

How we make decisions

The Department of Planning, Industry and Environment (DPIE) is supporting 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.

As rainfall is hard to predict, 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.

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.

About the Border Rivers catchment

The NSW Border Rivers catchment covers an area of 24,000 square kilometres. The catchment hugs the Queensland border between the western slopes of the Great Dividing Range and the floodplains of Mungindi. 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. Wetlands on a remnant channel of the Macintyre River are listed as a site of national importance in the Directory of Important Wetlands in Australia.

The rivers and wetlands of the region provide habitat for a range of native fish species, many of which used to be widespread in the Basin. The nationally significant Morella Watercourse, Boobera Lagoon and Pungboulal Lagoon are located on the Macintyre River floodplain and are important cultural sites for Aboriginal people.



NSW DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

NSW Border Rivers catchment

Annual Environmental Watering Priorities 2019–20



Table 1: Expected environmental water volumes available at 1 July 2019

Source	Maximum volume available	Volume expected at 1 July under current conditions
Planned environmental water		
Discretionary Planned Environmental – Pindari Stimulus Flow	8 gigalitres	0 gigalitres
Water licenced to the Commonwealth		
General security	2.806 gigalitres	0.896 gigalitres (TBC)
Supplementary	1.437 gigalitres	Event-dependent
Medium (Qld)	15.54 gigalitres	1.3 gigalitres
Unsupplemented (Qld)	19.986 gigalitres	Event-dependent

Note: This is an indicative summary of volumes expected to be available. For further detail and information on available volumes, please contact the region via DPIE enquiries on 1300 361 967.

1 gigalitre = 1000 megalitres

2.5 megalitre = 1 Olympic swimming pool

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Cover photo: Macintyre River at the Budelah Nature Reserve. Photo: Terry Cooke, Terry Cooke Photography.

Page 2 infographic: J Humphries/DPIE.

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Water for rivers and wetlands

In 2019–20, 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.

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 large 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

The Bureau of Meteorology (July 2019) forecasts drier than average conditions for much of Australia in the coming months. A positive Indian Ocean Dipole¹ typically brings below average winter–spring rainfall and above average temperatures. The chance of warmer than average temperatures in northern Australia is high, while southern Australia has roughly equal chances of warmer or cooler nights and more cloud-free days and nights. The ENSO² outlook remains neutral.

Water managers have prepared watering plans that take into consideration a range of weather and water availability scenarios. This is known as Resource Availability Scenario planning. Dry conditions are expected to continue for the NSW Border Rivers in 2019–20.

Key planned actions for 2019–20

Connectivity

- Water for the environment targeting native fish outcomes will provide low flow connectivity in the Dumaresq River downstream of Glenlyon Dam and in the Severn and Macintyre Rivers downstream of Pindari Dam.
- If larger natural events occur, a further proportion of these flows can be protected from extraction by use of supplementary and unsupplemented licences.
- Available held water for the environment may be used to provide a low connection flow along the Dumaresq, Severn and Macintyre-Barwon system to replenish pools.

Vegetation

- 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.

Native fish

- Stimulus flows and 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 in the Severn and Macintyre Rivers downstream of Pindari Dam.
- Native fish will also benefit from any delivery events targeting connectivity.

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



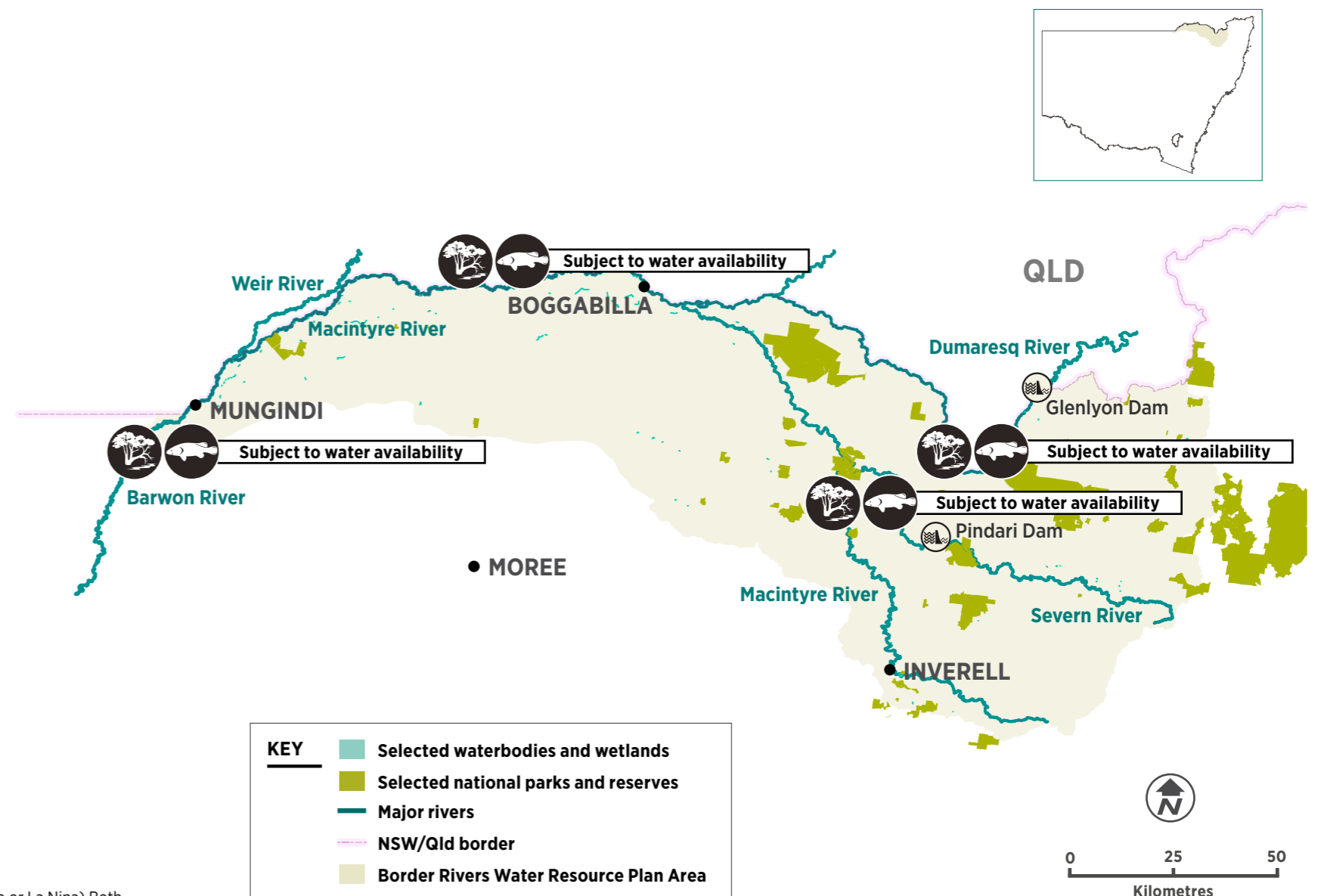
Wet to very wet

Main aim: Enhance

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



Map of proposed annual priority targets in the Border Rivers Water Resource Plan Area 2019–20



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.