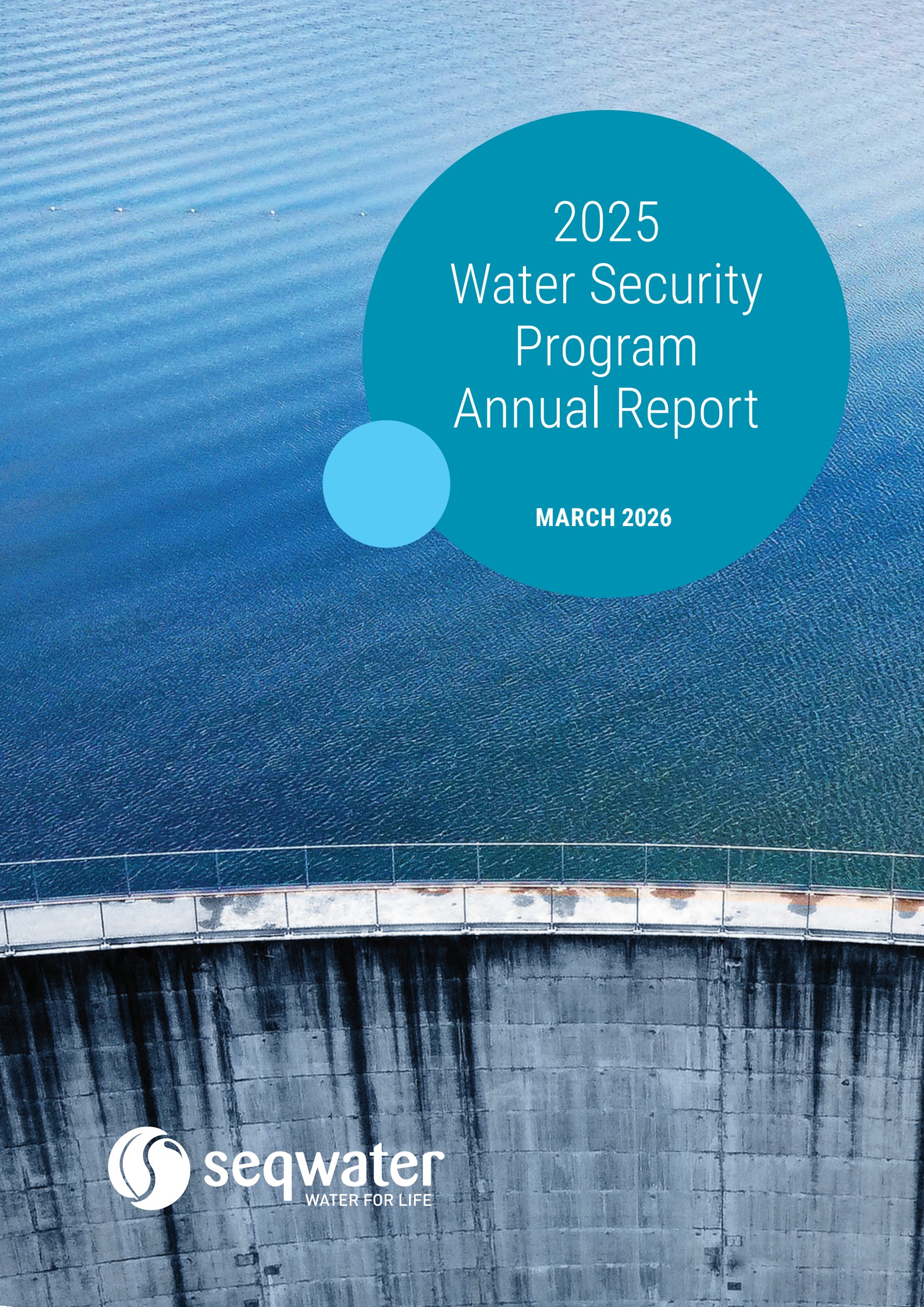

2025 Water Security Program Annual Report

MARCH 2026

seqwater
WATER FOR LIFE

Seqwater acknowledges the Traditional Custodians of the land, catchments and waterways on which we live, work and play.

We pay our respects to Elders past, present and emerging; and acknowledge their continued connection to the land, water and culture of South East Queensland.

Contents

Introduction

Seqwater is responsible for long-term planning, including drought response, for a reliable and sustainable water supply in South East Queensland (SEQ). This planning is outlined in the 30-year Water Security Program, 'South East Queensland Water Security Program 2023' that was released in October 2023. This report can be found at: www.seqwater.com.au/water-security.

Seqwater is required to prepare and report on water security for SEQ annually. This 2025 annual report assesses changes in water security compared to the Water Security Program (WSP) 2023.

Highlights

The highlights for 2025 include:

- Continued supply of a safe, reliable and high-quality bulk water supply.
- Storages decreased 10.2% between January and December in 2025, resulting in a water grid storage level of 78.6% as at 31 December 2025.
- Seqwater is continuing to develop an education campaign to encourage the SEQ community to be waterwise.
- Collaboration with the Department of Local Government, Water and Volunteers (DLGWV), and our SEQ Retailer Customer partners (City of Gold Coast, Logan Water, Redland City Council, Unitywater and Urban Utilities) on drought preparedness activities.
- Continued investigations for the use of the Western Corridor Recycled Water Scheme for non-potable industry uses.
- Supply of up to 2,576 ML of Purified Recycled Water (PRW) to industrial customers, offsetting water demand from Grid water sources.
- Progress on more detailed planning for regional long-term and drought contingency supply options, including the proposed Wyaralong Water Treatment Plant (WTP), Northern Pipeline Interconnector Stage 3 and expansion of the Gold Coast Desalination Plant.

Water supply security situation

Seqwater continued to improve preparedness and resilience for future droughts throughout 2025 by:

- engaging with the SEQ Retailer Customers to further develop our shared understanding of drought response needs
- continuing to develop public information to educate the community on water security challenges and the drought response plan
- managing the water grid to balance water security and cost efficiency drivers
- developing and progressing planning for drought contingency water supply options
- reviewing contingency planning for supplies to off-grid communities.

