

Environmental water delivery



Northern Basin initiatives



Sustainable diversion limit
adjustment mechanism



Water recovery



Water resource plans



July 2022 Report Card

Following above-average rainfall in 2021, many storages across the Basin are full or near-to-full. High allocations are forecast for most regions following back-to-back years with high water availability. The rain brought water to many wetlands, especially in the northern Basin.

For the first time in 20 years we've seen large waterbird breeding events occur concurrently at the Macquarie Marshes, the Gwydir, Narran Lakes, Low Bidgee and Lachlan wetlands throughout late summer and autumn. We've also seen native fish such as golden perch breeding in the northern Basin, and the dispersal of fish from the Menindee Lakes down into the Murray.

Despite the wet year, water is still not reaching important parts of the floodplain in the southern Basin.



This Basin Plan Report Card (the Report Card) provides an independent overview of progress on the implementation of key activities under the Basin Plan for the 6 months from January to June 2022. The Murray-Darling Basin Authority (MDBA) has a role to monitor progress toward achieving a healthy, productive Basin.

As highlighted in previous report cards, good progress has been made in implementing the Basin Plan, however, delivery of some critical elements remains delayed or stalled. 46 gigalitres (GL) remains to be recovered to achieve the Basin Plan water recovery target of 2,075 GL. Only 2 GL of the additional 450 GL in efficiency measures has been recovered, with a further 22.1 GL contracted for delivery. Improvements to environmental water delivery are progressing, but lack of progress in relaxing constraints continues to limit the ability to achieve some of the environmental outcomes in the Basin Plan. Accredited water resource plans from Victoria, Queensland, South Australia and the Australian Capital Territory remain in operation.

The Report Card also shows critical elements including the Sustainable Diversion Limit Adjustment Mechanism measures and New South Wales water resource plans continue to be at risk. While local supply measures are progressing, substantial work remains to deliver the system-scale projects. As at 30 June 2022, New South Wales had formally submitted 1 of the 20 water resource plans to the MDBA and provided 5 water resource plans for review ahead of formal submission.

The MDBA continues to seek and respond to feedback from communities through the Basin Community Committee, the MDBA's regional engagement officers; through staff located across our 6 regional offices; and our stakeholder relationships.

Some stakeholders and regions continue to seek implementation of the Basin Plan as it was agreed in 2012. Others are feeling worried about how the remaining water recovery, including the 450 GL of efficiency measures will be implemented. Enhancing First Nations access to water is broadly supported, however, there are concerns from some stakeholders that this will result in further water recovery from other users.



About the Report

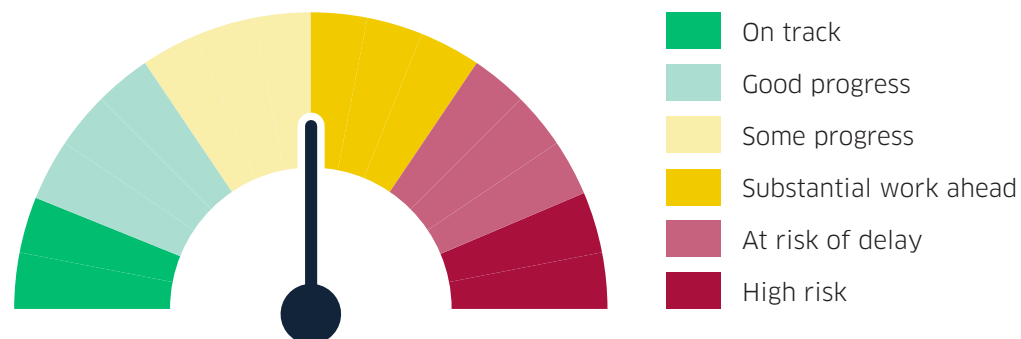
The MDBA is a statutory authority of the Australian Government, established to provide independent, expert advice on the development and implementation of the Basin Plan. An important part of the MDBA's role is to assess and monitor the implementation and effectiveness of the Basin Plan.

