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What we've heard: Regional Community Forums' perspectives to support the 2025 Basin Plan Evaluation

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Acknowledgement of the Traditional Owners of the Murray–Darling Basin

We acknowledge the Traditional Owners and Custodians of Country throughout the Murray–Darling Basin and their continuing connection to land, waters and community. We offer our respects to the people, the cultures and the Elders past, present and emerging.

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

In this report, we’re sharing the views and perspectives of Regional Community Forums. We know we get better outcomes when we work with Basin communities, First Nations, industries and governments. We encourage people with a range of views to share their ideas, interests and concerns with us. We listen, learn and make decisions based on what we’ve heard, in conjunction with the best available knowledge and evidence. We also share who we’re engaging with, and what we’ve understood from them.

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Acronyms:

CEWH	Commonwealth Environmental Water Holder
CEWO	Commonwealth Environmental Water Office
CLLMM	Coorong Lower Lakes, Murray Mouth
CRC	Cooperative Research Centre
DCCEEW	Department of Climate Change, Energy, Environment and Water
ESLT	Environmentally Sustainable Level of Take
EWAGs	Environmental Water Advisory Groups
EWR	Environmental Watering Requirement
GL	Gigalitre
IIOs	Irrigation Infrastructure Operators
LTDLE	Long Term Diversion Limit Equivalence (formally known as Long Term Average Annual Yield – LTAAAY)
MDA	Murray Darling Association
MDBA	Murray–Darling Basin Authority
MER	Monitoring Evaluation Report
MIA	Murrumbidgee Irrigation Area
NRM	Natural resource management
PEW	Planned Environmental Water
PIOP	Private Infrastructure Operator Programs
SDL	Sustainable Diversion Limit
SDLAM	Sustainable Diversion Limit Adjustment Mechanism
TLM	The Living Murray (projects)
HEW	Held Environmental Water
WRP	Water Resource Plan

Introduction

Purpose of this report

The purpose of this report is to gain insights and personal perspectives from Basin communities about Basin Plan implementation to date. In December 2023 the 6 Regional Community Forums were invited to share their views and perspectives based on evaluation questions we posed. The 6 Regional Community Forums are located across the Basin (Figure 1) and commenced in 2021, providing the Murray–Darling Basin Authority (MDBA) with valuable feedback on a range of topics and providing community members with an important opportunity to learn more about the role of science in decision-making, and contribute to the MDBA science and monitoring program by sharing their local knowledge and understanding.

The comments collected in this report represent a snapshot of perspectives within the Basin. It reflects conversations with the participants that were recorded during the December forums, showcasing the diversity of opinions across the Basin, and does not reflect the views of the MDBA or the Australian Government.

The content of this report reflects the views of the Regional Community Forums who contributed. It does not reflect the views of the Murray–Darling Basin Authority or the Australian Government.

This process aimed to capture the variety of viewpoints across the key themes of governance, accountability and transparency, environment and socio-economic outcomes, communication and engagement. Participants were asked four specific questions, designed to support the 2025 Basin Plan Evaluation:

- what has worked well?
- what has not worked well?
- what was unexpected?
- what can be done better in the Basin?

In some cases, participants referenced other aspects of water management and related activities not just those directly relevant to the Basin Plan. These comments have been retained as they provide useful context.

After the completion of the forums, participants were provided with the draft report alongside their forum’s detailed comments for review. Forum participants were invited to provide feedback and share any additional information.



Figure 1: Map of Murray–Darling Basin Regional Community Forums regions.

2025 Basin Plan Evaluation

Evaluations provide an opportunity to take stock of progress and achievements to date as well as identify challenges and opportunities to improve.

The Authority is responsible for leading all evaluations of the effectiveness of the Basin Plan. The requirements for the Evaluation are outlined in Chapter 13 of the Basin Plan and summarised in the [Framework for the 2025 Basin Plan Evaluation](#).

The outputs of the Regional Community Forums inform the 2025 Basin Plan Evaluation by capturing community views on what has worked or not worked and what could be done better in the Basin. The Evaluation will inform the 10-yearly review of the Basin Plan and will look back on the last 10 years to what has been achieved and worked well, alongside what could be done better and anything unexpected that arose.

The 2025 Basin Plan Evaluation builds on the previous evaluations undertaken in 2017 and 2020, however, the 2025 Evaluation has the additional purpose of supporting the first statutory review of the Basin Plan taking place in 2026.

The Evaluation provides a considered assessment, identifying those things that are working well and should be retained as we continue to implement the Basin Plan, as well as identifying the challenges and opportunities for improvement that should be considered through the 2026 Basin Plan Review. This assessment, and the associated key findings and recommendations, is intended to inform all Basin Governments who have a responsibility in the continued implementation of the Basin Plan.

The Evaluation is based on a range of evidence, including from State and Commonwealth Governments, as well as the perspectives and experiences from Basin communities and as such has sought to surface and acknowledge the diversity of views on the effectiveness of the Basin Plan.

The MDBA provided forum participants with an outline of the 2025 Basin Plan Evaluation and Basin Plan Review 2026 process, outcomes from the recent MDBA tour, and an update on the Basin Community Values research survey findings. These presentations provided participants with some contextual information and a starting point for forum discussion.

Executive Summary

What has worked well?

Regional forums agreed that having a Basin Plan was important and they thought they had seen cooperation across agencies leading to improved outcomes for the Basin. The forums broadly agreed that information provided to the community on the Basin Plan is improving and singled out these Regional Community Forums as useful for giving and receiving information.

Many forums highlighted environmental watering as having worked to improve some environmental outcomes in the Basin, but not all environmental outcomes. The Central West forum thought that the Basin Plan was not set up to provide enough environmental water to protect ecological assets, and this should be considered. The improvements raised across several forums included the reintroduction of native fish, environmental watering, water quality improvements in the Goulburn and Murray system, and outcomes for Basin icon sites.

Half of the forums praised the Environmental Watering Plan component of the Basin Plan for being seen to improve annual planning and prioritisation of environmental watering and communicating the benefits of environmental watering to the community. Some other areas of agreeance include the efficiency of water usage, with system upgrades and new technologies leading to this goal. The increased staffing of MDBA regional offices was discussed within the forums, with most forums agreeing the increased level of staff had increased regional accessibility to the MDBA. However, some participants did not share this view.

There were some disparate views amongst and within the forums themselves. This highlights the complexity of the Basin Plan and just how many opinions are held in relation to it. Participants within the same forums had different opinions on whether the coordination of environmental water had improved. Other forums had differing opinions on whether the engagement of community participants in the 2020 independent assessment of social and economic conditions in the Basin (conducted by the Independent Panel for the Assessment of Social and Economic Conditions) was methodologically sound.

What has not worked well?

There were several topics that were unanimously agreed upon across each forum as having not worked well. The need to increase the water literacy of the public through improved communication and engagement from the MDBA and Basin state agencies was a major stand out in all forums. There was a call by the forums to increase the public's knowledge of the importance of the Basin, on its environmental assets and about the communities and industries that rely on the water for their livelihoods. There was concern and confusion raised by the forums on the impacts of the new *Water Management Amendment (Restoring Our Rivers) Act 2023*.

Another point that was unanimously agreed upon across each forum was that the Basin Plan was not adaptive and was over politicised, with vested interests and government agendas getting in the way of doing what would benefit the collective. Some politicians discussing the Basin Plan as a failure were seen by some forum participants as undermining progress made to date. Poor governance, the lack of cooperation between Basin States and slowing momentum was a concern raised across the forums.

Greater transparency in decision-making was sought by the forums on the trade-off between environment and economic considerations. Some forum participants thought the environment was being put above irrigation, while others thought the reverse was happening.

In general, forums thought there was not enough consideration and transparency on where environmental water is coming from, how it is being utilised, and what benefits are being or will be realised. Some thought environmental watering was not working well, while others gave examples where it was working to improve the health of Basin icon sites and other environmental assets in the Basin. Concerns were raised across the forums on the occurrence of blackwater events, ongoing native fish decline and fish death events, lack of floodplain watering, declining connectivity, cold water pollution and poor water quality. Several forums raised that the success of the plan was focused on the delivery of fixed water volumes and not actual outcomes. Water efficiency projects were not always seen to be benefiting Basin states, with some participants in the SA forum thinking that they have lost environmental water as water efficiency projects upstream have no perceived benefit for South Australia. Other participants in this forum disagreed with this perspective citing a lack of evidence. Another forum's participants were concerned that efficiency projects were expensive, delayed and not adequately audited to confirm the water savings gained.

