W26 has been revised including the volume of recycled water exported to other service providers (W15), the volume of recycled water supplied for own

use (WR_N3), and the volume of non–revenue recycled water supplied for beneficial reuse (WR_N4) as additional components.

With minor or no changes observed in the 2024–25 data for W1, W2 and W3.1, historical data for these indicators remains valid for comparative analysis. However, the 2024–25 data for W26 may not be fully comparable with its historical data. Therefore, Table 2.2 presents only the 2024–25 data for W26 and does not include total values, as its comparison with the previous year would not be reasonable.

In 2024–25, among all water source types, groundwater contributed the lowest total volume (166,026 ML), and surface water contributed the highest total volume (1,687,432 ML) sourced for major urban centres. The total volume of recycled water sourced for major urban centres was 201,890 ML. Compared to the previous year, the use of surface water, groundwater and desalinated water for major urban centres increased by 1.2%, 0.4% and 16.6%, respectively, as a result of above-average rainfall across the country as well as hot weather conditions leading to higher water demands.

Similar to the previous year, Sydney was the largest supplier of surface water (547,033 ML) followed by Melbourne (516,006 ML). Adelaide, Darwin, Perth and South East Queensland reported decreases in their volume of surface water sourced compared to 2023–24, with Perth reporting the highest decrease of 27.3% (from 58,838 ML in 2023–24 to 42,785 ML in 2024–25), driven by the prolonged rainfall deficiency, low streamflow and hot conditions. Other major urban centres reported increases in the volume of surface water sourced from 2023–24.

Similar to the previous year, Perth remained the largest supplier of groundwater (147,308 ML). Compared to 2023–24, Melbourne reported the highest increase of 98.7% in the volume of groundwater sourced (from 101 ML in 2023–24 to 201 ML in 2024–25), and South East Queensland reported the highest decrease of 11.1% (from 12,856 ML in 2023–24 to 11,435 ML in 2024–25). The large increase reported by Melbourne is mainly driven by greater volumes of groundwater sourced by Greater Western Water due to drier conditions with lower rainfall and reduced inflows to surface water storages, as well as by South East Water Corporation to supply customers during maintenance to the activated sludge and ultrafiltration membranes at the Lang Lang Water Recycling Plant. Adelaide, Canberra and Sydney do not source any water from groundwater sources.

Similar to the previous year, Perth was the largest supplier of desalinated water (141,233 ML) with an 18.1% increase from 2023–24. Adelaide's desalinated water supply was 5.5 times higher than the previous year in response to prolonged dry conditions across South Australia. Sydney reported the highest decrease of 39.2% (from 35,216 ML in 2023–24 to 21,412 ML in 2024–25). This decline was driven by above-average rainfall in 2024–25 which lifted storage levels to more than 90% of the full capacity, and resulted in the Sydney Desalination Plant operating at its minimum production rate (50 ML/day), except during critical outage periods. Canberra, Darwin and Melbourne did not source any desalinated water to meet urban demands.

In 2024–25, Melbourne sourced the largest volume of recycled water (84,950 ML), driven by Greater Western Water's large supply to residential customers (W20), as well as large supply to non–residential customers (W21) by Yarra Valley Water Corporation. Canberra reported the smallest volume of recycled water sourced (4,700 ML). Darwin does not source any water from recycled water.

Table 2.2 Volume of water sourced in each urban centre (ML)

Major urban centre[f]	Surface water (W1)		Groundwater (W2)		Desalinated marine water (W3.1)		Recycled water (W26)[e]
	2023–24	2024–25	2023–24	2024–25	2023–24	2024–25	2024–25
Adelaide	171,334	164,105	-	-	4,827	26,454	32,554
Canberra	51,346	54,218	-	-	-	-	4,700
Darwin	40,905	34,956	4,316	7,082	-	-	-
Melbourne[a]	471,997	516,006	101	201	-	-	84,950
Perth[b]	58,838	42,785	148,164	147,308	119,548	141,233	27,754
South East Queensland[c]	344,769	328,329	12,856	11,435	9,627	8,265	17,408
Sydney[d]	528,804	547,033	-	-	35,216	21,412	34,524

Notes:

[a] Melbourne's surface water is sourced from Melbourne Water and Greater Western Water, while its recycled water is sourced from Melbourne Water and the three retailers (Yarra Valley Water, Greater Western Water and South East Water).

