

20 December 2018

Peel Valley

Allocations

The Peel regulated river general security allocation **remains unchanged at 38 per cent of entitlement**. Similarly, the aquifer general security allocation remains unchanged at 69 percent of entitlement.

The valley has experienced average rainfall since the last allocation increment in October 2018. However, this rainfall over the dry landscape produced limited inflow into Chaffey Dam, which has largely offset the evaporative loss over the same period. The storage volume has been fallen by about 8 gigalitres (GL), mostly to meet consumptive demand.

Access licence type	2018/2019	Drought Stage
Regulated River (General Security)	0.38 ML/share	 Stage 1
Aquifer (General Security)	0.69 ML/share	
Environmental Contingency Allowance	1,900 ML	

Apart from those listed above, all other licence categories in the Peel regulated river, unregulated river and alluvium water sources have received their full allocation for 2018/19.

Dam levels (as at 19 December)

Chaffey Dam is about 42 per cent full – falling – currently holding about 44,400 megalitres (ML).

Drought stage

The NSW Extreme Events Policy has been released for all surface and ground water sources in the NSW Murray Darling Basin. This introduces a staged approach to managing extreme events such as severe droughts or poor water quality events. Incident Response Guides (IRGs) are being developed for each valley as part of water resource plans to identify triggers and types of actions taken in each stage.

The Peel Valley is assessed to be in Stage 1, as all account water can be delivered using normal river operations.

An explanatory section on drought stages has been provided at the end of this statement.

Seasonal climate outlook

The Bureau of Meteorology seasonal outlook for December 2018 to February 2019 shows no clear indication of drier or wetter conditions for the catchment, though the historical accuracy of the forecast over this region is poor. Temperatures are likely to be above average.

The Bureau's El Niño-Southern Oscillation (ENSO) Outlook remains at El Niño ALERT and a positive Indian Ocean Dipole (IOD) event persists, but is weakening. El Niño conditions continue to develop with some indicators reaching El Niño thresholds. El Niño conditions are

likely to bring warmer than average temperatures for large parts of the continent while a positive IOD typically has very little influence on Australia from December to April.

Further information

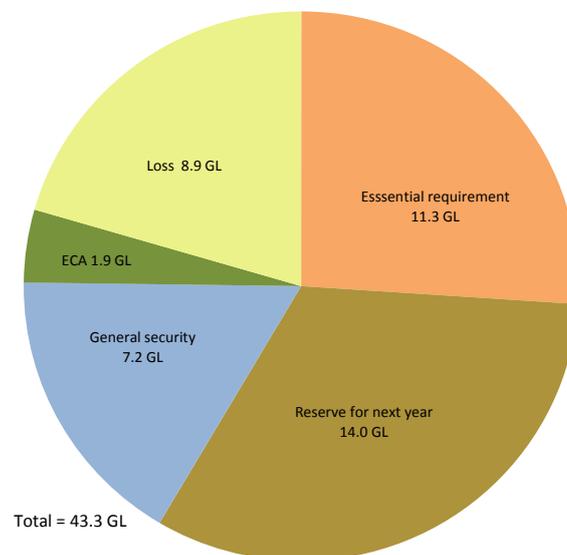
The department monitors the resources regularly and the water allocation statement for the Peel regulated river will be revised again if resource availability improves.

Information on available water determinations and water sharing plans is available on the Department of Industry website - www.industry.nsw.gov.au/water

Resource assessment data sheet

Resource Distribution (December 2018 to June 2019)	Volumes (GL)
Available Resources ⁽¹⁾	43.3
less	
Essential Supplies ⁽²⁾	11.3
Reserve for 2019-2020 ⁽³⁾	14.0
General security balance	7.2
ECA balance ⁽⁴⁾	1.9
Evaporation, operational and transmission loss ⁽⁵⁾	8.9
equals	
Uncommitted resources	nil

Resource Distribution(December 2018 to June 2019)



Notes:

- (1) Chaffey above dead storage, Dungowan below 50% and minimum inflow expected to June 2019.
- (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. All the relevant licenses high priority licences received a full (100%) allocation on 1 July 2018. However, for this year only, the estimate for Essential Supplies is reduced by 4.9GL, being 30% of the TRC full Local Water Utility entitlement of 16.4GL.
- (3) Reserve set aside to meet the minimum allocation of 2019-2020 under the water sharing plan obligation at the repeat of the worst drought. 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 2019-2020.
- (4) Total ECA account balance. GS accounts include 0.47GL of Held Environmental Water (HEW).

⁽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. ECA water delivery is measured at the dam wall therefore incurs no transmission loss.

Drought stage trigger levels

The drought stage is determined in accordance with critical trigger levels for this valley as outlined in the Namoi Valley Incident Response Guide developed by NSW Department of Industry-Water. A drought stage can range from Stage 1 (normal operations) to Stage 4 (critical drought). It is informed by routine water resource assessment results and is triggered by the degree to which water use priorities can be met within the water source. A summary of each drought stage is provided in the table below.

These drought stages are focused on the ability of the regulated river to deliver existing and high priority commitments within the valley. This is distinct from the drought phases determined by the NSW Department of Primary Industries in their Combined Drought Indicator, which is focused on categorising seasonal conditions based on rainfall, soil water, plant growth and drought direction for individual parishes in NSW.

For further details: www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/extreme-events

Drought stage trigger levels for surface water – general principles

Criticality	Evidence base for surface water	Broad intent of measures
Stage 1 Normal management 	Can deliver all account water under normal river operation practices.	Provide certainty for water use planning. Long term water security and emergency/drought contingency planning.
Stage 2 Drought management 	Unable to deliver 100% of high priority account water and maximum expected use of general security under normal river operation practices.	Operational measures in the current water year to reduce transmission losses and prevent potential future failure to supply water in accounts. Drought response readiness Local Water Utilities (LWUs).
Stage 3 Severe drought/water shortage 	Only able to deliver restricted high priority demands and restricted remaining general security account water.	Restricting access to account water, restricting trade, and suspending some water sharing plan (WSP) rules in addition to increased operational measures to prevent potential future failure to supply water in accounts. Drought management/restrictions (LWUs).

Criticality	Evidence base for surface water	Broad intent of measures
<p>Stage 4</p> <p>Critical drought/water shortage</p> 	<p>Only able to deliver restricted town water supply, stock and domestic and other restricted high priority demands.</p>	<p>Suspension of some WSP rules. Severe restrictions required to prioritise remaining supplies for critical human water needs.</p> <p>Emergency drought management measures/restrictions (LWUs).</p>