

Independent review of the MDBA's assessment of the PPM implementation.

- **a report prepared by members of the Independent
River Operations Review Group**

Stage 1 final report

Date: 24 June 2019

Document Control

Versions

Version	Date	Author(s)	Notes
01	11/06/2019	P Hoey and Garry Smith	Document creation
02	14/06/2019	P Hoey and Garry Smith	Final draft including IRORG comments
03	20/06/2019	IRORG	Updated draft including NSW review outcomes
04	21/06/2019	IRORG	Final report

Distribution

Version	Date	Recipient(s)	Notes
01	13/06/2019	IRORG	Draft for comment
02	14/06/2019	MDBA assessment panel	Final draft sent to MDBA for comment
03	21/06/2019	IRORG	Updated draft including NSW review outcomes for comment
04	21/06/2019	MDBA assessment panel	Final report sent to MDBA
4.1	24/06/019	MDBA assessment panel	Final report with minor corrections sent to MDBA

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1. Introduction

The members of the Independent River Operations Review Group (IRORG) were engaged to review the Murray Darling Basin Authority's (MDBA's) assessment of whether Prerequisite Policy Measures (PPMs) were in effect in NSW, Victoria, South Australia and the River Murray System by 30 June 2019, in accordance with section 7.15 of the Basin Plan, and against the PPM Assessment Guidelines (April 2015). This was not a review of the state PPM Implementation overview reports themselves.

IRORG is an advisory committee established under the provisions of Section 203 of the Commonwealth Water Act 2007 (the Act). IRORG was originally established with the primary purpose of reviewing the MDBA's performance in river operations and water sharing activities, however over time this role has expanded to include reviewing the outcomes of the MDBA's environmental water delivery actions. IRORG also reviews the operation of River Murray Improved Flows (Schedule F of the Agreement); the operation of the SA storage right (Schedule G of the Agreement); and the MDBA's compliance with its obligations under the Basin Plan in relation to managing river operations.

The IRORG members who participated in this review were Peter Hoey (Chair), Terry Hillman, Brett Tucker and Garry Smith¹.

IRORG's review has been undertaken in two stages:

1. Stage 1 (the subject of this report) addresses three criteria and related objectives which the MDBA has used to establish whether the PPMs are in effect by 30 June 2019.
2. Stage 2 addressed other principles within the Guidelines which are relevant to, but not essential for, the implementation of the PPMs by 30 June 2019.

2. Background

In developing the Basin Plan, modelling of the expected benefits associated with increased environmental water availability was based on a range of assumptions. A key assumption was that rivers will be managed to maximise environmental outcomes without impacting on the reliability of other water users. From 2010 onwards, this approach was being explored and tested by the MDBA in collaboration with NSW, Victoria and South Australia through the multi-site environmental watering trials (EWTs) in the River Murray system.

As a result, the Sustainable Diversion Limits (SDLs) determined in the Basin Plan were developed on the basis that two key policy measures to enable the improved use of environmental water would be implemented by the Basin states. These unimplemented policy measures, now referred to as Prerequisite Policy Measures (PPMs), were identified in Section 7.15 of the Basin Plan as follows:

- (i) credit environmental return flows for downstream environmental use (PPM 1); and

¹ IRORG members have wide ranging expertise in water management issues. As part of their consulting roles or past involvements in state water resource management agencies, IRORG members may have knowledge of or prior exposure to some water management processes that may now form part of PPM implementation. No members of IRORG have had direct involvement in or responsibility for the development or implementation of PPM measures in any jurisdiction.

- (ii) allow the call of held environmental water from storage during unregulated flow events (PPM 2);

All jurisdictions² have committed to implementing the PPMs through the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin 2013. The requirements of Chapter 8 of the Basin Plan also oblige the states to maximise the benefits from environmental water by managing deliveries in ways that are consistent with the PPMs.

The River Murray PPM implementation was coordinated by the MDBA on behalf of the jurisdictions. Since the MDBA is also required to assess the RM Plan, there was potential for a conflict of interest to arise with respect to the MDBA's involvement in the River Murray plan.

