

Submission to the Senate Select Committee into the Multi-jurisdictional Management and Execution of the Murray–Darling Basin Plan

The Murray–Darling Basin Authority (MDBA) welcomes the opportunity to provide a second submission to the Senate Select Committee on the Multi-jurisdictional Management and Execution of the Murray–Darling Basin Plan (the Committee).

The [Issues Paper](#) released by the Committee provides an accurate description of the Basin’s management arrangements and the MDBA will not be providing further information addressing the Committee’s Terms of Reference. However, the MDBA would like to provide additional information relating to the questions the Committee are exploring.

Adequacy of information

Summary

- Basin governments are working to increase the consistency, integration and availability of Basin information to improve transparency and ensure stakeholder needs are met.
- While improvements are evident, there is a need to consider ways to create an effective enabling environment to ensure stakeholders have information that is accessible, understandable, timely, relevant and credible.
- Water managers and stakeholders would both benefit from the development of new methods to obtain relevant, open and timely information.

The Basin is an inherently complex system and a vast amount of information exists regarding its condition and management arrangements across the many different agencies involved in its management. Basin governments are working to increase the consistency, integration and availability of this information to improve transparency and ensure the needs of stakeholders are met. Examples of integrated, cross-agency platforms being developed to improve accessibility of information include the Hydrometric Network and Remote Sensing Funding Program (Water Information Portal) and the Basin Science Platform.

It is important to note that sharing more and more information will not necessarily achieve greater levels of transparency. The real value add of any cross-agency approach is to identify how to concurrently construct an effective enabling environment for water users to understand, take advantage and manage risks in the new water management system. This is achieved only through the provision of accessible, understandable, timely, relevant and credible information – all of which means different things, to different stakeholders. The MDBA invests significantly in understanding and growing the Basin’s enabling environment for a wide range of stakeholders; and makes publicly available a range of information across a variety of information channels.

More can always be done; prioritization is challenging; and the needs of stakeholders are not static. Water markets, for example, has been a particularly challenging area to create both an effective enabling environment alongside the ‘right’ information. The accuracy, efficiency and transparency of the water market is currently being examined by the ACCC as part of its Inquiry into water markets.

The MDBA outlined the current arrangements for collection and use of data by government agencies in its first submission to the Committee and highlighted that different government agencies manage and use information in a manner that is not necessarily consistent across jurisdictional boundaries. The MDBA notes that more could be done to improve the efficiency and effectiveness of information sharing across agencies, for example system modelling.

It should be noted that limitations do exist within the datasets required for the effective management and oversight of the Basin’s water resources. An ongoing challenge for water managers is ensuring accurate calculations of water volumes where metering is not possible (e.g. floodplain harvesting or system losses). These calculations require accurate information regarding the landscape, river system, topography and land use of the Basin. Other complex accounting challenges include ‘separating’ water

in river and reservoirs into the theoretical constituent parts (e.g. environmental water; irrigation water; conveyance; losses).

Much of this information does not yet exist to the spatial, volumetric or temporal resolution required to be of use to Basin stakeholders; and there is not yet an effective, affordable and/or robust method to obtain and share such information.



Complexity of current Basin Plan governance arrangements

Summary

- Basin Plan governance is complex, but the current arrangements are necessary for the effective management of the Basin. Notwithstanding, the current arrangements require streamlining and better coordination of activities.
- The Claydon review provides a pathway to strengthen current governance arrangements to improve Basin management.

It is well established that Basin Plan governance is complex. In addition to several legislated advisory and decision-making committees and sub-committees, there are multiple agencies involved in each jurisdiction, each with different responsibilities. The governance reflects the complexity involved in managing the system; and is necessary for informed and measured decision-making at a Basin scale that also supports state responsibilities and planning frameworks. The governance arrangements aim to ensure that the Basin is managed in the national interest, and decision makers consider a range of perspectives.

“...the job at hand is broader than the remit of any existing single committee or agency at both State and Commonwealth levels, so effective collaboration, coordination and cooperation are needed. Committee members invariably supported the need for and desirability of change and improvements.”¹

While the current governance arrangements are working, there are opportunities to better coordinate activities and streamline processes to improve efficiency and transparency in decision making. The recent *Review of the Murray–Darling Basin joint governance arrangements* by Greg Claydon provides a detailed description of the current governance arrangements and a range of recommendations for improvement.

¹ Excerpt from Greg Claydon’s 2018 *Review of the Murray–Darling Basin joint governance arrangements* final report



Environmental water planning

Summary

- Effective use of water for the environment requires the integration of policy with operations—it involves coordination across many government agencies in its planning and delivery, and in the monitoring and evaluation of watering objectives.
- The current governance and planning arrangements for coordinating the delivery of water for the environment are increasingly effective in the southern Basin. These principles are being applied to the northern Basin to improve active management of flow events.
- There are opportunities to improve monitoring, evaluation and reporting of environmental watering outcomes, which will help demonstrate the wide range of benefits it provides across the Basin’s environment, economies and communities.