[b] Perth's surface water (W1) volume reflects Water Corporation transferring water into surface water storages. In 2023–24, it diverted 136,512 ML from surface water (W1) and returned 77,674 ML. In 2024–25, Water Corporation – Perth diverted 113,912 ML from surface water (W1) and returned 71,127 ML.

[c] South East Queensland's surface water, groundwater and desalinated water are sourced from Seqwater. South East Queensland's recycled water is sourced from Seqwater and the retailers (Urban Utilities, Unitywater, City of Gold Coast, Logan City Council and Redland City).

[d] Sydney's surface water (W1) volume includes water supplied by WaterNSW to Greater Sydney and the volume of water sourced directly by Sydney Water Corporation from surface water.

[e] Following the 2020 NPR Framework Indicator Review, historical data on the volume of recycled water sourced (W26) may not be fully comparable with its 2024–25 data for all service providers. Therefore, only the 2024–25 data is presented for W26.

[f] Total water volumes supplied in each major urban centre were not fully comparable between the two reporting years as a result of significant changes applied to the volume of recycled water sourced (W26). Therefore, total values are not presented in the table.

2.1.2. Average volume of residential water supplied per property – W12

Table 2.3 shows the annual average volume (kL/property) of residential water supplied to customers in each major urban centre. Following the 2020 NPR Framework Indicator Review, from 2024–25, W12 does not include the volume of urban stormwater supplied to residential customers. With no changes observed in the 2024–25 data for W12, historical data for this indicator remains valid for comparative analysis (Table 1.1).

In contrast to the previous year, which saw an increase in residential water supply for all major urban centres, the 2024–25 residential water supply experienced decreases in Darwin, Perth, South East Queensland and Sydney. The highest increase was in Adelaide (8.2%) driven by hot conditions and increased demands.

For Adelaide and Canberra, the annual average volume of residential water supplied per property was the highest since 2020–21. South East Queensland had a decrease of 2.0% compared to the previous year, after experiencing annual increases for two years since 2021–22. For the second consecutive year, Melbourne reported an increase (5.0%) in the average volume of residential water supply per property compared to 2022–23.

Table 2.3 Average volume of residential water supplied per property (kL/property)

Major urban centre[a]	2020–21	2021–22	2022–23	2023–24	2024–25[d]	Change from 2023–24 (%)
Adelaide	196	195	179	194	210	8.2
Canberra	176	163	159	169	179	5.9
Darwin	360	374	349	389	366	-5.9
Melbourne[bc]	147	146	140	144	147	2.1
Perth	227	228	219	242	237	-2.1
South East Queensland[b]	159	147	149	151	148	-2.0
Sydney	186	178	176	181	180	-0.6

Notes:

[a] The figures exclude bulk service providers because they do not supply to customers.

[b] Melbourne and South East Queensland figures are the weighted averages for their respective retailers in each year (i.e. [W8.3 – Volume of drinking and non–drinking water, excluding recycled water, supplied to residential customers + W20 – Volume of recycled water supplied to residential customers]/C2 – Number of connected residential properties: water supply).

[c] Melbourne figures from the 2021–22 reporting year onward are not comparable with pre-2021–22 reporting years due to the merging of City West Water and Western Water to form Greater Western Water on 1 July 2021. Values displayed in this table pre-2021–22 do not include the service area previously managed by Western Water.

[d] Following the 2020 NPR Framework Indicator Review, from 2024–25, the volume of urban stormwater supplied to residential customers is excluded from the calculation of average volume of residential water supplied per property. A detailed assessment found that this change has minimal impact on historical data and confirmed that historical data remains valid for comparative analysis.