Conflict of interest management

IRORG was advised that to manage any such conflicts of interest a "Chinese wall" arrangement was adopted to ensure those staff involved in coordinating the development and implementation of River Murray PPMs on behalf of relevant states, and those with operational roles in relation to the use of environmental water entitlements, were not directly involved in PPM assessment. This was to ensure the integrity of the MDBA's assessment was maintained.

A number of protocols were implemented to establish this arrangement, including:

- Probity advice was sought in relation to members of the assessment panel with previous roles in River Murray operations.
- The assessment panel's feedback on River Murray documentation was recorded and provided to the MDBA PPM developers through an assessment coordination team. The same structure was also used to facilitate feedback to relevant state PPM developers to ensure a consistent approach.
- Question logs were maintained by the assessment coordination team to document specific requests for further information from MDBA and state PPM developers. The responses that were received provided additional documentation to support the assessment.
- Access to assessment documentation was restricted to the assessment panel and coordination team.

These mechanisms recorded information flow between the assessment panel and the MDBA PPM developers, to ensure:

- the evidence of River Murray PPMs that the MDBA assessment panel used as a basis for their assessment was clearly documented,
- the MDBA PPM developers did not have inappropriate access to information or inequitable input into the assessment compared to state PPM developers, and
- engagement with MDBA PPM developers was consistent with state PPM developers.

IRORG was also appointed to review the MDBA's assessments to ensure the assessment process was consistently applied, the potential conflicts of interest were appropriately managed, and the assessment conclusions were robust, and evidence based.

² For the purposes of this report the term jurisdiction includes the River Murray

3. IRORG review methodology

IRORG was engaged to peer review the MDBA assessment methodology and conclusions.

For Stage 1 of the PPM assessment, the MDBA assessment panel developed three criteria and several related assessment questions based on the principles set out in the PPM Assessment Guidelines, to test whether PPMs are in effect by 30 June 2019.

Table 1: PPM Assessment criteria

Criteria	Assessment questions
1. Are PPMs enabled in a secure and enduring arrangement?	<p><i>How are PPMs enabled through legislative/statutory instruments? What other mechanisms are used to implement PPMs?</i></p> <p><i>What is required to change mechanisms that enable or implement PPMs?</i></p> <p><i>Given the above assessment findings, will the proposed arrangements enable PPMs in a way that ensure they will remain in effect from 30 June 2019?</i></p>
2. Can PPMs be fully operated from 1 July 2019?	<p><i>Are there sufficient obligations to implement PPMs?</i></p> <p><i>How is environmental water called from storage during unregulated flow events?</i></p> <p><i>How is environmental water accounted for?</i></p> <p><i>Given the above, are PPMs given effect through appropriate mechanism(s) within the relevant water management framework?</i></p>
3. Are operational arrangements sufficiently detailed and transparent ?	<p><i>Do operational arrangements include:</i></p> <ol style="list-style-type: none"> 1. <i>A process for ordering and delivering environmental releases that:</i> <ul style="list-style-type: none"> – <i>Enables all environmental water holders to target the use of their entitlements, within operational requirements</i> – <i>Includes processes for advising environmental managers of the estimated environmental releases and providing other information needed for event planning</i> – <i>Requires proposed flow descriptions (rates, volumes, timing, locations, intended targets etc.)</i> – <i>Describes accounting arrangements, including inter-valley accounting, where applicable</i> – <i>Requires disclosure of explanations for refusing or altering orders</i> – <i>Includes a process for resolving disputes</i> 2. <i>A process for accounting environmental water that:</i> <ul style="list-style-type: none"> – <i>Clarifies roles and responsibilities for estimating releases, losses and credits</i> – <i>Requires disclosure of the assumptions/information used in the estimations</i> – <i>Includes processes for adjusting the estimation during and post-event, where applicable</i> – <i>Applies the principle of incremental losses</i> – <i>Improves estimates as knowledge improves</i> – <i>Considers detrimental and beneficial impacts of environmental releases when considering potential third party risks</i> <p><i>Given the above, do the operational arrangements provide for a process enabling PPM operation?</i></p>

Based on consideration of the requirements for the review process the following key questions guided IRORG's review of the MDBA's PPM Implementation assessments.