This Report Card is the eighth in the series, providing a short, timely and accurate update on progress in implementing the Basin Plan, to inform the Australian public. The Report Card includes stakeholder insights that the MDBA has heard over the past 6 months from a wide range of sources including the Basin Community Committee, regional engagement activities, peak bodies, social media, and the public hotline and email inbox.

The Report Card does not assess on-ground Basin conditions or environmental and social trends occurring in the Basin. The MDBA's [2020 Basin Plan Evaluation](#), released in December 2020, provides the latest, most comprehensive report on this, along with recommendations for improvements to strengthen the social, cultural, economic and environmental outcomes being sought through the implementation of the Basin Plan.

The December 2021 Report Card showed several areas of success in implementing the Basin Plan, and areas where Basin governments need to consider actions and approaches that can be fast-tracked or adapted to accelerate implementation. Since December 2021, there has been little or no progress in key elements, increasing the risk that the remaining elements of Basin Plan implementation will not be completed on time.

Guide to the ratings





Assessment

The MDBA assessed the progress of the key activities of Basin Plan implementation. These activities are interconnected, and the Basin Plan needs all themes to progress to set the foundations for a healthy and sustainable Basin.



Water resource plans

Accredited plans from Victoria, Queensland, South Australia, and the Australian Capital Territory remain in operation. The MDBA has provided guidance to Basin governments on the process to amend water resource plans so the plans can evolve and adapt to new information and improvements.



Water recovery

Bridging the gap

Achieving the water recovery target is close to completion, with approximately 98% of the surface water and 92% of the groundwater targets recovered as at 30 April 2022. There was no Bridging the Gap water recovery between 1 January and 30 April 2022. Further work is needed to achieve the full recovery targets.



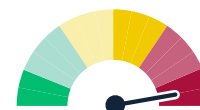
Sustainable diversion limit adjustment mechanism – supply and constraint measures

While local supply measures are progressing, substantial work remains to deliver the system-scale projects. All projects interact as a package, and successful delivery at the local scale cannot offset the lack of progress of the critical system-scale projects. Seven SDLAM projects were recently assessed by Basin governments as being at high or extreme risk of not being completed by 30 June 2024.



New South Wales water resource plans

New South Wales has formally submitted 1 of the 20 water resource plans to the MDBA and provided 5 water resource plans for review ahead of formal submission.



Sustainable diversion limit adjustment mechanism – efficiency measures

Two further Efficiency Measures projects under the Off-farm Efficiency Program were announced in January 2022 (New South Wales Murrumbidgee Irrigation Automation Finalisation Project; South Australia Marion Water Efficiency Project). However, these are relatively minor in the context of the 450 GL efficiency measures target. Only 2 GL of the additional 450 GL has been recovered, with a further 22.1 GL contracted for delivery.

Assessment (continued)



Northern Basin initiatives

Meeting the 2024 timeframes for many environmental works projects will be challenging, but good progress has been made with policy and management measures that form part of the toolkit. Business case development work is continuing on a number of the environmental projects.



Environmental water delivery

A range of improvements are still being delivered (e.g. Pre-requisite Policy Measures improvements; Enhanced Environmental Water Delivery).

Environmental water is playing an important role to fill in gaps between inflows and maintain water levels in key rivers, forests and wetlands, but outcomes are being limited by not having relaxed constraints.

Compliance

Following amendments to the *Water Act 2007* (Cth) (the Water Act) and the *Basin Plan 2012*, the MDBA is no longer responsible for enforcing compliance with the Basin Plan. This responsibility now sits with the Inspector-General of Water Compliance (IGWC), which was formally established on 5 August 2021.

The newly established IGWC has oversight of water management in the Basin, and inquiry powers to investigate the implementation of the Water Act, the Basin Plan and intergovernmental agreements, including the Murray- Darling Basin Agreement.

