

Murray-Darling Basin Plan: Implementation review 2023

Call for submissions



The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long-term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

Call for submissions

The Commission has released this paper to assist individuals and organisations to prepare submissions to the inquiry. It contains and outlines:

- the scope of the inquiry
- the Commission's procedures
- matters about which the Commission is seeking comment and information
- how to make a submission (see attachment B).

Participants should feel free to comment on matters not discussed in the paper. The Commission wishes to receive information and comment on issues which participants consider relevant to the inquiry's terms of reference.

Key dates

Receipt of terms of reference 2 May 2023

Due date for submissions 31 July 2023

Interim report August-September 2023

Final report to Government December 2023

Contact details

Phone 02 6240 3250 Freecall 1800 020 083

Email basin.plan.2023@pc.gov.au

Website www.pc.gov.au/inquiries/current/basin-plan-2023

Contents

1.	Introduction and key questions	4	
	Our focus	4	
	Out of scope	4	
	Have your say	5	
	Process and timing	5	
2.	Resetting the balance	7	
3.	Basin management arrangements	8	
	Water resource plans	8	
	Water quality	9	
	Critical human water needs	9	
	Environmental water management	9	
4.	Governance and institutions	11	
	Compliance	12	
	Monitoring, evaluation and reporting	12	
	Water trading rules	12	
5.	The future of the Basin Plan	13	
	Climate change	13	
	Aboriginal nations in the Basin	13	
	Community engagement	14	
	Helping communities adjust	14	
	Knowledge and science	15	
Atta	achments		
A.	Terms of reference	16	
В.	How to make a submission	18	
Ref	eferences 2		

1. Introduction and key questions

This inquiry follows three years of water abundance in the Murray-Darling Basin, with many communities still recovering from damaging floods. When the Productivity Commission last assessed the effectiveness of the implementation of the Murray-Darling Basin Plan in 2018, much of the Basin was experiencing drought.

The Murray-Darling Basin Plan is about protecting and nourishing the Basin through floods and droughts – for waterbirds, native fish, river red gums and other natural resources, and for farmers, rural communities, Aboriginal and Torres Strait Islander people and millions of other Australians who rely, directly or indirectly, on Basin water.

The Basin is among Australia's most precious environmental and economic assets. It is home to many communities and culturally, economically and spiritually important to many people, including a number of Aboriginal nations. Caring for the Basin will only become more important in the future, as climate change aggravates the challenges faced by the Basin.

This paper outlines the focus of our inquiry and invites you to have your say by sending us a submission.

Our focus

This is the Productivity Commission's second five-yearly inquiry into the effectiveness of the implementation of the Murray-Darling Basin Plan (the Plan) and related water resource plans. The scope of the inquiry is set out in s. 87 of the *Water Act* 2007 (Cth) and the terms of reference (attachment A).

The inquiry will look at whether the Plan is on track to be implemented on time, and where it is not on track, what needs to change. We are interested in whether implementation of the Basin Plan has been effective and efficient, and in whether institutional and governance arrangements are fit for purpose.

The Productivity Commission will also look to the future and consider how the framework could be simplified or otherwise improved, without undermining its key objectives. For example, the Commission is interested in how to ensure the Plan and its implementation reflect the best available scientific knowledge and can adapt to a changing climate, and how affected communities can be better engaged. The Commission is also interested in how the Plan can better reflect the interests of Aboriginal people in the Basin.

Out of scope

The Commission has been asked not to duplicate the work of other recently completed or ongoing reviews. Therefore, we will not revisit in detail recent work on compliance and enforcement by the Inspector-General of Water Compliance or work on water trading rules and practices by the Australian Competition and Consumer Commission. However, we may note whether recommendations made in recent reviews are being implemented.

This inquiry will also not revisit questions that fundamentally underpin the Plan, such as whether it is necessary to recover water for the environment, nor questions that other agencies have been tasked and resourced to answer, such as questions about how much water can sustainably be taken from the Basin.

Have your say

This paper broadly outlines the scope of the inquiry and sets out a number of questions the Commission will seek to answer. Nine key questions are set out in the box below, and some more detailed questions appear throughout the paper.

The Commission welcomes submissions addressing some or all of these questions and any other relevant matters. These submissions will form a key part of our evidence base.

Submissions can be made in writing, over the phone or by video. You can lodge your submission online, send us a document or letter, or simply send us a short email on a topic that is important to you. More information about how to make a submission is set out at the end of this paper.

