WATER SECURITY STATUS REPORT

August 2020



Water Grid capacity



Dam storage levels

*Data correct at 28 August 2020 – Dams selected are largest storages for North, South and Central areas. Visit the Segwater website for more information.







Average daily residential consumption (L/Person) 250 200 150 100 50 8EQ average 156 164 152 166 157 151

*Data range is 30/07/2020 - 26/08/2020 and 01/08/2019 - 28/08/2019

See map below and legend at the bottom of the page for water service provider information















Grid operations and overall water security position

The South East Queensland (SEQ) Water Grid storage is currently at 60.9%, down from 62.5% last month, and rapidly approaching the 60% Drought Response trigger. Current modelling indicates that reaching the 60% Drought Response trigger and implementation of the Drought Response plan could occur by mid-September, subject to conditions and water usage. As part of the Drought Response plan, the Gold Coast Desalination Plant will begin to operate up to 100% capacity to increase water supply and South East Queenslanders will be asked to reduce their water usage. The target for residential usage is150 litres per day (LPD).

August was a dry month for SEQ with only 19.4mm of rain falling in the Brisbane area compared to 59.4mm in July. Lake Wivenhoe – the region's largest water storage – has now had three consecutive months of levels below 50%. This is only the second time this has happened since the Millennium Drought in 2009, with October 2019 to Jan 2020 the first occurrence.

Sep-20 **59.3**%

Oct-20

Nov-20

Dec-20

Jan-21

Feb-21

56.9%

54.6%

52.0%

51.5%

49.2%

Although inflows to the dams were down this month, average SEQ water usage remains low at 156 LPD compared to 2019 usage this time last year at 187 LPD. This comparative saving of 31 LPD shows that SEQ residents understand how to be waterwise as we head towards

the 150 LPD water demand target set for Drought Response at 60%.

The Southern Regional Water Pipeline (SRWP) continues to operate in a northerly direction supported by the Gold Coast Desalination Plant when required. The Northern Pipeline is currently operating in a northerly direction to help with maintenance operations.

Although there has been dry weather recently, The Bureau of Meteorology (BOM) outlook for September to November is for wetter than average conditions with 70-80% chance of above median rainfall and for a wetter summer ahead. The El Niño/Southern Oscillation outlook from BOM is currently on "La Niña ALERT" with modelling suggesting sea temperatures will approach or exceed La Niña thresholds during the southern hemisphere spring.

End of month storage level assuming repeat of 2019 storage level decline: Water Grid storage

45.8%

45.2%

43.9%

43.1%

Mar-21 **46.5**%

Apr-21

May-21

Jun-21

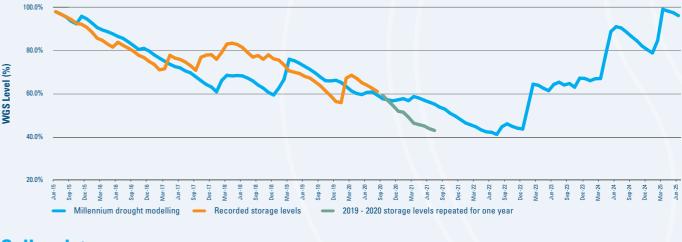
Jul-21

Water Grid storage actual drawdown to 28 August 2020, and projected draw down.

The Water Grid drawdown graph shows historical storage data and a projected draw down if the same rate observed between January 2019 and December 2019 occurred in the corresponding months from August 2020 until July 2021. The Millennium Drought is shown to compare drawdowns over an extended drought period (see figure 1).

Figure 1: Water Grid storage drawdowns.

1. This projected drawdown does not account for differences in demand and supply conditions in 2020, such as continued operation of the Gold Coast Desalination Plant.



Soil moisture

The rise in deep soil moisture that occurred due to the Feb-March 2020 rainfall continues to slowly decrease and is currently 35.25% full. There still needs to be significant rainfall events to see recovery and inflows into the catchment. (see figure 2).

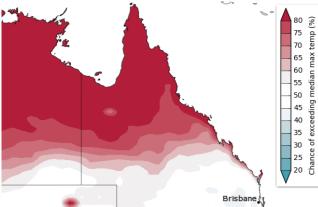


Figure 2: Brisbane River catchment monthly deep soil moisture - modelled estimate to August 2020 (source Bureau of Meteorology AWRA-L)

Weather forecasts

Temperature

The median maximum temperature for the Brisbane area from September to November is forecast at 26.4°C. The chance of exceeding the median temperature has an equal likelihood with a 40-65% probability. The past accuracy of these predictions has been classed as "very high".



http://www.bom.gov.au/climate/outlooks/#/temperature/maxir

Off-grid community drought status

The SEQ Water Grid allows us to move treated drinking water around the region. Off-grid communities are not connected to the SEQ Water Grid.