The delay in accreditation of NSW water resource plans (WRPs) and changes due to the sustainable diversion limit adjustment mechanisms (SDLAM) program¹ were thought as a negative across the forums. Some forum participants raised that they thought that SDLAM projects have not delivered the offsets for the 605 gigalitre (GL) 'credits' that were allowed in advance and do not allow any further advance credits. A lack of penalties for failure to deliver against the new extended deadlines was raised by forum participants.

Structural adjustment programs were seen by forum participants to have not kept pace with the changes happening in the Basin. Some participants thought compensation to communities was not enough for the losses felt by the communities due to buybacks. Forum participants raised it was seen as not engendering confidence in farming families, as many were leaving the land.

Some contrasting views were found within forums and between forums. Environmental watering and environmental flows were discussed as working well in four forums, with other forums had the opposite opinion. Cooperation amongst Basin authorities and Basin states was seen to be working in three forums. Engagement with the community was raised as needing some improvement in the Sunraysia, Lower Darling forum and the Upper Murray, Mid Murray and Goulburn Murray forum. First Nations involvement was regarded as needing improvement by the Northern Basin forum with the Central West forum noting there had been improvement. Irrigators' knowledge and ability to help create change was also highlighted by the Riverina forum and the Upper Murray, Mid Murray and Goulburn Murray forum as not being utilised enough, however another forum thought that irrigators are being utilised as a part of the solution. These disparities highlight the contrasting and complex views held within and amongst forums leading to strong and robust conversations.

¹ SDLAM applies only in southern Basin. In the northern Basin, the equivalent is the Northern Basin Toolkit. Unlike SDLAM, the toolkit does not provide an SDL offset.

What was unexpected?

Each forum held a variety of opinions on things that were unexpected in the implementation of the Basin Plan. Some reoccurring themes included the delays in finalising WRPs in NSW, previously mentioned in ‘what has not worked well’ above. Forums that explicitly referenced this as unexpected included the SA forum and the Riverina forum.

Some negative environmental effects were also mentioned as unexpected with both the Sunraysia, Lower Darling forum and the Upper Murray, Mid Murray and Goulburn Murray forum making specific reference to the Menindee fish deaths. Recent floods and the last three years being unprecedentedly wet were mentioned as unexpected in the Sunraysia, Lower Darling forum, the Riverina forum, and the Northern Basin forum. Several other negative environmental effects were also highlighted including the sand ‘slug’ blocking the Barmah –Millewa Reach from the Sunraysia, Lower Darling forum, and the continuing dredging in the Coorong by the Upper Murray, Mid Murray and Goulburn Murray forum. Positive environmental effects were also mentioned including the; delivering of environmental water to assets in the Upper Murray, Mid Murray and Goulburn Murray forum; shallow watering of some floodplains producing good results for the environment; and the reintroduction of Yarra Pygmy Perch in the SA forum.

Several unexpected things were highlighted across the theme of governance. An opinion was raised in the Sunraysia, Lower Darling forum that Victoria was thought to have not been part of the healthy rivers agreement for disagreeing with the Commonwealth government purchase of water. The introduction of the *Water Management Amendment (Restoring Our Rivers) Act 2023* was raised as being unexpected by the Northern Basin forum.

Several other themes appeared throughout the forums including the politicisation of the Basin Plan as discussed by the SA and Northern Basin forums. On farm efficiency projects were thought to not be happening further upstream by a southern based forum. Further, their implementation was seen to have an impact on the reduction of water recovery targets by the Central West forum. The irrigation industry also featured in conversations, with increases in high value, high water usage crops discussed as unexpected in the Sunraysia, Lower Darling forum. The Riverina forum debated whether they thought the industry had been able to adjust well to environmental challenges and water issues and if families are leaving their communities because of these stresses.

What can be done better in the Basin?

Each forum yielded a variety of ways to improve implementation of the Basin Plan, reflecting on the question ‘where/what/how could we do better?’. Improving the communication of the MDBA and the Basin Plan was mentioned in each forum, specifically communicating with communities that otherwise do not engage with Basin issues. Exploring new methods of communicating, improving communication with groups such as younger Australians, and simplifying the complex issues, legislation, and reports for improved readability and understanding was suggested by the forums. Four of the six forums thought transparency could be improved, with specific reference to lobbying of governments. Two forums, being the Northern Basin forum and the Upper Murray, Mid Murray and Goulburn Murray forum, thought that there was room for improvement in integrating First Nations knowledge into the Plan. The Northern Basin discussed using First Nations intelligence regarding flood and drought events to inform future

modelling, and the Upper Murray, Mid Murray and Goulburn Murray forum discussed needing to acknowledge cultural water and the variety of First Nations groups in the region.

Forums also suggested improvements to flow regimes, the reporting of flow variability, and better communicating water for the environment volumes. It was thought in the forums that diversion limits presented a rich topic for improvement, with environmental watering being requested to be considered in the calculation of any future sustainable diversion limits by the Central West forum and better targets for environmental water to be set requested by the SA forum. It was also suggested by these two forums that water allocations for consumptive uses such as irrigation should be of a higher security to protect these farmers and the environment they rely on.

A variety of improvements to governance were also suggested. Greater consistency in WRP accreditation was mentioned again by the Upper Murray, Mid Murray and Goulburn Murray forum, and improvements to watering targets with special focus on outcomes rather than GL targets raised by the Northern Basin forum and the Riverina forum. Some other recommendations included improved skills development in relevant decision-making agencies.

Some location-specific requests for changes to general water management include: the SA forum requested a new endangered species list accompanied with what is being done to ensure these species do not become extinct; the Sunraysia, Lower Darling forum requested delivery of the Victorian Murray Floodplain Restoration Project that is currently being implemented; the Northern Basin forum requested Environmental Water Advisory Groups (EWAGs) for all allocated water for the environment and a 'policy failure' risk management system or function; and the Upper Murray, Mid Murray forum requested the use of irrigation channels to deliver environmental water to environmental assets in the Goulburn region and allowing licensing of floodplain harvesting in NSW.

Forum Summaries

South Australian Regional Community Forum

Context for Region

The South Australian Regional Community Forum covers the region west of the South Australia (SA) border within the Murray River catchment. This region includes regional centres like Renmark with 10,000 people and Murray Bridge with 23,000 residents. In reference to the Murray River, this area is commonly referred to as the Riverland, CLLMM (Coorong Lower Lakes, Murray Mouth) and the SA lower Murray (aka Murraylands), and has a strong history of irrigation especially fruit, nuts, vegetables and grains. Tourism also plays a major role in the area with wine production contributing to its economic success. Town centres like Murray Bridge are growing in population, with other more rural areas declining.

Summary of Forum responses

The forum raised various topics when asked what they thought was working well, this included: environmental outcomes from the reintroduction and monitoring of the Pygmy Perch in the Lower Lakes; fish infrastructure such as fish passageways and monitoring have supported native fish recovery; ongoing work to stop evaporation and seepage has saved water and built resilience in communities; regular and increased watering of icon sites, and environmental flows to create spring pulses. Programs such as the '1 Million Turtles' Program were well received by most participants, however some had contrasting views. The introduction of the Inspector General of Water Compliance, monitoring of unlicensed water use through drones and water metering was welcome. Regional forums such as this one were seen to be working well by most participants.

Conversely some issues raised as positives were also raised as issues that had not worked well by participants. There was thought to be confusion in the community on technical Murray–Darling Basin Plan issues, requiring clear explanation. These technical issues include water calculations and terminology, justification for the Basin Plan and the 450 GL recovery target, Long Term Diversion Limit Equivalence (LTDLE) conversion factors and environmental flows. Furthermore, most forum participants thought misinformation about the Basin Plan was spreading, particularly in relation to environmental flows and constraint removal causing floods. The lack of mention and discussion of climate change in the Plan is also thought to be a large omission, alongside the Plan being thought to be irrelevant in periods of flood or drought. Greater transparency in decision making and reporting was sought. Water efficiency projects were not being thought to be advantaging South Australia by some participants, as the state was thought to have lost environmental water, with one participant disagreeing. Another forum participant thought efficiency projects have not been adequately audited to demonstrate the claimed volumes of water delivered. Contrastingly, another participant thought that both on and off-farm efficiency projects were effective in helping irrigators and returning water for the environment. There was concern amongst some participants over the new *Water Management Amendment (Restoring Our Rivers) Act 2023*.

