



Report summary:

Transition period water take report 2018–19

December 2020

The Murray-Darling Basin Authority (MDBA) completed its assessment of water use for the 2018-19 water year. This is known as the *Transition period water take* report 2018-19.

Water is a limited resource in the Murray-Darling Basin. There are many demands for water including agriculture, industry, towns, individuals and the environment. Robust water accounting is essential to ensure:

- the volume of water actually taken from the Basin does not exceed the limits
- water is used in accordance with the relevant rules
- outcomes from environmental water recovery investments are realised
- rights to water are protected
- investment certainty for irrigated agriculture
- the water needs of water dependent ecosystems can be met.

Surface water accounting and compliance has been applied across the Basin since the Cap on Surface Water Diversions (the Cap) came into effect in 1997.

Roles and responsibilities

Basin governments are committed to ensuring that water entitlement holders follow the rules when taking water, including compliance with the Cap and sustainable diversion limits.

Basin states are the frontline of compliance and enforcement and are responsible for policing water use and reporting on collective annual water use to the MDBA. The MDBA reviews annual water use by states to determine if their water use remains within the limits.

Having an effective, robust and fair compliance system underpins the integrity of water for the environment, water resource plans, the water market and water entitlements.

Water accounting



During the water year (July–June), water is allocated against entitlements by Basin States, according to local rules and water availability. Water availability can depend on the climate, rainfall, carryover and water in storage.



The historical data has consistently demonstrated that the amount of water used is quite different, and often less, than the amount of water permitted under Basin limits.



Entitlement holders make business decisions about water usage, and many choose not to use all the water allocated to them in every water year.



At the end of each water year, Basin state governments assess how much water was permitted to be taken and how much water was used. Water is accounted for after the water year has ended.



Once Basin state governments report on how much water was used, the MDBA assesses this information against sustainable diversion limits (SDLs).

SDLs came into effect on 1 July 2019. Water accounting to date has been based on transitional arrangements, including Cap compliance. The next water take report will assess use against the sustainable diversion limits.

The 2018-19 water year

Climate conditions

The Basin experienced continuing dry conditions throughout 2018-19. Rainfall and inflows were well below average for the second successive year.

Some areas of New South Wales and Queensland recorded the lowest rainfall on record. Inflows to the River Murray system were below average, and Menindee Lakes effectively had zero inflows during the water year. Compounding the lack of rainfall were above average temperatures, with several areas of the Basin experiencing record highs.

These conditions had a substantial effect on surface water availability.

Key findings

There were a number of key findings covering the 2018-19 water year.

- There was one instance of surface or groundwater use that breached the trial limits. However, all were compliant with water take limits under the Cap.
- Total water consumption for the Basin was 10,399 GLthis reflects the dry climate and is less compared to total take in 2017-18, which was 12,248 GL.
- Total surface water use decreased to 8.517 GL compared to 10,621 GL the previous year, due to continued dry conditions.
- Groundwater use was 1.882 GL. an increase of 255 GL from the previous year (1,627 GL in 2017-18).
- The use of groundwater generally increases during drier periods. This was evident in the Basin during 2018-19, especially during the drier than average period in the latter half of the water year.
- Surface water use varied across the Basin with Queensland, Victoria and New South Wales recording a decrease, while South Australia and the Australian Capital Territory registered a small increase. This pattern could be due to drier periods being experienced in the northern parts of the Basin for the year.
- In 2018-19 the volume of held environmental water used was 1.551 GL compared to 2.424 GL used in 2017-18. This is a decrease of **873 GL** (36%).

- This is a significant change from previous water years. where there was an annual 10-12% increase in held environmental water use from 2015-16 to 2017-18.
- Carryover of consumptive water continued to decrease in 2018–19 due to increasingly hot and dry conditions.
- During the same period, carryover of held environmental water remained consistent with 800 GL carried over for use in 2019-20.
- The MDBA undertook an analysis of trends in use in the southern Basin, focusing on the Murrumbidgee, New South Wales and Victorian Murray and the Goulburn catchments from 2012-2019.

Compliance

Basin states and the MDBA are using the transition period (2012-13 to 2018-19) to trial the types of water reporting, accounting and compliance methods and processes that have been in place from 1 July 2019 to ensure the arrangements are fit for purpose. The trial is necessary because the change from Cap to SDLs is substantial and the new approach needs to be well understood, ahead of formal implementation.

The trial makes an important contribution to building community trust in Basin governments' capacity to implement new water accounting rules set out in the Water Act 2007 and the Basin Plan 2012. It is also a timely demonstration of how the MDBA and Basin states are working together to ensure processes are in place before the transitional period ends.

Encouragingly, results show compliance with the Cap. While there was one breach against trial limits, the Basin Plan SDLs are only being trialled there are no compliance consequences during the transition period. This is the last year where these limits are in place.

All Basin Governments are committed to improving the metering and measurement of surface water and groundwater in the Basin. This commitment is outlined in the Compliance Compact.

While this final trial of SDL water accounting has no compliance status, publishing the accounts is an important step in providing transparency about how compliance will operate.

This is the seventh and final year of the transition period where water use is measured against the SDLs as a trial compliance measure.

The Murray-Darling Basin

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mdba.gov.au/publications/mdba-reports/transitional-sdl-water-take-reports

Office locations

Adelaide, Albury-Wodonga, Canberra, Goondiwindi, Griffith, Mildura, Murray Bridge, Toowoomba





