WATER SECURITY STATUS REPORT

January 2021



SEQ Water Grid capacity

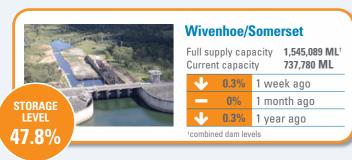


Dam storage levels

*Data correct at 27 January 2021 – Dams selected are largest storages for North, South and Central areas. Visit the Segwater website for more information.











*Data range is 31/12/2020 to 27/01/2021 and 2/01/2020 to 29/01/2020

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















Grid operations and overall water security position

South East Queensland (SEQ) remains in Drought Response with combined Water Grid storages at 57.7%. There was no significant change to the combined grid storage level over January 2021.

The region's largest water storage, Lake Wivenhoe, remains below 50% capacity for the eighth consecutive month. Hinze Dam is at full capacity and is overflowing. Production rates at the Molendinar and Mudgeeraba Water Treatment Plants (both supplied by Hinze Dam) are being maximised to make use of this surface water. The Gold Coast Desalination Plant continues to supplement water supply for SEQ, where required, after maximising use of Hinze Dam.

The average residential water usage remains high at 161 litres per person, per day (LPD). While this is less than the same period last year (174 LPD), it is still 11 litres above the recommended 150 LPD average according to the SEQ Drought Response Plan.

The Southern Regional Water Pipeline (SRWP) continues to operate in a northerly direction and is supported by the Gold Coast Desalination Plant when required. The Northern Pipeline Interconnector operated predominantly in a southerly direction for the month of January. The grid flow operations help to distribute water in SEQ to where it is needed most.

According to the Bureau of Meteorology (BOM) La Niña remains active but is likely past its peak. Model outlooks suggest a return to neutral conditions (i.e. neither El Niño nor La Niña) is likely by late summer or early autumn. However, the influence on Australian rainfall patterns is likely to continue until at least early autumn. La Niña typically increases the likelihood of above-average rainfall across eastern and northern Australia during summer and early autumn.

End of month storage decline assuming a repeat of the particularly dry 2019 year (2020 data not used):

Feb-21 **55.2%** | Apr-21 **51.8%** Mar-21 **52.5%** | May-21 **51.2%**

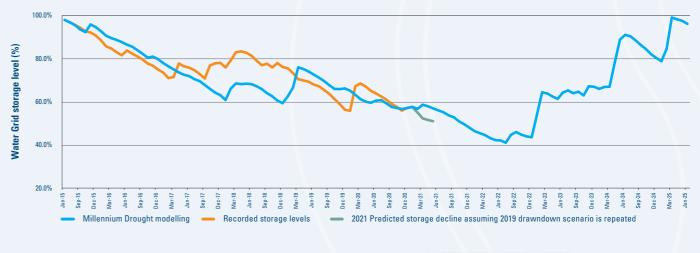
Figure 1: Water Grid storage drawdowns.

Water Grid storage

Water Grid storage actual drawdown to January 2021 and projected drawdown to May 2021.

The Water Grid drawdown graph shows historical storage data and a projected drawdown if the rate observed during the dry calendar year of 2019 occurred in the corresponding months from February 2021 until May 2021. The 2019 data is used because it was a particularly dry year, rainfall is usually higher in the summer period than it was in 2019. The Millennium Drought is shown with today's demands, current grid and drought response plan to compare drawdowns over an extended drought period (see Figure 1).

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



Soil moisture

The rise in deep soil moisture that occurred during the Feb-March 2020 rainfall continues to slowly decrease and is now at 29.8% full.

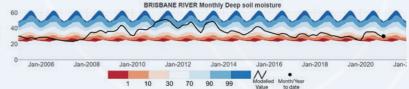
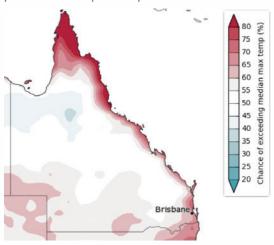


Figure 2: Brisbane River catchment monthly deep soil moisture - modelled estimate to Jan 2021 (source Bureau of Meteorology AWRA-L)

Weather outlook

Temperature

The BOM outlook is for a likely chance of exceeding the 28.1°C median maximum temperature in the Brisbane area from February to April with a 65-70% probability.



http://www.bom.gov.au/climate/outlooks/#/temperature/maximum/median/monthly/0

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 updated as at 27 January 2021.

Amity Point

Supply: North Stradbroke Island groundwater Standing water level 16.48 m AHD**

Level 1: drought trigger at 15 m AHD

Beaudesert

Supply: Maroon Dam 55.8%

Level 1: drought response in effect as of 19/10/20

Level 2: drought trigger at 25% dam level

Canungra

Supply: Canungra Creek; Stream flow ~75 ML/day

Level 1: Preparedness and monitoring; Flow falls to <7ML/day

Dayboro

Supply: groundwater

Well No. 1 standing water level 40.8 m AHD

Staged drought exit as of 22 January 2021. Monitoring demand before decision on drought exit enacted or additional drought

actions required.