Some unexpected outcomes raised by most forum participants included scale of delays in agreements including to the NSW Water Resource Plans (WRP), failure to meet the concept of Environmental Sustainable Level of Take (ESLT), the undermining of the Basin Plan by some governments, and politicisation of the 450 GL water recovery target. The issuing of floodplain harvesting licences in NSW was thought to be unexpected by some forum participants, with some welcoming greater transparency and others concerned about the impact on water recovery. Some environmental issues that are unexpected include shallow watering of some floodplains producing good results for the environment, the reintroduction of Yarra Pygmy Perch, and fish ladders being used as a food resource by seals.

Basin Plan improvement suggestions within this forum included better engagement with the public to improve water literacy, finding more ways of communicating with a wider array of communities that do not engage with Basin issues readily was sought, as well as exploring better ways of communicating approaches to explain strategies (i.e. positive effects of environmental water), outcomes and benefits of the Basin Plan. Better understanding of water calculations and terminology was also requested by some forum participants alongside a more streamlined method for informing the public. Improved recognition of First Nations values in water management is also sought. Better communication on citizen science arrangements was seen by some forum participants to have the capability to increase the knowledge uptake in the community.

Holding governments to account against targets, programs, and projects was an action sought by some forum participants. Other suggestions included favouring high security water licences over low security, taking account that climate change has already occurred/is occurring now in the Basin, and greater analysis of past buy back scenarios.

Forum responses in greater detail

What has worked well?

The South Australian Regional Community Forum highlighted several ways they thought that the Basin Plan has worked well including:

- environmental outcomes such as reduced salinity
- monitoring such as flood waters and fish ways
- reintroduction of the endangered Yarra Pygmy Perch to the Lower Lakes.

Other environmental outcomes mentioned by some participants include irrigation channels can link water back to the environment, coordination of environmental flows to trigger spring pulses of flows and, icon sites receiving more regular water. On and off-farm efficiency projects are thought to be effective in helping irrigators' businesses while returning water to the environment. Flood waters are also mentioned by some forum participants as having positive environmental effects, but not as intrinsically linked to the Basin Plan.

The benefits of monitoring and recording irrigation uses of water and unlicensed water use monitoring was mentioned by some forum participants. Several Programs were regarded as working well by most forum participants including the '1 Million Turtles' Program that aids to identify and protect turtles in the region. Programs such as these are raised by forum participants as examples of what is working well and as being well liked by the public. Conversely, another forum participant disagreed, explaining

decline in turtle populations is still prevalent despite this '1 Million Turtles' program. Although not directly related to the Basin Plan, the regional community forums were identified by most forum participants as something that worked well and as helping with dialogue, knowledge, and learning.

What hasn't worked well?

Some issues raised as positives were also raised as issues that have not worked well by the forum. Forum participants expressed a view that there was some confusion in the community on technical Basin Plan issues and that these require clearer explanation. These include:

- water calculations and terminology
- justification for the Basin Plan and the 450 GL recovery target
- the LTDLE conversion factors
- environmental flows.

The 450 GL target is provided as an example of something that has suffered from misinformation, with one participant thinking that this water is being referred to as 'extra' water rather than part of the allocation for SA needed for environmental flows and important environmental functions. Further to this, there was thought to be a need for better ways for the community to gain information quickly, rather than wading through links and large reports. Some forum participants thought that the justification for the plan was not readily available and useable for media and the general public.

Updated climate change data and numbers were sought by some forum participants, as well as greater information on what was being done to ensure Australia did not revisit the Millenium Drought, especially when dry conditions are expected. Climate change was also mentioned as not being factored into the Plan from the start, with this being thought to be a grave omission.

Some forum participants thought that misinformation about the Basin Plan was spreading, particularly in relation to environmental flows and constraint projects causing floods. Greater transparency and reporting in decision making and reporting was sought by most forum participants. Reporting is specifically mentioned in reference to the outbreak of Avian Cholera in the Coorong, with this being seen to have been not properly reported to the public. Water efficiency projects were not seen by some forum participants to be an advantage to SA, as they thought the state had lost environmental water. This idea of losing environmental water was disagreed upon by another forum participant. Another forum participant thought efficiency projects had not been adequately audited to demonstrate the claimed volumes of water delivered.

There was concern over the new *Water Management Amendment (Restoring Our Rivers) Act 2023* by most forum participants. Other forum participants were concerned that Basin States were putting their vested interest before the interests of the whole system. Greater collaboration between governments was sought by some forum participants. Others were concerned that the present plan has not been tested in a series of dry years and, without the 450 GL of environmental water being recovered. Concerns were raised by some forum participants that during the Millenium drought water permits were being issued when the river was being over allocated. The Plan is also thought to be more relevant in periods of median catchment inflows, while being irrelevant in periods of floods or drought where there is either excess water in the system or no water to manage.

More work was thought to be required to improve the health of the Basin ecosystem in the region with concern that river management was not meeting expectations during extreme floods and droughts. Some forum participants raised; insufficient watering between icon sites; the decline in turtles; lack of overbank flows; and a missed opportunity to extend the benefits of floodwater scouring through more permanent infrastructure in the Murray mouth. However, another forum participant thought that major flooding events were not the answer to the Murray Mouth and more flushing was required. The forum discussed greater focus was required on landscape scale for action. A specific mechanism that is not thought to be working well is the destruction of non-native trees along water courses.

Some forum participants thought that Sustainable Diversion Limit Adjustment Mechanism (SDLAM) projects have not delivered the offsets for the 605 GL 'credits' that were allowed in advance and does not allow any further advance credits. The forum participants thought there needed to be real penalties for failure to deliver against the new extended deadlines. Additionally, it is thought that water permits should not continue to be issued with the acknowledgement that the Basin systems such as the Murray and Darling are over allocated.

The unavailability and lack of access to MDBA staff in the region outside of the Murray Bridge office was raised by forum participants as an issue. Basin plan governance, cooperation and momentum between Governments was also raised as a concern by some forum participants with delays and water markets discussed as making the remaining water recovery expensive.

Did anything unexpected happen?

Some unexpected outcomes thought by forum participants included scale of delays in agreements including the NSW WRPs, failure to meet the ESLT, the undermining of the Basin Plan by some governments and politicisation of the 450 GL water recovery target. This water recovery target is also thought to have been too expensive, impacted by political delays and water markets. A further issue highlighted by participants and linked to the politicisation of the Basin Plan was that locks and barrages water had been made saleable resulting in less water flowing down the Murray which, in the view of forum participants, has stopped the natural flushing of the Murray mouth. The issuing of floodplain harvesting licences in NSW was raised as unexpected by some forum participants, with some welcoming greater transparency and others concerned about the impact on water recovery. Others thought the lack of action on On-farm efficiency projects further up the river was unanticipated. Forum participants raised the complexity of feedback required through multiple inquiries as unexpected, and that the greater use of video conferencing platforms such as Zoom was also unexpected but welcome as it meant unfunded volunteer groups could join in the discussion.

Some environmental issues are seen to be unexpected, including positives such as shallow watering of some floodplains producing good results for the environment, and the reintroduction of Yarra Pygmy Perch. The reintroduction of Yarra Pygmy Perch is also discussed as a negative with reference its impact on native Blackfish, alongside other negatives such as fish ladders being used as a food resource by seals.

What can be done better in the Basin?

The forum raised several ways that they thought the Basin Plan can be improved, spanning engagement and communication, legislation, and licensing. Finding more ways of communicating with a wider array of communities that do not engage with Basin issues readily was sought by most forum participants, as well as exploring better ways of communicating approaches to explain strategies simply (i.e. positive effects of environmental water and how lease back for environmental water may work) and communicate outcomes and benefits of the Basin Plan. The forum also suggested greater explanation of the variability of flow regimes associated with the LTDLE and what pre-Basin Plan arrangements were. Other forum participants suggested real time reporting of watering actions. Better understanding of water calculations and terminology was also requested by some forum participants alongside a more streamlined method for informing the public by some forum participants. Better communication on citizen science arrangements was seen as a way to increase the uptake in the community by some forum participants, as well as the improved recognition of First Nations values in water management. Regular reality checks on the state of the environment, particularly around climate change impacts and the amount of water recovered for the environment was suggested by some forum participants.

Forum participants raised the issue of the lack of data in the Coorong South Lagoon prior to the mouth closure in 1981, and suggested oral histories could be collected to fill this knowledge gap. A revisit of the mouth's targets on openings and salt export was suggested by some forum participants.