3.1. Review questions relevant to individual PPM assessments:

1. Were the MDBA assessment conclusions reasonable, based on the information provided in the implementation documentation and any other evidence available to the MDBA?
2. Have the MDBA's assessments overlooked any issues relevant to the assessment criteria?
3. Were there any issues identified not relevant to the assessment criteria, but nevertheless significant (e.g. addressing risks, monitoring and review processes) – if so, was the MDBA's treatment of these issues reasonable and consistent with the general policy directions set out in the PPM Guidelines?
4. Were there any actions identified by jurisdictions in implementation documentation that will refine PPM implementation beyond 30 June 2019 – if so, was the MDBA's assessment approach to these arrangements reasonable and consistent with the general policy directions set out in the PPM Guidelines?

Note: questions 3 and 4 above are relevant to Stage 2 of IRORG's review, and therefore will not be addressed in this report.

3.2. Review questions relevant to overall assessment processes:

5. Was the MDBA's assessment of PPM implementation applied consistently across all jurisdictions against the PPM assessment criteria?
6. Have the MDBA assessments identified general issues affecting more than one jurisdiction – if so, was the MDBA's assessment approach to these issues reasonable and consistent with the general policy directions set out in the PPM Guidelines?
7. Are there any issues the MDBA's assessments of the PPM implementation documents did not identify?
8. Did the MDBA effectively manage potential conflicts of interest with respect to MDBA's involvement in the River Murray PPM implementation?

IRORG's review of the MDBA PPM assessments and its subsequent recommendations were based on consideration of these questions.

3.3. Review process

The key steps in IRORG's review of the MDBA's assessment of the States' and River Murray PPM Implementation Plans were as follows:

- 1) IRORG members and the MDBA assessment panel held a project inception teleconference on 17 April 2019 to confirm the project scope, review questions, key timelines and contractual arrangements. At this teleconference IRORG was also briefed on the MDBA's assessment criteria and process, and on other relevant matters for conduct of the review.
- 2) On 10 May, the MDBA advised that its assessments would be undertaken in a two stage process.

Stage 1 will address three criteria:

- i. secure and enduring arrangements,
- ii. fully operable PPMs from 1/7/19, and
- iii. transparency;

Stage 2 will address how states will protect environmental water, how risks to the implementation of PPMs will be mitigated, and how PPM implementation will be monitored. Accordingly, IRORG has prepared this Stage 1 report. A Stage 2 review report will be prepared once the MDBA has completed its Stage 2 assessment process.

- 3) During May, the MDBA provided IRORG with its assessment reports for the River Murray, Victoria and South Australia, together with a range of supporting documents, the most important of which were the overview documents for each jurisdiction:
 - a) *Overview of proposed amendments to the Objectives and outcomes document to implement Pre-requisite Policy Measures* [for the River Murray]
 - b) *Addressing the criteria to assess the Pre-requisite policy measures* [for the River Murray]
 - c) *Overview of pre-requisite policy measures in Victoria*
 - d) *Prerequisite Policy Measures Implementation in South Australia*
- 4) On 11 June IRORG delivered via teleconference a verbal briefing on its interim findings in the review of Stage 1 MDBA assessments of the implementation of the PPMs for the River Murray, Victoria and South Australia. Draft documents were provided by IRORG to assist the discussion. The MDBA provided responses to all matters raised, and in some cases modified its assessment reports.
- 5) On 14 June IRORG provided the MDBA with its draft stage 1 report for the River Murray, Victoria and South Australia, and sought comment on errors of fact.
- 6) In mid-June the MDBA provided IRORG with its assessment report for NSW, together with supporting documents, the most important being:
 - a) *Addressing MDBA PPM Guidelines criteria – NSW Report*
 - b) *Letter to MDBA (13 June 2019): Demonstration that Pre-Requisite Policy Measures will be implemented in NSW by 30 June 2019*
 - c) *Draft amendments to both the Murrumbidgee and the Murray Lower Darling Water Sharing Plans*
 - d) *Draft amendments to the WaterNSW water supply work approvals for both the Murrumbidgee and the Murray Lower Darling*
 - e) *Draft PPM Procedures Manuals for both the Murrumbidgee and the Murray Lower Darling*
- 7) On 20 June IRORG delivered via teleconference a verbal briefing on its interim findings in the review of Stage 1 MDBA assessments of the implementation of the PPMs for NSW.
- 8) On 24 June IRORG provided the MDBA with its final stage 1 report for the River Murray, NSW, Victoria and South Australia.