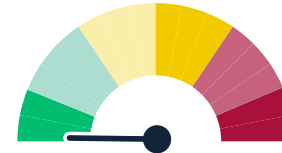
In response to these new arrangements this Report Card has not assessed Basin Plan compliance.



Priority one Water resource plans

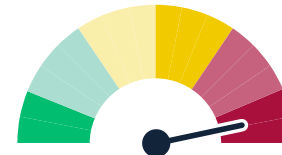
Water resource plans are an integral element of implementing the Basin Plan, as they set the rules for how much water can be taken from the system, so that the sustainable diversion limits in each area are achieved over time. The plans also make sure that state and territory water management rules meet the Basin Plan requirements and include arrangements that strengthen water management at a local level.

Water resource plans are developed by Basin governments, assessed by the MDBA, and accredited by the Australian Government Minister responsible for Water. There are 33 plan areas in total, 19 for surface water, 19 for groundwater and 5 that cover both surface and groundwater.



Water resource plans

Plans from Victoria, Queensland, South Australia and the Australian Capital Territory remain in operation. The MDBA has provided guidance to Basin Governments on the process to amend water resource plans so the plans can evolve and adapt to new information and improvements.



New South Wales water resource plans

New South Wales has formally submitted 1 of the 20 water resource plans to the MDBA and provided 5 water resource plans for review ahead of formal submission.



Priority one (continued)

Water resource plans

MDBA assessment

- All 13 water resource plans across Victoria, Queensland, South Australia, and the Australian Capital Territory remain in operation. The MDBA has begun providing advice to some Basin states about amendments to bring forward. It is anticipated that Basin governments will work closely with the MDBA prior to any amendment being submitted for assessment.
- Water management will continue to evolve and changes to water resource plans are anticipated as new information comes to hand and management practices are improved. Amendments to plans will require assessment by the MDBA and accreditation by the Australian Government Minister responsible for water. [Water resource plan amendment guidelines](#) have been developed to guide Basin governments in the development of amended plans.
- As at 30 June 2022, New South Wales has formally submitted 1 of the 20 water resource plans to the MDBA.
- Late in the reporting period, New South Wales provided 5 plans for preliminary document review ahead of formal submission. This is a good step towards the formal submission of accreditable plans.
- The New South Wales Government remains committed to rolling out its licencing framework for floodplain harvesting, which will require this form of take to be metered and monitored.

- The Inspector-General of Water Compliance's compliance and enforcement powers with respect to sustainable diversion limits are limited until water resource plans are accredited.

What we are hearing

- Calls from the Inspector-General of Water Compliance for New South Wales to submit water resource plans for MDBA assessment have generally been supported by Basin communities. Communities expect water resource plans to be delivered and there is a sense of frustration that this hasn't already occurred.

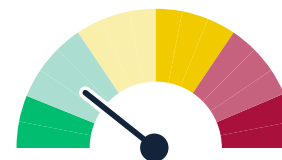
Priority two

Water recovery



Sustainable diversion limits indicate how much water can be used whilst leaving enough water in the system to sustain natural ecosystems. The Australian Government implements a range of measures to achieve the sustainable diversion limits (SDL) set out in the Basin Plan. The program has involved a combination of water efficiency projects and purchasing of water licences in the market. The water recovered under the program is passed to the Commonwealth Environmental Water Holder as licences and must be used to achieve Basin Plan environmental watering objectives.

Bridging the Gap is the primary water recovery target in the Basin Plan. In 2018 this target was revised to 2,075 gigalitres per year (GL/y) as a result of 2 amendments to the Basin Plan, one as a result of the [Northern Basin review](#) and [scientific reviews of groundwater systems](#), and the other to reflect the SDL adjustment mechanism. This revised target is dependent on the SDL adjustment mechanism projects being delivered by 2024.



Bridging the gap

Achieving the Bridging the Gap water recovery target is close to completion, with approximately 98% of the surface water and 92% of the groundwater targets recovered as at 30 April 2022. There was no Bridging the Gap water recovery between 1 January and 30 April 2022. Further work is needed to achieve the full recovery targets.