The forum also raised that while the targets for water for the environment are thought to be good, enforcement of the targets is seen to be required. Water licences were thought by participants to be needing to be high security water licences, as low security water licences were seen as not providing the environmental or economic returns required. Analysis of past buybacks were suggested to be reviewed to understand their impacts across different industries with some requesting a revisit of the 'Sefton' report 'Independent Assessment of Social and economic conditions in the Basin' by some forum participants. The achievement of all social, cultural, environmental, and economic values at once was also discussed as being impossible to achieve, with the environmental needs being seen to be needing a prioritisation of water requirements in order to avoid a failure of the system.

Other forum recommendations for improvement included a new endangered species list accompanied with what is being done to ensure these species do not become extinct. Further, forum participants sought more weed monitoring, and better overbank flow management and monitoring. Some participants sought to ensure water transfers are deliverable at the new location, for example not transferring water from a permanent planting to an ephemeral system. Others requested water accounting to consider the future needs of crops as well as highlighting the importance of first flows, peak flows, and overbank flows in the system for connectivity. Climate change was also a topic that was seen to be requiring improvement in the Plan, with responses to the changing conditions brought on by climate change needing to be an integral part of the Plan.

Reference materials

Forum participants provided reference material for the MDBA to review to inform the Basin Plan evaluation including existing citizen science Programs:

- Waterwatch SA
- Waterwatch Vic
- Waterwatch NSW
- Waterwatch Upper Murrumbidgee (ACT)
- Frogwatch SA
- TurtleSAT
- 1 Million turtles.

Sunraysia and Lower Darling Regional Community Forum

Context for Region

The Sunraysia and Lower Darling Regional Community Forum participants come from the Southwest corner of the Basin and include city centres such as Mildura and Horsham with 33,000 and 20,000 residents respectively. The Sunraysia district has intensive horticulture and produces crops like almonds and table grapes, for which there is offshore demand. The Lower Darling region is primarily grazing country. Tourism is also becoming an increasing economic contributor to the area.

Summary of Forum

The Sunraysia and Lower Darling Regional Community Forum group discussed several ways they think the Basin Plan is working well, including environmental watering leading to Blackbox woodlands improvements, recovering Red Gum forests, and wetland reconnection and recovery. They highlighted salinity management as a positive, as they thought it had succeeded in reducing salt levels. Some participants think the coordination of environmental actions across the Basin was working well, where others thought coordination was lacking, they discussed that slow progress had been made and that environmental watering could be deployed more 'meaningfully'. Blackwater events in the region was also seen as a negative by some forum participants. They highlighted environmental water on floodplains and the ability to donate water to the environment as positives.

Some issues that participants thought weren't working well included the delay in Water Resource Plan (WRP) accreditation for NSW, and the management and processing of intervalley trades which was thought to be lacking transparency. Participants thought that the continued decline of the health of the lowland floodplain below the Barmah Reach was a negative. Several forum participants raised that as an icon site, the River Murray should be treated as an important environmental asset rather than as an irrigation channel. Forum participants sought greater transparency and increased communication from the MDBA, increased First Nations input, and improved coordination between different governmental agencies and bodies in the area. They thought that community engagement could be improved and wanted more details on the social impact of water buybacks on communities.

Unexpected outcomes mentioned in the forum by participants include the benefits of the major flooding in 2022/2023 throughout the Southern Basin, and high-water use crops such as almonds expansions in the Basin. The sand 'slug' (a large amount of sand moving downstream and reducing the ability to delivery managed flows through this area) moving into the Barmah Reach and fish deaths in the Menindee were not anticipated by forum participants.

Forum responses in greater detail

What has worked well?

The Sunraysia and Lower Darling Regional Community Forum highlighted several ways they thought the Basin Plan has worked well, notably improvements to Riverina ecosystems due to environmental watering outcomes. The forum highlighted that river and wetland environments are improving with Blackbox woodlands and red gum forests being seen to be recovering due to environmental watering. Native fish are thought to be benefiting from fish passages from Hume to the Lower Lakes. Some

participants attribute improvements in part to better coordinated environmental watering, however other forum participants are frustrated and thought the coordination was slow. Some forum participants thought salinity management has been a positive in the Basin with reduced salt levels entering the river. They thought that flooding over the last 12 months has demonstrated how the river responds without storages in the upper catchment and this was seen as a positive. The forum participants thought that utilising existing lock and weirs for environmental purposes, and check banks (large banks to collect and divert water) are working well. The recapturing of floodplain water back into the system for reuse on additional environmental sites downstream was identified as a positive by some forum participants as was the ability to donate water for the environment.

The Living Murray (TLM) program was seen by participants to have shown how structures are providing floodplain resilience, with the Hattah Lakes provided as an example where the floods have complemented the watering prior to the Basin Plan. Technology available for large scale environmental operations is seen to have allowed for greater flexibility in water delivery and improved water quality, with metering in the northern Basin regions also seen as a positive by some forum participants. The existence of a Basin Plan to negotiate on and implement was seen as positive by some forum participants, and it was agreed that it has provided a structure to negotiate on and fostered greater understanding between all stakeholders.

What hasn't worked well?

Forum participants thought governance of the Basin Plan was not working. They cited delays in approval and funding of projects, delays in accrediting WRPs for NSW, and the lack of water metering compliance as examples. Forum participants expressed concern that the Basin States were not working as well together as they could, with specific reference to Sustainable Diversion Limit Adjustment Mechanism (SDLAM) project delivery. Some participants thought that greater coordination was required between Basin States and the Commonwealth Government on environmental watering projects, while others thought environmental watering coordination was working well.

Forum participants thought there was a lack of engagement and communication with the community, identifying the lack of detail on community and social impacts of buybacks as an example. Other areas that participants discussed where transparency could be improved concerned reporting on cultural heritage ownership and management and how it is to be improved. While some forum participants highlighted where good environmental outcomes have been experienced in the region, other forum participants highlighted areas of concern, including

- Blackwater events
- flood plain health below the Barmah –Millewa Reach
- river connectivity
- lack of water metering and compliance
- the removal of snags impacting fish habitat
- the lack of carp control impacting water quality.

Some participants discussed that they thought there was not enough water for the environment and that river structures in the bottom half of the Basin should be used for environmental benefits not just river operation purposes.

The constraints Program below the Hume dam, river operations in general, and water entitlements were also mentioned by forum participants as areas of concern, as they had not yielded the results sought by the forum. Forum participants raised that these environmental issues cause the community significant distress and this needs to be acknowledged. Some participants thought environmental outcomes of the plan was not given the equal importance as economic considerations.

Buybacks were seen by some to be increasing the price of permanent water throughout the Basin, impacting the Basin Plan budget. Further questions were raised about why environmental water could not be released back into the system in NSW.

Did anything unexpected happen?

The major floods in 2022–23 throughout the southern Murray–Darling Basin was seen as unexpected but welcome event, however the ‘new’ exotic fish species *Oriental Weatherloach*, which was discovered in the floods blocking irrigation filters was not welcome by forum members. The sand ‘slug’ (a large amount of sand moving downstream) moving into the Barmah–Millewa Reach and causing further restrictions was not anticipated by forum members. The expansion of Almonds, other nuts and table grape crops was also not anticipated by participants, and neither was cotton production in the southern Basin, as these are thought to be high water use crops. The Menindee fish death events were thought to be unexpected and confusing to some forum participants, and it is still not thought that it is clear what solutions are being sought to fix the issues in the river. Some governance issues were highlighted as unexpected by forum members, including the thought that Victoria was left out of the healthy rivers agreement for disagreeing with the Commonwealth Government purchase of water, and people selling water to the government for higher than market rates, and then returning to the market to buy back in.

What can be done better in the Basin?

This forum had several suggestions as to how the Basin Plan can be improved. Participants sought a clearer picture of the future vision for the Basin, greater engagement with younger generations in the Basin, and transparency surrounding who is lobbying to the government regarding the Basin Plan. They also expressed the need for better coordination between agencies, industry, and community and suggested finding the common denominators to foster agreement. First Nations lived knowledge and cultural experience was raised by forum participants as vital to the Basin Plan moving forward, as well as the management of community mental health impacts related to changed riverine flows and environment.

Forum participants highlighted that while economic considerations are vital in decision making in the Basin, cultural and social aspects are also very important. Concerns were raised that economic needs are overrepresented in riverine flow allocations. Others raised the need for greater structural adjustments to support communities and suggested the creation of one Basin community development fund to help bridge the wealth gap. Specific aspects signalled out for improvement by participants included the introduction of five-year reviews for environmental watering projects, water buybacks being more targeted, and the impact of buyback offsets considered, realising SDLAM project benefits, and the delivery of the Victorian Murray Floodplain Restoration Project. The importance of the River Murray as an icon site to be treasured for its environmental value rather than as a series of irrigation channels was raised by forum participants. Forum participants highlighted that the next iteration of the Basin Plan should reimagine the future, consider climate change, and create cultural transformation by

acknowledging ecological ethics. It was also thought by some participants that the MDBA should consider new information across the Basin and via the Drought Hub.