Seqwater continuously monitors and responds to the water security situation in SEQ. When the combined water grid storage level falls below 70%, Seqwater releases a monthly Water Security Status Report. Above 70%, the reports are produced every two months.

The final report for 2025 can be found here: https://www.seqwater.com.au/sites/default/files/2025-12/Water%20Security%20Update%20November%202025.pdf

Water Grid

Seqwater continued to progress drought preparedness throughout 2025, including further collaboration with the SEQ Retailer Customers (https://www.seqwater.com.au/waterforlife).

Despite some rainfall in the first half of 2025, below average rainfall in the second half of 2025 meant that water grid storage levels declined overall. The water grid storage level declined from 88.8% on 1 January 2025 to 78.6% as at 31 December 2025.

The full supply level of the SEQ Water Grid has been reduced while Seqwater undertakes its Dam Improvement Program. The program will deliver infrastructure upgrades at a number of Seqwater dams and ensure ongoing safety and security of bulk water supply well into the future.

The Lake Macdonald Dam Improvement Project commenced early works in November 2024, with major construction underway from May 2025. The lake was lowered to 42% in October 2024 ahead of the wet season, and further lowering to 39% occurred in August 2025 to limit impacts from wet weather events and reduce the chances of the temporary cofferdam overtopping. This water level is expected to remain until the project is complete in 2028/2029. This water level is higher than the previously proposed design and will improve water security for the Noosa community and maintain access to the lake during the construction period.

A detailed business case is currently being prepared for the Somerset Dam Improvement Project. While detailed planning is underway on the main dam upgrade, Seqwater has identified an opportunity to undertake Early and Enabling Works. The Early and Enabling Works are required to be completed irrespective of the final design configuration and will involve a range of preliminary activities that support the main dam upgrade. These works are being progressively rolled out with works commencing onsite in 2025.

Early planning is underway for the Wivenhoe Dam Improvement Project however, as Somerset and Wivenhoe Dams operate as one system, the outcomes of the Somerset Dam planning will inform final considerations for Wivenhoe Dam.

Planning is also underway to confirm the preferred upgrade options for North Pine Dam (Lake Samsonvale). While North Pine Dam continues to operate safely under normal conditions, Seqwater implemented additional precautionary measures this wet season by lowering Lake Samsonvale to better manage large spill events and catchment inflows. In late January 2025, Lake Samsonvale was gradually lowered to 54% of its total capacity, which is approximately two metres lower than the previous full supply level.

While detailed planning for the main North Pine Dam upgrade continues, Seqwater has identified an opportunity to undertake early strengthening works to the dam wall. The Staged Strengthening project involves installing post-tensioned anchors vertically through sections of the dam wall and into the rock foundation below the dam. Post tensioned anchoring is an industry-accepted strategy to enhance the

structural stability of dams and will ensure the dam can withstand more extreme floods. Work on the staged strengthening commenced in mid-2025, and is expected to be complete in late 2026, weather and conditions permitting.

While the dam improvement program is underway, Wivenhoe, Somerset and North Pine Dams are operating at a reduced full supply level. This is an industry-accepted practice to manage dam safety.

The temporary changes mean Wivenhoe Dam storage will be maintained at 90% full supply level, Somerset Dam at 80% full supply level and North Pine at 54% full supply level, until upgrades are completed.

The temporary full supply levels mean the SEQ Water Grid at full supply is reduced from 100% to approximately 88%.

Seqwater closely monitor supplies and will implement the adaptive drought response plan, as detailed in the Water Security Program, as required. Seqwater collaborates with its SEQ Retailer Customers, Government and other key stakeholders to effectively manage drought, including continuing with pre-planning activities whilst the storages are above drought trigger levels.

Off-Grid communities

Seqwater supplies drinking water to around 53,000 people living in 16 locations not connected to the SEQ Water Grid, known as off-grid communities. The water for these communities is sourced and treated locally, then distributed to households and businesses.

Dayboro is supplied by water from an alluvial aquifer. The Dayboro WTP accesses this aquifer via intake wells in the North Pine River. Dayboro reached the drought readiness level) of below 40.7m in the well in May 2025 after damage to the aquifer from Cyclone Alfred. The source has continued to be able to supply the town and is being monitored closely.

Canungra is supplied by water from Canungra Creek and reached the drought pre-trigger level of below 15ML/day of flows to the creek in October and again for a short period in December. At the drought pre-trigger normal demands are maintained and Seqwater increases monitoring of the water level to weekly. The creek has had consistent flow for all of 2025. Relevant dates and trigger levels are provided in **Table 1** below..

Long term water security assessments for the off-grid communities were undertaken as part of the Water Security Program 2023 and will be updated in the next review of the Water Security Program.

Seqwater has considered the future demand forecast for Canungra and Dayboro with our retailer customers, Urban Utilities and Unitywater, and determined the level of sustainable supply. As identified in the WSP 2023, additional investment will be required between 2031-2035.

Seqwater is currently working on strategic water supply options and timing for investment for both Dayboro and Canungra.

The preferred option for Canungra is an off-stream storage, and the preferred option for Dayboro is a pipeline to connect the Dayboro community to the SEQ Water Grid.

Table 1: Off-Grid drought response actions

Off-Grid	Date	Trigger
Canungra	08 October 2025	Drought Pre-Trigger
	28 October 2025	Exit
	21 December 2025	Drought Pre-Trigger
	23 December 2025	Exit
Dayboro	27 May 2025	Drought Readiness

Changes to Water Security Program planning assumptions

The key planning assumptions that underpin the Water Security Program are currently under review as part of the work for the next Water Security Program which is to be delivered in 2028. This review began in 2025 and is ongoing with some of the key assumptions assessed in 2025 including:

- Demand
- Dam Full Supply Levels
- Grid Operating Parameters

Seqwater is working with DLGWV on formal review of these assumptions as part of the development of the next WSP.