Environmental water planning and delivery has matured significantly since the Basin Plan was enacted. Water for the environment is now an established element of water management and is being used by environmental water holders to replenish rivers, wetlands and connected groundwater systems.

The coordination and delivery of environmental water throughout the Basin includes inputs from a range of agencies at a Commonwealth (the MDBA and Commonwealth Environmental Water Office) and state level (environmental water holders). The number of planning mechanisms are designed to ensure planning occurs at multiple spatial and temporal scales and in a way that ensures complementarity between local delivery plans and Basin scale objectives and priorities.

While agencies have their own environmental watering objectives, there are forums and frameworks in place to ensure that individual environmental watering actions contribute to local, state and Basin-scale outcomes where possible. For example, state reporting requirements ensure watering activities align with MDBA’s Basin scale annual watering priorities.

Planning

At a Basin scale, the Environmental Watering Plan (Chapter 8 of the Basin Plan) guides the planning, prioritisation and use of environmental water across the Basin. The Environmental Watering Plan sets out the responsibilities of the MDBA to provide guidance to states and water holders on environmental watering at the Basin scale. It includes (amongst other things) environmental objectives, targets to measure progress towards these objectives, and an Environmental Management Framework.

The key components of the Environmental Management Framework (part 4 of Chapter 8) are the Basin-wide Environmental Watering Strategy, the Long-Term Watering Plans, the Basin annual environmental watering priorities, and state annual environmental watering priorities. Each planning document plays a distinct role. For example, the long-term environmental watering plans include the detail required to deliver environmental water accurately, and the Basin-wide Environmental Watering Strategy has a long-term strategic perspective on the Basin’s priority environmental assets and objectives.

Together these four planning documents aim to provide clear objectives and guidance for the coordination of environmental water delivery across the Basin. They have been developed



collaboratively by Commonwealth and state governments to form a cohesive framework which covers multiple temporal and spatial scales. These frameworks have legislated five-yearly reviews. A revised Basin-wide Environmental Watering Strategy was published late in 2019, and the Environmental Watering Plan review will be completed by the end of 2020.

Delivery

These planning processes are brought together at northern and southern Basin environmental water holder forums. The Southern Connected Basin Environmental Watering Committee (SCBEWC) takes into account state and Basin-scale planning perspectives in their decisions on environmental water delivery activities for the water year.

The SCBEWC ensures that environmental water holders work together to undertake complementary watering actions and monitoring activities to get the best outcomes with the collective pool of environmental water available. The effectiveness of the SCBEWC was noted by the Productivity Commission's 2018 review of the Basin Plan.

A Northern Basin Environmental Watering Group (NBEWG) has recently been established, using the success and lessons learnt from the SCBEWC as a guide. This group will provide the enduring governance arrangements required to facilitate future environmental watering activities in the northern Basin. NBEWG held its first meeting in November 2019 and has met several times since then with a specific focus on a coordinated government response to the rainfall across the northern Basin in early 2020.

Monitoring of outcomes

There is clear evidence that environmental water is supporting the health of the Basin. The southern Basin environmental report cards aggregate ten years of monitoring data to publicly communicate the benefit of environmental water at key sites. The 2020 Evaluation will capture environmental water impacts on the Basin's broader health.

Opportunities to improve monitoring and reporting are being explored to include the contribution of environmental water to the social, cultural and economic values of the Basin. This would better demonstrate the multiple benefits that environmental water provides and is critical to build community support for environmental watering.

Groundwater

In highly connected surface water-groundwater systems, groundwater plays a vital role in providing drought refuges, baseflow to rivers and maintaining the health of groundwater dependent ecosystems.

The MDBA works with Basin state governments to manage and monitor the Basin's groundwater resources to make sure they are healthy and productive. The Basin Plan and Water Resource Plans acknowledge groundwater connectivity via long-term watering plans. Overbank and floodplain watering events recharge groundwater systems to service terrestrial and aquatic ecosystems during times of reduced surface water availability. In some areas, these watering events also recharge freshwater lenses within groundwater systems, suppressing salinity and protecting rivers.

Water Resource Plans

Summary

- Despite variations in Basin governments' approaches to Water Resource Plans, the plans themselves ensure that water management is consistent across the Basin.
- Water Resource Plan assessment and compliance arrangements are comprehensive and tailored to account for variations in state water management frameworks.
- There are several independent review processes in place that will ensure Water Resource Plan compliance regimes are effective, appropriate and transparent.

The *Water Act 2007* (Cth) sets out the requirement for states to develop Water Resource Plans (WRPs) to ensure state water management rules meet Basin Plan objectives, bringing state legislation into Commonwealth law. The aim of these plans is to strengthen water management at a local level and outline how each region will seek to achieve community, cultural, environmental and economic outcomes.

