



Australian Government



Prerequisite policy measures

MDBA position statement

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Acknowledgement of the Traditional Owners of the Murray–Darling Basin

The Murray–Darling Basin Authority pays respect to the Traditional Owners and their Nations of the Murray–Darling Basin. We acknowledge their deep cultural, social, environmental, spiritual and economic connection to their lands and waters.

The guidance and support received from the Murray Lower Darling Rivers Indigenous Nations, the Northern Basin Aboriginal Nations and our many Traditional Owner friends and colleagues is very much valued and appreciated.

Aboriginal people should be aware that this publication may contain images, names or quotations of deceased persons.

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Executive summary

In implementing the Basin Plan, environmental water entitlements have become an integral element of water management across the Basin. Once, water flowed freely over the landscape with natural high flows in winter and low flows in summer. Now water is stored and released from dams, and ordered and used when it's needed. Less water moving naturally through the system can cause problems like increased salinity, outbreaks of algae, and loss of vegetation and native animals.

Water for the environment aims to address these issues. Water managers must be able to deliver water for the environment when and where it is needed. Policy measures, known as pre-requisite policy measures, are part of the new management framework that has been established to manage water in the Basin. These measures are required under the Basin Plan to maximise the outcomes of water recovered for the environment without impacting on other water users. The measures include instruments that account for and protect 'return flows' of water for the environment and instruments that allow 'piggybacking' on unregulated events. The measures are legislative, operational and highly technical, and are vital because they ensure enduring and effective use of water for the environment. These measures are now in effect in the southern-connected Murray–Darling Basin.

The Basin is a dynamic landscape and changes over time, which means water management policy must change with it. Basin governments will continue to adopt an adaptive management approach to prerequisite policy measures (Figure 1).



Measures will be reviewed and adjusted over time, to ensure there is an ongoing process to improve the efficient use of water for the environment, as this type of water use is relatively new to water managers. This will include ongoing monitoring and assessment, including assessment through the Sustainable Diversion Limit Adjustment Mechanism assurance reporting. These measures are an important step in delivering the SDL Adjustment Mechanism projects, and will provide integrity to those projects.

Figure 1: Adaptive management approach to managing water in the Murray–Darling Basin.

The implementation of prerequisite policy measures brings environmental water holders, river regulators and river operators together to deliver the Basin Plan and work through the challenges changing water policy presents. We must ensure that the Basin Plan delivers long-term enduring environmental outcomes, while maintaining water reliability to other entitlement holders—working together is vital to ensure this is achieved.

Prerequisite policy measures explained

Prerequisite policy measures

Prerequisite policy measures are legislative and operational rule changes that improve the use, management and accounting of water for the environment in the southern-connected Murray–Darling Basin. The measures are outlined in the Basin Plan and must be implemented before 1 July 2019.

These policy measures ensure there are secure and enduring water management arrangements for the efficient and effective use of water for the environment without impacting on other water users, and provide greater flexibility in how this water can be used.

The policy measures include **instruments that account for and protect ‘return flows’ of water for the environment**. A portion of the water used in an environmental event may return to the river as a ‘return flow’. The changes account for these flows, allowing the water to be protected through crediting arrangements, and used for environmental purposes downstream (Figure 2).