The Commission will also consult widely. We look forward to meeting with basin governments, environmental water managers, peak bodies, researchers and academics, Aboriginal and Torres Strait Islander people, and other communities in the Basin. We will hold meetings in regional areas of the Basin, to enable members of these communities to provide direct input to the inquiry. We will also request specific information directly from some agencies.

Engaging with Aboriginal and Torres Strait Islander people will be a particular focus, and we will seek to ensure engagement is fair and inclusive, transparent and open, ongoing, and reciprocal.

The Commission will aim for genuine and meaningful engagement with all participants.

Process and timing

The Commission will start its first round of consultations and meetings after we release this call for submissions.

A stakeholder working group will be set up to exchange information and views and provide advice to the Commission (see s. 89 of the Water Act). A list of members will be published on our website.

We plan to set out our preliminary findings in an interim report (or reports) and call for further submissions in response. After considering the new submissions and other evidence, and conducting any further consultations, the Commission will prepare its final report and send this to the Treasurer, after which time the report will be tabled in Parliament and made public.

The results of this inquiry will inform government policy and other upcoming reviews – notably, the review of the Commonwealth Water Act and the Sustainable Diversion Limit reconciliation in 2024, and the 2026 review of the Basin Plan by the Murray-Darling Basin Authority (MDBA).



Key questions

When responding to these questions, you are invited to tell us both how effective implementation has been so far and what you think needs to change in the future.

- 1. What needs to change to ensure water recovery targets are met and that supply and efficiency measures are delivered? What lessons can be learnt from past experiences?
- 2. Are the current arrangements for implementing the Murray-Darling Basin Plan operating effectively? How could the arrangements be improved? The Commission is particularly interested in the effectiveness of the arrangements for:
 - · developing, accrediting and reporting on water resource plans
 - water quality
 - critical human water needs
 - · environmental water planning and management.
- 3. Have the governance and institutional arrangements for the Plan including the arrangements for compliance and monitoring, evaluation and reporting proved effective? What changes would you recommend?
- 4. How well is the Plan responding to a changing climate? How should this be improved?
- 5. How well is the Plan addressing the interests of Aboriginal people?
- 6. How well has community consultation and engagement been conducted? How can this be improved?
- 7. What lessons should be learned from programs aimed at helping communities adjust to the Plan?
- 8. Does the implementation of the Plan reflect a commitment to the best available scientific knowledge? How well is this knowledge communicated? What improvements should be made?
- 9. Are there any other issues with Plan implementation that you wish to raise?

2. Resetting the balance

The Basin Plan aims to rebalance access to water between the environment, irrigation and other uses, following decades of over-extraction and environmental degradation. The Plan sets 'sustainable diversion limits' (essentially, caps) on annual water take. Meeting these limits requires the Australian Government to recover water entitlements from existing water users – a process known as 'bridging the gap'. The recovered water is then made available for the environment.

Based on current 'bridging the gap' targets, 98% of the surface water target and 92% of the groundwater target has been reached, and the Australian Government announced in February 2023 that it will purchase the remaining 49.2 GL/y¹ from willing sellers (table 1).

Table 1 - Summary of water recovery targets

Bridging the gap: Surface water				
2750 GL/y	Original 'bridging the gap' water recovery target			
- 605 GL/y	Target reduced by agreed supply measure package, assuming projects are fully delivered			
- 70 GL/y	Target reduced following Northern Basin Review			
2075 GL/y	Current target			
46 GL/y	Remaining gap-bridging surface water to be recovered			
190-315 GL/y	Potential shortfall from incomplete supply measure package (MDBA estimates)			
Bridging the gap: Groundwater				
40.4 GL/y	Original groundwater recovery target			
38.45 GL/y	Target adjusted following Queensland WRP process			
3.2 GL/y	Remaining groundwater to be recovered			
Efficiency measures				
450 GL/y	Target			
26 GL/y	Efficiency measures currently recovered or under contract			
424 GL/y	Efficiency measures to be recovered by 30 June 2024			

Note: Current as of 28 February 2023; exact gaps to be bridged subject to change until NSW WRPs are accredited.

However, these current targets assume full delivery of 36 'supply measure' projects, and there has been considerable delay in implementing both the supply and efficiency programs to which Basin governments have committed. In 2018, the Commission noted the substantial risk that these 'sustainable diversion limit adjustment mechanism' measures would not be implemented by the June 2024 deadline. Little progress has

¹ Gigalitres per year. All water volumes are presented in long-term-average annual yield terms, which provide a common unit for different types of water entitlements in the Basin. 1 gigalitre of water = 1 billion litres.

since been made and the MDBA has recently assessed delivery of the measures to be at high risk (MDBA 2022b, pp. 4, 5).

