

The Northern Inland Regulated Rivers Critical Water Advisory Panel held its fifth meeting on 21 February 2019.

The Northern Inland Regulated Rivers Critical Water Advisory Panel (the Northern Panel) was established in response to extended dry conditions in the Gwydir, Namoi, Macquarie and, most recently, the NSW Border river systems. Further information on the function and membership of critical water advisory panels can be found in the Fact Sheet https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/203125/critical-water-advisory-panels-fact-sheet.pdf.

A summary of the meeting outcomes is provided below.

The community drought meetings

To ensure that there is greater understanding of local issues to inform the Panel, the Department of Industry - Water and WaterNSW held a series of public meetings with communities in critical drought affected river systems between 6 and 14 February 2019. The presentations and a report on the key issues raised at the meetings are available from Department of Industry - Water's website *Information sessions: drought outlook and water availability* at <https://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/update/information-sessions>.

The key issues raised and corresponding actions for the Department of Industry - Water and WaterNSW from the Moree, Narrabri and Dubbo community meetings are:

- greater local involvement on the Panels – this has been initiated with local councils represented through Joint Organisations of Councils. Representatives attended the Northern Inland Regulated Rivers Panel meeting
- provide dedicated support for local councils at risk – James McTavish has been appointed by the NSW Government as the Regional Town Water Supply Coordinator to work directly with councils on their water supply and water quality issues
- provide further information on the drought and the impacts on water supplies through a range of media.
- work with the Office of Environment and Heritage to provide more information on the purpose and timing of environmental releases
- assess the impact of the drought on groundwater, including recharge, and come back to further community meetings in April/May with this information
- ensure further community consultation occurs on floodplain harvesting policy and its implementation
- provide information on the purpose of the temporary water restrictions applied in some of the river systems, such as the Namoi and Macquarie - this information is available on the Department of Industry - Water website at: <https://www.industry.nsw.gov.au/water/allocations-availability/temporary-water-restrictions>
- advise if supplementary flows will be embargoed when the next tributary flows occur – this will depend on the size and timing of the events
- explain why Keepit Dam was emptied – the remaining water was released on top of an environmental flow with the aim of reaching Walgett's weir on the Namoi river. This provided a small volume of water for Walgett township, but also provided complementary benefits for stock and domestic supply along the river and delivery of the remaining ordered water held in accounts.
- retain water in storages for recreation – it will not be possible to retain volumes of water in storage for recreation if the drought continues.
- assess further infrastructure options to secure future supplies – this work is underway through programs such as the Safe and Secure Water Program, Regional Water Strategies, and WaterNSW's 20-year infrastructure options study.

An action plan is to be developed to ensure that the issues raised are progressed.

Criteria for allocating water between high priority needs

The Department of Industry - Water is developing a framework that can assist the Panel assess water supply options and priorities if conditions continue to deteriorate. A key focus is identifying the critical survival needs for towns, industry and the environment. The broad considerations that will be taken into account when allocating water when river systems are at critically low levels include:

- Priorities under the *Water Management Act 2000*, including meeting critical human water needs.
- Connectivity with other river valleys
- Ability to deliver water without incurring excessive losses
- Equity of access between groups of similar priority users
- Social, economic and environmental costs and benefits.

Consideration of environmental release of water from Copeton and Glenlyon Dams that may provide water to Bourke

The township of Bourke on the Barwon River has about six weeks supply remaining in its weir pool and work is underway to install an additional emergency bore. Bourke Shire Council has requested that the Commonwealth and NSW environmental water holders release environmental water from Copeton Dam (Gwydir River) and Glenlyon Dam (Border Rivers) to provide a flow to Bourke and supplement its supply, similar to the Northern Connectivity release that occurred in April to June 2018.

State and Commonwealth agencies are currently assessing whether there is sufficient water available for this release and the impacts on water quality and ecosystems of making a release in summer over a hot dry river bed. This decision needs to weigh up many of the criteria as outlined above and the criticality of timing for Bourke's water supply.

Drought situation update

General outlook

- Minimal inflows to the northern systems this water year – record low inflows in the Macquarie and Namoi valleys.
- Experiencing extended and exceptional drought conditions in the north and west of the state.
- Not able to predict yet whether Cyclone Oma off Queensland will provide any benefit for NSW flows in the coming months. (*Update following panel meeting – Cyclone Oma did not lead to any notable rainfall within the catchments*)
- In the northern inland valleys, the normal pattern is for spring and summer rainfall - this did not occur.

Border Rivers

- Just entered Stage 2 drought status - drought contingency measures have been introduced.
- Low allocations for the smaller A class general security licences and 100% for high security.
- Carryover water in accounts was able to be delivered.
- Refuge pools for environmental needs were topped up by river releases.
- Replenishment flow provided to Boomi River.