2.2. Finance and pricing

2.2.1. Total typical residential customer bill (drinking water supply and wastewater) – P8

Table 2.4 shows the total typical residential customer bill ($) for water supply and wastewater in each major urban centre. Following the 2020 NPR Framework Indicator Review, P8 has not materially changed, and its historical data remains valid for comparative analysis (Table 1.1).

The sum of total typical residential bill increased by 1.5% from the previous year across all major urban centres. In contrast to the previous year, which saw an increase in total typical residential bill for almost all major urban centres, the 2024–25 combined residential bill experienced decreases in Darwin, Perth and Sydney. The decreases in Darwin and Perth were driven by lower typical residential bill for drinking water supply, despite increases in wastewater charges. In Sydney, both typical residential bills for water supply and wastewater services decreased, resulting in the overall highest decrease (2.5%) among all major urban centres compared to the previous year.

Adelaide reported the highest increase (8.7%) and Melbourne reported the lowest increase (1.5%) from 2023–24. Over the past four years since 2021–22, Melbourne and Darwin have consistently reported the lowest and highest total typical residential bills, respectively.

After experiencing annual declines since 2020–21, the total typical residential bill in Melbourne increased by 1.5% in 2024–25 compared to the previous year. For the second consecutive year, Adelaide and South East Queensland both recorded increases. Adelaide reported a 14.4% increase (from $1,159 in 2022–23 to $1,326 in 2024–25) and South East Queensland reported a

3.5% increase (from $1,625 in 2022–23 to $1,682 in 2024–25). Canberra, Darwin, Perth and Sydney recorded annual decreases from 2020–21 to 2022–23, followed by slight increases in 2023–24, and then further decreases in 2024–25.

Despite all year-to-year changes, total typical residential bills remained below 2020–21 levels in almost all major urban centres, with Melbourne reporting the highest decline of 14.0% (from $1,220 in 2020–21 to $1,049 in 2024–25) and Sydney reporting the lowest decline of 4.6% (from $1,219 in 2020–21 to $1,163 in 2024–25) over the past five years. Adelaide was the only exception, with the total typical residential bill exceeding the 2020–21 level by only 1.1% (from $1,311 in 2020–21 to $1,326 in 2024–25), due to increases in both residential water use and prices.

See Section 4.1 for the typical bills charged by all service providers.

Table 2.4 Total typical residential bill ($)

Major urban centre[a]	2020–21	2021–22	2022–23	2023–24	2024–25	Change from 2023–24 (%)
Adelaide	1,311	1,267	1,159	1,220	1,326	8.7
Canberra	1,313	1,244	1,136	1,160	1,222	5.3
Darwin	2,185	2,172	2,030	2,086	2,066	-1.0
Melbourne[bc]	1,220	1,115	1,049	1,033	1,049	1.5
Perth	1,907	1,851	1,750	1,785	1,773	-0.7
South East Queensland[b]	1,793	1,694	1,625	1,653	1,682	1.8
Sydney	1,219	1,173	1,142	1,193	1,163	-2.5

Notes:

[a] The figures exclude bulk service providers as they do not supply to customers.

[b] Melbourne and South East Queensland figures are the weighted average of the retail utilities in that year (i.e. Σ[P3 – Typical residential customer bill: drinking water supply × C2 – Number of connected residential properties: water supply)]/Σ(C2 – Number of connected residential properties: water supply), and Σ[P6 – Typical residential customer bill: wastewater × C6 – Number of connected residential properties: wastewater)]/Σ(C6 – Number of connected residential properties: wastewater)).

[c] Melbourne figures from the 2021–22 reporting year onward are not comparable with pre-2021–22 reporting years due to the merging of City West Water and Western Water to form Greater Western Water on 1 July 2021. Values displayed in this table pre-2021–22 do not include the service area previously managed by Western Water. The service area managed by Western Water pre-2021–22 makes up approximately 3.5% of total connections in the Melbourne urban centre from the 2021–22 reporting year onward.