- Some state government supply measure projects are in place, but the planned 605 GL/y offset is unlikely
 to be achieved in full. A shortfall of between 190 and 315 GL/y is expected. This includes a number of
 state-led constraint management projects, which may be 5 to 10 years late.
- Efficiency measures are unlikely to meet the 450 GL/y target. Projects under contract by early 2023 might save 26 GL/y less than 6% of the target.
- Some of the water-saving 'Northern Basin Toolkit' projects have been implemented, but the timeline remains ambitious for the remainder, and it is difficult to monitor implementation.

The Productivity Commission is interested in what needs to be done to get these measures on track and ensure that water recovery is cost effective and that programs meet their objectives.

- · What are the main barriers to progress?
- Have the monitoring and oversight arrangements been appropriately designed, resourced and implemented?
- How can water recovery targets be met, having regard to impacts on communities and government budgets? Is the Australian Government's Strategic Water Purchasing Framework fit for purpose?

3. Basin management arrangements

The Basin Plan requires governments to establish arrangements for managing water resources, with many of these arrangements to be set out in state and territory water resource plans. The Plan also has a framework for the management of water for the environment.

The Commission is interested in whether the arrangements for implementing the Plan are operating effectively and, in particular, in the effectiveness of arrangements for developing, accrediting and reporting on water resource plans; water quality; meeting critical human water needs; and environmental water planning and management.

Water resource plans

The implementation of the Basin Plan relies on state governments developing catchment-level water resource plans. These plans set out, among many other things, how much water can be taken annually from each catchment, how much will be made available to the environment, and how water quality standards and critical human water needs will be met.

Queensland, South Australia, Victoria and the Australian Capital Territory have now had all of their plans accredited. New South Wales has had four of its 20 plans accredited, but the rest are now with the MDBA for review.

It is not possible to assess the effectiveness of the implementation of plans that are yet to be finalised, or to comprehensively assess those that have only been in place for a couple of years. Nevertheless, the Commission is interested in whether areas with accredited plans have seen improvements in water planning and management, consistent with the objectives of the Basin Plan.

Making, assessing and accrediting water resource plans is a complex process, with 55 statutory requirements that must be met, many of which are multi-faceted and interlinked. Understanding the plans and how they interact with, for example, state water sharing plans and operations may also be challenging.

Water resource plans must be prepared 'having regard to the views of relevant Indigenous organisations' (Basin Plan, s. 10.53), and each plan must identify objectives and outcomes based on values and water uses of Indigenous people. Further, the MDBA is expected to consult with Indigenous organisations in relation to whether the requirements of Part 14 of the Basin Plan have been met (Basin Plan, part 14, note). The Murray Lower Darling Rivers Indigenous Nations has said that, in practice, engagement and consultation on some water resource plans has been inadequate and that there should be clear targets, indicators and timelines for meeting the objectives (MLDRIN 2022).

Basin states must also prepare annual reports about compliance with their water resource plans. The Commission is interested in whether these reporting arrangements are operating effectively.

Water quality

The Basin Plan sets water quality targets and objectives and requires Basin states to prepare water quality management plans. While most water quality targets in the Plan appear to be generally supported, questions have been raised about some targets and objectives. For example, in 2020 the MDBA recommended that improvements be made to the water quality objectives for salt export, cultural use, and raw water for treatment for human consumption (MDBA 2020a, p. 6).

The Commission is interested in the value and effectiveness of water quality targets and objectives, whether the processes for reviewing and revising the targets and objectives are working, and whether compliance is being effectively monitored and enforced.

Critical human water needs

The Basin Plan seeks to ensure critical human water needs are given the highest priority in the Basin, particularly during periods of extreme water shortages. Water must be set aside to meet these needs, and relevant Basin states have obligations to monitor, assess and manage related risks. However, concerns continue to be raised about water quality and security in some areas, such as in Walgett, New South Wales (ABC News 2023).

The Commission is interested in whether critical human water needs are effectively managed in the Basin and whether there are opportunities to simplify or otherwise improve the framework for managing these needs, including in response to climate change.

Environmental water management

Environmental water management aims to protect and restore water-dependent ecosystems and ensure that they are resilient to risks such as extreme variations in climate and water availability. The Basin Plan sets out a framework for managing environmental water and outlines specific environmental objectives for water-dependent ecosystems. Basin states must prepare more detailed long-term watering plans and watering priorities for individual catchments.

