

Review of the Environmental Watering Plan

To protect and restore the Murray–Darling river system, water for the environment needs to be managed across the Basin and within catchments. Planning for how to use water for the environment is coordinated through the Environmental Watering Plan (EWP).

The Murray–Darling Basin Authority (MDBA) has completed its first review of the EWP. The review found that overall, most parts of the plan are working well, that substantial changes are not needed and there are no critical gaps. Therefore, the MDBA is not recommending changes to the EWP at this time. The review identified areas for potential improvement and the MDBA will work with Basin governments and other key stakeholders to implement the review’s recommendations.

Planning for the Basin environment

The Murray–Darling Basin is Australia’s largest and most diverse river system. Its rivers connect across large floodplains to more than 30,000 wetlands and ultimately to the Southern Ocean. Numerous wetlands are internationally important for migratory waterbirds. The many plant and animal species found in the Basin depend on a variety of river flows and periodic flooding for their survival.

The EWP (Chapter 8 of the Basin Plan) sets objectives to improve the health of the Basin’s rivers and floodplains, and the plants and animals that rely on them. These objectives are:

- Protect and restore water-dependent ecosystems of the Murray–Darling Basin
- Protect and restore the ecosystem functions of water-dependent ecosystems
- Ensure that water-dependent ecosystems are resilient to climate change and other risks and threats.

The EWP describes what water for the environment aims to achieve for the Basin’s ecosystems and sets targets to measure progress towards achieving them. The framework covers long-term planning and annual prioritisation for this water for the Basin as a whole (Basin-scale) and for each water resource plan area (regional-scale). Methods for identifying environmental assets (rivers, wetlands, floodplains) and principles to guide how to prioritise the use of water for the environment are also included.

This framework assists different agencies to co-ordinate planning and use of water for the environment so it as effective as possible. Agencies that work together include the MDBA, the Commonwealth Environmental Water Office (CEWO), Basin States and managers of planned environmental water. Co-ordination of water for the environment maintains and improves the health of the Basin’s river systems

which supports the cultural needs of First Nations people, the needs of Basin communities and economic activities including agriculture.