Riverina Regional Community Forum

Context for Region

The Riverina region refers to a region encompassing the Murrumbidgee River, within southwestern NSW. Major centres include Wagga Wagga and Griffith with 68,000 and 27,000 residents respectively, irrigated agriculture and high value crops relying on the Murrumbidgee are key economic contributors in this region, with value adding industries such as rice milling, cotton processing plants, citrus fruit packing facilities, a large chicken processing plant and wineries also playing a role. Grazing production is also present.

Summary of Forum

The Riverina Regional Community Forum discussed several ways they thought the Basin Plan has worked to date, these views included the bipartisan approach across Basin State and Commonwealth agencies to deliver water for the environment, annual planning and prioritisation of environmental water at a catchment scale, and on-farm water efficiency programs. Aspects identified by participants as not working well included the focus on water volumes over water quality, failures in governance through non-adaptiveness, and a lack of communication with the community. This forum thought that Basin water management is very complex and making it simpler to understand is key to moving forward.

Unexpected things highlighted by participants included better than expected capacity of irrigation industries to adjust and be efficient in water use, and the increases in permanent water prices over time. Increasing funding for environmental assets and balancing the needs of the environment and economic interests in the Basin were raised by participants as ways to improve the Basin Plan. Greater efforts to ensure transparency in Basin Plan reporting was sought from forum participants. They also suggested greater involvement of local councils and the community in Basin Plan dialogue, however when doing so considered a funding mechanism to compensate for community time and expertise.

Forum responses in greater detail

What has worked well?

The Riverina forum highlighted ways they thought the Basin Plan has worked well. The bipartisan approach to the Basin Plan, being cooperation between political parties, embodied in engagement prior to action was thought as a positive by the participants. Annual planning and prioritisation of environmental water at catchment scale through Environmental Water Advisory Groups (EWAGS) in NSW was seen as having had worked well by participants. System upgrades were thought to have led to improved efficiency in the Murrumbidgee Irrigation Area (MIA). Some participants thought that Private Infrastructure Operator Programs (PIOP) and on-farm efficiency programs were complete, with increased uptake in innovation thought by the participants, however data on benefits was required. System upgrades leading to increased water efficiency were welcome actions by some forum participants. The consideration of future years of water usage in the planning of water, and intake allowed for normal river operations in the Southern Basin in the last drought was discussed as having worked well.

Cooperation across agencies was highlighted as a positive by participants, leading to multiple improved outcomes in the Basin. Engagement sessions to encourage community dialogue are thought to be working well, and are an ongoing need as thought by the forum. Different commodity and industry groups feeding into research and development in the Basin is thought to have worked, as have university partnerships. Some forum participants found the MDBA employing staff in the regions as a positive, as they thought this had increased access to regional communities. However, other participants did not share this view, stating they did not think that MDBA staff in the regions had the time to talk to the community and output from the MDBA was not thought to be reflecting what was required or expected by the community.

What hasn't worked well?

Participants thought that there were delays in implementing the Basin Plan, restrictive approaches to accrediting the Water Resource Plans (WRPs), the lack of timely accreditation of NSW WRPs, restrictive and non-adaptive approaches placed on the Basin Plan by legislation and regulation, and government project failures and delays, all highlighted as areas that have not worked well by participants. Participants also thought that there were negative environmental impacts of water trade allowing water rights or allocations originating upstream to be delivered downstream to the Lower Murray and to South Australia. Some participants thought water markets were providing the ability for some to 'feather their own nest'.

In relation to governance, some forum participants held the view that the Basin Plan had failed to meet section 100 of the Constitution (being "*The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation*") as the Commonwealth Government had interfered with the use of trade and commerce. Other participants thought that government policy has created irrigation opportunities and increased productivity, however they also thought that government policy was now destroying those irrigation areas by placing the environment above people. Some forum participants thought that regional adjustment programs had not worked. Others raised confusion on where communities stand, after the introduction of the *Water Management Amendment (Restoring Our Rivers) Act 2023*.

Forum participants thought the communities in the Basin are not quite understanding Basin issues, and that plain English explanations should be considered to fill this knowledge gap, including on environmental watering and the role and rights of the Commonwealth Environmental Water Office (CEWO). Some participants thought that the Murrumbidgee's water issues especially are not being well communicated to the public, with a misunderstanding about how much water is actually leaving the catchment. There were also views from participants that there is a lack of reporting on water that crossed the South Australia border.

Some forum participants agreed the three years of wet weather have highlighted the shortcoming of long-term averages used in designing the Basin Plan and the Sustainable Diversion Limits (SDLs). Participants thought that there was a focus on water volumes rather than water quality, this was seen as a missed opportunity by some forum participants, while negatively impacting the environment and showcased the non-adaptability of the Plan. They thought a focus on volumes has come at the expense of options such as riparian management and other complementary measures. The Plan is thought not to be adaptive by some participants, without the consideration of environmental outcomes. Participants

agreed that three years of high flows have not resolved ongoing issues, such as fish deaths and blue-green algae. Others raised the conflict between operations and environmental outcomes as an issue. 'Simply adding more water' was not seen to be working by some participants. Regional structural adjustment programs were also thought to be not working by some participants.

Politics was also thought to be detrimental to Basin Plan implementation. Work done to date was thought to be undermined when politicians discussed the Basin Plan as 'a failure'.

Did anything unexpected happen?

Forum participants thought industry in the Basin have adjusted well to environmental challenges and water issues, by managing impacts and improving water use efficiency. This positive adjustment was not expected by participants. However, this view is in contrast with another participant who thought that several irrigation families are leaving the industry without selling their water. It was thought that there were permanent water price increases over the long-term, and this was unexpected. The major WRPs in NSW still being unaccredited was not anticipated and neither were the delays in water metering in NSW. Participants also thought that there was a lack of positive environmental impacts from years of environmental watering, alongside the last three wet years being unlike any years since 1970s.

What can be done better in the Basin?

Better communication and transparency were raised by forum participants as a suggestion to improve the Basin Plan. This included improving the communication to communities outside of the Basin to increase their awareness of Basin issues. More community engagement sessions were sought to increase interest and participation, while compensation for community time and expertise was raised as well. Forum participants suggested these engagements to include Irrigation Infrastructure Operators (IIOs) and Councils for greater place-based solutions.

Forum participants suggested that funding for catchment-scale planning of assets and threats is required, incorporating land and riparian management and environmental considerations. In the view of the participant that raised this issue, this would allow a more informed prioritisation process for targeting threats and should include all aquatic dependant species and ecosystems, as well as those that rely on aquatic ecosystems during dry times. Further suggestions from participants included:

- annual funding for addressing threats
- improving catchment assets
- building resilience to climate change.

Governance-related improvements raised by participants included finding a balance between environmental and irrigation requirements, renegotiation of the 'Snowy Hydro agreement' (the Snowy Water Inquiry Outcomes Implementation Deed – an agreement between the governments of NSW, Victoria and the Commonwealth, which is not part of the Basin Plan) to provide some obligation to provide mandatory minimum supply in drought years, improving flow to the upper Murrumbidgee, restricting the need to add additional flows on top of large floods, and commencing dialogue to change regulatory acts (State and Commonwealth) that are thought to have a detrimental impact on Basin Plan operations.

Reference materials

References supplied for the MDBA by the participants include several submissions by the Murray Darling Association (MDA) to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and regarding the Basin Plan Review and the *Water Management Amendment (Restoring Our Rivers) Act 2023*. These submissions contain several recommendations with reference to time, options, funding, and accountability.

Northern Basin Regional Community Forum

Context for Region

Encompassing the largest area in the Regional Community Forums, the northern Basin region includes the whole of Queensland's land in the Basin, as well as the northern edge of NSW. Major centres include Toowoomba with 134,000 residents. Many rivers flow through the area including the Paroo in the west, the Gwydir in the East, and the Darling in the northern part of NSW. In the west of the region which has lower rainfall, major commodities and industries include grazing sheep, and cattle for beef and wool. Few irrigated crops are grown in the area. In the Gwydir and Barwon Darling area of the forum as well as the Balonne and Border Rivers catchments more cotton, grain and oilseed production can be found.

Summary of Forum

The northern Basin forum participants thought there were several ways the Basin Plan is working well, such as:

- the delivery of environmental water
- the presence of a Basin Plan
- locally based governance agencies
- improvements in communication.