Since 2018, long-term watering plans have been put in place across the Basin and measures to promote the efficient use of environmental water ('pre-requisite policy measures') are now in effect. A forum has also been set up to coordinate the delivery of water for the environment across the northern Basin.

Recent reviews have suggested that the process for setting environmental watering priorities is generally appropriate, but improvements have also been suggested – for example, in relation to the effectiveness of the annual environmental watering priorities and incorporating First Nations' values and uses into the Basin-wide environmental watering strategy (MDBA 2021, pp. 7, 13). Delays in accredited water resource plans in some areas may also present risks to the provision of planned environmental water in those areas.

The Productivity Commission is interested in whether environmental water management is working effectively, and how it might be improved. For example:

- Does the current framework adequately allow for environmental water management to adapt to a changing climate?
- · Are interested parties adequately consulted?
- Are there opportunities to better integrate environmental water management with other natural resource management programs and infrastructure works?
- Are Aboriginal cultural values sufficiently incorporated into environmental water management?

Overall Environment Objectives Targets Methods Principles to prioritise Reporting Collaborating **Basin Environmental Long-Term Environmental** Watering Strategy Watering Plans Multi-Year **MDBA States Basin Annual Environmental Regional Environmental** Watering Priorities **Watering Priorities** Annual

Figure 1 - Overview of environmental water management

Source: (MDBA 2021, p. 4).

4. Governance and institutions

Good governance and effective institutional arrangements are critical to the successful implementation of the Basin Plan. Governance refers to the institutional and administrative structures, practices, and processes through which decisions are made, implemented and enforced. At its core, it is about who does what and how. Good governance helps address challenges at their source and maintain community trust and confidence in water management.

In 2018, the Commission found that the institutional and governance arrangements for the Basin Plan had major shortcomings that posed a significant risk to implementing the Plan. Other reviews have also noted that the Plan's governance arrangements are complex and unwieldy (Claydon 2019, p. 2).

Since 2018, as discussed below, compliance functions have been transferred from the MDBA to the newly established Inspector-General of Water Compliance, but this is only one piece of a complex framework.

The Commission is interested in whether the Basin Plan's governance and institutional arrangements (including those changes made since 2018) have been effective and whether there are opportunities to improve them (table 2). For example:

- Is the current division of roles and responsibilities between institutions appropriate?
- · Are there credible mechanisms for transparency, integrity, conflict management and accountability?
- Do institutions have the capability, powers and resources necessary to achieve their objectives?

As discussed further below, the Commission is also interested in how to ensure Aboriginal people and others in Basin communities are appropriately involved in decision-making.

Table 2 - Key Basin institutions

Role	Institution
Policy and decision making	 Australian Government Water Minister Murray-Darling Basin Ministerial Council Basin Officials Committee Basin Community Committee Australian Government Department of Climate Change, Energy, the Environment and Water Basin state agencies
River operations and environmental water management	Murray-Darling Basin AuthorityCommonwealth Environmental Water HolderBasin state agencies
Regulation	Inspector-General of Water ComplianceAustralian Competition and Consumer CommissionBasin state agencies
Information, monitoring and reporting	 Bureau of Meteorology Murray-Darling Basin Authority Commonwealth Environmental Water Holder Productivity Commission Basin state agencies

Compliance

There have been significant changes in recent years to the arrangements for monitoring compliance with the Basin Plan. Most notably, in 2021 the office of the Inspector-General of Water Compliance was established, with functions including monitoring and providing independent oversight of government agencies acting under the Water Act and Basin Plan. The Inspector-General has since released metering and measurement 'report cards' and a report into compliance and enforcement.

The report found that across the Basin 'compliance at the individual water user level is well managed', but that a significant amount of unmeasured water continues to be taken, and that there was an opportunity for greater collaboration on compliance among the Basin states (IGWC 2022, p. 2).

In the report, the Inspector-General committed to five action items: establish a Regulatory Leaders Forum; improve public reporting on water compliance; set a metering standard; conduct a review of unmeasured take; and determine the harm caused from unauthorized take (IGWC 2022, pp. 18–20).

The Productivity Commission does not propose to duplicate the Inspector-General's recent work on compliance, but we are interested in the broader question of the suitability of the institutional and governance arrangements for monitoring compliance with water laws in the Basin.