DLGWV also reviewed the water security targets (specified as Level of Service objectives in legislation). Seqwater is required to have a WSP which includes strategies and plans for the achievement of these water security targets. DLGWV are proposing amendments to the legislation this year, particularly around water efficiency, which also triggers an update to the Water Security Program.

Demand

Demand data in this report is for the 2024/25 financial year. Reporting based on financial year is consistent with all other demand related reporting, enabling ease of comparison.

SEQ Retailer Customers

Water demand is influenced by many factors including weather conditions, population growth, consumption behaviour and system shocks (as seen between 2020 to 2022 during the COVID-19 pandemic). Observed water demand (urban demand) for 2024/25 decreased by 1.3% compared to the 2023/24 demand. SEQ experienced drier conditions in 2023, followed by above-average rainfall across much of Queensland in 2024, including early 2024/25. The reduction in annual demand for 2024/25 compared with 2023/24 is consistent with these observed weather conditions.

Figure 1: SEQ historical water demand and Water Security Program 2023 Planning Demand (WSP 2023 Demand)

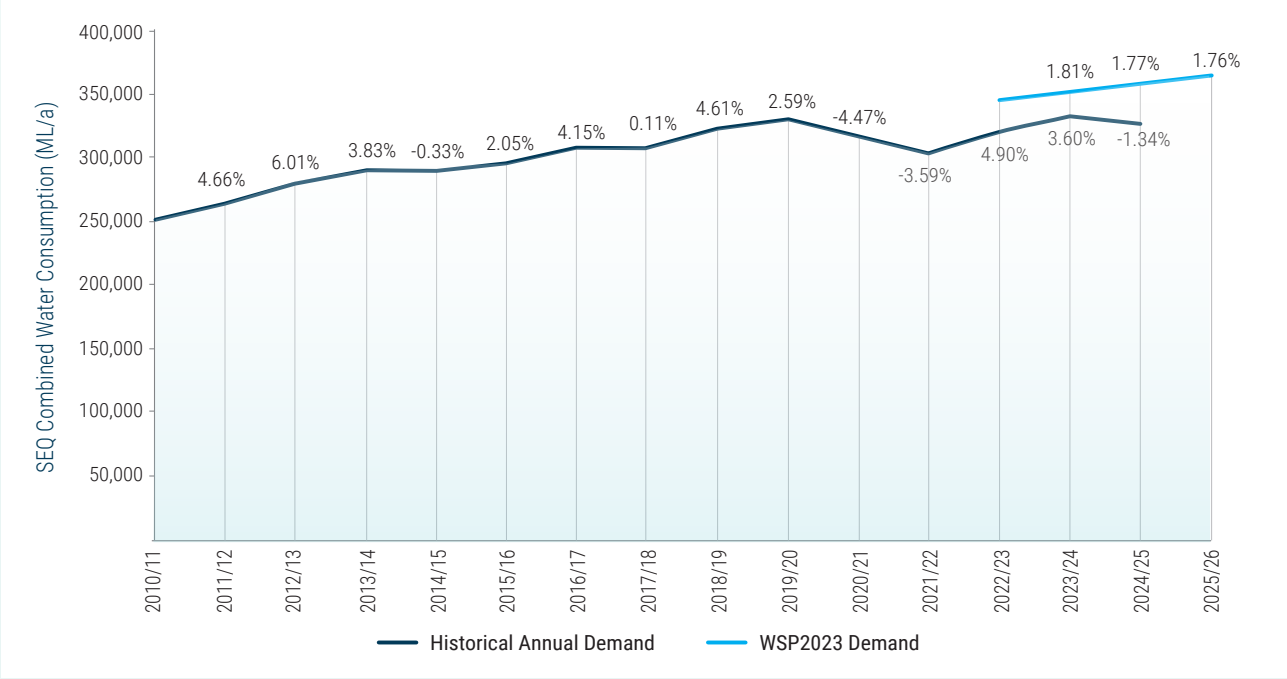

Figure 1 *(page 7)* shows a trend of around 3% growth in water consumption per annum from 2010/11 through to 2019/20. In 2024/25, total water consumption decreased by 1.3% compared to the previous year. Over the same period, Queensland Government Statistician's Office (QGSO) population forecasts (2023 Edition, Medium Series) indicate population growth expected to be around 2%. Taken together, this implies either a per-capita reduction in water use of approximately 3.3%, or that there were material deviations from expected residential population growth and/or shifts in non-residential consumption, or a combination of the above, which collectively contributed to the net 1.3% reduction in total annual demand. (Table 2).consumption per annum from 2010/11 through to 2019/20.

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Table 2. 2023/24 and 2024/25 Water supplied to SEQ Retailer Customers (ML/a) & (L/p/d)

Region	2023/24	2024/25	% change
SEQ Water Supplied (ML/a)	331,061	326,609	-1.3%
Total water consumption (residential and non-residential) (L/p/d)	246	238	-3.3%

Table 3 below illustrates consumption (megalitres per annum (ML/a)) has decreased across almost all Local Government Areas (LGA), in particular Moreton Bay, Noosa, Scenic Rim and Somerset. Table 4 illustrates the same demand data in litres per person per day (L/p/d). Table 5 and Table 6 present the same demand information, disaggregated into residential and non-residential components.