Areas where the Basin Plan is thought to be not working well by participants included:

- gaps between production and environmental water needs
- responses to drought
- politicisation of the Basin Plan.

Some forum participants sought greater risk management tools to address possible future policy failures. Participants thought there was a lack of integration of First Nations knowledge, being cited as a concern. There was a perception of significant misinformation about the Basin Plan circulating within Basin and non-Basin communities from participants of the forum.

Unexpected aspects by the participants related to Basin Plan implementation included the introduction of the *Water Management Amendment (Restoring Our Rivers) Act 2023*. Participants thought there was a disjointedness of Basin programs, and this was not anticipated by some forum participants. Ways to improve the Basin Plan were discussed in the forum. These suggestions included improvements in Basin Plan transparency and governance, and improvements to water literacy within communities. Visioning for the next iteration of the Basin Plan was thought to be important, as 'we need to be sure where we want to be in 20 years' time'.

Forum responses in greater detail

What has worked well?

The northern Basin forum discussed several ways they thought the Basin Plan is working well with reference to environmental objectives, governance, and engagement. Delivery of environmental water

was thought to be a positive, particularly for the Gwydir wetlands in the latest years of drought. Identifying river and wetland values, focussing on efficiency, maximising production outcomes, and good science are seen to be drivers of this by participants, as well as acknowledgement of the connectivity of the system. Governments are seen by participants as having positive attitudes towards the requirements of environmental watering, as well as recognising the importance of irrigators and their needs in the Basin. Participants raised that this is not thought to have happened for First Nations in the Basin and that First Nations contributions should not be underestimated. The fact that there is a Basin Plan to be discussed is seen as a major positive by participants. Participants thought that the MDBA having a presence in regional areas in the Basin is also a positive. The government-coordinated emergency drought response in 2019 was thought to have worked well as did the joint NSW and Commonwealth Environmental Water Holder (CEWH) setting up stakeholder groups for water for the environment discussions and meetings for the Peel and the Namoi catchments.

Participants thought that overall communication of the process of the Basin Plan is working well, fostering community trust and community input and engagement. Working and sharing information with the community on water for the environment planning and management was highlighted as a positive example of engagement by participants. These regional forums and the community knowledge they bring to the table is seen to bring cohesive and rational discussions to Basin issues. Some specific programs singled out by participants as working well include the Gwydir Environmental Water Advisory Group (EWAG) in communicating the benefits of environmental water, and the Murray Darling Basin Economic Development Funding Program for a positive impact on community infrastructure. The Northern Basin Review and subsequent investment and co-investment in complementary measures for environmental outcomes was seen as a positive by forum participants.

What hasn't worked well?

In contrast to the above responses of what has worked well in the Basin Plan, participants also thought that environmental objectives, governance, communication, and programs were not working well in some areas, highlighting the complexity of these issues in the Basin. Participants thought there was a lack of floodplain watering, poor management of environmental water in critical times such as:

- droughts (i.e. lack of full connectivity achievement)
- planning for drought
- nominated this issue as not yet done in a planned and predictable way.

There is seen to be a gap in the provisions for extreme dry conditions for both communities and the environment, and governments are thought by participants to have not yet integrated water catchment and land management. Some thought environmental water was not being seen as an equal to irrigation requirements. Participants thought there is limited acknowledgement of the importance of headwaters and thought Basin managers are not looking back far enough in time, for example back to the paleoclimate, to understand what 'normal' conditions are.

Northern Basin Outlooks differ to those in the Southern Basin based on Climate Futures work; with one participant thinking that climate change reporting is 'lumped' together with Basin reporting.

Desertification was raised as an issue with the outlook for the next 20 years being a key matter for the Basin Plan to consider. Other long-term issues such as cold-water pollution and lack of fish passage were

also highlighted as problems to be addressed. Some forum participants raised they thought that the politicisation of the Basin Plan was destructive, and referred to the years of denial, lack of direction and commitment to environment and climate as something that has not worked well for the Basin.

Participants thought that the use of Long-Term Diversion Limit Equivalence (LTDLE) was the only measure utilised in Basin management, with this being seen to miss the importance of flood and drought events and other measures. Participants thought that they did not always have access to or agreement on 'best available science', and that this marginalised some decisions, mostly those related to social issues.

Interactions between agencies within the Basin are also seen by participants as not working well. Aspects associated with competing interests were discussed. Participants thought there was still some work to be done to improve collaboration between competing interests across agriculture, environment, social and economic spheres. Some participants thought there was a lack of First Nation involvement in all water management, including water for the environment.

Of particular interest to the forum was the amount of misinformation within the communities, with the thought that communities had contrasting and sometimes incorrect information. This was seen to increase the divide within the community. Some commented that they thought that timeframes for engagement were too short and government driven. Programs highlighted as being thought to be not working well by forum participants include:

- industry transition programs
- metering implementation
- water for firefighting.

Some raised concerns that past monitoring programs had been abandoned. Further the lack of an EWAG in the Upper Namoi and Peel River was particularly thought as 'destructive' of support for water for the environment.

Did anything unexpected happen?

To some participants, the introduction of the new *Water Management Amendment (Restoring Our Rivers) Act 2023* was unexpected. Others thought the conflicting government politics in the Basin, as well as ongoing changes to departments and people was not expected. Participants saw a lack of understanding of which agencies do what in the Basin and raised the perception of a gap between urban and regional/rural areas understanding of Basin issues and this was unexpected. Disjointedness of programs across the Basin was raised by some forum participants. Positive unexpected outcomes included governments emphasis on First Nations interests and improvements to relationships between different sectors in the Basin. The break in the long drought and three wet years was also mentioned by participants as unexpected.

What can be done better in the Basin?

Three main themes to improve the Basin Plan were highlighted by participants, being governance, communication, and achieving environmental objectives. Suggestions to improve Basin Plan governance included continued transparency, alignment/integration of regional natural resource management (NRM) plans with water planning and continuing to build relationships with Basin States for active

management of environmental water, including an EWAG for all allocated water for the environment. The potential establishment of a 'policy failure' risk management system or function was raised by some participants. Regarding buybacks, one suggestion from a participant was to consider part buybacks from individual enterprises rather than total allocation purchase. Another asked all to consider how the community can gain better "value" from environmental water, and suggested this may be through local or tourism uses for natural environment engagement.

Ways to improve communication and engagement suggested in the forum included improvements to water literacy for the whole community, greater usage of First Nations knowledge related to flood and drought data to inform future modelling, and a clear 'plain English' annual report on the progress and benefits of the Plan. The importance of local knowledge and expertise was also highlighted, as was developing a better community understanding of what 'resilience' and 'sustainable water security' meant. Participants saw a need to better describe the roles of Basin agencies and highlight the benefits of the plan. These were seen as actions that would increase community understanding and support of the Basin Plan. Some forum participants expressed a change in focus to outcomes rather than outputs (i.e. moving away from sustainable diversion limit (SDL) targets) was required. Others thought a greater focus was required for surface water capture and compliance monitoring, and surface water interception. A further suggestion by a participant included considering how the Basin authorities can ensure good initiatives that endure election and policy cycles and how all perspectives can be understood. Visioning for the next iteration of the Basin Plan was seen to be important by participants, as 'we need to be sure where we want to be in 20 years' time'.

Reference materials

References supplied by participants covered Monitoring and Evaluation Reports on environmental watering outcomes and climate considerations on climateapp.net.

Upper Murray, Mid Murray and Goulburn Murray Regional Community Forum

Context for Region

This region has many city centres including Echuca, Shepparton, and Albury –Wodonga with 15,000, 69,000 and 100,000 residents respectively. The Upper Murray, Mid-Murray, Goulburn Murray Irrigation District region is very agriculturally fertile and encompasses a wide variety of practices including horticulture, grazing, dairy, cereal, oilseed, and rice. This variety of production makes agriculture a key economic player in the region, with the Goulburn Murray area especially reliant on irrigation, supporting many manufacturers such as SPC and Fonterra.

Summary of Forum

The Upper Murray, Mid Murray and Goulburn Murray Regional Community Forum highlighted aspects that they thought have worked well to date from the implementation of the Basin Plan. These included the input from community provided through Environmental Water Advisory Groups (EWAGs) and the increased recovery of environmental water, which was thought to have positively impacted environmental assets like the Coorong. Further, the forum raised positives from the upgrade of irrigation systems managed by Goulburn Murray Water which was thought to have led to farmers improving growing capacity and accessing new technology, as well as the progress on investment in green infrastructure such as:

- fishways
- gates on weirs
- fencing to prevent stock impacts, as a positive for the river and the community.

