Summer Water Outlook 2017-18
for South East Queensland
One region, one water supply
Queensland experienced its second warmest winter on record, with warm days and below average rainfall.

Despite some parts of South East Queensland receiving record rainfall as a result of ex-Tropical Cyclone Debbie battering the region in March, winter has been mostly sunny days with little rain. August was particularly dry and hot for winter.

Most of South East Queensland recorded average to very much below average rainfall.

The Sunshine Coast region received only about one-fifth of its normal rainfall.

Around our water storage catchments, soils are much drier than we would normally expect this time of year. As a result, we will likely need more rainfall to generate run-off into our dams.
### RAINFALL AND TEMPERATURE DURING WINTER

<table>
<thead>
<tr>
<th>Location</th>
<th>Total rainfall winter 2017</th>
<th>Average winter rainfall</th>
<th>Rank</th>
<th>Mean temperature winter 2016-17</th>
<th>Variation from winter average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brisbane</td>
<td>132.2mm</td>
<td>133mm</td>
<td>Average</td>
<td>23.5°C</td>
<td>+1.2°C</td>
</tr>
<tr>
<td>Gold Coast*</td>
<td>149.8mm</td>
<td>228.1mm</td>
<td>Low</td>
<td>22.7°C</td>
<td>+1.2°C</td>
</tr>
<tr>
<td>Ipswich</td>
<td>82.4mm</td>
<td>114.2mm</td>
<td>Average</td>
<td>23.8°C</td>
<td>+2.0°C</td>
</tr>
<tr>
<td>Logan</td>
<td>137.7mm</td>
<td>155.6mm</td>
<td>Average</td>
<td>23.1°C</td>
<td>+1.2°C</td>
</tr>
<tr>
<td>Moreton Bay</td>
<td>172.8mm</td>
<td>153.3mm</td>
<td>Average</td>
<td>22.4°C</td>
<td>+1.2°C</td>
</tr>
<tr>
<td>Sunshine Coast</td>
<td>57.0mm</td>
<td>262.9mm</td>
<td>Very low</td>
<td>23.2°C</td>
<td>+1.7°C</td>
</tr>
</tbody>
</table>

*Gold Coast storages were replenished by ex-Tropical Cyclone in March this year and continue to enjoy high water supply security.

Water consumption in South East Queensland increased during winter and in the first few weeks of spring. Consumption averaged 175 litres per person per day.

Consumption peaked at 189 litres per person per day at the end of winter, and in most areas spiked in the first few weeks of spring to more than 200 litres per person per day - which is the kind of use we’d usually see in summer.

South East Queenslanders have shown in the past they can change their water use when asked. By being aware of how much water you use, it is easier to find ways to be more water efficient.
South East Queensland water consumption between 31 May 2017 and 27 September 2017

**Central SEQ**
- Average: 167L
- Highest: 197L
- Lowest: 148L

**Gold Coast**
- Average: 199L
- Highest: 232L
- Lowest: 181L

**Redland**
- Average: 185L
- Highest: 223L
- Lowest: 168L

**Scenic Rim**
- Average: 116L
- Highest: 162L
- Lowest: 94L

**Sunshine Coast**
- Average: 196L
- Highest: 247L
- Lowest: 160L
As at 3 October 2017, the combined storage levels of our 12 water grid dams was 71.1%.

This is a decrease of 5.6% from 76.7% on 1 June 2017. Over winter, the region's water grid dam levels dropped by more than one per cent a month.

When dam levels reach 70%, Seqwater will activate the drought readiness phase of its Drought Response Plan.

This phase is about getting South East Queensland ready for the possibility of drought. We will encourage increased water efficiency at this time.
HOW THE WATER GRID WORKS

The grid allows us to move treated drinking water around the region.

This is especially important when patchy rainfall leaves some areas with full dams and other parts of the region with lower dam levels, as is currently the case on the Sunshine Coast. However the grid has limits to the amount of water it can move. It can supplement but not completely replace local water supplies.
The Bureau of Meteorology has forecast an equal chance of wetter or drier than average conditions for October to December - so there is the potential for above average rainfall in this period.

Some places may receive above average rainfall, some may experience below average rainfall, depending on local conditions.

Temperatures are likely to remain warmer than average as we head into summer.

Warm temperatures will continue to affect soil moisture, which means even if we do receive rain, it may not be enough to trigger inflows into our dams and increase their levels.

Drier soils also can enhance heatwaves, as the soil and the air above it heat up quicker when there is little water to evaporate.
GETTING READY FOR ANY WEATHER

Summer in South East Queensland is synonymous with bushfires, storms, floods and cyclones. With a dry winter behind us, it’s easy to forget that wet weather can arrive suddenly.

Remember to sign up to or update your details for our dam release notification service at seqwater.com.au.

Keep at least three days’ supply of fresh water in bottles and containers in case of an interruption to your water supply. That’s about 10 litres per person in your household.
We live in a region where conditions can vary from one part of the region to another.

The dams in the southern part of our region received record inflows as a result of ex-Tropical Cyclone Debbie, and even after average rainfall in winter, Hinze Dam currently sits above 95% capacity heading into summer.

At the opposite end of the region, the Sunshine Coast has experienced two consecutive failed wet seasons followed by a record dry winter.

The Sunshine Coast’s largest water supply dam – Baroon Pocket – experienced unprecedented low inflows last summer and is currently less than 50% capacity.

Seqwater is using the Water Grid to move water to help take the pressure off Baroon Pocket Dam.

