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

As rainfall is hard to predict, we plan for a range of scenarios based on the likely amount of water 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 Murray and Lower Darling valleys, rivers and wetlands are important cultural and spiritual sites for Aboriginal people.

About the Murray and Lower Darling valleys

The Murray and Lower Darling valleys cover 98,300 square kilometres. The valleys include the world's largest stand of river red gums and 1700-kilometres of Australia's longest river, the Murray. The Murray is also home to diverse wetland ecosystems, plants and animals. Ramsar-listed sites include the Millewa forest, Werai forest, Koondrook–Perricoota forest, the eastern section of Chowilla Floodplain and the River Murray Channel.

The Murray and Lower Darling valley wetlands and rivers also support important Aboriginal cultural heritage values, with more than 968 cultural heritage sites formally recorded. Aboriginal people continue to contribute important knowledge to inform the management of environmental water.

Expected environmental water volumes available at 1 July 2017
(The Living Murray environmental water is not included in this table)

Source	Maximum volume available	Volume expected at 1 July under current conditions
Planned environmental water		
Barmah–Millewa environmental water allowance	700 gigalitres	358 gigalitres (170 gigalitres in NSW, 188 gigalitres in VIC)
Murray additional environmental water allowance	29 gigalitres	5.7 gigalitres
Water licensed to NSW		
Murray – conveyance	30 gigalitres	15 gigalitres
Murray – high security	2 gigalitres	1.9 gigalitres
Water licensed to the Commonwealth		
Murray – general security	352 gigalitres	Up to 176 gigalitres
Murray - high security	17 gigalitres	17 gigalitres
Lower Darling – general security	2 gigalitres	2 gigalitres
Lower Darling – high security	0.5 gigalitres	0.5 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

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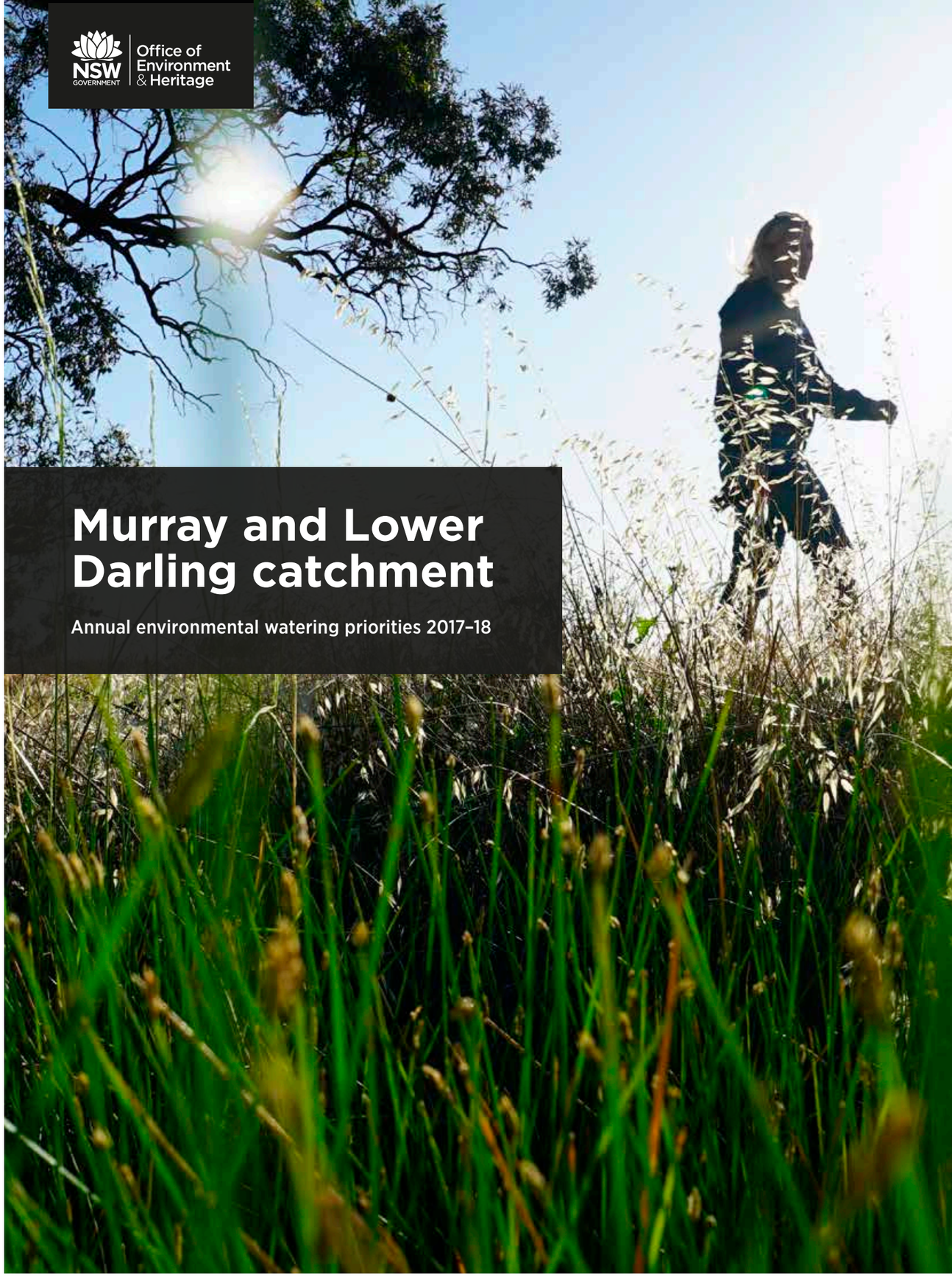