There was disparity in opinions from community participants when asked to nominate what had not worked to date and many of these opinions contradicted the aspects that were nominated to have gone well. Participants thought there was a delay in accreditation of NSW Water Resource Plans (WRPs) and changes due to the Sustainable Diversion Limit Adjustment Mechanisms (SDLAM) program in the northern Basin, both being seen as a negative. There were many differing views on Basin water recovery targets in the forum, regarding whether they would meet environmental and socio-economic requirements and needs. Forum participants raised that they thought that government agendas were getting in the way of doing what would benefit the collective and Basin Plan decisions were often politicised.

Unexpected outcomes raised by participants included the impacts of water trade downstream, the time taken and complexity of environmental approvals, and the re-emergence of the buyback program. The positive effects of irrigation infrastructure for species protection during drought, negative high flow impacts on river ecosystems, blackwater events, fish deaths and the increasing cycle of extreme events were also not anticipated by participants.

Ways that the Basin Plan can be improved, as viewed by participants, cover the themes of governance, environment, and communication. Under the theme of governance, the forum sought greater consistency in the application of WRPs between Basin States and that non-performance should not be

sanctioned. They also sought better structural adjustment tailored for regional requirements. The forum raised the need for transformative change and new ideas to complex Basin issues such as SDLAM and recovering water for the environment. They thought opportunities were being missed to better use consumptive water, both for high value products and environmental outcomes, and reflecting use for environmental outcomes as offsets against the 450 GL of water to be recovered for the environment. Opportunities were also being thought to be missed to better use excess water in the system in wetter years. Communication and engagement improvements were sought to bring communities along and up to speed by forum participants. Greater acknowledgement was sought as to what farmers were losing when water is taken out of the consumptive pool, the value of agriculture (including to the environment), and the challenges farmers were facing. Forum participants sought greater feedback on their input provided to governments.

Forum responses in greater detail

What has worked well?

The Upper Murray, Mid Murray and Goulburn Murray community forum highlighted aspects that they thought have worked well to date from the implementation of the Basin Plan. This included the amount of information provided in the Victorian WRPs and the thought of increased availability and amount of information available on the Basin and the Basin Plan. Locally based government departmental staffing was thought to have led to better engagement for the region, however it was thought that there was more that could be done in this area. The forum participants appreciated the ability to provide input through EWAGs. There was praise for the engagement of community participants in the 2020 independent assessment of social and economic conditions in the Basin, conducted by the Independent Panel for the Assessment of Social and Economic Conditions in the Basin, and conversely criticism from other participants that thought the study had a selective sampling approach.

The Basin Plan environmental assets Pollack Swamp and the Coorong were seen to be beneficiaries of environmental watering arrangements and the forum thought that there was evidence that water delivered for environmental outcomes was providing benefits, with substantial water quality improvements seen by participants in the Goulburn and Murray system. The forum was positive about irrigation systems upgrades in Goulburn Murray Water management area, as they thought it had led to farmers improving their growing capacity and accessing new technology. Further the investment in green infrastructure such as:

- screens on pumps
- fishways
- gates on weirs
- habitat rehabilitation
- re-snagging
- revegetating riverbanks
- fencing to prevent stock impacts, were seen as positive for river health and positive for community engagement.

These examples were mentioned as positives by the participant but with the note that we could be doing better, however some of these projects were in progress before the Plan.

What hasn't worked well?

Several ways the Basin Plan was seen to be not working well fall into themes such as governance, environmental outcomes and communication and engagement. The delay in accreditation of NSW WRPs and changes due to the SDLAM program in the Northern Basin were seen as a negative. There were many differing views on Basin water recovery targets in the forum. Some forum participants thought that decisions associated with the 450 GL recovery target to be returned to the environment was political and would deliver less environmental outcomes than promised. Others thought that the 2,750 GL target was only ever enough to protect low-lying floodplains and different solutions to reach the mid- to upper levels of floodplain environmental communities was required. Other forum participants thought that the success of the Basin Plan was focused on the delivery of fixed water volumes and not actual outcomes, and that conversely the northern Basin review water recovery target reduction was not going to meet the needs of the native fish. Additionally, some participants expressed the view that government agendas were getting in the way of doing what would benefit the collective.

Forum participants raised that infrastructure to utilise environmental water is lacking, and that there has not been enough consideration and transparency on where environmental water is coming from, with how it is to be utilised and what environmental benefits will be gained being thought to be unclear. Some participants thought there was a lack of water quality improvements in the region, with a potential opportunity to broaden the scope of environmental assets for prioritisation outside of the Barmah –Millewa Forest and the Goulburn Floodplain. Greater effort to reduce invasive species and protect native fish through fish ladders and mesh on off-take pipes was sought. Others thought that structural adjustment has not kept pace with the changes happening in the Basin. Participants raised that compensation to communities was not seen to be enough for the losses thought due to buybacks in the community. Structural adjustment was not engendering confidence in farming families, as they are thought to be leaving the land. What to do with stranded assets, particularly in the Goulburn Murray, when irrigators have left the areas was a concern raised by forum participants. Forum participants thought communities were feeling disregarded as part of the solution and the removal of community safeguards was eroding the original equity of the Basin Plan.

Genuine engagement with the farming community was thought to be poor by participants, with the most vocal voices being thought to be receiving the most attention. There was seen to be a lack of genuine engagement with communities on solutions, with forum participants thinking that they are raising ideas to government, after the government has already decided on their course of action. Greater feedback to the community from ministerial and community committees was sought as well as greater transparency, impartiality and accountability in decision making.

Did anything unexpected happen?

Unexpected outcomes from Basin Plan implementation discussed by participants included:

- the impacts of water trades downstream
- the complexity of environmental approvals and the time taken to gain approval
- impacts and disruption of the pandemic
- leading to the thought of increased project delivery times
- costs, as well as the re-emergence of the buyback program.

Participants raised that they thought there were positives effects of irrigation infrastructure for species protection during drought, delivering environmental water to assets and the mitigation of natural disasters such as blackwater events. Negatives raised by forum participants included:

- continual high flow impacts on river ecosystems and water quality
- blackwater events
- fish deaths in the Menindee lakes and the continuation of dredging in the Coorong Mouth despite floods and high flows
- the increasing cycle of extreme events (cycles of droughts and floods) and how this different climatic cycle is thought to be different from what river operational rules were drafted for.

Other unanticipated events raised by forum participants included the removal of the socio-economic test for recovery of the 450 GL “up-water” target from the Basin Plan that aimed to protect communities. This requirement setting out the socio-economic criteria for projects recovering water for the 450 GL under the Murray–Darling Basin Plan was removed by the *Water Management Amendment (Restoring Our Rivers) Act 2023*. Service and cost impacts on irrigators left in the Goulburn Murray Water area in dry years if more farmers leave the area was raised as a concern.

What can be done better in the Basin?

Forum participants suggested numerous improvements to the Basin Plan, and these covered the themes of governance, environment, and communication and engagement. Under the theme of governance, the forum sought greater consistency in the application of WRPs between Basin States and that non-performance should not be sanctioned. Participants raised that they thought there was need for transformative changes and new ideas to complex Basin issues such as SDLAM and recovering water for the environment. A simpler SDLAM assessment model, based on environmental outcome principles was suggested, rather than the current system that is thought to be too complex. New ideas were thought to be required to find water for the environment other than removing it from food-producing communities, with scale and regional differences and drivers at the forefront. It was unclear to some forum participants what the next iteration of government programs in the Basin will be, as the programs of the last ten years such as The Living Murray, Barmah –Millewa forum, Stock and Domestic Strategy, are coming to an end.

Forum participants thought opportunities were being missed to better use consumptive water, both for high value products and environmental outcomes, some suggested reflecting use for environmental outcomes as offsets against the 450 GL to be recovered for the environment. Others suggested providing the opportunity for irrigators to sell water to the environment to protect icons sites in dry and extreme dry times as they thought it would likely be more profitable for irrigators to feed fodder than use water which is valued at \$600/ML. Some thought opportunities were also seen to be being missed to better use excess water in the system in wetter years, where it is thought that more can be made available for consumptive use under a cumulative SDL framework, as well as for environmental outcomes without debiting Held Environmental Water (HEW). Some participants suggested that in the Goulburn system the irrigation channel system could be used to deliver environmental water to environmental assets in the region.

