

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 Murray and Lower Darling catchments, rivers and wetlands are important cultural and spiritual sites for Aboriginal people.

About the Murray and Lower Darling catchments

The Murray and Lower Darling catchments cover 98,300 square kilometres. The catchments 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 catchment 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 water for the environment.

Expected environmental water volumes available at 1 July 2018 (The Living Murray environmental water is not included in this table)

Source	Maximum volume available	Volume expected at 1 July 2018 under current conditions
Planned environmental water		
Barmah-Millewa environmental water allowance	700 gigalitres	358 gigalitres (170 gigalitres NSW; 188 gigalitres Victoria)
Murray additional environmental water allowance	29 gigalitres	5.7 gigalitres
Water licenced to NSW		
Murray – conveyance	30 gigalitres	15 gigalitres
Murray – high security	2.8 gigalitres	1.9 gigalitres
Water licenced 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	0 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 OEH enquiries on 1300 361 967.

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

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Murray and Lower Darling catchments

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.

While rainfall was below average in 2017–18, water storages were near capacity, paving the way for the delivery of about 287 gigalitres of water to 18 wetlands and/or waterways in the Murray and Lower Darling, as well as 13 private property wetlands in the central Murray.

Last year, flows supported the breeding and movement of Murray cod in the Lower Darling. Water for the environment was also used to maintain stable water levels for Murray cod in the Murray River and boost food production. In the Millewa precinct, water for the environment supported Moira grass germination and seeding. Ibis, spoonbills, cormorants and Australasian bitterns all saw the benefits of these flows.

This year, managed water will target a range of outcomes, including the maintenance of

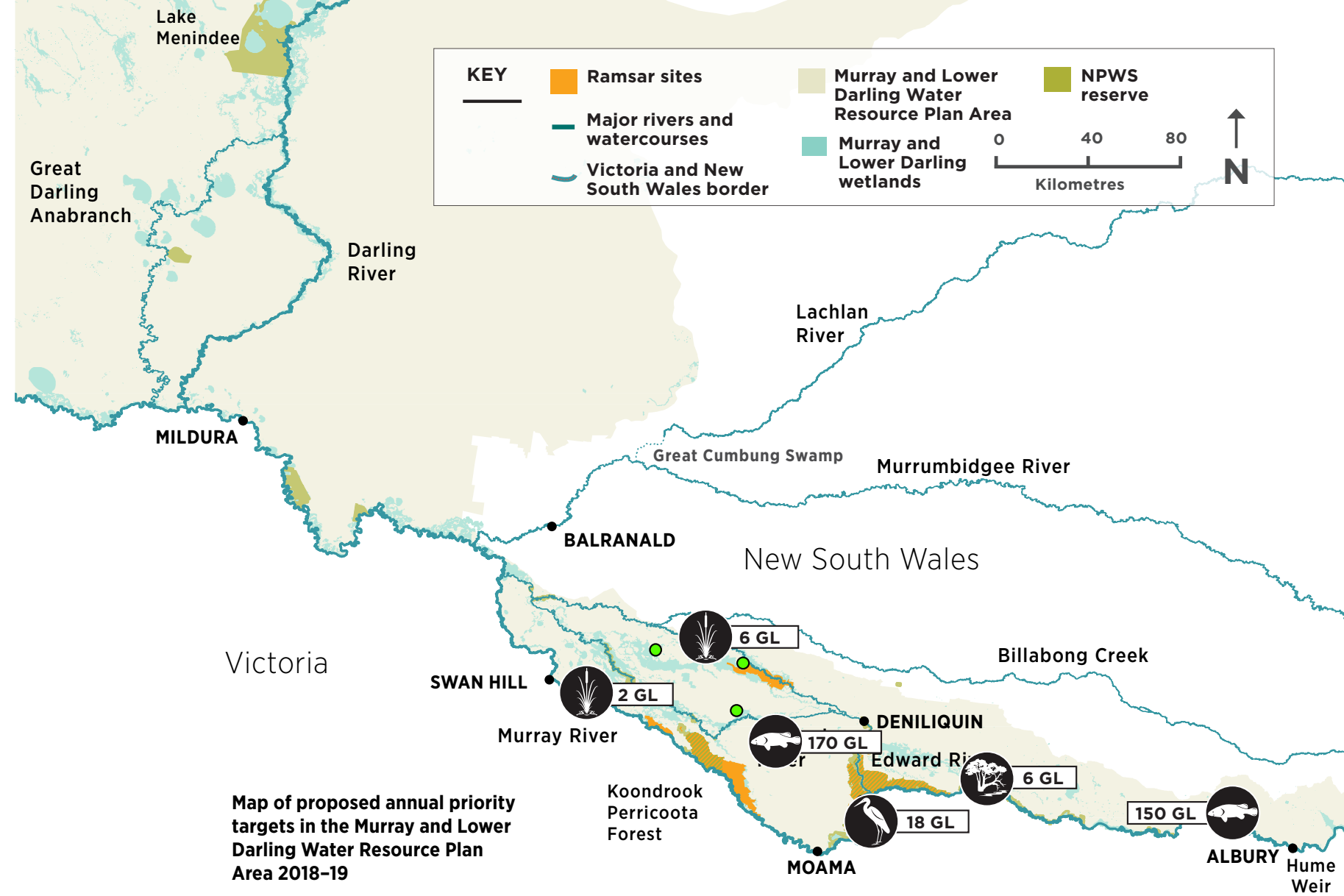
habitat for colonial nesting waterbirds, improving conditions for small-bodied native fish, providing dispersal flows for large-bodied native fish, supporting wetland plants and enhancing connectivity in waterways for native fish.

Weather and water forecast

Availability of planned and licenced water is expected to be limited in the Murray catchment early in the 2018–19 water year due to a lack of inflows into the major storages during autumn and winter.

Below average rainfall is forecast for winter-spring in the Murray catchment, coupled with warmer than average temperatures with the possibility of a late autumn break. Drier conditions are forecast for the Lower Darling.

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 to moderate conditions are forecast for the Murray and Lower Darling catchments in 2018–19.



Map of proposed annual priority targets in the Murray and Lower Darling Water Resource Plan Area 2018–19

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



Key planned actions for 2018–19

Waterbirds



- Managed water events (18 gigalitres) are planned for the Murray Valley National and Regional parks to maintain colonial nesting waterbird rookeries and sites that contain nesting Australasian bitterns.

Native fish



- Multi-site flows (up to 150 gigalitres) are planned from Hume Dam into South Australia for native fish (particularly golden perch), vegetation, instream productivity and waterbird outcomes.
- Fish flows (60 gigalitres) in the Edward-Wakool river system will provide benefits for native fisheries, instream vegetation and food-webs. Water (110 gigalitres) will be delivered via the Murray Irrigation system to provide refuge habitat for native fish (especially Murray cod) if an oxygen depleted blackwater event occurs.

Vegetation



- Should a natural rainfall event occur, flows (6 gigalitres) will be released to enhance the health of vegetation along the Jimaringle, Cockran and Gwynnes creeks, aiming to improve water quality in highly saline sections, provide wildlife corridors across a modified landscape, and maintain habitats for iconic species, such as the threatened southern bell frog.
- Flows (2 gigalitres) will be delivered to targeted private wetlands for southern bell frog habitat and to promote breeding.

Connectivity



- Flows (6 gigalitres) will provide connectivity between Tuppall Creek and the Edward River for native fish and carbon exchange.