MDBA assessment

- At a Basin scale about 98% of surface water recovery (against the Bridging the Gap target) is complete – as of 30 April 2022, 46 GL/y remains to be recovered to meet the Basin Plan target of 2,075 GL/y.
- The majority of Basin jurisdictions have completed the revision of their 'Cap factors,' which are conversion factors that allow different types of water entitlements to be counted on equal terms. These factors help to determine if the correct amount of water has been recovered in each region. The 'cap factors' come into effect as water resource plans are accredited.

Priority two (continued)

Water recovery



- While the total amount of water recovered across the Basin is higher than the overall target of 2,075 GL/y, there are local and shared water recovery targets in the Basin Plan that must still be met at the catchment-scale. There has been some over-recovery in some catchments.
- For groundwater, 92% of water has been recovered – as at 30 April 2022, a further 3.2 GL/y of recovery is required to meet the Basin Plan target of 38.45 GL/y.
- Full recovery of surface and groundwater Bridging the Gap targets would improve the MDBA's assessment rating.

What we are hearing

- There is positivity among Basin communities in many regions for full implementation of the Basin Plan, although there are also concerns from some stakeholders about the possibility for water buybacks to address sustainable diversion limit adjustment mechanism shortfall.
- Some individuals would like to see direct water recovery and are hopeful this will now be possible.

Priority three

Sustainable diversion limit adjustment mechanism



The Basin Plan sets [sustainable diversion limits](#) (SDLs), which are limits on how much water can be used for consumptive purposes in the Murray–Darling Basin, while leaving enough water to sustain the environment. In 2012, Basin governments agreed a mechanism to adjust these limits in the Basin on the basis that there are better ways to manage the system that still achieve equivalent environmental outcomes, with less water recovery.

The [SDL adjustment mechanism](#), adopted for the southern Basin only, involves 3 elements that work together – namely ‘supply’ and ‘constraints’ projects that improve river management and achieve equivalent environmental outcomes with less water, and ‘efficiency measures’ that recover water for the environment through modernised infrastructure that increases water use efficiency.

Southern Basin governments brought forward 36 supply projects in July 2017. The 2017 SDLAM determination found that these measures, as a package, could deliver an offset of 605 GL/y, meaning 605 GL/y less water would need to be recovered from consumptive users such as towns, communities, farmers and industries, while still achieving equivalent environmental outcomes sought by the Basin Plan. Southern Basin state governments are responsible for the design and implementation of these projects, with funding from the Australian Government.

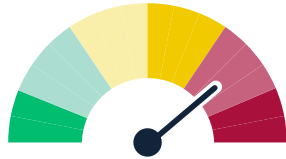
Under the water efficiency program, the Australian Government has set aside \$1.5 billion to recover 450 GL of water by 2024. The Basin Plan requires that efficiency measures meet agreed criteria to ensure they have neutral or positive socio-economic outcomes for Basin communities.

Under the Basin Plan, the MDBA is required to assess whether the notified measures have been implemented as proposed and are capable of achieving the adjustment determined in 2017. Leading up to this decision, the MDBA will conduct assurance on the progress and expected outcomes of the notified measures. If the notified measures are not implemented, or are amended in a way that would impact on the outcomes as per the 2017 determination, the Authority must undertake a reconciliation of the mechanism in 2024, which may lead to a revision of the adjustment volume.

A [framework](#) outlining how the MDBA will approach this reconciliation has been developed in consultation with Basin governments. This framework provides the Authority's proposed approach to the reconciliation decision, including the role of assurance, and clarifies the roles and responsibilities of the Authority and Basin governments.

