

How we make decisions

OEH 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.

Community-based Environmental Water Advisory Groups (EWAGs) provide feedback and advice to OEH on the management of water for the environment.

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 Macquarie catchment, rivers and wetlands are important cultural and spiritual sites for the Wiradjuri and Ngemba-Wailwan people.

About the Macquarie catchment

The Macquarie-Castlereagh catchment covers more than 75,000 square kilometres in the state's central west. It extends from the Blue Mountains to the Barwon River Plains, with major tributaries including the Cudgegong, Talbragar and Bell rivers. The valley is home to the iconic Macquarie Marshes – one of the largest remaining semi-permanent wetland systems in inland Australia. It is one of the biggest colonial waterbird breeding sites in Australia.

Expected environmental water volumes available at 1 July 2018

Source	Maximum volume available	Volume expected at 1 July under current conditions
Planned environmental water		
Environmental water allowance	160 gegalitres	123 gegalitres
Water licensed to NSW		
General security	48.4 gegalitres	37 gegalitres
Supplementary	1.4 gegalitres	1.4 gegalitres
Water licensed to the Commonwealth		
General security	126.2 gegalitres	72 gegalitres
Supplementary	8.3 gegalitres	8.3 gegalitres

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

1 gegalitre = 1000 megalitres

2.5 megalitre = 1 Olympic swimming pool

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Cover photo: Egret nesting in the
Macquarie Marshes, J Spencer/OEH.
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Macquarie-Castlereagh catchment

Annual Environmental Watering Priorities 2018-19



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Water for rivers and wetlands

In 2018–19, water managers will continue to build on the success of previous years through the careful management of water for the environment.

Water managers have worked with the local Environmental Water Advisory Group to develop and implement a three-year watering strategy for the Macquarie Marshes. The strategy focuses on building resilience of wetland vegetation in the Marshes and supporting recovery of native fish populations in the mid-Macquarie River. The strategy will allow water managers to carry over water for use in future years should dry conditions continue.

The strategy will focus on building resilience within a 20,000-hectare area taking in the eastern, southern and northern Macquarie Marshes.

The plan aims to improve the condition of wetland vegetation, provide feeding opportunities for waterbirds, support the recovery of native fish and the wetland food web and replenish groundwater systems.

Weather and water forecast

Since December 2016, rainfall in the catchment and lower floodplain has remained well below average.

The Bureau of Meteorology forecasts drier than average conditions across the region.

The amount of water available is unlikely to increase so carryover will be used to meet the needs of the Macquarie system.

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 forecast for the Macquarie-Castlereagh catchment in 2018–19.

Macquarie–Castlereagh 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



Key planned actions for 2018–19

Waterbirds



- Flows (between 130 and 165 gigalitres) are planned to inundate 20,000 hectares of the Macquarie Marshes providing foraging opportunities for resident, nomadic and migratory waterbirds, including young birds after nesting in spring. The flow will also provide breeding opportunities for a range of water fowl, such as ducks, geese and swans.

Native fish



- Flows into the mid-Macquarie River and Macquarie Marshes will be managed to provide cues for native fish breeding.

Vegetation



- Flows will help to maintain the resilience of flood-dependent vegetation communities, including, reed beds, water couch meadows, mixed marsh areas and river red gum woodlands. These flows are expected to recharge shallow groundwater systems to help drought-proof vegetation communities.

Connectivity



- Delivery of water to the marshes should provide connectivity to the Barwon River.