About the Water Outlook

Water gives and sustains life. We all use water every day and we rely on a safe, secure, resilient and reliable water supply. But in South East Queensland (SEQ) we live in a climate of extremes—from times of drought to summer storms—and we need to be ready to adjust our water use when conditions change.

This Water Outlook shows how SEQ is tracking for summer 2013-14. It provides information about our dam supply levels and water consumption, together with the outlook for the summer ahead based on the latest weather forecasts. It highlights how the region’s water service providers are working together to prepare for the wet season, and how you can help. It also features some of the many projects underway to improve our water supply network.

Partnering for better value

SEQ’s water service providers have formed a partnership to ensure a safe, secure, resilient and reliable water supply at the best value for money to customers.

As the region’s bulk water authority, Seqwater sources, stores and supplies water from its 26 dams, 47 weirs and 14 bores and aquifers. Unitywater, Queensland Urban Utilities and the water businesses of the Redland, Logan and Gold Coast city councils deliver drinking water to households and businesses, and provide sewerage services.

As partners, we work together so that the region’s water assets – natural, built and organisational – are planned for, delivered and managed as a single, integrated, efficient and effective system, ensuring maximum value for communities and businesses.
Drinking water supply levels are high

Right now we are enjoying a high level of water security, with the drinking water supply levels in 11 of our 12 key dams all greater than 80%. The 12 key dams in our supply network make up nearly 90% of SEQ’s total water storage volume.

*The water level in Cooloolabin Dam on the Sunshine Coast has been dropped to around 50% to allow the dam wall to be assessed as part of Seqwater’s dam safety program.

At full supply capacity, our 12 key dams can hold 2,220,161 megalitres of water.
That’s the equivalent of almost five Sydney Harbours.

We catch the rain falling across more than 1.2 million hectares of catchments and rivers flowing into our dams, aquifers and off-stream storages.
While there are currently no water restrictions in SEQ, we remain a water wise region. The average daily water consumption across SEQ in November 2013 was 182 litres per person per day.

We live in a climate of extremes and need to be ready to adjust our water use when conditions change. Making smart water choices all year round will save you money and protect our water supply.

Before the Millennium Drought:
330 litres per person per day.

At our best during the drought:
124 litres per person per day.

November 2013:
182 litres per person per day.
Almost 700,000 water quality tests are performed in SEQ every year.

Check your bulk water quality at seqwater.com.au

Noosa ↔ 600 km ↔ Coolangatta

A 600 kilometre bulk supply pipeline network moves water around the region. Reverse-flow pipelines allow us to move bulk water from Noosa in the north to Coolangatta in the south.
The Bureau of Meteorology forecasts warmer days are more likely over most of eastern Queensland and warmer night-time temperatures are more likely over the state. The chances of the December to February maximum and minimum temperatures exceeding the long-term median are greater than 70% over South East Queensland.

The odds suggest that for every ten summer outlooks with similar odds to these, about six or seven of them would be expected to be warmer than average, while about three or four years would be cooler. While warmer temperatures are not the only possible scenario for the region, it is the most likely.

Warm, dry summer ahead
The Bureau of Meteorology also forecasts a drier than normal season is more likely for most of north eastern Australia. Climate influences include a neutral tropical Pacific and local sea surface temperature patterns. The chances of below average rainfall during December to February are 60 to 70% over eastern Queensland (the chances of exceeding the median rainfall are 30 to 40%). This means for every ten summer outlooks with similar odds to these, about six or seven would be below the long-term median rainfall, while about three or four of them would result in above median rainfall.

Near average cyclone season forecast
A near average tropical cyclone season is most likely. The Bureau of Meteorology forecasts a 53% chance of above average tropical cyclone activity for the Eastern region. The long-term average number of tropical cyclones during the season in Eastern Australia is four.

Source: This information was sourced from the Bureau of Meteorology website following the issue of the December to February seasonal climate outlook on 27 November 2013.

The water inflows into our storage dams vary depending on the amount and distribution of rainfall and the catchment conditions. Drier catchments mean less runoff into the dams.

We’ve considered the impact of the Bureau of Meteorology’s forecast that a warmer, drier than normal summer is more likely.

Starting with a combined storage level in our 12 key dams of 93.7% on 2 December 2013, the graph shows the dam storage levels that could result if the inflows into the storages over the next 12 months are either low or closer to average.

With low inflows, the dams would not reach 100% by the end of summer, but average inflows would probably result in full dams by the end of summer. Above average inflows would fill the storages.

Water security expected to remain high
South East Queensland water security

Based on the Bureau of Meteorology’s seasonal forecast, our own dam storage predictions and current water consumption data, South East Queensland’s water security is expected to remain high at the end of the summer.
Even with the warmer, drier weather forecast, the summer season generally brings with it higher and heavier rainfall than the rest of the year. This means there’s potential for more water quality and supply issues, and flooding. Across South East Queensland, your water service providers have been working hard behind the scenes to get ready for the summer ahead.