Monitoring, evaluation and reporting

Accountability and transparency are crucial elements of good governance and fundamental to implementing the Basin Plan. Among other things, transparency enables the effective review and ongoing improvement of the Plan, and it builds public confidence in water policy and management.

Basin governments have monitoring, reporting and evaluation requirements under the Plan and in related intergovernmental agreements. In 2018, the Commission said that the evaluation framework for the Plan was unclear and that there was 'no clear strategy to coordinate information collection from the various monitoring programs'. This lack of coordination can decrease the capacity of responsible agencies and stakeholders to respond to issues and make improvements to implementation. Since 2018, the MDBA has published a roadmap and framework for its upcoming evaluation and 10-year review of the Plan (MDBA 2022c, 2022a).

The Commission is interested in whether the monitoring, reporting and evaluation framework for the Plan is effective, and if it is not, how it might be improved. For example, are the practices and requirements across jurisdictions sufficiently consistent, and is the information needed to monitor and evaluate implementation widely available?

Water trading rules

Considerable work has been done in recent years to review the Basin water markets. In February 2021, the Australian Competition and Consumer Commission (ACCC) published a report on Basin water markets and found that 'decisive and comprehensive reform' was needed (ACCC 2021, p. 3). In late 2022, Mr Daryl Quinlivan AO's roadmap for water market reform was released, setting out advice on implementing the ACCC's proposed reforms (Quinlivan 2021).

The Australian Government has expressed support for Mr Quinlivan's recommendations and announced it will introduce legislation and a mandatory code of conduct to improve integrity safeguards and standards,

with penalties for brokers who do not comply. It also announced that water market conduct will be regulated by the ACCC.

The Productivity Commission will not duplicate this work, though welcomes submissions on the progress of implementing the reforms recommended by the ACCC and Mr Quinlivan that are relevant to the Basin Plan (in particular, the trading rules in the Basin Plan). We also welcome submissions on the need for any additional reforms to the Plan's trading rules that were not considered by these recent reviews.

5. The future of the Basin Plan

This inquiry is also concerned with how the Basin Plan and its implementation might be improved in the future – for example, how the Basin Plan can better adapt to a changing climate, reflect the values of Aboriginal people, incorporate the best available science, and help communities adjust to the Plan.

Climate change

Longer-term climate trends show a decline in rainfall in the Basin, an increase in mean temperature, and more frequent and extreme drought and floods. Over the past 10 years, the region has experienced some of the highest and lowest inflows on record, contributing to, among other things, blackwater events, algal blooms, fish deaths and water shortages.

The MDBA has identified 'adapting to climate challenges and increasing resilience' as one of the six priority areas for the future and has made recommendations and commitments to enhancing climate resilience and adaptation in the Basin (MDBA 2020b, p. 118). The Australian Government has also acknowledged the importance of integrating emerging climate change knowledge into water resource management, including by committing \$22 million to 'update the science' to ensure the impacts of climate change are accounted for in managing the Basin.

A number of features of the Basin Plan are designed to allow for water management to adapt to changing conditions. The Commission is interested in whether the Plan is sufficiently robust and adaptable to deal with these challenges.

Aboriginal nations in the Basin

There are more than 40 Aboriginal nations across the Basin for whom water is central to their spirituality, identity, and relationship with Country. Aboriginal people value and use water for cultural, social, spiritual, customary and economic purposes.

For First Nations People, water is a sacred source of life. The natural flow of water sustains aquatic ecosystems that are central to our spirituality, our social and cultural economy and wellbeing. The rivers are the veins of Country, carrying water to sustain all parts of our sacred landscape. The wetlands are the kidneys, filtering the water as it passes through the land. (National Cultural Flows Research Project 2018, p. 3)

The Basin Plan seeks to ensure Aboriginal people can participate in water resource management – including water resource planning, environmental management, knowledge building and evaluation.

In 2018, the Productivity Commission stressed the importance of 'fostering long-term partnerships with Traditional Owners'. Aboriginal groups have emphasised the need to build knowledge and understanding and the need for Aboriginal people to lead those efforts, with appropriate support (Sefton et al. 2020, p. 26). It has been recommended that access to water for economic, social and cultural purposes for Aboriginal people be increased, and that the participation of Aboriginal people in water policy be embedded at all levels of government (Sefton et al. 2020, pp. 26–27).

The Commission is interested in whether, in practice, Aboriginal people are sufficiently and properly involved in water resource management and decision-making. Are their interests given appropriate consideration in decision-making? What needs to change to ensure they are involved in decision-making in the Basin?