Supply: North Stradbroke Island groundwater

Standing water level 16.48 m AHD**

Level 1: drought trigger at 15 m AHD

Esk

Supply: Supply: Wivenhoe Dam 37.8%

(Regional Water Grid Storages response) Level 1: drought response in effect as of 15/09/20

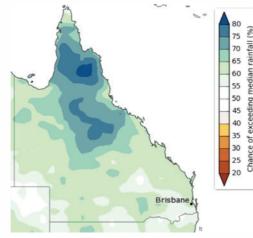
Level 2: drought trigger at 50% Water Grid level

Supply: Yabba Creek; Plant operating to meet demand

Level 1: Preparedness and monitoring; No water flowing over the weir

Rainfall

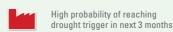
The BOM outlook is for a likely chance of exceeding the 335mm median rainfall for the Brisbane area from February to April with a 60-65% probability.



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

Low probability of reaching drought trigger in next 3 months

Medium probability of reaching drought trigger in next 3 months



Kalbar (Boonah, Aratula and Mount Alford)

Supply: Moogerah Dam 14.6%

Level 2: drought response in effect as of 30/8/20

Level 3: drought trigger at 7.5% dam level

Kenilworth

Supply: Wells near the Mary River Bellbird Creek flow ~137 ML/day

Level 1: drought trigger at 0 ML/day flow

Kilcov

Supply: Somerset Dam 78.6%

(Regional Water Grid Storages response)

Level 1: drought response in effect as of 15/09/20

Level 2: drought trigger at 50% Water Grid level

Kooralbyn

Supply: Maroon Dam 55.8%

Level 1: drought response in effect as of 19/10/20

Level 2: drought trigger at 25% dam level

Linville

Supply; Brisbane River at Linville ~53 ML/day Level 1: drought response in effect as of 15/09/20

Next drought trigger: Cart from Kilcoy when water treatment plan unable to meet demand

Rathdowney

Somerset

Supply: Maroon Dam 55.8%

Level 1: drought response in effect as of 19/10/20

Level 1: drought response in effect as of 15/09/20

Level 2: drought trigger at 50% Water Grid level

*Groundwater level in metres Australian Height Datum (AHD)

Supply: Somerset Dam 78.6% (Regional Water Grid Storages response)

**The bore chosen has the most reliable and up-to-date data that can be continuously monitored.

Level 2: drought trigger at 25% dam level

Lowood

Supply: Wivenhoe Dam 37.8%

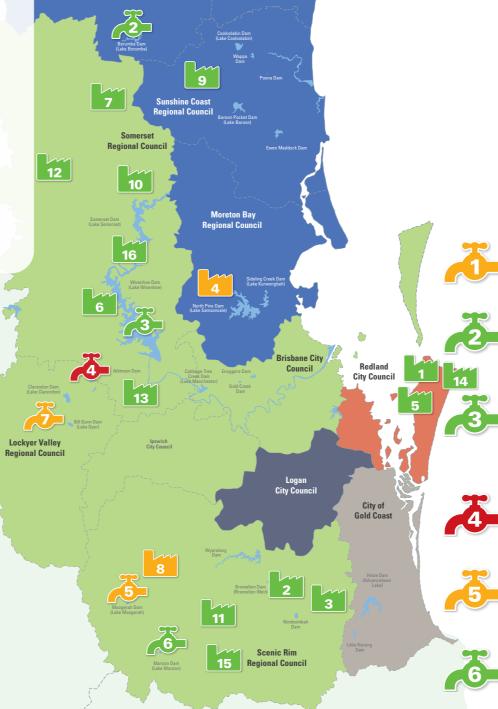
(Regional Water Grid Storages response) Level 1: drought response in effect as of 15/09/20

Level 2: drought trigger at 50% Water Grid level

Point Lookout

Supply: North Stradbroke Island groundwater Standing water level 16.48 m AHD**

Level 1: drought trigger at 15m AHD



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 27 January 2021







Full allocation

Restricted

Cedar Pocket Water Supply Scheme

Cedar Pocket Dam currently 66.4% (up 6.8% from last month) nounced allocations Medium Priority 87%

Mary Valley Water Supply Scheme

Borumba Dam currently 79.3% (up 0.9% from last month)

Medium Priority 100% (also supplies high priority)

Central Brisbane Water Supply Scheme

Wivenhoe Dam/Somerset Dam currently 47.8% (no change from last month)

Inced allocations Medium Priority 100%

(also supplies high priority)

Lower Lockyer Water Supply Scheme

Atkinson Dam currently 3.7% (down 1.7% from last month) nced allocations Medium Priority 0%

Warrill Valley Water Supply Scheme

Moogerah Dam currently 14.6% (down 0.9% from last month)

Medium Priority 31% (also supplies high priority)

Logan River Water Supply Scheme

Maroon Dam currently 55.8% (up 6.5% from last month) Medium Priority 100%

(also supplies high priority)

Central Lockyer Water Supply Scheme

Clarendon Dam & Bill Gunn Dam currently 3.1% (no change from last month)

Announced allocation (surface water)

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

Medium Priority 80%.

Low Priority 60%