You can play your part too. Just complete our simple checklist to get ready— if you do a little, we all accomplish a lot.

### How we’re getting ready

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<thead>
<tr>
<th>How we’re getting ready</th>
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<tr>
<td>We’ve increased water reservoir levels to provide more emergency storage. These storage levels are closely monitored to ensure your water supply.</td>
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<td>We’ve put in place contingency plans to help critical water customers (such as hospitals).</td>
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<tr>
<td>We’ve conducted pre-summer risk assessments of all Seqwater assets— dams, water treatment plants, reservoirs and pipelines in readiness for the storm and cyclone season.</td>
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<tr>
<td>We’ve updated emergency action plans for all 26 Seqwater dams across South East Queensland and revised the manual guiding flood mitigation at Wivenhoe, Somerset and North Pine dams.</td>
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<tr>
<td>We’ve updated and tested the water sector’s Emergency Response Plan, involving all water service providers, the Department of Energy and Water Supply and Queensland Health.</td>
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<tr>
<td>We’ve launched weir and dam safety campaigns to educate the community to rethink their behaviour around weirs and dams.</td>
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<tr>
<td>We’ve readied generators for pumping stations and water boosters in case of power outages.</td>
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<tr>
<td>We’re conducting regular water testing to ensure the quality of supply and protect public health.</td>
<td>✔</td>
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<tr>
<td>We’ve readied experienced crews to respond to water quality and supply emergencies around the clock.</td>
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## How you can get ready

<table>
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<th>Tip</th>
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<tr>
<td>Have an emergency plan in place and keep at least two days’ supply of water in case of an interruption to your water supply.</td>
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<td>Know how to turn off your water supply and check your meter reading in case of leaks.</td>
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<td>Check the plumbing and gutters around your home are in good working order and contact a licensed plumber if you need to make repairs.</td>
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<tr>
<td>Check your overflow relief gully is clear of obstructions, raised above ground level so stormwater does not flow into it, and the grate is loose fitting. This will help prevent sewage backing up inside your home during bad weather. If you have an illegal or inappropriate stormwater-to-sewer connection on your property (such as rainwater down pipes connected to the sewage network instead of stormwater), contact a licensed plumber to have them fix the problem.</td>
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<tr>
<td>Ensure you know how to access essential service information, such as unplanned service interruptions. Check if your water retailer offers a sign up service for updates.</td>
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<tr>
<td>Know how to report a water or sewerage fault or emergency. Check your water retailer’s website for details.</td>
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<tr>
<td>Sign up to receive alerts about dam releases or spilling dams in your area. To register, visit <a href="http://www.seqwater.com.au">www.seqwater.com.au</a> or call (07) 3035 5500.</td>
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<tr>
<td>If you plan on visiting one of South East Queensland’s dam recreation areas, check <a href="http://www.seqwater.com.au">www.seqwater.com.au</a> before you go and be DAMsmart:</td>
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<tr>
<td>• boaties and jet skiers keep your distance from swimmers and paddlers</td>
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<tr>
<td>• be courteous to other people whether it be on boat ramps, at campsites or on the road</td>
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<tr>
<td>• keep our lakes beautiful and litter-free</td>
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<tr>
<td>• supervise children at all times.</td>
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For more tips on how to be prepared for the storm and cyclone season, visit qld.gov.au/getready
Improving South East Queensland’s water and sewerage systems

We’re continually working to improve the region’s water supply network and sewerage systems. Here are just some of the projects recently completed or underway.

**Seqwater**

**Flood-damaged Mt Crosby Weir ready for wet season**

Essential repairs to Mt Crosby Weir have been completed ahead of summer. The weir and associated infrastructure was significantly damaged by the huge volume of water and debris that flowed down the Brisbane River as a result of Ex-Tropical Cyclone Oswald in January 2013. Mt Crosby Weir is one of the most important assets in South East Queensland’s bulk water supply system. Water from the weir is pumped to the region’s largest water treatment plants, which supply most of Brisbane and Ipswich’s drinking water.

**Reservoirs upgraded to improve water quality**

Reservoirs at Chapel Hill, Stafford and North Pine were drained and upgraded to improve drinking water quality. These reservoirs store water for tens of thousands of households across South East Queensland.

**Caring for our catchments**

This financial year Seqwater is investing more than $5 million in revegetation work to improve catchment health. Seqwater works in partnership with landholders, local catchment groups, councils and organisations such as Healthy Waterways and SEQ Catchments to ensure a whole-of-catchment approach to managing our natural resources.

**State-of-the-art water treatment plant for Kilcoy**

After more than three years of planning and construction, Kilcoy’s new water treatment plant will be officially opened in December 2013. The state-of-the-art plant uses the latest water treatment processes, including UV and dissolved air filtration, to produce high quality water with a reduced need for chemical treatment. More than 1700 residents and local businesses will benefit from the plant’s improved reliability.