We also welcome submissions on how, in implementing the Basin Plan, agencies can meet commitments under the National Agreement on Closing the Gap, including the four priority reforms: 1. formal partnerships and shared decision making, where self-determination is supported; 2. building the community-controlled sector; 3. transforming government organisations; and 4. shared access to data and information at a regional level.

The Commission is also interested in how the effectiveness of meeting the Indigenous objectives and outcomes in the Plan should be evaluated in this and future reviews.

Community engagement

Meaningful engagement with communities affected by the Basin Plan is crucial and builds trust in decisionmaking, even for those who disagree with the outcomes.

There are a range of consultation requirements in the Basin Plan. For example, communities must be consulted about changes to sustainable diversion limits and Aboriginal people must be consulted when water resource plans are developed. The MDBA is required to publish a range of information (for example, findings and recommendations from evaluations, reviews and assessments), and the Basin Community Committee provides community feedback to the MDBA and Basin Ministers.

Community engagement effort appears to have intensified since 2018. For example, the MDBA, the Commonwealth Environmental Water Office and the Inspector-General of Water Compliance have each established a regional presence across the Basin. The Inspector-General has also worked to improve access to water information and build community understanding. Basin state and territory water agencies have also implemented various engagement processes during this same period.

In recent years, there have been a substantial number of reviews related to the implementation of the Plan (over 30 since 2018), most of which have included at least some form of community consultation. The consultation burden on communities has been significant, and some note that there has been consultation fatigue and disengagement. At the same time, the views and lived experiences of communities are critical to understanding the impacts of Basin Plan implementation and to formulating proposals about a better way forward.

In this context, the Commission is interested in hearing about how well community consultation and engagement have been working, the clarity of information provided to communities to support engagement, and how these arrangements could be improved.

Helping communities adjust

In light of continuing concerns raised about the social and economic impacts of the Basin Plan, several programs have sought to help industries and communities adapt to a future with less water.

In 2018, the Commission found insufficient evidence to indicate whether or not such programs had been effective, and recommended that the programs be more targeted. Further initiatives have been launched since then, such as the Murray-Darling Basin Economic Development Program.

The Commission is interested in what is being done or could be done to help communities successfully adjust to the Basin Plan and the changes attributable to its implementation. What can be learnt from past programs and from communities that have adjusted successfully?

Knowledge and science

The Water Act is clear that the Basin Plan should reflect the 'best available scientific knowledge'. Environmental watering, water resource plans, and the monitoring and evaluation of the Basin Plan must also be based on the best available research.

The MDBA has published a considerable body of research, commissioned several independent scientific studies and reviews, and seeks advice from independent scientists. Other recent efforts to generate and share scientific knowledge include: the Basin Climate Resilience Summit (2021), annual River Reflections conferences (launched in 2021), and the Murray-Darling Water and Environment Research Program. In 2022, the Australian Government committed \$51.9 million to update the science and improve public confidence and trust in Basin water resource management.

The MDBA has identified 'advancing science and monitoring' as one of the six priority areas for the future, and has noted that ongoing and consistent investment in science is essential to improving the management of water in the Basin (MDBA 2020b, p. xxiv). It has also stressed the importance of making science more accessible and the 'considerable opportunity to further draw on and learn from First Nation knowledge and understanding of the river systems and natural resource management' (MDBA 2020b, pp. xxiv, xv).

However, there have also been strong criticisms from some about the extent to which the Plan, and particularly water recovery targets, reflect the best available science (SA Government 2019). The Productivity Commission is interested in how to ensure the best research is conducted and followed in the management of Basin water resources and in future amendments to the Basin Plan.

A. Terms of reference

I, Jim Chalmers, Treasurer, pursuant to Parts 2 and 3 of the *Productivity Commission Act 1998*, hereby request that the Productivity Commission (the Commission) undertake an inquiry into the effectiveness of the implementation of the *Basin Plan 2012* (Cth) (Basin Plan) and water resource plans.

Background

The Basin Plan provides for the integrated management of water resources of the Murray-Darling Basin in ways that optimise the objectives and outcomes in section 5.02 of the Basin Plan and promote the objects of the *Water Act 2007* (Cth) (Water Act).

Under section 87 of the Water Act, the Commission is required to undertake five-yearly assessments of the effectiveness of the implementation of the Basin Plan and water resource plans. This inquiry is the second such assessment. The first assessment was completed on 19 December 2018. This subsequent 5-year assessment is due 19 December 2023.