Table 3. 2023/24 and 2024/25 Water supplied to SEQ Retailer Customers by LGA (ML/a)

Region	Demand supplied (ML/a)		% change
	2023/24	2024/25	
Brisbane	123,737	122,279	-1.18%
Gold Coast	66,000	65,045	-1.45%
Ipswich	22,960	22,292	-2.91%
Lockyer Valley	2,853	2,894	-1.45%
Logan	26,373	27,160	2.98%
Moreton Bay	35,582	34,302	-3.60%
Noosa	5,836	5,563	-4.68%
Redlands	14,888	14,487	-2.69%
Scenic Rim	2,032	1,944	-4.35%
Somerset	2,429	2,314	-4.72%
Sunshine Coast	28,372	28,329	-0.15%

Table 4. 2023/24 and 2024/25 Water supplied to SEQ Retailer Customers by LGA (L/p/d)

Region	Demand supplied (L/p/d)		% change
	2023/24	2024/25	
Brisbane	259	252	-2.42%
Gold Coast	273	263	-3.67%
Ipswich	252	238	-5.86%
Lockyer Valley	265	263	-0.75%
Logan	204	204	0.33%
Moreton Bay	195	183	-6.06%
Noosa	337	318	-5.67%
Redlands	251	242	-3.69%
Scenic Rim	263	244	-7.50%
Somerset	478	447	-6.66%
Sunshine Coast	233	226	-2.80%

Table 5 2023/24 and 2024/25 Water supplied to SEQ Retailer Residential Customers by LGA (L/p/d)

Region	Residential (L/p/d)*		% change
	2023/24	2024/25	
Brisbane	160	153	-4.04%
Gold Coast	181	179	-1.40%
Ipswich	148	138	-6.41%
Lockyer Valley	126	121	-4.43%
Logan	154	157	1.92%
Moreton Bay	145	137	-5.89%
Noosa	233	219	-5.92%
Redlands	204	196	-3.96%
Scenic Rim	147	133	-9.65%
Somerset	157	150	-4.63%
Sunshine Coast	166	163	-2.19%
SEQ	**164**	**158**	**-3.25%**

* The LPD figures presented are derived from data available at the time of calculation and may be revised when more recent or refined consumption breakdown data is released.

Table 6 2023/24 and 2024/25 Water supplied to SEQ Retailer Non-Residential Customers by LGA (L/p/d)

Region	Non-Residential (L/p/d)*		% change
	2023/24	2024/25	
Brisbane	99	99	0.38%
Gold Coast	91	84	-7.94%
Ipswich	104	99	-4.99%
Lockyer Valley	138	141	2.59%
Logan	49	47	-4.08%
Moreton Bay	49	46	-6.05%
Noosa	103	98	-4.76%
Redlands	46	45	-1.55%
Scenic Rim	116	110	-4.69%
Somerset	321	296	-7.78%
Sunshine Coast	66	63	-3.96%
SEQ	**82**	**79**	**-3.18%**

* The LPD figures presented are derived from data available at the time of calculation and may be revised when more recent or refined consumption breakdown data is released.

In the current financial year (2025/26), year-to-date demand to the end of December 2025 is 5.0% higher than for the same period in 2024/25. The higher demand from July to December 2025 is likely influenced by the lower than average rainfall over this period compared with 2024. SEQ's average daily rainfall for July–December 2025 was approximately 22% lower than in the previous financial year.

Neighbouring communities

Under the bulk water supply agreement with Toowoomba Regional Council, up to 10,000 ML/a can be transferred from Wivenhoe Dam to Cressbrook Dam to supplement drinking water supplies in the Toowoomba region. **Table 7** shows that Toowoomba Regional Council accessed a small amount in 2024/25.

Table 7. 2023/24 and 2024/25 water supplied to Toowoomba (Wivenhoe to Cressbrook transfer) (ML/a)

Customer	2023/24	2024/25	% change
Toowoomba Regional Council (ML/a)	0	4.5	N/A

Power stations

Under bulk water supply agreements with Stanwell and CleanCo, Tarong and Swanbank power stations could take up to a combined total of 3,360 ML/a[1] in 2024/25. **Table 8** below shows the volume of water supplied (combined total of raw and purified recycled water) to power stations in 2024/25 compared with 2023/24.

Table 8. 2023/24 and 2024/25 Observed Power Station Demands (ML/a)

Customer	2023/24	2024/25	% change
Power stations (ML/a)	4,615	2,724	-40.98%

1 The estimated total allowable take is allocated proportionally against the contracted volumes, incorporating any contract adjustments made throughout the year.

Assessment of the projected regional average demand

A review of the current water security planning demand forecast was completed in late 2025. The outcomes of this review determined no adjustments are needed to the demand profile, given:

- The existing planning demand profile (WSP 2023 Planning Demand) has demonstrated acceptable performance, remaining within the 10% variation threshold.
- Despite a reduction in annual demand in 2024/25, the broader post-COVID-19 growth trend remains above the pre-covid (2013/14-2019/20) long-term average of 2.5%. The short period of post COVID-19 data (2022/23-2024/25) introduces uncertainty the post COVID-19 trends for expected residential population growth, residential consumption and/or shifts in non-residential consumption. Convergence with planning demand remains a plausible future outcome (see Figure 2) and Seqwater will provide another update in the next WSAR. (see **Figure 2**).
- Monitoring of observed demand trends and performance against the forecast will continue. Where a sustained material change in growth trends is observed, a review will be undertaken to determine impacts to water security planning and if necessary, an update to the WSP Planning Demand (and therefore the Water Security Program) will be made.

Seqwater continues to work with its SEQ Retailer Customers and DLGWV to understand longer-term demands.