We’ve turned on the Ewen Maddock Water Treatment Plant to draw water from Ewen Maddock Dam to supplement the Sunshine Coast’s supply.

In addition, Seqwater is investing $20 million in infrastructure projects to increase our ability to move drinking water around the region and take pressure off the northern dams.
The past two years of low rainfall is very unusual for the Sunshine Coast. The region historically receives more rainfall than most other parts of South East Queensland.

Dams in this region were designed and built to accommodate this quick and frequent replenishment.

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**SNAPSHOT**

**RAINFALL AT BAROON POCKET DAM***

<table>
<thead>
<tr>
<th></th>
<th>Total monthly rainfall</th>
<th>Monthly average</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2017</td>
<td>63.9mm</td>
<td>135.0mm</td>
</tr>
<tr>
<td>Feb 2017</td>
<td>54.8mm</td>
<td>301.9mm</td>
</tr>
<tr>
<td>Dec 2016</td>
<td>96.2mm</td>
<td>169.9mm</td>
</tr>
<tr>
<td>Aug 2016</td>
<td>69.8mm</td>
<td>71.4mm</td>
</tr>
<tr>
<td>May 2016</td>
<td>52.2mm</td>
<td>135.0mm</td>
</tr>
<tr>
<td>Feb 2016</td>
<td>90.6mm</td>
<td>301.9mm</td>
</tr>
</tbody>
</table>

South East Queensland will go into drought readiness phase when our water grid dam levels reach 70%. This is the time for us all to start preparing for the possibility of drought.

We’re asking all South East Queenslanders, no matter where they are in the region, to watch their water use and be water wise.

Water consumption is traditionally higher in the warmer months, but this summer we’re asking you to make a conscious effort to be water efficient.

Not sure how? There are simple things you can do around home, school or work to be water efficient. Check out our tips on the next page.

In our drought response plan, region-wide mandatory water restrictions will be implemented when combined dam levels reach 50% capacity.

One of the important lessons we learnt from the Millenium Drought was to start talking to the community early when things are looking dry. Small efforts now may make a big difference later.
South East Queensland’s Drought Response Plan has been updated and is ready to be enacted. You can find it on our website in our Water Security Program 2016 – 2046, which was released on 24 March 2017.

A key element of our drought response plan is the drought readiness phase, to help better prepare the region for the prospect of drought. This drought readiness phase is vital to help individuals, businesses and industries plan effectively for a potential drought.

**GETTING READY FOR DROUGHT**

South East Queensland adaptive drought response approach

- **Drought readiness**
  - Up to full production: Gold Coast Desalination Plant
  - Western Border recycled water scheme commissioning commence

- **Drought response**
  - Target: 150 L/day residential demand (ordinary measures)
  - Water conservation messaging and non-residential/nature programs

- **Drought contingency**
  - 20% Target: 120 L/day residential demand (voluntary measures and restrictions)
  - Water conservation messaging and high level water restrictions

**Notes:**
1. Percentages are based on the combined volumes of the SEQ key bulk water storages.
2. Demand management targets are SEQ regional averages.
70% Drought readiness
Our water grid combined dam levels have reached 70%, indicating drought might be on the horizon. That’s why we’re asking the community to be water wise.

60% Drought response
When our water grid combined dam levels reach 60%, we ask the community to target 150 litres of water use per person per day in their homes to reduce demand on water supply. This is a voluntary water conservation measure.

We will increase production at the Gold Coast Desalination Plant (supplying up to 125 million litres of water a day to the water grid) and start work to bring the Western Corridor Recycled Water Scheme online. The scheme has been in care and maintenance and it will take around two years before purified recycled water can be produced and piped into Wivenhoe Dam.

50% Drought response
If dam levels continue to drop, residents are asked to target 140 litres of water per person per day. We also make changes to the operation of our infrastructure, initiate industry and business voluntary programs and introduce mandatory water restrictions.

25% Drought contingency
When water grid dam levels drop to 25% (this could take years of no substantial inflows to our dams), we target 120 litres of water use per person per day in residential demand, with high level mandatory water restrictions.

At 10%, this target drops to 100 litres per person per day.
The biggest water savings can be made outside the home. Here are five simple things you can do to use water wisely:

1. **BEFORE 10AM AND AFTER 4PM**
   This is the best time to water outside. If you water in the heat of the day, you can lose up to 50% of the water to evaporation.

2. **CHECK FOR LEAKS**
   Check for leaks at home and in your irrigation system. Many leaks are underground, so you will only know you have one if you use your water meter to check. You can lose thousands of litres of water a day without even knowing it due to underground water leaks.

3. **MULCH IT**
   A good mulch will help your plants retain water through the scorching summer days and reduce weeds that also compete for water.

4. **USE YOUR POOL COVER**
   Pool covers reduce evaporation by about 90%.

5. **CHECK HOW MUCH WATER YOU USE**
   Do you really know how much water you use? Use the water audit tool at seqwater.com.au/water-supply/water-wise or one of the many apps or online tools to calculate what appliances are your water guzzlers, where you’re using a lot of water and opportunities to make savings.
WE'RE GETTING READY FOR DROUGHT

Seqwater is closely monitoring weather forecasts, catchment conditions and dam levels, and operating the South East Queensland Water Grid to manage our water supply.

We live in a climate of extremes—from droughts to flooding rains—and we have plans in place to meet South East Queensland's water needs in all weather.

You can play your part in managing this precious resource.