Priority three (continued)

Sustainable diversion limit adjustment mechanism



Sustainable diversion limit adjustment mechanism – supply and constraints measures

While local supply measures are progressing, substantial work remains to deliver the system-scale projects. Local scale projects will contribute significantly to local-scale environmental outcomes and to the 605 GL offset, however, as all projects interact as a package, a significant portion of the offset, and the desired environmental outcomes, will not be achieved without the delivery of critical system-scale projects.

MDBA assessment

- The Australian Government and Basin state governments are continuing to work together to accelerate the planning and delivery of the SDL adjustment mechanism projects.
- To track progress and improve transparency, Basin state governments self-assess SDLAM project progress on a quarterly basis. The [SDLAM program quarterly progress updates](#) are compiled and published on the MDBA website on behalf of jurisdictions.
- A number of SDLAM projects are already in operation and are delivering ecological outcomes. As at March 2022, 15 supply projects were self-assessed by Basin state

governments as operational or on track to be completed by 30 June 2024, including projects such as The Living Murray package of floodplain works, several River Murray operational rules projects and the South Australian Riverland Floodplain Integrated Infrastructure Program (SARFIIP).

- State-based quarterly reporting has identified 7 projects not on track and are at high to extreme risk of not being operational by June 2024 due to their complex nature and significant challenges. The majority of measures at risk are key system-wide projects that impact the capability of other measures to successfully achieve the 605 GL of water recovery.
- The MDBA also provides an annual update on the progress of the package of measures. The MDBA's assessment of progress in the most recent [assurance report](#) in 2021 aligned with the [2021 independent status assessment of progress by Indec](#) and Basin governments' self-reporting in relation to many measures. However, the assurance report also identified some administrative matters and other issues relevant to progress of the SDLAM measures that had been assessed by the Indec report as being completed and in operation. For example, some operational rule change measures have implemented rule changes but require amendments to water sharing plans to enable operationalisation. Such measures include the '2011 Snowy Water Licence Schedule 4 Amendments', 'Operating rule change to the use of the Barmah-Millewa Forest Environmental Water Allocation', and 'Computer Aided River Management systems (CARM) for the Murrumbidgee River' amendments.

Priority three (continued)

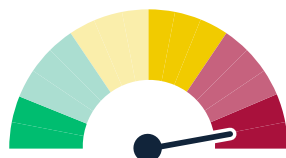
Sustainable diversion limit adjustment mechanism



- Key achievements in this assurance reporting period include:
 - New South Wales is fast tracking the delivery of 3 supply measure projects and 2 elements of the Yarrowonga to Wakool constraints measure, with Australian Government funding.
 - The Menindee Lakes Water Savings (including the Lower Darling constraints) and Yanco Creek Offtake Regulator projects are being re-scoped by New South Wales as the 'Better Baaka' and 'Better Bidgee' programs. What these programs will provide in the context of the SDLAM offset volumes has not yet been determined. Re-scoped projects are subject to the Basin Plan's requirements for amendment of project notifications and must have the agreement of the Ministerial Council and Basin Officials Committee before proceeding.
 - Basin governments continue to work closely with communities on the Constraints Measures projects in the Murrumbidgee, Goulburn, and Murray Rivers to find solutions to removing operational and physical constraints to delivering higher flows in the rivers.
 - South Australia has identified early works projects to progress the South Australian River Murray constraints. This work is expected to be complete by June 2024.
 - The Koondrook-Perricoota Forest Flow Enabling Works and Mid-Murray Anabranches Constraints Demonstration Reach Project are being progressed under the New South Wales accelerated projects.
 - The Lower Darling Constraints Measure which is a component of the Menindee Lakes Water Savings Project is being rescoped.
- In Victoria, community engagement has commenced through a stakeholder reference group and scoping works on Victoria-specific constraints modelling is progressing well.
- Stage 1A of the Enhanced Environmental Water Delivery project commenced in August 2021. As part of this stage, the MDBA in collaboration with New South Wales, Victoria and South Australia has established project management and governance arrangements, completed a program of early technical investigations, and is preparing an implementation plan to support a decision to proceed to implementation.
- The 9 Victorian environmental works projects are progressing through the regulatory approvals process and accelerating procurement activities to support delivery for 2024 completion subject to approvals, confirmed Australian Government funding and Traditional Owner and community support.