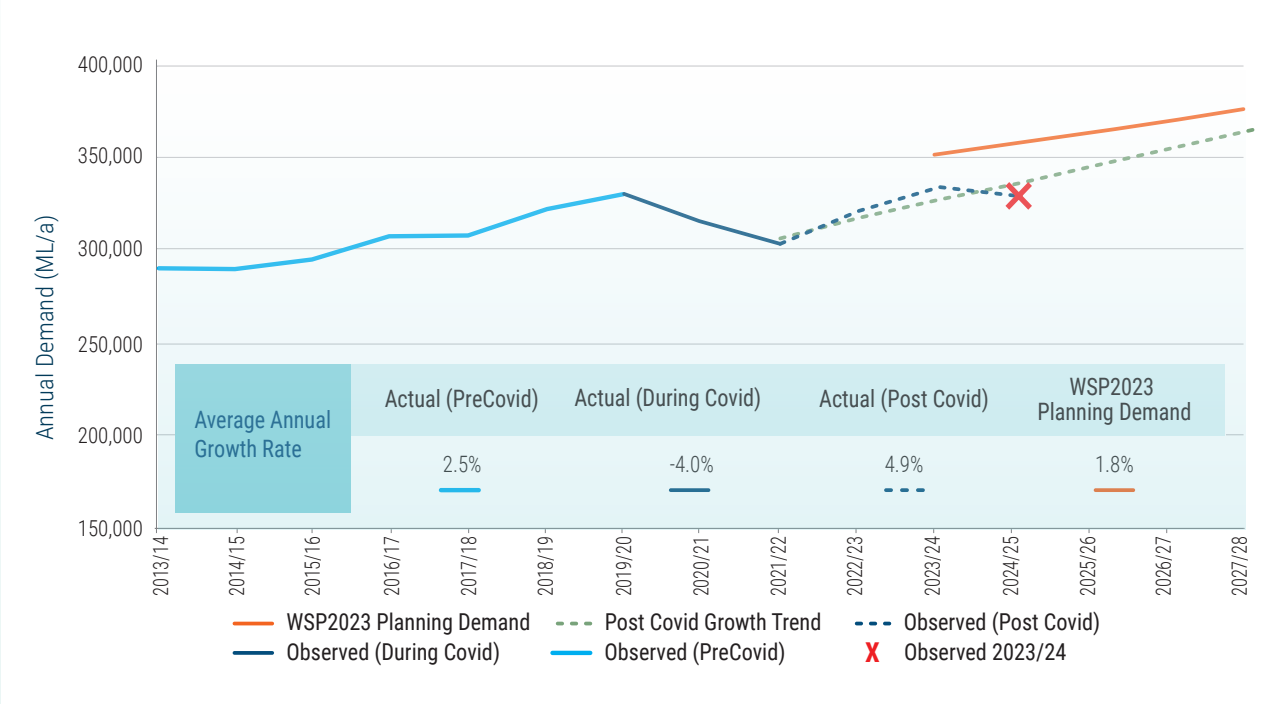

Figure 2: Historical and WSP2023 Planning Demand Growth Trends

Off-Grid community demand projection assessment

In most off-grid communities, the observed demands for the 2024/25 financial year were lower than in the 2023/24 financial year. It is likely this reduction in observed demands was driven by the higher total rainfall in the 2024/25 financial year for the corresponding Off-Grid communities.

Observed rainfall across the 2025 calendar year was lower than in 2024. This lower rainfall is likely driving the increase in observed demands in the July to December 2025 period compared to the same period in the previous year.

Despite the increased rainfall and the corresponding lower observed demands in the 2024/25 financial year, the variation of observed demands from the WSP 2023 Off-Grid Demand Forecast has persisted.

As Off-Grid communities are small and isolated networks, they can be subject to greater variability of demand due to changes from a single large user, such as increased demand during construction, or seasonal demand from tourism. However, there is uncertainty in the post COVID-19 trends for expected residential population growth, residential consumption and/or shifts in non-residential consumption, and there will be ongoing monitoring to understand the possible associated impacts to demand growth trends, along with collaboration with retailer customers to incorporate these learnings into the Off-Grid demand forecasts.

The WSP 2023 identified that 10 of the 16 Off-Grid communities had adequate LOS Yield to meet LOS requirements beyond 2051, with the remaining six undergoing planning for future water supply upgrades. As part of the WSP 2028 work, Seqwater is conducting a review and update of the Off-Grid demand forecasts and the Level of Service assessments for Off-Grid water supply schemes.

Noting that the Off Grid communities are subject to greater demand variability, WSP 2023 assessment outcomes and the review currently underway for the WSP 2028, the Demand Forecast variation against observed demand is not considered a significant risk in the short term. The revised demand forecast and LOS assessments for the Off-Grid communities will be reflected in the next update to the Water Security Program.

Water Supply

Table 9. Water supplied by Seqwater 2024/25 (ML/a)

Sector	Total volume for 2024/25 (ML/a)
SEQ Region – total production of treated water to supply SEQ Retailer Customers	326,609
Subregions – total treated water supplied to each sub-region	
Northern (Moreton Bay, Sunshine Coast and Noosa council areas)	68,194
Central (Brisbane, Ipswich, Lockyer Valley, Scenic Rim & Somerset Council areas)	151,724
Southern (Gold Coast and Logan council areas)	92,204
Eastern (Redland City Council area)	14,487
Bulk water grid storages – Raw water extracted for water treatment (excludes environmental, flood releases and water for irrigators)	
Wivenhoe Dam & Brisbane River downstream of Wivenhoe (exclusive of pipelines)	152,794
Somerset Dam	1,433
North Pine Dam	34,053
Hinze Dam	60,644
Baroon Pocket Dam	23,700
Leslie Harrison Dam	2,681
Ewen Maddock Dam	2,987
Cooloolabin Dam and Wappa Dam	4,743
Sideling Creek Dam (Lake Kurwongbah)	0
Lake Macdonald	2,270
Little Nerang Dam	13,890

Sector	Total volume for 2024/25 (ML/a)
Climate-resilient water sources	
Gold Coast Desalination Plant Production	8,265
Western Corridor Recycled Water Scheme Production (PRW sent to power stations)	2,306
Other water sources	
North Stradbroke Island (Minjerribah) – water used for water treatment (Herring Lagoon and North Stradbroke Island Bore fields, 15 Bores)	6,308
Off-grid communities[2] - total water produced at the water treatment plant	
Amity Point	111
Beaudesert	854
Boonah-Kalbar	564
Canungra	135
Dayboro	194
Dunwich	151
Esk	242
Jimna	5
Kenilworth	67
Kilcoy	1,247
Kooralbyn	219
Linville	9
Lowood	3,687
Point Lookout	340
Rathdowney	20
Neighbouring communities – total water supplied	
Toowoomba Regional Council	4.5
Power Stations – total water supplied	
Total raw water intake	418
Total purified recycled water intake	2,306

Note: Whilst the data used for this reporting is from the same base data source as the Resource Operations Licence/Water Licence reporting, because the focus of the reporting is different, the figures will not be consistent. For example, the Resource Operations Licence/Water Licence reporting is reported by off-take/water allocation, whilst the water security reporting is based on the dam source.