- Pindari Dam is now at 8% (24 GL) and Glenlyon Dam at 16% (40 GL).
- High priority needs (towns, domestic, stock and high security water) can be met in 2019/20.
- Most towns are small and Mungindi is served by a reasonable capacity weir.
- Release of environmental water to Bourke may affect the security of high priority licences next year because of the high transmission losses involved in delivering the water.

Gwydir Valley

- Stage 2 drought operations for 2018/19.
- Only a small volume of general security account water carried over to 2018/19.
- Reasonably large volumes of licensed environmental water and the Environmental Contingency Allowance were used for environmental watering of the Gwydir wetlands and flows to creeks
- Replenishment flows occurred – Mallowa Creek has sufficient supply to end of March/April 2019.
- Copeton Dam is now at 12% (180 GL).
- Likely to be able to provide replenishment flows from dam releases, even if dry conditions continue.
- Inverell obtains its water by pipeline directly from Copeton Dam so, like other towns in the Gwydir, supply is assured.
- Small permanent planting requirements upstream of Moree should be deliverable as they are close to the dam.
- Key environmental habitat identified in Carole Creek, Meehi and Lower Gwydir – some environmental water set aside for this purpose.
- Release to the Barwon River would significantly reduce available environmental water, but could provide environmental benefit along the Gwydir River plus domestic and stock supplies.

Macquarie Valley

- Stage 3 drought operations for 2018/19.
- Started the season with reasonable volume of general security carryover – 51% of entitlement on average.
- Insufficient inflows occurred to enable all carryover to be supplied at the start of the water year.
- As a result, a 30% temporary restriction on all general security account water was applied on 4 September 2018, including environmental account water.
- A total of 130 GL was delivered to the Macquarie Marshes up until December 2018, providing water along the full length of the river system to the Barwon river confluence.
- Annual replenishment flows were provided this water year, but next water year will have to be met from downstream tributary flows.
- Burrendong Dam is currently 8% (98 GL of active storage) and Windamere Dam at 35% (128 GL) - the proposed bulk water transfer could be deferred until at least November 2019 following 26 GL of inflow in January.
- It should be possible to provide flows down to Dubbo for 2019/20 by accessing dead storage in Burrendong Dam. Full delivery to Cobar and Nyngan and nearby mines cannot be guaranteed.
- Limited environmental water remaining – if water frozen in accounts can be accessed, environmental water managers will target core marsh areas, requiring at least 30 GL.
- Windamere Dam should have sufficient water for general security carryover
- Some environmental water in Burrendong Dam is available from 15 March under the translucency rule, if sufficient inflows are received. Releases may be deferred by OEH, consistent with historical practice.

Namoi Valley

- The lower Namoi Valley is now in Stage 4 drought and the Upper Namoi is in Stage 3 drought.

- A small volume of general security carryover water was able to be delivered in a final block release in December 2018 along the Lower Namoi. This was delivered on top of an environmental release and enabled water to reach the full length of the river to Walgett, replenishing refuge pools for fish.
- Currently dissolved oxygen levels in the remaining pools were measured to be within a healthy range.
- No replenishment flow was able to be provided to Pian Creek.
- Keepit Dam is now effectively empty – at 0.5% - only dead storage remaining. No more water can be released.
- Split Rock Dam has 3% which is just sufficient to meet the needs of Manilla and Barraba and a small amount of general security carryover water in 2019/20 – there are small intensive livestock industries along the river.
- All towns on the Lower Namoi, including Walgett, have groundwater supplies - basic needs can be provided.
- Of all the higher priority water needs in the valley, one high security water user with less flexible water needs is currently at risk – in discussion with WaterNSW over alternative supplies.
- A small volume of Environmental Contingency Allowance remains in Chaffey Dam - preferred release time is spring 2019, but will be forfeited on 1 July (carryover is not allowed under the water sharing plan).
- Tamworth's water supply from Chaffey Dam is secure in 2019/20, despite reported concerns by Council over general security access in the Peel River.

Given the low storage levels across the northern inland valleys, any inflows will be highly valued. Access decisions on the first inflow(s) will need to consider the criteria for determining access amongst high priority needs – towns, domestic, stock, industry and environmental needs. The Panel agreed that it would meet at short notice if inflows occurred.

Water quality issues

The Extreme Events Policy released in October 2018 provides for Critical Water Advisory Panels to be established for both critical drought situations and for extreme water quality events. It was agreed that the existing Panels should more actively consider both issues given the interconnection between water flows and water quality. Further work is underway to improve water quality management across the state.

Agencies present

Department of Industry - Water

WaterNSW

NSW EPA

DPI Agriculture

DPI Fisheries

Rural Assistance Authority

Office of Environment and Heritage

Department of Premier and Cabinet

Local Land Services

Orana Joint Organisation of Councils

Far North West Joint Organisation of Councils

Namoi Joint Organisation of Councils

Central West Joint Organisation of Councils

New England Joint Organisation of Councils

Next meeting

The next Panel meeting is likely to be convened in April / May 2019, coinciding with further community engagement. If conditions change, an earlier meeting may be arranged at short notice.