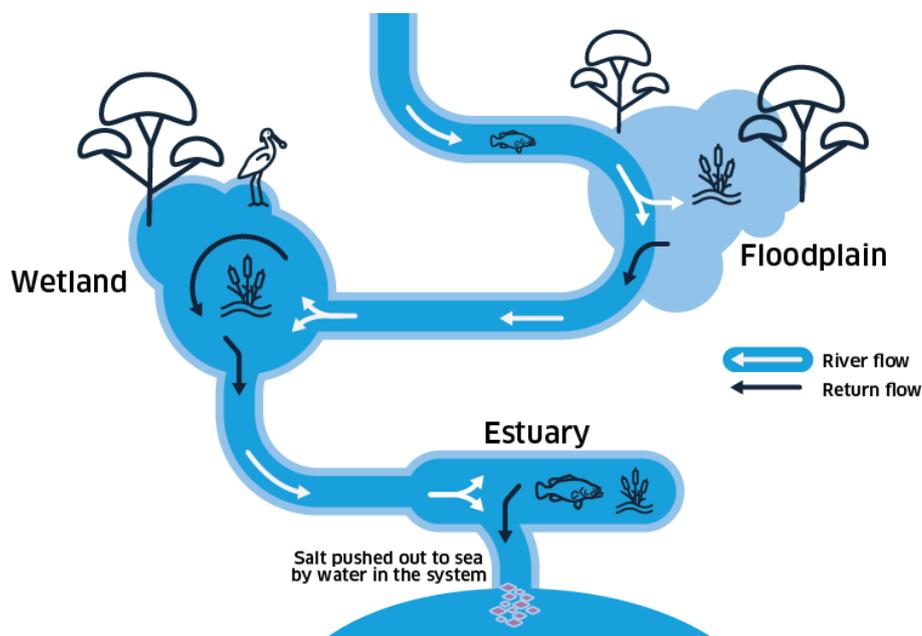


Figure 2: Water used for environmental purposes can return to the river and be used again for environmental purposes.

The policy measures also include **instruments that allow ‘piggybacking’ on unregulated events**. This means water for the environment can be released on top of other unregulated flows such as natural flooding (to the extent that private land will not be inundated without consent). Environmental water holders will also be able to specify which storage, or dam, their water order is released from to enable them to plan events and efficiently deliver water where it is needed most.

As a result, environmental outcomes can be achieved through piggybacking on an unregulated event while the water is travelling to its planned destination, making the best use of water available for the environment (Figure 3).

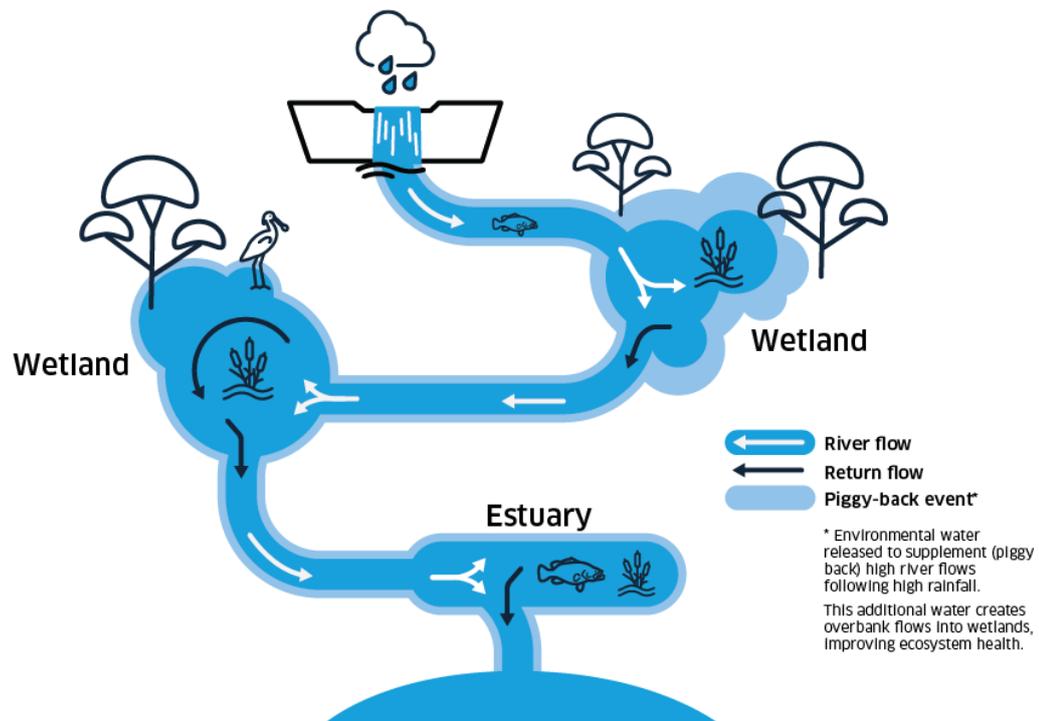


Figure 3: Water for the environment can be released on top of other unregulated flows such as natural flooding. This is known as piggy-backing.

Implementation of these policy measures must ensure that reliability of other water entitlements are not adversely affected.

These measures are made by states through:

- state legislative changes
- amendments to local water sharing plans
- changes to regulations and operational manuals
- the new [water resource plans](#).

Each Basin state has made these changes through their own legislative and regulatory amendment processes, including consulting with stakeholders. The Murray–Darling Basin Authority (MDBA) has implemented the measures in the River Murray system under the Murray–Darling Basin Agreement on behalf of the Basin states.

These measures are now in effect (as of 30 June 2019). States have demonstrated that water for the environment can piggyback on unregulated events, and be accounted for, to ensure the planned outcomes are achieved.