NSW GOVERNMENT Office of Environment & Heritage

Murray and Lower Darling catchment

Annual environmental watering priorities 2017–18

environment.nsw.gov.au

Planning for the year ahead

In 2016–17, strategic environmental watering followed by high rainfall and natural flooding paved the way for a strong Murray cod spawning response, dispersal flows (that move the fish through the river system) for golden perch and waterbird breeding throughout the valley. Managed environmental flows also provided refuge for fish during a hypoxic blackwater (low levels of dissolved oxygen) event in 2016.

Water managers plan to build on the successes of the previous watering year through the careful management of environmental flows in 2017–18.

Weather and water forecast

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

Warmer and drier than average conditions are forecast for 2017–18 and water management plans reflect this.

Water managers 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 (www.mdba.gov.au/sites/default/files/archived/altered-PBP/APBP-Ch7-Guideline.pdf). Moderate to dry scenario actions are proposed for the Murray and Lower Darling valleys in 2017–18.

Murray and Lower Darling 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 Murray and Lower Darling Water Resource Plan Area 2017–18

Key planned actions for 2017–18

Waterbirds

Managed water events (18 gigalitres) are planned in the Murray Valley National and Regional Parks to maintain colonial nesting waterbird rookeries, and sites that contain nesting Australasian bitterns, if required.

Vegetation

Water managers plan to expand the watering program (7 gigalitres) into areas of the central-Murray that are currently stressed and affected by salinity.

Flows (6 gigalitres) are planned to enhance the condition of vegetation along the Jimaringle, Cockran and Gwynnes and Murrian-Yarrien creeks, improving water quality and reconnecting with receiving streams like the Niemur and Wakool rivers.

Native fish

Fish flows (60 gigalitres) in the Edward–Wakool River will be used to provide benefits for native fisheries, vegetation growing in the river (in-stream vegetation) and productivity. As well as delivering freshwater (110 gigalitres) via the Murray Irrigation system to provide refuge habitat for native fish (especially Murray cod) if a blackwater event (low levels of dissolved oxygen) was to occur.

Connectivity

Flows (6 gigalitres) will provide connectivity between Tuppal Creek and the Edward River for carbon exchange, water quality and native fish outcomes.