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 Lachlan catchment, rivers and wetlands are important cultural and spiritual sites for Aboriginal people.

About the Lachlan catchment

The Lachlan valley covers an area of 90,000 square kilometres. Nearly 1300 kilometres of the 1400-kilometre river is regulated by water storages, of which Wyangla Dam is the largest at 1220 gigalitres. The river originates near Gunning in the tablelands and terminates at the Great Cumbung Swamp. Important sites include the Booligal Wetlands, Great Cumbung Swamp and Lachlan Swamps, all of which are listed in the Directory of Important Wetlands in Australia. The Lachlan catchment has important Aboriginal cultural heritage values.

Expected environmental water volumes available at 1 July 2018

Source	Maximum volume available	Volume expected at 1 July under current conditions
Planned environmental water		
Wyangala environmental contingency allowance	10 gigalitres	10 gigalitres
Water quality allowance	20 gigalitres	20 gigalitres
Lake Brewster environmental contingency allowance	10 gigalitres	O gigalitres (volume may become available during year dependent on there being active storage in Lake Brewster)
Translucent flow	Up to 350 gigalitres	Depends on significant inflows to reach triggers
Water licenced to NSW		
High security	1.8 gigalitres	1.8 gigalitres
General security	37.5 gigalitres	37.5 gigalitres
Water licenced to the Commonwealth		
High security	0.9 gigalitres	0.9 gigalitres
General security	87 gigalitres	54.5 gigalitres

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 OEH enquiries on 1300 361 967.

1 gigalitre = 1000 megalitres

2.5 megalitre = 1 Olympic swimming pool

Office of Environment and Heritage, 59 Goulburn Street, Sydney South NSW 2000. Phone: 131 555 (environment information and publications requests); Email: info@environment.nsw.gov.au; Website: www.environment.nsw.gov.au. Cover photo: Booligal Wetlands at sunset, V Bucello. Page 2 infographic: J Humphries/OEH.

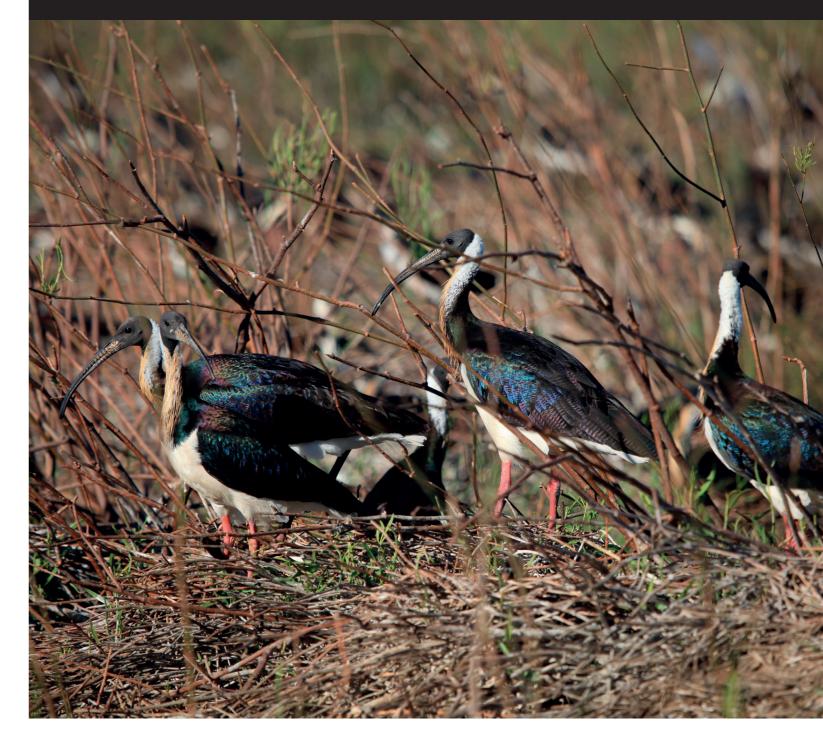
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OFFICE OF ENVIRONMENT & HERITAGE

Lachlan catchment

Annual Environmental Watering Priorities 2018–19



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.