As IRORG developed its report and findings for Stage 1, the MDBA was also requested to provide additional information as necessary to clarify various matters. IRORG was satisfied with the level of transparency and diligence in relation to additional information requests, albeit available timeframes were a constraint.

3.4. Limitations on our review scope and assumptions

An important consideration in IRORG's overall approach to the review was that the overriding objective was a review of the MDBA's assessment process and conclusions against the requirements of Section 7.15 of the Basin Plan and against the PPM Assessment Guidelines of April 2015, not a review of the PPM implementation overview reports themselves.

In undertaking this review, IRORG relied on the information contained in the PPM Implementation reports, and in the MDBA assessment reports, together with the supporting information provided by the MDBA. IRORG has not undertaken any further enquiries or engaged directly with the states to seek information, as this was outside the scope of the review assignment. In undertaking these reviews, IRORG is focused on the MDBA's assessment processes. We accepted the advice of parties that measures in place or under development are legal and feasible, unless this is clearly not the case, based on our experience.

IRORG's review was significantly assisted by the verbal and written contributions provided by MDBA assessment staff. IRORG has used the information provided to it by the MDBA in helping it to formulate its observations, conclusions and recommendations; however, the conclusions and recommendations included in this report are entirely those of IRORG.

4. IRORG findings

4.1. Addressing review questions relevant to individual PPM plan assessments

Were the MDBA assessment conclusions reasonable, based on the information provided in the implementation documentation and any other evidence available to the MDBA?

For each of the jurisdictions' PPM implementation arrangements the MDBA concluded that PPMs are in effect in the River Murray, New South Wales, Victoria and South Australia.

IRORG has reviewed the process taken by the MDBA assessment panel to reach this same conclusion on each of the four reports, with some caveats. We were impressed by the volume of documented information put forward by the four jurisdictions, and the thorough manner by which this information was assessed. This professional approach was evidenced, for example, by the well-structured assessment approach documented prior to commencement of the assessments, the development of protocols to manage potential conflict of interests, tracking communications with jurisdictions through question logs, the provision of a considerable number of supporting documents in an orderly manner, and the promptness and responsiveness to questions raised by IRORG.

During the course of our review, IRORG raised a number of issues which received further discussion and clarification; key amongst these issues being:

1. We noted that BOC 65 (28/2/19) agreed to amend the O&O, effective 1 June 2019, on the understanding that full implementation of PPMs for the River Murray will be supported by States' policies. We understand that the policies were those contained in the information put forward by the States.
2. Compliance with Basin Plan trade rules for environmental transfers – see section 4.2 below.
3. The River Murray Environmental Watering Manual appears well progressed but is yet to be completed. This will be an important guide to the implementation of PPMs on the

River Murray, although the MDBA advises that there is sufficient operational detail to deliver the PPMs in the absence of the manual.