If the measures are not implemented according to the approved processes, this would be expected to have negative implications for the 605 GL Sustainable Diversion Limit Adjustment Mechanism package in any reconciliation process, currently scheduled for 2024.

Roles and responsibilities

The New South Wales, Victorian and South Australian state governments are responsible for developing and implementing the policy measures in their respective states, including consultation with environmental water holders, river operators and other stakeholders. The River Operations team within the MDBA is responsible for coordinating the implementation of the measures for the River Murray, on behalf of New South Wales, Victoria and South Australia.

Assessing prerequisite policy measures

New South Wales, Victorian and South Australian state governments have been working to ensure pre-requisite policy measures would be in effect as of 30 June 2019. This work has included conducting consultation through workshops and focused consultation with environmental water holders, river operators and other entitlement holders. In March–June 2019, the MDBA assessed whether these measures are in effect/enabled in water management frameworks. This assessment was then reviewed by the Independent River Operations Group.



Figure 4: The process for developing, assessing and implementing prerequisite policy measures.

Assessment process

Assessment approach

In 2015 the MDBA developed the Prerequisite Policy Measures Assessment Guidelines (the Guidelines) to provide assistance to states in developing and codifying the measures. The Guidelines informed the content and format of policy implementation plans. The Guidelines recognised that the measures could be implemented in a number of ways, and provided broad non-prescriptive advice that measures should:

- be secure and enduring
- be fully operable
- be transparent
- identify and mitigate risks arising from new policy measures
- provide for releases of held environmental water (HEW) from storages on top of other in-stream flows, including unregulated flows
- allow environmental water to flow throughout the length of the river, and between rivers and be protected from extraction, re-regulation or substitution.

The MDBA has used these principles to develop criteria and key objectives to establish whether the measures are in effect by 30 June 2019.

Criteria	Key objective
Are measures enabled in a secure and enduring arrangement?	Measures are enabled through provisions in state instruments that ensure they remain in effect from 30 June 2019, so that water for the environment can be used within each jurisdiction's water resource management framework to contribute to Basin Plan outcomes.
Can measures be fully operated from 1 July 2019?	Water can be called from storage during unregulated flow events. Environmental return flows can be used for downstream environmental purposes and environmental water can be accounted for as having been protected from extraction or re-regulation.
Are operational arrangements sufficiently detailed and transparent?	Jurisdictions have documented operational processes for ordering, delivery and accounting of water for the environment.

The implementation of prerequisite policy measures is an important mechanism to enable the environmental outcomes in the Basin Plan to be met with the water identified for recovery, as was anticipated in the benchmark SDL modelling. The measures are only part of the picture in terms of the mechanisms used by the Basin Plan to ensure that these environmental outcomes are achieved.

Other mechanisms include:

- the protection of planned environmental water and environmental watering requirements through water resource plans
- ensuring compliance with SDLs to protect environmental water from extraction
- providing for an adaptive management approach to the use of environmental water through reporting, evaluation and risk management.

Assessment process

The MDBA has worked bilaterally with jurisdictions to support their development of documentation on how prerequisite policy measures are enabled in water management frameworks. This documentation provides evidence against each of the assessment criteria for the MDBA to base its assessment.

The final documentation was submitted to the MDBA. An internal panel of assessors with expertise in technical aspects of river operations and environmental water delivery then formally assessed all evidence to make an assessment as to whether PPMs were in effect for each jurisdiction and the River Murray. These assessments are available at <https://www.mdba.gov.au/publications/mdba-reports/prerequisite-policy-measures>.

The MDBA's assessments were then independently reviewed by the Independent River Operations Review Group, who have detailed knowledge of how the River Murray system is run and how state water management arrangements work. Their review focused on whether the MDBA has:

- conducted its assessment in accordance with the Basin Plan requirements
- applied the assessment consistently across jurisdictions
- reached robust conclusions based on the evidence presented
- managed any potential conflicts of interest.

This [independent review report](#) and the assessment reports were provided to the Authority to inform their determination of whether PPMs were in effect by the end of June 2019.

Assessment outcome

The MDBA assessment reports for each jurisdiction and the River Murray found that PPMs were enabled in a secure and enduring arrangement; were fully operable; and had operations arrangements that were sufficiently detailed and transparent. This assessment was supported by IRORG. This information supported the Authority's decision that PPMs were in effect as of 30 June 2019.

Ongoing monitoring and management

Prerequisite policy measures will be an element of the MDBA's annual assessment of SDL Adjustment Mechanism. In this assessment, the MDBA will consider the ongoing use of measures, provide advice

on any improvements that may be needed, and make this assessment publically-available and transparent. PPMs are also critical as a part of any reconciliation process undertaken by the MDBA.

