How we make decisions

The Department of Planning, Industry and Environment (the Department) supports the health and resilience of rivers and wetlands by delivering water for the environment where and when it is needed.

We use the best available science, management expertise and experience to manage water across the landscape.

This statement of annual priorities identifies the waterways and wetlands that are likely to receive water.

Our decision-making process considers:

- expected availability of water in the coming year
- conditions of the previous year
- current health of the plants and animals in these ecosystems.

The NSW Government works with the Commonwealth Environmental Water Holder to manage water in the catchment.

In other catchments, we use Environmental Water Advisory Groups (EWAG) to help make decisions on the use of environmental water. While the Border Rivers catchment doesn't currently have an EWAG, the intention is to establish one soon.

What is water for the environment?

Water for the environment is a share of the water in dams and rivers that is set aside to support the long-term health of local rivers, creeks and wetlands. Healthy rivers carry water to homes, farms, schools and businesses. In the Border Rivers catchment, rivers and wetlands are important cultural and spiritual sites for Aboriginal people and the broader community.

About the Border Rivers catchment

The NSW Border Rivers catchment covers an area of 24,000 square kilometres. The catchment hugs the Queensland border. The catchment is influenced by the management of water on both sides of the border. Pindari Dam, on the Severn River (NSW), and Glenylon Dam, on Pike Creek (Queensland), are two of the major water storages influencing the catchment. Morella Watercourse, Boobera Lagoon and Pungbougal Lagoon located on the Macintyre River floodplain are listed as a site of national importance in the Directory of Important Wetlands in Australia. These wetlands are also important cultural sites for Aboriginal people.

Table 1: Expected environmental water volumes available at 1 July 2020

Source	Maximum volume available	Volume expected at 1 July under current conditions
Planned environmental water		
Discretionary Planned Environmental – Pindari Stimulus Flow	8 gigalitres	Event-dependent
Water licensed to the Commonwealth		
General security	2.806 gigalitres	0.896 gigalitres (TBC)
Supplementary	1.437 gigalitres	Event-dependent
Medium (Qld)	15.54 gigalitres	1.185 gigalitres
Unsupplemented (Qld)	19.986 gigalitres	Event-dependent

Note: This is an indicative summary of volumes expected to be available. For further information on available volumes, please contactthe region via Department of Planning, Industry and Environment enquiries on 1300 361 967.
1 gigalitre = 1000 megalitres
2.5 megalitre = 1 Olympic swimming pool

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NSW GOVERNMENT

DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

NSW Border Rivers catchment

Annual Environmental Watering Priorities 2020–21

environment.nsw.gov.au

Water for rivers and wetlands

In 2020–21, water managers will focus their efforts on supporting native fish populations in the Severn, Dumaresq, Macintyre and upper Barwon rivers.

Access to water for the environment is limited in the catchment. The NSW Government works in partnership with the Commonwealth Environmental Water Holder to manage available resources.

The Pindari Stimulus Flow is a small volume of planned water that may be available for use if triggered by inflows into Pindari Dam. If the Pindari stimulus flow trigger is not met the flow will not be delivered unless it can be negotiated under rules in the new Water Sharing Plan.

Not all environmental demands can be met by water for the environment. Some demands are met by regulated water deliveries for consumptive purposes, while others are met by unregulated (natural flows) events.

The scope of deliveries possible in the NSW Border Rivers is limited mainly to smaller in-channel events.

Weather and water forecast

In July 2020, the Bureau of Meteorology has forecast the Indian Ocean Dipole (IOD[1]) and El Niño–Southern Oscillation (ENSO[2]) in Australia to remain neutral, with a shift toward wetter than average conditions and warmer than average temperatures through winter–spring 2020. The ENSO Outlook is currently at La Niña WATCH, indicating the chance of La Niña forming in 2020 is around 50%.

Water managers have prepared watering plans that consider a range of weather and water availability scenarios. This is known as resource availability scenario planning. Compared to recent years, higher rainfall is probable but unlikely to result in significant increases in storage volumes for the NSW Border Rivers in 2020–21. While rainfall has improved in 2019–20, significant rainfall is needed to provide enough inflows for held environmental water allocations to become available. On balance the outlook is considered to be dry.

[1] IOD: The difference between sea surface temperatures between two areas of the Indian Ocean.

[2] ENSO: The interaction between the sea surface and atmosphere over the Pacific Ocean which results in dryer or wetter conditions (El Nino or La Nina). Both IOD and ENSO are considered key influences of weather in Australia.

Resource availability scenario

Very dry

Main aim: Protect

- Avoid critical loss
- Maintain key refuges
- Avoid catastrophic events

Dry

Main aim: Maintain

- Maintain river functioning
- Maintain key functions of high priority wetlands

Moderate

Main aim: Recover

- Improve ecological health and resilience
- Improve opportunities for plants and animals to breed, move and thrive

Wet to very wet

Main aim: Enhance

- Restore key floodplain and wetland linkages
- Enhance opportunities for plants and animals to breed, move and thrive

Keyplanned actions for 2020–21

Connectivity

- Available held water for the environment may be used to provide a low connection flow along the Dumaresq and Macintyre-Barwon system to replenish pools if more water becomes available in the storages.
- If larger natural events occur, a further proportion of these flows can be protected from extraction by use of supplementary and unsupplemented licences.

Native fish

- Held water for the environment may be used to support native fish movement, breeding and recruitment outcomes in the Dumaresq River downstream of Glenlyon Dam and planned water for the environment in the Severn and Macintyre Rivers downstream of Pindari Dam.
- Native fish will also benefit from any delivery events targeting connectivity.

Vegetation

- Riparian and aquatic vegetation will benefit from any events under the connectivity and native fish actions if delivered.

Waterbirds

- Waterbird benefits will occur from any actions taken under the connectivity and native fish actions above if delivered.

Map of proposed annual priority targets in the Border Rivers Water Resource Plan Area 2020–21