2.2.2. Total capital expenditure: water supply and wastewater – F16

Table 2.5 shows the combined capital expenditure ($000s) related to the service providers' water and wastewater operations, aggregated by major urban centre. Historical values are adjusted using the consumer price index (CPI) value. Following the 2020 NPR Framework Indicator Review, from 2024–25, F16 has changed to a reported indicator including the corporate capital expenditure for water supply and wastewater services. With minor or no changes observed in the 2024–25 data for F16, its historical data remains valid for comparative analysis (Table 1.1).

Overall, the sum of total capital expenditure for water supply and wastewater services increased by 17.2% from the previous year. All major urban centres, except Melbourne, experienced an increase compared to the previous year. Melbourne experienced a decline (4.6%) from 2023–24 yet still recorded the second-highest total capital expenditure ($1.666 billion) among all major urban centres after Sydney in 2024–25. The decline was driven by a reduction in capital

expenditure for water supply. While similar to the previous year, Darwin reported the highest increase (83.8%) from 2023–24 – driven by the Manton Dam return to service and Darwin River Dam pump station projects – it had the second-lowest total capital expenditure ($126,643 thousand) among all major urban centres after Canberra in 2024–25. Sydney recorded the lowest increase of 10.6% from the previous year but continued to report the highest total capital expenditure ($2.534 billion) for the fourth consecutive year since 2021–22.

Despite all year-to-year changes over the past four years, total capital expenditure increased in all major urban centres, remaining above 2021–22 levels, with Darwin recording the highest increase (from $28,620 thousand in 2021–22 to $126,643 thousand in 2024–25), and Canberra the lowest increase (from $76,418 thousand in 2021–22 to $96,050 thousand in 2024–25). Comparison with 2020–21 levels is not valid since Melbourne's data from 2021–22 onward are not comparable with pre-2021–22 reporting years (see notes for Table 2.5).

See Section 4.3 for combined capital expenditure for all service providers.

Table 2.5 Total capital expenditure: water supply and wastewater ($000s)

Major urban centre	2020–21	2021–22	2022–23	2023–24	2024–25[c]	Change from 2023–24 (%)
Adelaide	340,647	288,240	302,289	373,116	581,314	55.8
Canberra	104,082	76,418	77,283	72,278	96,050	32.9
Darwin	24,541	28,620	38,988	68,884	126,643	83.8
Melbourne[ab]	1,300,160	1,267,137	1,439,351	1,746,290	1,665,844	-4.6
Perth	443,101	394,719	427,774	665,412	1,113,643	67.4
South East Queensland[a]	987,654	997,914	1,089,444	1,289,834	1,511,703	17.2
Sydney[a]	1,179,539	1,409,484	1,856,932	2,291,924	2,533,860	10.6

Notes:

[a] Melbourne, South East Queensland and Sydney figures are aggregates for the bulk service provider and their respective retailers.

[b] Melbourne figures from the 2021–22 reporting year onward are not comparable with pre-2021–22 reporting years due to the merging of City West Water and Western Water to form Greater Western Water on 1 July 2021. Values displayed in this table pre-2021–22 do not include the service area previously managed by Western Water.

[c] Following the 2020 NPR Framework Indicator Review, from 2024–25, total capital expenditure for water supply and wastewater services is changed to a reported indicator including the corporate capital expenditures. A detailed assessment found that this change aligns with the reporting requirements for the historical period and confirmed that historical data remains valid for comparative analysis.

2.3. Assets and operations

2.3.1. Average duration of an unplanned interruption: drinking water supply – C15

Table 2.6 shows the average duration (minutes) of unplanned interruptions to drinking water supply in a service provider's operation, aggregated by major urban centre. Following the 2020 NPR Framework Indicator Review, C15 has not materially changed, and its historical data remains valid for comparative analysis (Table 1.1).