Priority three (continued)

Sustainable diversion limit adjustment mechanism



Sustainable diversion limit adjustment mechanism – efficiency measures

Two SDLAM off-farm efficiency projects were announced in January 2022 (New South Wales Murrumbidgee Irrigation Automation Finalisation Project (6,290 ML/y); South Australia Marion Water Efficiency Project (126.56 ML/y)). However, these are relatively minor in the context of the 450 GL efficiency measures target.

MDBA assessment

- Three off-farm projects have been approved and are progressing:
 - The New South Wales project in the Murrumbidgee Irrigation Area
 - An urban stormwater harvesting water savings project from South Australia
 - The Water Efficiency Project at Victoria's Goulburn-Murray Water
- The total volume of water to be recovered from these off-farm projects is 21.5 GL/y (Long Term Average Annual Yield – LTAAY).
- The Basin Plan requires the total adjustment to remain within a 5% increase or decrease of the total surface water SDL. The efficiency measures program therefore needs to recover a minimum of 62 GL/y for the full 605 GL supply offset under the sustainable diversion limit adjustment.

- Based on recovery to date, ongoing effort to accelerate the delivery of the efficiency (and constraints and supply) projects is needed.
- The second Review of the Water for the Environment Special Account is expected to be tabled in the Australian Parliament in the winter/spring sitting.

What we are hearing

- The community knows that these key elements of the Basin Plan will not be delivered on time and are calling for a clear plan to manage incomplete implementation.
- Views on how to respond are widely divergent – many are concerned about a return to water buybacks and the consequent impacts on their communities. Others have highlighted that water recovered through infrastructure is more expensive than purchasing on the open market, and view buybacks as the only way to get the water needed to sustain the Basin.
- In relation to constraints projects, some worried that even in very wet years, water has been unable to flow to important areas of the floodplain.

Priority four

Northern Basin initiatives



There are several initiatives underway in the northern Basin to better manage water for local communities, the environment and future generations. This includes a diverse range of projects, known as the 'Northern Basin Toolkit measures'.

The northern Basin Review (2017) resulted in a 70 GL reduction to the 390 GL water recovery target in the north, on the basis that the New South Wales and Queensland Governments adopted a range of ['toolkit measures'](#) with assistance from the Australian Government.

The Basin Plan was amended in 2018 to reflect this outcome, along with bipartisan support for further initiatives. Following the Menindee fish death events and the subsequent 2019 Vertessy Independent Panel review, an additional response package was added, which included significant funding to improve northern Basin monitoring and compliance, protect native fish and improve river management.

Together, these initiatives are intended to protect water for the environment, improve compliance with water laws, improve river management across the northern Basin, and create opportunities for local communities, including First Nations Australians.



Northern Basin Initiatives

Meeting the 2024 timeframes for many environmental works projects will be challenging, but good progress has been made with policy and management measures that form part of the toolkit. Business case development work is continuing on a number of the environmental projects.

MDBA assessment

- The Basin governments' agreed work plan to implement the toolkit measures, and progress updates, are available on the [MDBA website](#).
- There has been good progress implementing the policy and management measures in the 'toolkit'. Key milestones achieved include New South Wales implementation of 'active management' to protect held environmental water along the Barwon-Darling and through the lower Gwydir and lower Macquarie unregulated river systems; and new accounting arrangements in place to protect water for the environment crossing the Queensland-New South Wales border. Work is ongoing by New South Wales to consider options to improve protection of water for the environment once it crosses the border.