In addition to this annual assessment, there is also ongoing work needed by Basin state governments to ensure measures are refined and improved, as part of an adaptive management approach.

Measures need to be operationalised, and knowledge and expertise built across the Basin. There is an opportunity for governments to work together to understand the implementation approach to pre-requisite policy measures across different states, and the different opportunities and challenges that each state is experiencing.

Arrangements across Basin state governments

Arrangements in New South Wales

New South Wales have developed a framework for implementing prerequisite policy measures through valley-specific procedures manuals, which are recognised under statutory water sharing plans. Associated amendments to the river operator (WaterNSW) water supply work approval conditions will support the implementation of the measures.

The use of these measures in NSW will apply, at least in the short to medium term, to held environmental water only. It will not apply to the delivery of planned environmental water, which has specific rules set out in the relevant NSW water sharing plans.

Procedures manuals set out a process for developing watering actions for environmental assets, including delivery pathways and how held environmental water will be accounted for.

NSW has been implementing watering trials and documenting watering actions in the Procedures manuals, and have committed to implementing the Procedures manuals in full from 30 June 2019.

Until now the measures have been implemented in the Murrumbidgee regulated river via the Bulk Entitlement Delivery mechanism, but these arrangements will be refined through the watering actions and review process set out in the Procedures manuals.

The adaptive management framework for these measures in NSW is set out in the Procedures Manuals and includes a process for an annual review of the operation of the measures, with the objective of continual improvement and refinement over time, as knowledge increases.

Arrangements in Victoria

Victoria has implemented prerequisite policy measures under the Victorian *Water Act 1989*. The measures are given effect through the Victorian Environmental Water Holder's (VEWH) bulk and environmental entitlements.

The instruments of appointment for the storage and resource manager obligate Goulburn-Murray Water (GMW) to deliver VEWH's bulk and environmental entitlements. Other environmental water holders' entitlements are delivered through the VEWH's bulk and environmental entitlements.

The VEWH's bulk and environmental entitlements require the VEWH and GMW to agree on operating arrangements for delivery of water under the entitlements.

These arrangements are already well-established. The VEWH and GMW are formally documenting these in arrangements in consultation with other delivery partners, and are scheduled to be complete by June 2020.

The VEWH and GMW may vary operating arrangements at any time, which provide the flexibility integral for adaptive management. Formal reviews are undertaken at least every 5 years.

Victoria's return flow policy was developed as part of the [Northern Region Sustainable Water Strategy \(2009\)](#). The VEWH has a Northern Victorian Environmental Metering Program which sets out how environmental water use and return flows are measured and calculated.

Arrangements in South Australia

South Australia has developed a number of operational documents as part of their implementation of prerequisite policy measures, including policies and procedures for return flows, use of unregulated flows and transmission losses. These policies and procedures are implemented by the Department for Environment and Water (DEW), who have delegated responsibilities for River Murray management from the South Australian Minister for Environment and Water.

SAWater have some responsibility for the operation of South Australian River Murray infrastructure under the direction of DEW, and for monitoring flows within South Australia on behalf of the MDBA. South Australia has also developed a method to account for environmental water in the SA River Murray.

Implementation of these policies and procedures will enable measures to take effect in the SA River Murray in. In addition, amendments to the SA River Murray Annual Operating Plan, the development of specific SA River Murray Objective and Outcomes document, and the implementation of an environmental water accounting framework will improve transparency in the SA River Murray.

Conclusion

Water for the environment is still relatively new to water management in the Murray–Darling Basin. Basin governments know more needs to be done to improve the way water for the environment is used and accounted for. The pre-requisite policy measures ensure water for the environment has an enduring effect across the Basin so water for the environment can be delivered when and where it is needed.

The MDBA is confident that all prerequisite policy measures were in effect as of 30 June 2019 and strongly supports the ongoing adaptive management of these measures.

Providing confidence in the ongoing implementation of prerequisite policy measures requires a commitment of resources and identification of appropriate governance arrangements. Basin governments should work together to determine what arrangements are necessary and how these will be implemented.

The implementation of measures is designed to support the environmental objectives within the Basin Plan. The MDBA supports the development of a strong and robust independently verified annual assessment process that will support public accountability and operational decision making.

Any review function should reflect the shared operational responsibilities between Australian Government agencies and Basin state governments in implementing connected environmental watering activities.

Basin governments must work together to ensure that environmental water has the intended and enduring effect outlined in the Basin Plan.

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