2 Treated volume

Changes to the Bulk Water Supply System

Throughout 2025, Seqwater continued to deliver capital works to improve the capability of the SEQ Water Grid. Some of the more significant works include:

- Construction of the South West Pipeline, which connects Beaudesert to the SEQ Water Grid, is complete however is not yet fully operational. This pipeline is the most significant addition to the SEQ Water Grid since 2012 and will ensure a reliable long-term water supply for the Beaudesert community. In 2025 performance testing and operational planning continued for supply to Beaudesert via the Logan Water Network.
- Lake Macdonald Dam and North Pine Dams storage levels were further reduced during 2025

To ensure continuity of water supply, operational strategies for the SEQ Water Grid were updated to allow operational flexibility:

- to proactively maximise the use of water from Lake Macdonald Dam and North Pine Dam (Lake Samsonvale) during the lowering of lake levels;
- to manage drawdown of the lake levels in an effective manner; and
- during when planned maintenance works are undertaken on assets and /or during unplanned shutdowns of assets.

In the Off-Grid communities, long term water security assessments in the WSP 2023 identified communities needing infrastructure investments to address supply constraints. The existing system infrastructure and source constraints for the Lowood, Dayboro and Beaudesert communities have increased the water supply risk for managing peak summer demand until the required infrastructure investments are delivered. The delivery of the planned water supply infrastructure options will address long term water supply needs and resolve this short term water supply risk. These supply systems are being monitored closely, with work underway to manage current peak summer demand risks and to ensure ongoing supply with existing infrastructure until the preferred options are delivered.

Climate-resilient water assets

Seqwater has two climate-resilient water supplies – the Gold Coast Desalination Plant and the Western Corridor Recycled Water Scheme. These assets are operated based on the adaptive drought response strategy in the Water Security Program. The desalination plant is also able to support operational requirements.

Desalination

The Gold Coast Desalination Plant is a key asset for the provision of water security in SEQ. The plant is a critical drought water supply asset. The plant is used to provide supply resilience and to enable planned maintenance to other assets within the Water Grid or support the Grid during unplanned outages. It also plays an important role supplementing the SEQ Water Grid during flood events and storms, when raw water quality issues can reduce production capability at some water treatment plants.

When not in production, the Gold Coast Desalination Plant is maintained in a 'hot standby' mode to maintain the condition of its membranes and can be operational at a rate of 33% capacity within 24 hours and up to the maximum production capacity of 133 ML/d within 72 hours (45,625 ML/a based on 125 ML/d operation capacity that includes maintenance and down time).

One of our key strategies under the 2023 Water Security Program is to review the SEQ Water Grid Operations to ensure they are continuously optimised to maximise value of existing assets to match available water supplies with current projected water demands.

During 2025, a study was undertaken to determine the prudency and efficiency of increasing the production trigger of the Gold Coast Desalination Plant from the current drought response trigger to enable it to be part of our Business-As-Usual (BAU) operational asset particularly when some of our key dam storages are operating at their reduced full supply levels. This study concluded that there is merit in operating the GCDP as a BAU asset by increasing the operational trigger from 65% to between 75% and 80% WGS level. Each year the appropriate trigger will be chosen based on Climate Outlook and other considerations. The changes to the GCDP Operating Strategy will be implemented following an amendment to the Water Security Program which is planned for early 2026. Desalination plants are not dependent on rainfall into catchments for source water but can be impacted by source water limitations such as exceptionally high tides or seaweed blooms that can produce high turbidity source water.

Purified recycled water

The Western Corridor Recycled Water Scheme is a scheme consisting of three advanced water treatment plants (AWTP) and over 220 km of connecting pipelines between the AWTPs, industrial customers (including the power stations) and Wivenhoe Dam. This scheme has an annual production capacity of 59,130 ML/a once recommissioned to full capacity.

The Western Corridor Recycled Water Scheme comprises three AWTPs, which are:

- Bundamba AWTP, average production capacity of 19,710 ML/a
- Gibson Island AWTP, average production capacity of 16,425 ML/a
- Luggage Point, average production capacity of 22,995 ML/a.

Three treatment units (or trains) at Luggage Point AWTP are currently operational to produce PRW. The peak capacity of the three treatment units is 70 ML/d, however this is limited by the current balance of plant capacity of 46 ML/d. This water is currently used to flush the pipeline and supply industrial customers such as power stations.

During 2025, Seqwater continued investigations for the use of the Western Corridor Recycled Water Scheme for non-potable industry uses. Utilising the scheme outside of drought for non-potable industry uses would enable more treatment trains to be recommissioned and thereby improve readiness for when it might be needed to support urban supplies in drought.

Operation of climate-resilient water assets

Throughout 2025, the Water Grid Storage level remained above the Pre-Drought trigger of 70% as such no contributions were needed from the two climate-resilient sources specifically as a drought response measure. However, the Gold Coast Desalination Plant operated as required throughout 2025 to support system resilience and maintenance at other areas of the water grid (including unplanned outages) and the Western Corridor Recycled Water Scheme operated throughout 2025 to supply industrial customers. The use of PRW reduces the demand on Grid water supplies.