**Unitywater**

**Three new water supply reservoirs for the Sunshine Coast**

Unitywater has commissioned three new water supply reservoirs at Harbour Hill, Craig’s Hill and Albatross Avenue. The reservoirs provide greater water storage capacity and improved water service security and efficiency in periods of peak use, disruption to supply and emergency situations, such as extreme weather events and fire fighting.

**Water main for greater Maroochydore**

A new 6.5 km trunk water main is delivering increased water security and has the ability to provide coastal Maroochy with two water supplies in a ‘ring main’ configuration instead of just one supply main into the area. This will also increase fire fighting capacity in the network.

**Control system upgraded**

The Supervisory Control and Data Acquisition (SCADA) system is critical to Unitywater’s ability to provide reliable and efficient water supply and sewage treatment services across an area of more than 5200 square kilometres. The system enables Unitywater to monitor and control the entire network from one location, saving time and resources and minimising risk of human error. Recent upgrades support improved reporting with historical data and optimised pump and network control.

**Reducing sewage overflow**

Unitywater’s Sewage Overflow Abatement Program (SOAP) is reducing the frequency and impact of sewage overflows in the community during wet weather. The SOAP includes an ongoing program to find the causes of inflow and infiltration on private property and in the Unitywater network. Inflow is the rainwater that enters the sewerage network via defective or inappropriate plumbing of stormwater to the sewer. Infiltration occurs when groundwater enters sewer pipes through cracks and faulty joints. Unitywater works with customers to identify and fix defective plumbing connections, which then reduces the amount of stormwater into the sewer network and reduces sewage overflows.
Queensland Urban Utilities

Water main for Ipswich CBD
Queensland Urban Utilities has completed a $2.9 million water main along Brisbane Street and is building a new 700 metre section of water main along Brisbane Street between Burnett and Ellenborough Streets. The upgrade will ensure Queensland Urban Utilities continues to provide a reliable water supply to the Ipswich CBD.

Urban growth prompts sewer upgrades
The capacity of a 62 km sewerage network in Brisbane’s south-east suburbs at Bulimba Creek has been increased to cater for growth in the area. The $51.7 million project was completed earlier this year. Queensland Urban Utilities is investing a further $80 million to increase the capacity of Woolloongabba’s sewerage system, again to meet the demands of a growing population. The project involves the installation of 5.2 km of trunk sewer mains in Woolloongabba and Stones Corner and will take around two years to complete.

Canungra water main renewal project
Queensland Urban Utilities is investing $1.2 million to install new water mains along several streets, including Pine Street, within the township of Canungra. This work will ensure sufficient water supply during a fire event and increase the reliability of the water supply. Work commenced in August 2013 and will progress in stages until April 2014.

Redland City Council

Sewer system readied for wet season
Work is underway to reduce inflow to the existing sewer system on the mainland and in Dunwich to minimise the impact of water entering the system. This includes relining sewers and replacing sewer maintenance holes to reduce the demand on pumping and treatment systems during heavy rain.

Improving waterways
A total of $850,000 has been invested in new screens on the inlet to Cleveland sewage treatment plant to cope with heavy rainfall and to ensure the receiving waterway is cleaner.

Logan City Council

Water supply infrastructure upgrades
Design work is underway to improve water supply infrastructure in the city’s south. Works will involve the installation of new pressure reducing valves or flow meters, and water pipelines at more than 40 locations to more efficiently manage the water supply. Construction is expected to commence in early 2014.

City’s largest wastewater catchment gets an upgrade
Logan City Council is upgrading the Loganholme sewerage catchment to enhance its operability and facilitate future growth. The upgrade involves two major projects with a combined value of $72 million, including installation of a 6.4 km pipeline from Slacks Creek to the Loganholme sewage treatment plant and modifications to a pump station. At the same time, a new inlet works and odour control facility is being constructed at the Loganholme treatment plant. These works are scheduled to be completed in mid-2015.

City of Gold Coast

Improvements to Maudsland water supply
The City of Gold Coast is installing multiple new potable water mains, a new pump station and three pressure reducing valves to cater for future growth and fire fighting demand in the Maudsland area. Some $2m will be invested in upgrading this essential infrastructure.

At risk water mains to be replaced
The Gold Coast’s water supply reticulation network consists of more than 3,000 km of water pipes. Despite the relatively young age of much of the city’s water network, there are water mains which experience frequent failures or are at risk of failure. A $2.4 million program will see these water mains replaced. This will minimise the number of water outages and minimise water loss from water main failures.

$5 million pressure and leakage system upgrade
Gold Coast’s pressure and leakage management system has been upgraded to improve the reliability of the equipment and enable remote monitoring and control. The pressure and leakage management system comprises 63 district metered areas, which cover about 50% of customers. The process limits water losses due to leakage as well as reducing pipeline and service connection breakages.