Other suggestions raised included:

- allowing licensing of floodplain harvesting in NSW
- better cold-water pollution management
- acknowledging the damage to upstream environments by delivering water downstream particularly on bank erosion
- carp
- water quality in the Murray River.

Building on the good work to date on Indigenous cultural water requirements and connections in the region, as well as threatened species management, for species such as Macquarie perch and platypus, in times of drought are also thought to be needing improvement. Monitoring Evaluation and Reporting (MER) are suggested to be focused on areas that are criticised. Greater acknowledgement was sought as to what farmers were losing when water is taken out of the consumptive pool, the value of irrigated agriculture, including to the environment, and the challenges farmers were facing. Some participants highlighted that structural adjustment needs to be done well, including building more resilient and diverse rural communities in partnership with gaining more water for the environment. Buybacks were seen as not the only solution by the forum.

Communication and engagement improvements were sought by participants to bring communities along and up to speed. Participants thought that education of the wider Australian community is needed, on where their food comes from, how agriculture supports local and larger communities, and the challenges Basin communities are facing. Forum participants wanted greater feedback from governments on the response to their input. The utilisation of established community and stakeholder groups was preferred over setting up new ones and forum participants suggested more government offices in local communities where impacts of water recovery were felt the most.

Central West Regional Community Forum

Context for Region

The Central West region covers a vast swath of central NSW, including towns such as Dubbo and Orange with both having just over 40,000 residents each. Grazing is the dominant industry in the area, with historically 70–90% of income derived from grazing. Some cotton farming is also seen in the west of the region. Although the region relies on grazing, it is also irrigation dependant in the east of the region due to the low rainfall. Here irrigated crops such as cereals and oilseed are grown. This is also the case along the Macquarie, Castlereagh, and Lachlan rivers, which are also major grain growing areas. Tourism is also an economic contributor in the east.

Summary of Forum

The Central West Regional Community Forum highlighted several things that they thought were working well in the Basin including changes in government attitudes to the Basin Plan which were inspiring momentum, greater public awareness of linked Basin systems, the creation of this community forum, and increased recognition of First Nations knowledge and rights in the Basin.

Some examples related to environmental water were also identified as working well, such as:

- achieving SDL compliance
- held environmental water (HEW) management improving
- the recognition of the benefits of the Baaka River for environmental water management.

Ways participants thought that the Plan was not working well included:

- thinking that there is an over politicisation of the Basin Plan
- delayed Water Resource Plans (WRPs)
- water efficiency projects.

Additionally, delays and queries over water savings, lack of transparency in NSW modelling and Cap factor (Long Term Diversion Limit Equivalence) changes, how Available Water Determinations (AWDs) were calculated, and drought management issues were also thought to be not working well. Break downs in agreements of what exactly are the problems to be solved by the Plan are also thought to be occurring, with community consultation suffering. A lack of information sharing on scientific evidence of water flows was seen as a problem, and cultural water entitlements in the Wambuul-Macquarie Valley was thought by some participants to be tokenistic and not enough.

Unexpected outcomes raised in the forum include the reduction in water quality targets in the Northern Basin and approval of certain projects in the region, including use of Northern Basin Toolkit measures to fund native fish projects, and the cancellation of the Wyangala Dam project.

Several suggestions were raised in this forum for the next iteration of the Basin Plan. The first related to the description of the Sustainable Diversion Limits (SDLs) and that it must be detailed and robust enough to ensure state governments can't redefine them. The second suggestion was that Environmental Watering Requirements (EWRs) should be taken into consideration in the development of any further new SDLs in a new iteration of the Basin Plan. Participants thought it should be noted that

EWRS need to be considered more when new SDLs are developed in the Basin Plan 2.0. Other suggestions from the participants included higher security water allocations, including allocations for rivers, and finding better ways to keep water in the environment such as rehydrating the land via Landcare. Some other recommendations included an up-skilling of government agencies employees, and communication improvement such as helping the community to understand better who the water belongs to.

Forum responses in greater detail

What has worked well?

The Central West community forum comments concerning the Basin Plan and what they thought was working well included:

- the changes in government attitudes to the Basin Plan, which was inspiring to some forum participants and helped them move forward.
- greater public awareness of linked Basin systems.
- the creation of this community forum.
- increased recognition of First Nations knowledge and rights in the Basin system.

Some examples of how the Plan has worked well relating to the usage and management of environmental water in the system were identified, such as:

- achieving SDL compliance across the Basin
- HEW management improving
- the recognition of the benefits of the Baaka River for environmental water management.

What hasn't worked well?

Forum participants highlighted they thought governance issues stemming from over politicisation of Basin Plan issues, delayed WRPs in NSW, and a breakdown in the agreements for problem solving under the Plan had not worked well in Basin Plan implementation to date. One forum participant raised that they thought there were delays with water efficiency projects and that this is regrettable as it seems to be working, however they also thought that it is not as straightforward as buying back water. Another participant thought water efficiency projects are expensive, were not all based on best available science and the water saving measures can be difficult to measure, for example the loss of return flows to the river and groundwater recharge are generally not seen to be included. Another participant highlighted that they thought that some governments have lost the effectiveness of their consultation processes, impacted by the complexity of water management, resulting in ill-informed water management recommendations.

A lack of transparency in NSW modelling and 'Cap factors' changes was raised by a forum participant as not working well. It was thought that it was not clear what models have been used and the efficacy of the models. One forum participant expressed that the next iteration of the Basin Plan should include dam drought reserve floors for NSW. They gave the example that Dubbo was three months off from being evacuated in 2019, due to the dam running out of water. Further, they thought Available Water

Determinations (AWDs, i.e. allocations) should be calculated on dam water physically in the dam, not on predicted inflows.

Information sharing regarding scientific evidence of water flows and PEW (planned environmental water) was seen as not to be working by a forum participant, and another participant raised the lack of cultural water entitlements in the Wambuul-Macquarie Valley as tokenistic and not enough.

Participants thought that information and communication methods have 'failed to bring stakeholders along the journey.' The impacts of non-Murray–Darling Basin related infrastructure on water flows was raised as a concern by participants. Negative upstream impacts in the lower Macquarie catchment area were raised in the forum. Forum participants thought that irrigators from the region were underrepresented in this forum as well as representatives for the river ecology in the Basin, as a major water user.

Did anything unexpected happen?

Unexpected things in relation to the Basin Plan raised in the forum include specific programs such as:

- the approval of the McPhillamy's Gold Mine
- the forum participants raised concerns with approvals regarding water availability
- the cancellation of the Wyangala Dam project
- the NSW government implementation of SDLAM
- the Northern Basin Toolkit measures to fund native fish projects (e.g. fishways).

These native fish projects were thought to be needing funding on their own merit and should not be a trade-off for water recovery.

The reduction of the water recovery targets was also raised as unexpected in the Northern Basin Review. A forum participant expressed that they thought this reduction was based on industry pressure, rather than science. Another participant expressed that they thought that the target reduction was based on the implementation of water efficiency projects, and this was 'taking/keeping this water for extractive purposes before the projects (the water savings) were delivered.'

What can be done better in the Basin?

Several ways that Basin Plan implementation could be improved were raised by the forum. It was thought that monitoring and reporting should include flood impact monitoring, with reporting suggested to be against Sustainable Development Goals (SDG), set out by the United Nations.

Tourism and recreational fishing representatives are seen to be underrepresented in these forums and in decision making in general in the Basin by participants.

Several suggestions were raised for the next iteration of the Basin Plan. The first related to the description of the SDLs, with the thought that it must be detailed and robust enough to ensure state governments can't redefine them. The second suggestion was that Environmental Watering Requirements (EWRs) are to be taken into consideration in the development of any new SDLs. The EWRs

were seen to be developed after the Basin Plan SDL was set², and it was thought that the Basin Plan cannot provide enough water for EWRs to be met.

Other suggestions included:

- improved skills development in relevant decision-making agencies
- higher security water allocations
- including allocations for rivers
- finding better ways to keep water in the environment such as rehydrating the land via Landcare and better use of nature-based solutions including wetland restoration
- reforestation
- improving water quality.

The sharing of information that can be easily understood by diverse audiences was also raised by forum participants as a potential improvement. Additional communication improvement included improved Planned Environmental Water (PEW) information and helping the community to understand who the water belongs to.

Reference materials

Some references provided by participants for this question include a report stating that the EWRs are not being met. This report finds that 65% of assessed sites EWRs are not being achieved, with some improvement however seen.

² EWRs were considered while developing SDLs in 2010, the EWR reports were published after the Draft SDL had been proposed.

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*

Wodonga – *Dhudhuroa Country*



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