This table has been undated as at 28 August 2020

trigger in next 3 months



trigger in next 3 months



High probability of reaching drought



Amity Point

Supply: North Stradbroke Island groundwater Standing water level 16.492 m AHD

Level 1: drought trigger at 15 m AHD



Beaudesert

Supply: Maroon Dam 55.3%

Level 1: drought trigger at 50% dam level



Supply: Canungra Creek Stream flow ~12.85 ML/day

Level 1: drought response in effect as of 4/6/20 Level 1b: drought trigger at <1 ML/day flow

4 Dayboro

Supply: groundwaterWell No. 1

standing level >RL 41.10 m AHD

Level 1: drought trigger at RL 40.7 m AHD

Dunwich

Supply: North Stradbroke Island groundwate

Standing water level 16.492 m AHD

Level 1: drought trigger at 15 m AHD

6 Esk

Supply: Wivenhoe Dam 45.6%

(Regional Water Grid Storages response)

Drought response at 60% grid storage level

Supply: Yabba Creek Water has ceased flowing over the weir

Level 1: drought response in effect as of 6/5/20

Level 2: drought trigger — when the Big Hole is 8m below

normal operating level

Level 1: drought trigger at 0 ML/day flow

Supply: Somerset Dam 77.9%

Drought response at 60% grid storage level

Kooralbyn

Supply: Maroon Dam 55.8%

Supply; Brisbane River at Linville — 1.71 ML/day

13 Lowood

Supply: Wivenhoe Dam 47.4%

Drought response at 60% grid storage level

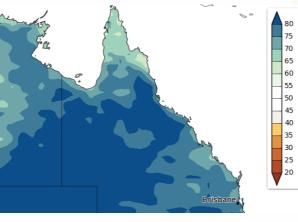
Point Lookout

Standing water level 16.615 m AHD

Level 1: Drought trigger at 15 m AHD



Median rainfall for the Brisbane area from September to November is forecast at 171mm. There is a likely chance of exceeding the median with a 70-80% probability. The past accuracy of these predictions has been classed as "high"



Source: http://www.bom.gov.au/climate/outlooks/#/rainfall/median/monthly/0



Low probability of reaching drought



Medium probability of reaching drought



trigger in next 3 months

Kalbar (Boonah, Aratula and Mount Alford)

Supply: Moogerah Dam 26.5%

Level 2: drought response in effect as of 31/8/20

Level 3: drought trigger at 15% dam level

Kenilworth

Supply: Wells near the Mary River

Bellbird Creek flow ~4.33 ML/day

Kilcov

(Regional Water Grid Storages response)

Level 1: drought trigger at 50% dam level

12 Linville

Level 1: drought trigger - water treatment plant

unable to meet demand

(Regional Water Grid Storages response)

Supply: North Stradbroke Island groundwater



Drought response at 60% grid storage level

Level 1: drought trigger at 50% dam level

Supply: Somerset Dam 77.9% (Regional Water Grid Storages

Rathdowney

Somerset

Supply: Maroon Dam 55.8%

Regional Counci

10

16

13

12

Lockyer Valley

Regional Council

Water Supply Scheme status

Segwater supplies water to rural landholders and businesses that are licensed to take water from dams and waterways via Water Supply Schemes. The amount of water that can be extracted by licensed irrigators varies according to local water conditions. In times of drought or low flows, irrigation entitlements may be restricted or suspended.

This data has been updated as at 28 August 2020



Noosa Shire Council

Moreton Bay Regional Council

isbane City

Scenic Rim

15 Regional Council

Redland

City of

Gold Coast





100% allocated

< 100% allocated 0% allocated

Cedar Pocket Water Supply Scheme

Cedar Pocket Dam currently 82.8% (down 2.7% from last month) nounced allocations Medium Priority 100%

Mary Valley Water Supply Scheme

Borumba Dam currently 90.4% (down 2.2% from last month)

Medium Priority 100% (also supplies high priority)

Central Brisbane Water Supply Scheme

Wivenhoe Dam/Somerset Dam currently 53.5% (down 1.3% from last month)

Medium Priority 85%

(also supplies high priority)

Lower Lockyer Water Supply Scheme

Atkinson Dam currently 5.4% (no change from last month) Announced allocations Medium Priority 0%

Warrill Valley Water Supply Scheme

Moogerah Dam currently 25.2% (down 1.3% from last month)

Medium Priority 19%

(also supplies high priority) Proposed amendments to water sharing rules in process.

Logan River Water Supply Scheme

Maroon Dam currently 55.3% (down 0.5% from last month) Inced allocations Medium Priority 100% (also supplies high priority)

Central Lockyer Water Supply Scheme

Clarendon Dam & Bill Gunn Dam currently 2.3% (1.5% increase from last month)

Announced allocation (surface water)

Morton Vale 0%, Medium Priority 0% (all zones)

Medium Priority 80%, Low Priority 60%

