

6 August 2020

## Peel Valley

### Water allocation update

Despite recent rainfall and some improvement in storage at Chaffey Dam, Peel Valley water availability remains critical and current allocations remain unchanged.

The Peel catchment saw above average rainfall in July with falls ranging from 50 to 200 mm. Net inflow to Chaffey Dam was about 7,000 megalitres (ML). The dam is now holding 25,000 ML and is about 23% full.

A small environmental release of approximately 62 ML was completed between 29 July and 2 August. This water had accrued in the environmental water account while Chaffey Dam was less than 20% full and not releasing water. This release replenished the upper 7.5 km of river between the dam and Duncan's Creek, which had isolated pools harbouring platypus and threatened fish species.

Table 1 lists the announced water allocation for the Peel Regulated River Water Source for the current water year. With system deficits of around 10,600 ML to overcome, current allocations remain unchanged.

**Table 1. Announced Water Allocations for the Peel Regulated River Water Source**

Access licence type	2020/21	Drought Stage
Domestic and Stock	70%	
Local Water Utility	70%	Stage 4
High Security	50%	
Environmental Contingency Allowance	0%	
General Security	0%	
Aquifer (general security)	51%	

### Drought stage

The Peel regulated river water source is at maximum Stage 4 drought criticality and remaining resources are committed to meeting only the highest priority needs. Drought contingency measures have been implemented to save water and extend critical supplies.

Further information on drought stages can be found at: [www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/critical-valleys-in-drought](http://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/critical-valleys-in-drought)

### Key facts

- Despite recent inflows, Chaffey Dam has experienced its worst 25 month inflow sequence on record. Inflows since July 2018 have been critically low at approximately 17 gegalitres (GL), compared to prior the historic minimum of approximately 18 GL.
- The new pipeline from Chaffey Dam to Dungowan Village; an emergency drought water savings measure, reduces transmission losses to zero while operating.
- With Chaffey Dam rising above 20% full, environmental water managers elected to use 62 ML of accrued account water between 29 July and 2 August to provide downstream replenishment.
- Water held behind Chaffey Dam is primarily securing critical human needs into the future.
- Under a minimum inflow scenario and current usage restrictions, Chaffey Dam is not forecast to reach dead storage.

### Seasonal climate outlook

August is forecast likely to be wetter than average for the Peel Valley. Also, the three months August to October, are likely to be wetter than average. August to October days are likely to be warmer than average and nights are very likely to be warmer than average.

The central and eastern tropical Pacific Ocean is expected to continue to cool in the coming months and it is expected that this cooling will reach or exceed the threshold for La Nina by the end of spring. Water to the northwest of Australia and in the tropical eastern Indian Ocean are likely to remain warmer than average – a typical component of a negative Indian Ocean Dipole (IOD) – Bureau of Meteorology (BOM) models suggest a neutral IOD is most likely for the coming months. The Southern Annular Mode (SAM) is expected to become positive in early August. A positive SAM during winter can bring wetter conditions to northern NSW.

Details can be found at: [www.bom.gov.au/climate/ahead/outlooks/](http://www.bom.gov.au/climate/ahead/outlooks/)

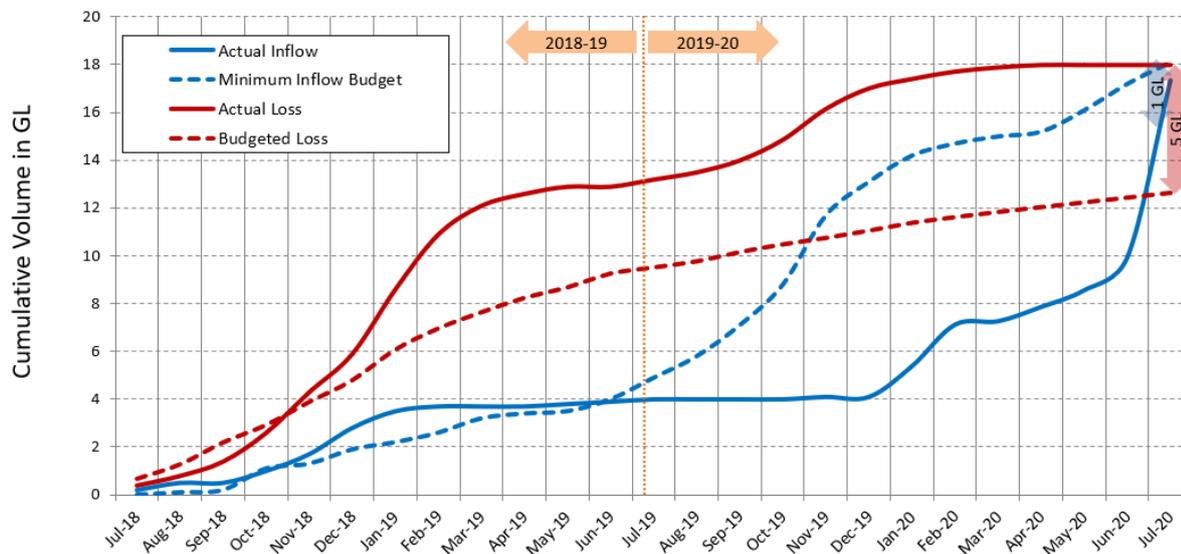
### Resource assessment data sheet

Resource Distribution (August 2020 to June 2021)	Volumes (GL)
Available Resources <sup>(1)</sup>	28.8
<b>less</b>	
Essential Supplies <sup>(2)</sup>	12.2
Reserve for 2021-2022 <sup>(3)</sup>	14.0
General security balance	0
EWA balance <sup>(4)</sup>	0
Evaporation, operational and transmission loss <sup>(5)</sup>	13.2
<b>equals</b>	
Current resource deficit for current commitments	-10.6

#### Notes:

- (1) Chaffey above dead storage, Dungowan above 50% and minimum inflow expected to June 2021.
- (2) Water set aside to provide for basic landholders' rights, domestic and stock, local water utility, high security and associated transmission loss plus minimum storage release. Local water utility and domestic and stock received 70% allocation and high security licences received a 50% allocation on 1 July 2020.

- (3) Reserve set aside to meet the minimum allocation of 2021-22 under the water sharing plan (WSP) obligation at the repeat of the worst drought since the implementation of the WSP. This includes basic landholders' rights, 70% domestic and stock, 70% local water utility, 50% high security and associated transmission loss plus minimum storage release. This also considers minimum inflow expected post drought offset by evaporation over 2020-21.
- (4) Total EWA account balance (GS allocation multiplied by 5000).
- (5) Evaporation budget assumes historical high evaporation rates. The transmission loss is to run the river to deliver water orders based on current conditions and forecasts. EWA water delivery is measured at the dam therefore incurs no transmission loss.



**Figure 1: Cumulative inflow to Chaffey Dam and transmission loss since July 2018**

This figure shows that inflows are now approximately 1 GL below previous minimums (budget) and losses have tracked 5 GL higher than expected (budget), adversely affecting water availability.

### Further information

The department will continue to closely monitor Peel water resource availability and will provide a routine statement update in November 2020; earlier if conditions change significantly beforehand.

Information on available water determinations and water sharing plans is available on the Department of Industry website - [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water)

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