Compared to the previous year, all major urban centres, except Canberra and Darwin, reported a decrease in their average duration of unplanned drinking water supply interruptions, with Adelaide reporting the largest decrease of 42.3% and Perth and Sydney reporting the lowest decrease of

0.6% (almost no change compared to the previous year). Canberra and Darwin recorded an increase, with Darwin reporting the largest increase of 61.8% due to repairs of main bursts. Among all major urban centres, Melbourne reported the shortest duration of unplanned drinking water supply interruptions (98 minutes) in 2024–25, and Sydney reported the longest (178 minutes).

For the first time in the past five years, Canberra and Darwin experienced an increase in the average duration of unplanned drinking water supply interruptions. However, both remained below their 2020–21 levels. After only slight year-to-year changes over the past five years, Melbourne returned to its 2020–21 level (98 minutes). For the first time in the past five years, Perth managed to slightly reduce its average duration of unplanned interruptions in drinking water supply from the previous year, although it remained 29 minutes above its 2020–21 level. Similarly, South East Queensland reported a decrease from the previous year while its average duration of unplanned interruptions in drinking water supply remained 23 minutes above its 2020–21 level. Despite year-to-year changes over the past five years, Adelaide and Sydney reported decreases of 16.5% (from 188 minutes in 2020–21 to 157 minutes in 2024–25) and 11.0% (from 200 minutes in 2020–21 to 178 minutes in 2024–25), respectively.

See Section 5.1 for unplanned interruptions to water supply for all service providers.

Table 2.6 Average duration of an unplanned interruption: drinking water supply (minutes)

Major urban centre	2020–21	2021–22	2022–23	2023–24	2024–25	Change from 2023–24 (%)
Adelaide	188	181	165	272	157	-42.3
Canberra	147	136	132	118	123	4.2
Darwin	139	102	77	76	123	61.8
Melbourne[a]	98	103	110	110	98	-10.9
Perth	140	141	162	170	169	-0.6
South East Queensland	121	134	132	149	144	-3.4
Sydney	200	192	231	179	178	-0.6

Notes:

[a] Melbourne figures from the 2021–22 reporting year onward are not comparable with pre-2021–22 reporting years due to the merging of City West Water and Western Water to form Greater Western Water on 1 July 2021. Values displayed in this table pre-2021–22 do not include the service area previously managed by Western Water.

2.4. Public health and environment

2.4.1. Total greenhouse gas emissions reported under the NGER scheme – HE_N1

Table 2.7 shows the contribution of the service providers' operations to greenhouse gas emissions (t CO_2 equivalent), aggregated by major urban centre. Following the 2020 NPR Framework Indicator Review, from 2024–25, greenhouse gas emission indicators, including E12, were decommissioned and HE_N1 was introduced as a new indicator to capture the same context, with no historical data collected.

In 2024–25, Melbourne reported the highest total emissions (490,675 t CO_2 equivalent), driven by Melbourne Water Corporation's high emissions as the only bulk water supply in Melbourne. Darwin reported the lowest total emissions (15,217 t CO_2 equivalent).

See Section 6.1 for total greenhouse gas emissions for all service providers.

Table 2.7 Total greenhouse gas emissions reported under the NGER scheme (t CO_2 equivalent)

Major urban centre	2020–21	2021–22	2022–23	2023–24	2024–25	Change from 2023–24 (%)
Adelaide[a]	-	-	-	-	-	-
Canberra	-	-	-	-	34,247	-
Darwin	-	-	-	-	15,217	-
Melbourne	-	-	-	-	490,675	-
Perth	-	-	-	-	462,923	-
South East Queensland	-	-	-	-	365,573	-
Sydney	-	-	-	-	292,714	-

Note:

[a] The National Greenhouse and Energy Reporting (NGER) scheme requires reporting only from registered service providers that meet NGER thresholds. Therefore, SA Water Corporation has reported data for corporation's entire service area rather than providing separate reporting for the Adelaide urban centre.