Scope of the inquiry

In accordance with the provisions of Part 3 of the Water Act, the Commission is to report on the matter of the effectiveness of the implementation of the Basin Plan and water resource plans for the five-year period ending 19 December 2023.

In undertaking the inquiry, the Commission should assess the progress towards implementing the Basin Plan, including the:

- · extent to which the Basin Plan is on track to be delivered within statutory timeframes,
- the likelihood and extent to which activities and arrangements currently in place will ensure that these
 provisions and timeframes will be met,
- the effectiveness of reforms to address previous Productivity Commission recommendations, including the Joint Basin government response to the Productivity Commission inquiry report: Murray–Darling Basin Plan: Five-year Assessment (2019), and
- the extent to which the current framework for implementing the Basin Plan, including the framework for monitoring, reporting and evaluation, is likely to be effective in supporting implementation of the Basin Plan.

In undertaking this assessment, the Commission should have regard to relevant agreements and reviews or audits that have recently been completed or are ongoing. Where possible, the Commission should avoid unnecessary duplication with recently completed or ongoing reviews, including those focused on compliance and enforcement, Basin Plan implementation, the Murray-Darling Basin water reform roadmap and national water reform.

The Commission should consider the impact of major droughts, floods, and the COVID-19 pandemic on the effectiveness of implementing the Basin Plan and water resource plans over the assessment period.

The Commission should also have regard to the differing responsibilities of the Basin states, the Department of Climate Change, Energy, the Environment and Water (DCCEEW), the Inspector-General of Water Compliance (IGWC), the Commonwealth Environmental Water Holder (CEWH), the Murray–Darling Basin Authority (MDBA), the Australian Competition and Consumer Commission (ACCC) and the Bureau of Meteorology (BOM).

The Commission should assess progress towards full Basin Plan and water resource plan implementation in the context of the differing timeframes applicable.

The Commission should make findings on progress to date and recommendations on any actions required to ensure full implementation of the Basin Plan and water resource plans.

The Commission should also consider and provide practical advice on the Basin Plan and water resource plans that could improve:

- the operation of the Basin Plan and water resource plans, particularly their ability to address future challenges including the impacts of climate change, their recognition of First Nations values, and their ability to efficiently support the maturation of environmental water management; and
- the efficiency and effectiveness of implementing the Basin Plan and water resource plans and contribute to the information available for the 2024 review of the Water Act and the 2026 review of the Basin Plan.

Given the breadth of the issues available for consideration, the Commission should consider reporting separately on:

- the effectiveness of the implementation of the Basin Plan and water resource plans over the five years since the previous assessment; and
- advice and recommendations on future actions and opportunities to simplify the framework of the Basin Plan to ensure effective achievement of its outcomes.

Process

In undertaking the inquiry, the Commission should undertake an appropriate public consultation process, including establishing a stakeholder working group in accordance with section 89 of the Water Act, inviting public submissions and releasing a draft report to the public.

The Commission should consult widely with relevant Australian Government, Basin state and territory government agencies, key interest groups and affected parties. These consultations should include, but not be limited to, parties with interests in agriculture, industry, the environment, First Nations people, local government, regional development, planning, emergency management and tourism. The Government has asked Basin jurisdictions to co-operate with this inquiry, including by providing the Commission with the information it considers necessary in undertaking its inquiry.

The final report is to be provided to the Government by 19 December 2023.

The Hon Jim Chalmers MP

Treasurer

[Received 2 May 2023]

B. How to make a submission

How to prepare a submission

Written submissions may range from a short comment outlining your views on a particular topic to a much more substantial document covering a range of issues. Where possible, you should provide evidence, such as relevant data and documentation, to support your views.

You are also welcome to make an oral submission by calling the Commission (details below), or a video submission.

Publishing submissions

- Each submission, except for any attachment supplied in confidence, will be published on the Commission's website shortly after receipt, and will remain there indefinitely as a public document.
- The Commission reserves the right to not publish material on its website that is offensive, potentially defamatory, or clearly out of scope.

Copyright

- Copyright in submissions sent to the Commission resides with the author(s), not with the Commission.
- Do not send us material for which you are not the copyright owner such as pictures, photos and newspaper articles you should just reference or link to this material in your submission.