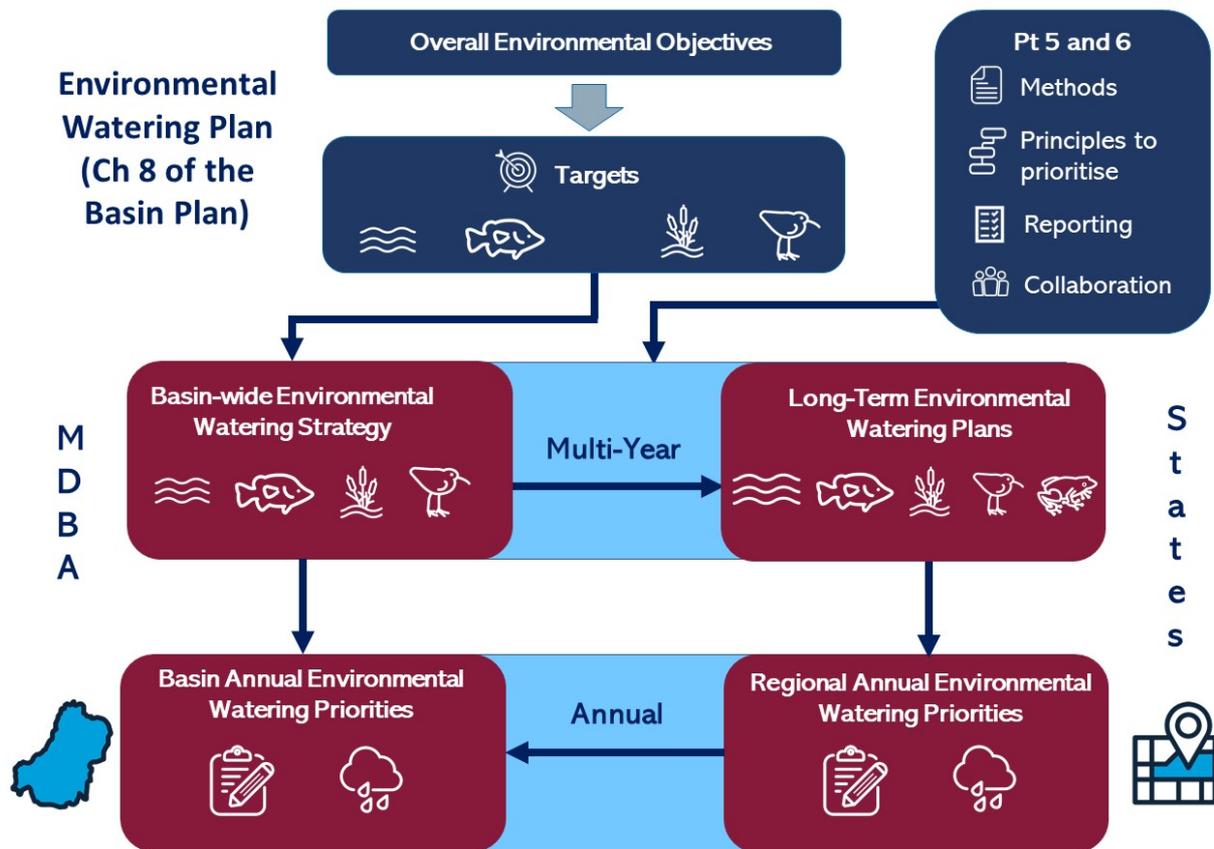


Figure 1: Components of the Environmental Watering Plan. Note that annual environmental water priorities are prepared for each water resource plan area, while Basin annual environmental watering priorities are at the Basin-scale.

Review

The EWP must be reviewed before the end of 2020 and within every five years thereafter to assess how it is contributing to achieving the environmental objectives for the Basin’s water-dependent ecosystems.

The MDBA undertook the first review of the EWP in consultation with a range of stakeholders, including Basin state governments, the CEWO, the Australian Government Department of Agriculture, Water and Environment, state water planners, scientists, peak organisations and First Nations.

Overall, the review found that the EWP is effectively co-ordinating the planning, prioritisation and use of environmental water across the Basin. The key findings were:

- First Nations’ values and uses, and methodology to have regard to these values and uses, should be strengthened through implementation of the EWP.
- Adaptive management requires the continual incorporation of new environmental watering knowledge and better communication of uncertainty.

- SMARTer (Specific, Measurable, Achievable, Relevant and Timebound) objectives and targets should be explored where practical.
- Opportunities to streamline reviews, evaluations and long-term watering plans should be pursued over the next five years.
- Communication of how different components of the EWP work together and link to other Basin Plan components should be improved.
- Inter-governmental cooperation in environmental water planning should be improved to enhance the effectiveness of the EWP.

Collectively, practitioners, researchers, advocates and MDBA staff agreed that substantial changes to the EWP are not required and there are no critical gaps that require legislative change at this time. However, the review identified potential improvements in relation to implementing the EWP, as well as potential improvements that could be addressed at the Basin Plan review in 2026.

These improvements have been summarised below by five key topics.

- First Nations
- Adaptive management
- Climate adaptation and objectives and targets setting
- Alignment within the EWP and to other Basin Plan chapters
- Regulatory power and interpretation of the EWP

More detail on these recommendations is provided below.

The MDBA is considering how findings from the review would provide a foundation for the next EWP review, scheduled in 2025, and the Basin Plan review in 2026.

First Nations

The EWP includes several requirements to consider First Nations' values and uses when planning for environmental water. For example, the MDBA must have regard to Indigenous values and uses when preparing the Strategy. Similarly, the Basin Priorities must have regard to Indigenous values and uses. An example of using existing provisions to further First Nations' involvement in environmental watering is the [First Nations Environmental Water Guidance](#) project, which has been used to inform the Basin priorities as well as the CEWO's delivery of environmental water.

Although these requirements are important, the review found that it was unclear how parts of the EWP have 'regard to' Indigenous values and uses. The review also found that there were opportunities to strengthen First Nations' values and uses in other parts of the EWP. For example, an overall objective should include First Nations' ecological values after engagement, facilitation and agreement with Traditional Owners.

These findings on First Nations' values and uses are best addressed through implementation activities under the existing EWP. These include the review and update of the Basin-wide environmental watering strategy (the Strategy) and Long-term watering plans (LTWPs), continued stakeholder engagement with

First Nations’ peak groups in the Basin, and further work with First Nations’ groups who have Cultural Authority.

Potential improvements include:

- adopting First Nations ecological outcomes in the next Strategy
- providing opportunities for environmental watering to contribute to cultural outcomes (without compromising environmental outcomes)
- incorporating First Nations’ ecological objectives into the next Basin Plan following engagement, facilitation and agreement with Traditional Owners.