Table 10. Operation of climate-resilient water sources due to drought response and to support grid operations during 2025

Date/s	Climate-resilient water operation
1 January 2025 – 31 December 2025 (Supporting grid operations)	**Gold Coast Desalination Plant** operated throughout 2025 to support system resilience and maintenance at other areas of the water grid (including unplanned outages). Production volume between 1 January 2025 – 31 December 2025 was 13,951 ML.
1 January 2025 – 31 December 2025	The **Western Corridor Recycled Water Scheme** operated throughout 2025. Luggage Point AWTP continued to produce purified recycled water, with approximately 2,576 ML produced to supply industrial customers.

Assessment of the regional water balance

Level of Service (LOS) yield modelling undertaken in the development of the Water Security Program 2023 determined the existing SEQ system has an LOS yield of 430,000 ML/a under historical climate conditions dropping to 325,000 ML/a by 2051 (under future climate conditions). This modelling indicates a water supply augmentation is required by about 2030/31, depending on what projected demands are considered and the assumed impact of future climate change. The WSP 2023 proposed the delivery of the Gold Coast Desalination Plant expansion and the Wyaralong WTP by 2030/31 to deliver the additional system yield, and a major new water source by 2035. The existing system case modelling scenario used in determining the LOS Yield represents current water supply infrastructure, operational strategies, and assumes all storages can be operated using their designed Full Supply Level.

During 2025, a number of works progressed which will impact the regional water balance. This includes the following:

- Seqwater completed a review of the Gold Cost Desalination Plant operating strategy which found an opportunity for increased whole of region efficiency through increased use of this asset. An amendment to the WSP 2023 is underway to allow for increased use of GCDP where it is efficient to do so. This change will impact the regional water balance, which will be reflected in the next update to the Water Security Program.
- DLGWV reviewed the water security targets (specified as Level of Service objectives in legislation) and are proposing amendments to the legislation this year. Any changes to the LOS Objectives resulting from the review will be considered in the development of the next update of the Water Security Program.
- In 2025 DLGWV removed the requirement to complete dam improvement projects by a specific target date and instead are being coordinated into a schedule based on priority and greatest risk reduction benefit across Seqwater's portfolio. Dam improvement project options and schedules are subsequently being reviewed, which may result in a change to dam Full Supply Level assumptions that applied for LOS yield modelling in the WSP 2023.
- Seqwater received new alternative climate data sets which have been prepared based on Shared Socioeconomic Pathways 2-4.5 and 3-7.0. A review of how this new data will be integrated into planning will be undertaken during 2026.
- While formal key inputs remained largely unchanged during 2025, a number of key inputs and methodologies have or are being reviewed. Formal outcomes of these reviews will be implemented into the regional water balance as part of the development of the next Water Security Program.

Drawdown scenarios

The region's water grid storage level was at 78.6% at 31 December 2025, a material decrease on its level of 88.8% at the beginning of 2025. Storages decreased 10.2% in 2025, partly attributable to strategic dam releases made to achieve targeted operational Reduced Full Supply Levels (RFSL) for Lake Macdonald (reduced to 39% August) and North Pine Dam (reduced to 54% Jan-Feb) to maintain dam safety until completion of dam safety work.

Wivenhoe Dam decreased 9% over 2025, to a low of 80.8% on 31 December 2025. With Wivenhoe Dam representing more than half of the total water storage for the water grid, this makes a significant impact on the water grid storage level and the likelihood of triggering drought response measures. Seqwater provides access to the water grid storage levels and individual dam levels drawdown data at: https://www.seqwater.com.au/historic-dam-levels

There are two drawdown scenarios used to understand and plan for drought driven risks:

- **Short term drought response planning:** In 2019, grid storages saw a drawdown of 19.3% over the year, which is the longest continuous drawdown since the Millennium Drought. In short term drought

response planning, the 2019 drawdown scenario is applied to current levels to show the likelihood of reaching drought response for the next 12 months. Figure 3 below applies the 2019 drawdown scenario to the recorded water grid storage level as of March 2026.

- **Long term drought response planning:** A Design Drought is used in Water Security Program modelling. The Design Drought is a modelling-generated drought based on the worst droughts in the stochastic dataset. The Design Drought was developed based on data from our stochastic record to define a potential drought worse than the Millennium Drought. All droughts start with declining inflows; it is the severity and duration of the drought that differs. **Figure 4** shows Design and Millennium Drought inflow draw downs and recorded water grid storage levels from the most recent date in 2025 that system was at its full supply level (December 2025).