Last year, managed watering events allowed native fish to move and breed along the length of the Lachlan River. When the flows arrived in the Great Cumbung Swamp, they supported partial inundation of the reed beds, open water bodies and fringing wetland vegetation.

Water for the environment was delivered to Lake Brewster, where it supported a sizable pelican breeding event. This water was then returned to the river and, in combination with other flows, provided a series of small freshes, which supported the aquatic food web and fish movement.

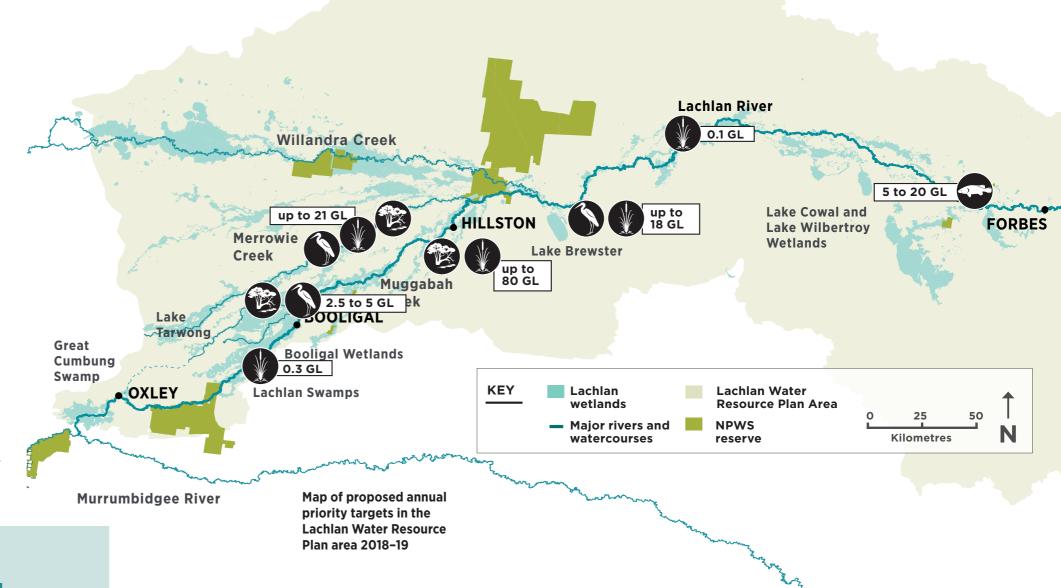
This year, water managers plan to target floodplain-river connectivity, provide opportunities for the growth, reproduction and small-scale recruitment of various plants and animals, maintain key refuges and allow for natural wetting and drying cycles.

Weather and water forecast

In the Lachlan catchment, availability of planned environmental water is substantially dependent on inflow conditions, while availability of licenced or held environmental water is expected to be relatively high through carried over water.

Conditions are likely to be warmer and drier than average in the Lachlan catchment during the coming year.

Water managers have prepared watering plans that take into consideration a range of weather and water availability scenarios. This is known as <u>Resource Availability Scenario</u> planning. Dry to moderate conditions are forecast for the Lachlan catchment in 2018–19.



Lachlan 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

Connectivity



• If natural inflows occur, flows (of up to 80 gigalitres) are planned for the Lower Lachlan to extend floodplain wetting and support healthy habitat.

Vegetation



- Flows (up to 12 gigalitres) are planned for Lake Brewster to support establishment and growth of aquatic plants.
- Flows to Merrowie Creek (5 to 9 gigalitres) will support floodplain creek and wetland vegetation, food webs and refuge habitat.
- Flows (0.3 gigalitres) at Lake Bullogal-Noonamah are planned to support southern bell frog habitat and allow aquatic plants to re-establish before spring breeding season.
- Flows to Murrin Bridge wetland (0.1 gigalitres) are planned to support cultural wetland rehabilitation.

Waterbirds



 Flows to Merrimajeel Creek (2.5 to 5 gigalitres), Merrowie Creek (5 to 12 gigalitres) and Lake Brewster (3 to 6 gigalitres) are proposed to support colonial bird breeding if it commences.

Native fish



 Flows (from 5 to 20 gigalitres) are planned for the Lachlan River between Forbes and Booligal, including the mid-Lachlan anabranch creeks, to provide opportunities for fish breeding and movement.