Priority four (continued)

Northern Basin initiatives



- Australian Government funding has been made available to Queensland and New South Wales for the approved 10 environmental works projects. A number of these projects have commenced early activities including site surveys, stakeholder consultation, request for tenders and expressions of interest sought (for example in [Queensland](#) and [New South Wales](#)). New South Wales has submitted business cases for 3 Gwydir constraints projects and an Australian Government assessment of these business cases has been completed. Development of Queensland-led business cases has commenced but there have been delays which will affect when these are submitted for Australian Government assessment. Decisions on implementation funding for these projects will be determined by the Australian Government Minister responsible for water.
- Australian Government funding has been provided to Queensland and New South Wales to deliver the Fencing Northern Riverbanks program. Agreements are in place for delivery of over 500km of riverine fencing and off stream stock watering points in Queensland, which will help to improve health of waterways and native fish populations. New South Wales has experienced some delays in delivering this program.
- Ministers have agreed that all toolkit measures would be operational by 30 June 2024. Whilst implementation of the policy and management measures is well advanced, delivering the environmental works projects within this timeframe will be challenging and there is a significant risk that agreed implementation timeframes will not be met. Ministers will further consider project implementation timeframes when project development activities for all projects have been completed and project delivery timeframes are better understood.
- The toolkit includes a requirement for remaining water recovery in the northern Basin to be targeted based on social, economic and environmental considerations. However, further progress towards achieving the 320 GL target in recent years has stalled. Whilst work is underway to identify options for recovering gap bridging water in the Condamine-Balonne SDL area, a plan and timeframe is needed for achieving all remaining northern Basin water recovery.
- The coordination of environmental watering (a specific toolkit measure) continues to mature. There have been 3 coordinated, joint environmental releases to achieve whole-of-north connected flows since 2018. The Northern Basin Environmental Watering Group has been established to coordinate planning and delivery of water for the environment across the northern Basin.
- For the first time representatives from the Northern Basin Aboriginal Nations participated in the most recent Northern Basin Environmental Watering Group meeting. Future planning and delivery of coordinated environmental watering flow events in the northern Basin will benefit from First Nations knowledge and perspectives. This will include exploring opportunities to coordinate connectivity watering actions to achieve cultural outcomes along with environmental outcomes.

Priority four (continued)

Northern Basin initiatives

What we are hearing

- Northern Basin communities live through the 'boom and bust' of the northern system. Storages across the northern Basin are near full capacity and widespread flooding has provided full connectivity of the Darling (Baaka) River from the Queensland-New South Wales border through to Menindee Lakes. According to locals some parts of the northern Basin are the wettest they've been for over 2 decades.
- Communities are eager for on-ground delivery and more information on implementation progress, including opportunities to provide input. The community wants these measures implemented to deliver the best possible outcomes.

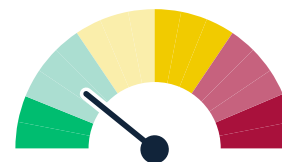


Priority five

Planning and delivery of environmental water

The health of our rivers is crucial for all Australians. Water for the environment is used to improve the health of rivers, wetlands and floodplains, which benefits communities and industries. Water is allocated to environmental water holders across the Basin, who make decisions about when, where and how much water is released for the environment. Stakeholders and partners including government agencies, community and First Nation groups contribute to many environmental watering decisions.

Six organisations hold water for the environment across the Basin. The Commonwealth Environmental Water Holder has the largest portfolio of water entitlements and uses this water across the whole Basin. The MDBA provides advice and guidance to support environmental water holders to plan when and where to release environmental flows, primarily through the MDBA Basin-wide Watering Strategy and the Annual Environmental Watering Priorities. The MDBA also manages water for the environment held under the Joint Government Living Murray program.



Environmental water delivery

A range of improvements are still being delivered (e.g. Pre-requisite Policy Measures improvements; Enhanced Environmental Water delivery). Environmental water is playing an important role to fill in gaps between inflows and maintain water levels in key rivers, forests and wetlands, but outcomes are being limited by not having relaxed constraints.

