

How we make decisions

OEH uses the best available science, management expertise and experience to identify watering sites and provide the right amount of water where and when it is needed.

This statement of annual environmental watering priorities identifies the waterways and wetlands that are likely to receive water. We take into account how much water is expected to be available in the coming year, conditions of the previous year, and the current health of the plants and animals in these ecosystems.

As rainfall is difficult to predict, we plan for a range of objectives based on different scenarios. These scenarios are determined by how much water is likely to be available in the coming year, the climate conditions of the previous year and the seasonal forecast for the coming year.

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

About the Lachlan valley

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 valley has important Aboriginal cultural heritage values.

Lachlan catchment

Annual environmental watering priorities 2017-18

Expected environmental water volumes available at 1 July 2017

Source	Maximum volume available	Volume expected at 1 July under current conditions
Planned environmental water		
Environmental water allowance	10 gigalitres	10 gigalitres
Water quality allowance	20 gigalitres	20 gigalitres
Lake Brewster environmental contingency allowance	10 gigalitres	10 gigalitres
Translucent flow	Up to 350 gigalitres	Depends on inflow triggers being reached
Water licensed to NSW		
High security	1.8 gigalitres	1.8 gigalitres
General security	36.5 gigalitres	34 gigalitres
Unregulated	0.1 gigalitres	-
Water licensed to the Commonwealth		
High security	0.9 gigalitres	0.9 gigalitres
General security	87 gigalitres	80 gigalitres

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 the Environment Line 131 555.

1 gigalitre = 1000 megalitres
2.5 megalitre = 1 Olympic swimming pool

Planning for the year ahead

Above-average rainfall across the Lachlan valley allowed all major semi-permanent waterbodies (for example Lake Waljeers, Lake Ita, Lake Bullogal) to fill in 2016-17. Flows connected the Lachlan and Murrumbidgee systems. While dry conditions have followed, high storage levels will allow water managers to target a range of ecological outcomes in 2017-18.

Weather and water forecast

As a result of recent floods, availability of planned and licensed water is expected to be high.

Warmer and drier than average conditions are forecast for the coming year and water management plans reflect this.

Water managers and Environmental Water Advisory Groups have prepared watering plans that take into consideration a range of weather and water availability scenarios, in case it rains more or less than expected. This is known as resource availability scenario planning (<https://www.mdba.gov.au/sites/default/files/archived/altered-PBP/APBP-Ch7-Guideline.pdf>). Wet scenario actions are proposed for the Lachlan valley.

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 2017-18

Waterbirds

Flows (up to 20 gegalitres) are planned for Lake Brewster to assist current pelican breeding and nesting activity and to provide appropriate wetting and drying regimes to support the re-establishment and growth of wetland plants.

Flows to Merrimajeel Creek (2.5 to 5 gegalitres) and Merrowie Creek (5 to 15 gegalitres) may also be initiated to support colonial bird breeding, if the birds start to breed.

Vegetation

Flows (0.3 gegalitres) are planned for Lake Bullogal-Noonamah to support southern bell frog habitat and to allow aquatic plants to re-establish before spring breeding season.

Native fish

Flows (from 5 to 20 gegalitres) are planned for the Lachlan River from Forbes to Booligal to support fish breeding and movement.

Connectivity

Flows (of up to 100 gegalitres) are proposed for the Lower Lachlan, if natural inflows occur, to extend floodplain wetting and support post-flood ecological responses.