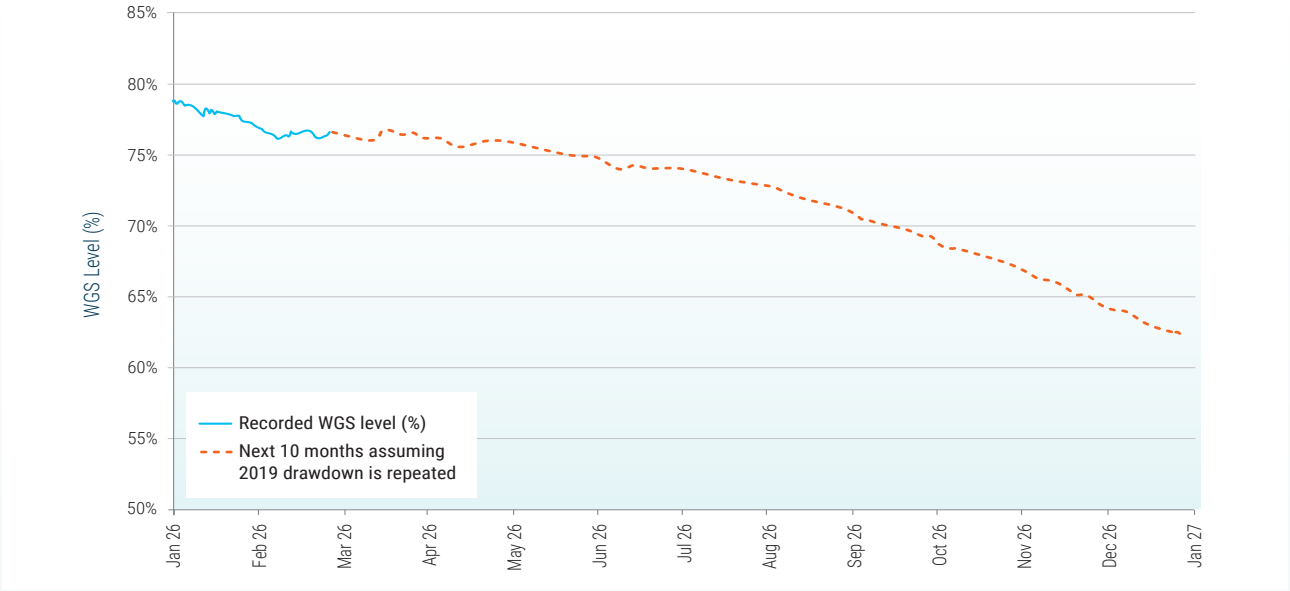

Figure 3: Recorded grid storage levels and projected storage decline assuming 2019 drawdown from December 2025 storage levels

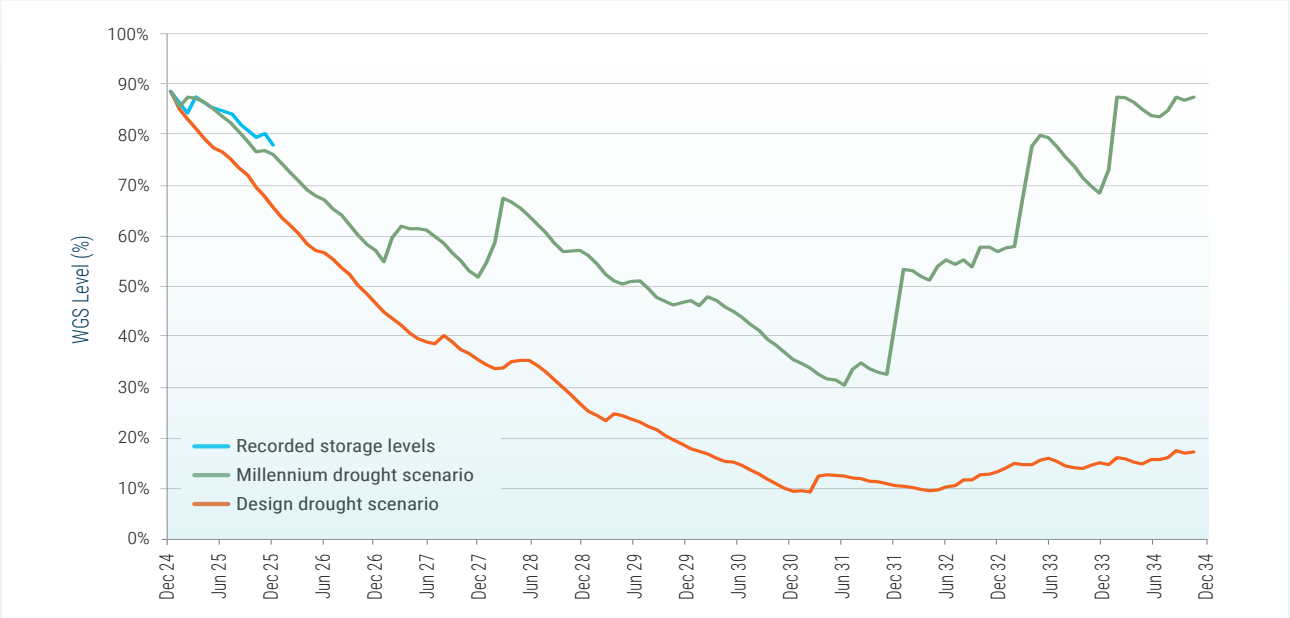

Figure 4: Design and Millennium Drought inflow draw downs and recorded water grid storage levels from December 2025

Water security outcome statement status

All Water Security Program 2023 actions are underway. Updates on the planned actions for 2023-2028 are provided in **Table 11** below. Planned Actions for 2028-2035 remain as per the WSP 2023 Action Plan.

Table 11 Water Security Program 2023 Action Plan Update

	Action	Progress
2023-2024	Review the depth and storage volumes of Seqwater's largest dams using the latest techniques to ensure dam capacity assumptions remain accurate as these are critical to LOS yield assessments	Work is complete with updated storage information being reviewed by Seqwater to determine inputs for the Water Security Program 2028.
	Review ongoing developments in climate change science and data and update water supply modelling with new information about climate change impacts	New Climate Change Data has been received. A review of the data is underway to determine inputs for the Water Security Program 2028.
	Proceed with business cases for the proposed Gold Coast Desalination Plant expansion and Wyaralong Water Treatment Plant.	Both projects received initial investment approval from the Queensland Government in September 2024. The Gold Coast Desalination Plant Augmentation progressed early and enabling works with onsite surveys in 2025 and ongoing refinement of the proposed project design, capacity and timing for delivery. The Wyaralong Water Treatment Plant project commenced the open market procurement process in February 2025 and shortlisted two joint ventures in September 2025 and is progressing through the Early Contractor Involvement phase. Final proposals are expected in 2026, with a preferred proponent to be awarded the contract, subject to government approvals.
	Complete a new detailed business case by the end of 2024 for the next major enhancement.	Seqwater continues to work with its water supply partners and the Queensland Government to investigate a range of future source options for future SEQ supply.
2024-2028	Provide an update to the Water Security Program	Work has begun on the review of the Water Security Program, due to be finalised in 2028.
	Continue with investigations and project development for the next major enhancement	Seqwater continues to work with its water supply partners and the Queensland Government to investigate a range of future source options for future SEQ supply.
	Confirm timing and staging of infrastructure upgrades	To be provided in future Water Security Annual Reports.


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