

Managing water for the environment

The NSW Government is committed to managing water resources in a way that protects the environment and the communities and industries that depend on secure water access.

Water that is allocated and managed specifically to improve the environmental health of river systems is known as ‘water for the environment’. The management of this water aims to provide the right amount of water where and when it is needed to support healthy rivers for the benefit of plants, animals and people.

The NSW Government has policies for reporting on, managing and recovering water to support the ongoing health of rivers across the state.

Policy

Water for the environment is managed within a range of NSW and Commonwealth legislation and policies.

Within this legislative and policy framework (visit environment.nsw.gov.au/topics/water/water-for-the-environment/about-water-for-the-environment/government-initiatives for more information), the NSW Government has implemented a range of programs to protect the environmental value of river systems, including:

- NSW RiverBank
- Pipeline NSW
- Rivers Environmental Restoration Program
- NSW Wetland Recovery Program
- Living Murray initiative
- Hawkesbury–Nepean River Recovery Program
- Environmental Works and Measures Feasibility Program
- Water Sharing Plans
- Basin Plan

These programs cover water sharing rules, licences and purchasing, infrastructure investment for delivering water for the environment, partnerships with landholders, research and monitoring.

NSW Office of Environment and Heritage

The Office of Environment and Heritage (OEH) manages water for the environment (see environment.nsw.gov.au/topics/water/water-for-the-environment/about-water-for-the-environment/what-is-it/how-is-it-managed) in five main inland river valleys across NSW: the Murray–Lower Darling; Murrumbidgee; Lachlan; Macquarie; and Gwydir. OEH performs this function in consultation with other government agencies, local and Aboriginal communities, scientists, environmental representatives and industry groups.

OEH uses the best available science, management experience and local knowledge to prioritise sites in NSW for environmental watering.

OEH also develops annual and long-term watering plans, and reports extensively on the outcomes of environmental water usage (see environment.nsw.gov.au/topics/water/water-for-the-environment/planning-and-reporting).

Outcomes

In 2017–18, water for the environment was used strategically in NSW to:

- support habitat health
- provide essential refuge sites for wildlife and plants as the river system dried down
- change river flow patterns at a number of locations to enable native fish to breed
- connect rivers with key wetlands and give native fish increased access to habitats and food.

The following sections detail notable environmental outcomes achieved in the five major inland river valleys of NSW in 2017–18 (see also environment.nsw.gov.au/topics/water/water-for-the-environment/planning-and-reporting/water-for-environment-outcomes-2017-18).

Murray and Lower Darling

- Delivered 344 gigalitres of water to rivers, creeks and wetlands on private and public land
- Managed water flows in the Lower Darling that triggered Murray cod breeding and enabled this important fish population to connect with the Murray River, building on the success of an earlier breeding event in 2016
- Worked with other agencies to manage the delivery of water to connect the Murray River with the Millewa wetlands and Edward–Wakool river system, connecting the river and floodplain, which increased access to habitat and food for native fish and encouraged breeding and movement
- Used water to sustain waterbird breeding events and support the endangered southern bell frog
- Monitored water flows that recharged groundwater reserves, supporting wetland plants such as river red gums and Moira grass plains

Murrumbidgee

- Managed 270 gigalitres of water to support the lifecycle and resource needs of the native plants and animals in the valley
- Managed watering events that triggered golden perch to breed in significant numbers
- Managed a whole-of-system water flow, in collaboration with other agencies, to connect hundreds of wetlands between the mid-Murrumbidgee and Murray junction
- Monitored a significant golden perch breeding event at Yanga Lake
- Maintained refuge habitat for native fish, southern bell frogs, turtles and waterbirds

Lachlan

- Managed water to trigger the recovery of aquatic plants at the Lake Brewster wetlands and a pelican breeding event
- Released water to enable native fish to feed, breed and move along the length of the river
- Enhanced river flows in the mid-Lachlan creeks to improve habitats for native fish and wetland vegetation

Macquarie

- Delivered water to semi-permanent wetlands in the Macquarie Marshes, priming the river system and improving water efficiency
- Delivered water to support semi-permanent wetland plants
- Supported breeding and movement of native fish in the mid-Macquarie River and lower-Macquarie River channels

Gwydir

- Managed water flows in the Northern Basin connectivity event to provide native fish access to additional food and habitat along the delivery path and creeks within the lower catchment area
- Managed water events (e.g. dam inflows and releases) to support habitat health, breeding, food and movement for native fish
- Supported more natural flow patterns for the Gingham and Lower Gwydir watercourses
- Delivered water to the Peel River to stimulate nutrients and food production
- Enabled the connection between the Peel and Namoi river systems, providing opportunities for fish movement on a larger scale

Further reforms

The NSW Government is committed to improving the way in which we manage environmental water. In 2018 we supported the northern connectivity event in which 31 gigalitres was released from northern storages in a partnership between the Commonwealth Environmental Water Office and OEH. The flow travelled over 2,000 km through Bourke, Wilcannia and to Menindee, helping refresh waterholes and provide connectivity to support native fish and other aquatic life.

We are currently examining solutions to:

- better understand connectivity in the northern Murray–Darling Basin
- actively manage held environmental water
- manage the resumption of flows in the Barwon–Darling River after an extended dry period
- limit daily water take in the Barwon–Darling River.

Stakeholders will have an opportunity to comment on any proposed changes. These consultations will occur in the first half of 2019, once analysis is complete.

Further information and background on the NSW Government's commitment to these reforms is available at industry.nsw.gov.au/water-reform/better-management-of-environmental-water.