Adaptive management

The review found that communicating the complexity and uncertainty involved with how and why environmental water is used is critical to support informed conversations with community stakeholders about Basin Plan implementation. The review also flagged that the MDBA should consider communications that explain the influence of climate change on environmental water management.

There are still areas of the complex Murray–Darling system that the MDBA and Basin governments need to better understand. The review recommended an ongoing commitment to invest in research to address knowledge gaps, such as through the Water Environment Research Program (*WERP*) and the Basin Science Platform.

Potential improvements include:

- better communicating complex narratives around environmental water management
- fostering a culture of learning and adaptation and adopting best available scientific knowledge
- continuing the evolution in approach from site-scale to system-scale environmental watering
- reshaping the EWP in the next Basin Plan to reflect that environmental watering has matured
- ensuring that ecological monitoring provides timely information for decision-making.

Climate adaptation and objective and target setting

The influence of a changing climate on achieving the objectives and targets for the Basin environment was strongly emphasised in the review. Achievement of targets for all sites under a changing climate will need to be considered at the 2026 Basin Plan review. However, there are multiple ways of responding to a changing climate; it is not as simple as reducing targets and it depends on how resilience to a changing climate is addressed both in environmental watering and water management more broadly.

Water-dependent ecosystems, for instance, will adapt in complex ways to a changing climate and understanding these adaptations will inform different approaches to environmental watering.

Future work under climate adaptation should also consider how to define the sub-set of all water-dependent ecosystems that will be protected and restored.

Potential improvements include:

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- acknowledging the influence of a changing climate on water-dependent ecosystems in the next Strategy
- reviewing the appropriateness of targets and objectives in the lead up to the Basin Plan review in 2026
- better defining the sub-set of water-dependent ecosystems that can be protected and restored
- improving links between objectives, targets and expected environmental outcomes in the various environmental water planning documents.

Alignment within the EWP and to other Basin Plan chapters

The review found that the Basin Priorities were the least effective component of the planning framework. Publication of the priorities in late June of each year was considered too late to influence regional environmental water planning.

The MDBA is exploring a new approach, in collaboration with Basin state governments and the CEWO with the aim of reducing duplication of State planning process while retaining a Basin-wide perspective.

The review found that the alignment and hierarchy of components within the EWP was difficult to interpret, and that a guide for practitioners and the public could help.

The EWP review also found that improving alignment between the long-term targets in the Strategy and the LTWPs was desirable.

Potential improvements include:

- aligning Basin priorities with environmental water planning processes in the regions
- explaining how different EWP components relate to each other and what their role is in delivering best practice environmental watering
- improving links between the EWP and other chapters of the Basin Plan, such as the Water Quality and Salinity Management Plan and Water Resource Plan requirements.

Regulatory power and interpretation of the EWP

The review identified the need for genuine collaboration with Basin state governments, the CEWO and in particular, local community stakeholders in environmental water planning and delivery. Improving stakeholder understanding of how water for the environment is used is a pre-requisite to meaningful collaboration.

The review found that the Strategy and LTWPs could be better aligned and that guidance provided to prepare LTWPs should be improved. This would occur after the 2022 Strategy update and would involve asset managers and environmental water holders assisting preparation of this guidance.

The review also identified two important factors in protecting environmental water. These were held environmental water (HEW) being protected as it passes through catchments and recognising the importance of non-consumptive non-environmental water in contributing to environmental outcomes. These findings acknowledge that all water in the system contributes to environmental outcomes.

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Potential improvements include:

- genuine collaboration between the different spheres of government, and improved community participation in environmental watering
- improved alignment between chapters in the Basin Plan to strengthen coordination of environmental watering
- better integration between planning across catchments, and improved protection of environmental water, to ensure that environmental outcomes are maximised.

While the review considered whether regulatory powers provided in the EWP are sufficient for compliance and audit activities, the MDBA’s compliance functions are to be transferred to an Inspector-General of Water Compliance to ensure strong and independent regulation.

It is worth noting that this review identified the need to improve monitoring arrangements across the Basin. This finding will be addressed by the MDBA’s new Monitoring Strategy.

More information

Read the [full review report](#)

Find more information about water for the environment under the Basin Plan at:

<https://www.mdba.gov.au/managing-water/water-for-environment>

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