In confidence material

- This is a public review and all submissions should be provided as public documents that can be placed on the Commission's website for others to read and comment on. However, information of a confidential nature or submitted in confidence can be treated as such by the Commission, provided the cause for such treatment is shown.
- The Commission may also request a non-confidential summary of the confidential material it is given, or the reasons why a summary cannot be provided.
- Material supplied in confidence should be clearly marked 'IN CONFIDENCE' and be in a separate attachment to nonconfidential material.
- You are encouraged to contact the Commission for further information and advice before submitting such material.

Privacy

- For privacy reasons, all **personal** details (e.g. home and email address, signatures and phone numbers) will be removed before they are published on the website.
- You may wish to remain anonymous or use a pseudonym. Please note that, if you choose to remain anonymous or use a pseudonym, the Commission may place less weight on your submission.

Technical tips

- The Commission prefers to receive submissions as a Microsoft Word (.docx) files. PDF files are
 acceptable if produced from a Word document or similar text-based software. You may wish to search the
 Internet on how to make your documents more accessible or for the more technical, follow advice from
 Web Content Accessibility Guidelines (WCAG) 2.0: https://www.w3.org/TR/WCAG20/
- · Do not send password protected files.
- Track changes, editing marks, hidden text and internal links should be removed from submissions.
- To minimise linking problems, type the full web address (for example, http://www.referredwebsite.com/folder/filename.html).

Oral submissions

- The Commission accepts oral submissions if you are unable to make a written submission or brief comment.
- Oral submissions are taken through a phone or video call, where Commission staff will record and write
 down your submission. Staff will then provide you with a written submission for your approval. Once you
 have approved your submission, we will publish it on our website.
- To arrange an oral submission, please call 02 6240 3250.

Video submissions

- The Commission accepts video submissions if you are unable to make a written submission.
- More information on how to upload your video submission is available on the Commission's website: www.pc.gov.au/inquiries/current/basin-plan-2023.

How to lodge a submission

Submissions should be lodged using the online form on the Commission's website or by organising an oral submission with the Administrative Officer. Submissions lodged by post should be accompanied by a submission cover sheet, available from the Commission's website.

Online* www.pc.gov.au/inquiries/current/basin-plan-2023

Post* Murray-Darling Basin Plan: Implementation review 2023

Productivity Commission

GPO Box 1428

Canberra City ACT 2601, Australia

Phone Please contact the Administrative Officer on 02 6240 3250

Due date for submissions

Please send submissions to the Commission by 31 July 2023.

^{*} If you do not receive notification of receipt of your submission to the Commission, please contact the Administrative Officer.

References

ABC News 2023, 'Slimy, bitter, salty and potentially unsafe: In Walgett, people with some health conditions can't drink the water', *ABC News*, 12 April, https://www.abc.net.au/news/2023-04-13/walgett-nsw-water-insecurity-worse-than-bangladesh/102212784 (accessed 3 May 2023).

ACCC (Australian Competition and Consumer Commission) 2021, *Murray-Darling Basin Water Markets Inquiry - Final Report*, Canberra.

Claydon, G. 2019, Review of the Murray-Darling Basin Joint Governance Arrangements, Final Report.

IGWC (Inspector-General of Water Compliance) 2022, Compliance and enforcement across the Murray—Darling Basin.

MDBA (Murray-Darling Basin Authority) 2020a, Review of water quality targets in the Basin Plan, Canberra.

- —— 2020b, The 2020 Basin Plan Evaluation, Canberra.
- —— 2021, Review of the Environmental Watering Plan, Canberra
- —— 2022a, 2025 Basin Plan Evaluation Roadmap, Canberra.

- —— 2022b, December 2022 Report Card, Canberra.
- —— 2022c, Framework for the 2025 Basin Plan Evaluation, Canberra.

MLDRIN (Murray Lower Darling Rivers Indigenous Nations) 2022, Murray Lower Darling Rivers Indigenous Nations' advice on the Macquarie-Castlereagh Alluvium water resource plan, Murray-Darling Basin Authority.

National Cultural Flows Research Project 2018, A pathway to cultural flows in Australia: Law and Policy Summary, Melbourne.

Quinlivan, D. 2021, Water market reform: final roadmap report.

SA Government (South Australian Government) 2019, *Murray-Darling Basin Royal Commission*, 29 January, Bret Walker SC Commissioner, South Australia.

Sefton, R., Peterson, D., Woods, R., Kassebaum, A., McKenzie, D., Simpson, B. and Ramsay, M. 2020, *Final Report: Independent Assessment of Social and Economic Conditions in the Murray-Darling Basin*, Panel for Independent Assessment of Social and Economic Conditions in the Murray-Darling Basin, Melbourne.