Each Basin state has its own water management framework, and therefore each state has approached WRP development in different ways. Despite the variation in the approach to and format of WRPs, the plans themselves ensure consistency in water management across the Basin, by demonstrating how state water management frameworks comply with the Basin Plan. In this way, WRPs are a step closer to achieving consistent water management across all states.

The MDBA has established a comprehensive WRP assessment process that accounts for jurisdictional differences. All WRPs are assessed against the requirements as set out in Chapter 10 of the *Basin Plan 2012*. This inter-jurisdictional complexity has not significantly hindered the WRP accreditation process with 8 WRPs accredited as at February 2020, and 5 more submitted to the MDBA for assessment.

The MDBA takes a risk-based approach to regulating WRP compliance, in line with its legislated functions and powers under the Water Act and the MDBA's Compliance and Enforcement Policy 2018-2021. The MDBA identifies risks to WRP compliance and appropriate actions to respond to the risks through an annual comprehensive assessment of risks to WRP and Basin Plan compliance, regular reviews of the risk assessment, and in response to allegations or intelligence received by the MDBA. The MDBA's public regulatory program is delivered through the MDBA's annual Compliance Priorities and audit program, which are published in June each year.

In all but Victoria, WRPs "pick up" elements of state water management law (in NSW Water Sharing Plans, in Queensland Water Plans, in SA Water Allocation Plans and in the ACT Water Use and Catchment General Code). The MDBA's working understanding is that Basin states will implement these arrangements appropriately and responsibly. In other words, in applying state water management law, Basin states will ensure their operations are consistent with the requirements of WRPs. The situation is a little different in Victoria, in that Victoria's WRPs do not incorporate state law.



The MDBA will use its regulatory powers and tools – reporting, information gathering, audit and compliance reporting – to proactively determine the extent of compliance with the Basin Plan.

There are two existing initiatives that aim to ensure the MDBA’s WRP Compliance arrangements are effective. The MDBA’s Independent Assurance Committee regularly provides advice on the adequacy of the MDBA’s regulatory framework, including the MDBA’s arrangements for ensuring WRP compliance, and provide a public summary of the committee’s advice and views. Additionally, the Productivity Commission will review the effectiveness of WRP compliance in its next five-year review of the Basin Plan.



Compliance arrangements

Summary

- Through the Basin Compliance Compact, the MDBA has driven and monitored Basin governments' improvements to their regulatory arrangements.
- There is a need to further strengthen compliance regimes through the on-ground implementation of new metering and measurement policies.
- Continued improvements in how governments share information, including how compliance decisions are made, will improve transparency and help restore confidence in the system.

The July 2017 Four Corners expose into water compliance in NSW triggered various state and federal reviews and investigations into water compliance, including the Murray–Darling Basin Water Compliance Review (2017) undertaken by the MDBA and an independent panel.

Following the reviews, in 2018 Basin states and the Australian Government agreed to a Murray–Darling Basin Compliance Compact (the Compact) to reform their regulatory frameworks. The Compact was endorsed by the Council of Australian Governments and the MDBA publishes annual assurance reports on progress implementing the Compact commitments.

Improvements committed to under the Compact include the establishment of new regulatory agencies (NSW NRAR), amendments to water compliance legislation (NSW, QLD and Victoria), increased resources and more public transparency.

In recognition of the importance of accurate and reliable water meter data, as part of the Compact, Basin states committed to reviewing and updating their metering policies to require the use of meters that comply with the Australian Standard for non-urban water meters. The MDBA also commenced an annual audit program which includes audits into Basin state metering policies, monitoring and enforcement, and maintains a public list of pattern approved meters that meet the Australian Standard.

Notwithstanding the progress to date, efforts to improve the metering and measurement of water take must be maintained. This includes increasing the coverage of metering or measurement of actual take, particularly floodplain harvesting. Additional opportunities include expanding telemetry using a risk-based framework, and real time measurement and reporting of water data. Regular and accessible public reporting about compliance resourcing and activities by regulators is also important for increasing transparency and accountability.

The establishment of a national water compliance community of practice has increased peer to peer sharing on regulatory best practice. These exchanges are critical to ensure there is understanding of the reforms underway across the country and the Basin and opportunities for sharing learnings and driving consistent improvement.



Opportunities for improvement

Despite significant improvements since 2017 the broader public, as well as the Commonwealth and other regulators, have limited access to information that provides ongoing confidence that arrangements are appropriate, fair, and in effect.

Increased information on actual water take and water licence details is still lacking. This includes information to enable users to understand what rules or conditions are in effect in different areas, levels of water extraction and quantity, and environmental flows occurring. This is essential for the broader public as well as the Commonwealth and other regulators to have ongoing confidence that arrangements are appropriate, fair, and in effect.

A significant factor influencing this challenge is the separate water registers of each Basin state, which hold information about allocations, use and licences. The varying levels of accessibility and security of each register means that while entitlement holders generally understand the rules and are familiar with their license conditions, it is difficult for the public to access information on how much water can and has been taken, and the rules of take.