MDBA assessment

- The [2020 Basin Plan Evaluation](#) found that the delivery of water for the environment has been crucial for sustaining water-dependent ecosystems during the recent drought.
- Due to the presence of constraints across the system, there are times when the environmental water holders want to inundate floodplain assets but their water can only be delivered at in-channel flow rates, which limits the extent of environmental outcomes achievable.



Priority five (continued)

Planning and delivery of environmental water

- The 2020 Basin Plan Evaluation found that floodplain outcomes anticipated in 2012 by Basin Plan hydrological modelling are not yet being achieved. The majority of water for the environment leading to wetland and floodplain inundation is being delivered through regulators and infrastructure rather than through overbank flows, limiting the area of the floodplain that can be watered. Implementation of relaxed constraints is needed.
- Both the [Northern Basin Environmental Watering Group](#) and the [Southern Connected Basin Environmental Watering Committee](#) are operating effectively, and provide a focus for multi-catchment coordination and cross border connectivity. Environmental water holders, Basin Governments and Australian Government agencies undertake extensive planning before the start of each water year for different climate scenarios and are well prepared for all conditions.
- Environmental water managers continue to work with a range of First Nations and organisations to [better integrate cultural objectives](#) into the management of water for the environment. Key partners include Murray Lower Darling Rivers Indigenous Nations and Northern Basin Aboriginal Nations. This includes delegates from Northern Basin Aboriginal Nations participating for the first time in the most recent meeting of the Northern Basin Environmental Watering Group to ensure First Nations' values are consistently considered in water for the environment planning.
- Even though the past year has been relatively wet, environmental water is playing an important role to fill gaps between inflows, mimicking some of the flows that would have occurred naturally if not for river regulation. This helps maintain water levels in key rivers and wetlands to help birds, fish and plants flourish.
- [Key sites](#) along the Murray are monitored each year and are showing sustained improvements in condition where water can be delivered and works operated.
- Large-scale colonial waterbird breeding has occurred in the Ramsar listed Macquarie Marshes, Gwydir wetlands and the Narran Lakes. This is the first time in 24 years that colonial waterbird breeding has been observed at all 3 sites at the same time. Whilst conditions have vastly improved, recovery of river and wetland ecosystems will take time given the record-breaking preceding drought.
- Considerable improvements have been made to the implementation of environmental water protection measures across the Basin. This includes new cross-border accounting arrangements between Queensland and New South Wales that protects water for the environment as it flows across the border, a measure implemented under the Northern Basin Toolkit.
- The Basin Plan requires water resource plans to identify planned environmental water and the associated rules and arrangements. These provisions must ensure that there is no reduction in the protection of planned environmental water, compared with arrangements in place in state law prior to the Basin Plan.
- The risk remains that incomplete water recovery in key catchments, lack of progress to remove constraints, and changes to river operation rules that impact on the ability to deliver environmental water, will continue to limit the ability to achieve the ecological outcomes under the Basin Plan.
- Work to understand how to better prioritise, invest in, assess, and integrate natural resource measures with water management and environmental watering remains critical to achieving better Basin outcomes.



Priority five (continued)

Planning and delivery of environmental water




What we are hearing

- Where communities understand environmental water deliveries that have occurred, they value the environmental outcomes achieved as a result. Many regional communities have also welcomed an uptick in tourism and its flow-on economic benefits, following the easing of lockdowns.
- Across the Basin, communities are concerned about the impact of climate change and what it will mean for them. Climate change will have significant impacts on water availability for both communities and the environment across the Murray–Darling Basin.
- There are concerns in communities that even in a wet year water isn't reaching the lower floodplains, into the Mallee and lower Murray floodplains.



Office locations – First Nations Country

Adelaide – Kurna Country | **Canberra** – Ngunnawal Country
Goondiwindi – Bigambul Country | **Griffith** – Wiradjuri Country
Mildura – Latji Latji Country | **Murray Bridge** – Ngarrindjeri Country
Toowoomba – Jarowair and Wakka Wakka Country
Wodonga – Dhudhuroa Country

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