4. The MDBA's conclusion that the NSW PPM will be in effect on 30 June 2019 is based upon a letter dated 13 June 2019 and signed by Senior Officials from the key agencies responsible for water planning, policy, operations and environmental water planning and management in NSW. The letter confirms that, as of 30 June 2019 and until such time as the Water Sharing Plans and the provisions and conditions on WaterNSW Works Approvals are amended, PPMs can be implemented in NSW via the processes described in the Procedures Manuals. Given the importance of this letter in establishing the interim PPM arrangements, IRORG is of the view that the MDBA needs to be satisfied that these officials have the delegated authority to commit their agencies to implementation of PPMs from 1/7/19 via the processes described in draft Procedures Manuals.
5. Using Victorian return flows in NSW is covered to some extent in the Victorian PPM Overview documentation, and by further information provided in the Victorian question log. BOC has endorsed trials to test and further develop processes for delivery and accounting of Victorian return flows at NSW sites (and vice-versa), as noted in the MDBA's Victorian Assessment report.
6. IRORG notes that the SA Department of Environment and Water (DEW) has developed a number of policies and associated procedures which set out the internal DEW processes to implement PPMs. These documents are to be approved by the Chief Executive Officer and sub-delegates who have delegated authority for aspects of water resource management relevant to PPMs under the *Murray-Darling Basin Act 2008* (South Australia). In terms of the PPM Assessment Guidelines (2015), the 'secure and enduring' assessment criteria can be met by "approved policy documents". IRORG notes that the documents have now been provided for Chief Executive approval and will be provided to the MDBA as final as soon as practical, and they will be in effect by 30 June.
7. The PPM Manual for the NSW Murray and Lower Darling Regulated Rivers states that it is unlikely that PPMs would be utilised in the Lower Darling when Menindee Lakes is under NSW control. Whilst IRORG agrees PPMs are unlikely to be applicable in these circumstances, we would not like to see use of PPMs absolutely prohibited. IRORG notes that the NSW submission seem to contemplate allowing this and addressing issues as they arise on their merits.
8. IRORG also notes that all jurisdictions have further work required to finalise elements of the PPM implementation, including finalising draft policies and procedures, or putting in place monitoring, reporting and review processes etc. This is an area that will need to be monitored by the MDBA to ensure timely compliance with the implementation commitments given by the jurisdictions. This issue will be further considered and discussed in the Stage 2 review process.

None of the issues raised by IRORG arising from the four assessment reports negated our view that the MDBA assessment conclusions are reasonable and are soundly based on the information provided in the implementation documentation.

Have the MDBA's assessments overlooked any issues relevant to the assessment criteria?

Again, IRORG relies on the MDBA's conclusion that the letter from NSW to the MDBA committing all relevant state agencies to implement Procedures manuals obligates New South Wales to implement PPMs from 1 July 2019.

4.2. Addressing review questions relevant to overall assessment processes

Was the MDBA's assessment of PPM implementation applied consistently across all jurisdictions against the PPM assessment criteria?

IRORG is satisfied that the MDBA assessment panel has addressed the implementation of PPMs against the assessment criteria consistently across the River Murray, New South Wales, Victoria and South Australia. Due to quite different approaches to implementation in each of the jurisdictions, the MDBA necessarily adapted its assessments, but consistently followed the PPM Guidelines of 2015 and the assessment criteria and related questions contained in Table 1 above.

Have the MDBA assessments identified general issues affecting more than one jurisdiction – if so, was the MDBA's assessment approach to these issues reasonable and consistent with the general policy directions set out in the PPM Guidelines?

With the exceptions of matters already raised in sections 4.1 and 4.2 of this report (e.g. the use of Victorian return flows in NSW; compliance with trade rules; transparency), IRORG is of the view that the MDBA assessment panel has addressed general issues affecting more than one jurisdiction in a reasonable manner, consistent with the PPM Guidelines of 2015 and with the assessment criteria and related questions contained in Table 1 above.

Are there any issues the MDBA's assessments of the PPM implementation documents did not identify?

Two matters raised in our 2016 interim review were not mentioned in the 2019 MDBA assessments; however, both are being addressed:

1. IRORG understands that compliance with trade rules for environmental transfers in the River Murray will be addressed in the Environmental Watering Manual, and a BOC endorsed Trade Adjustment Project. The MDBA also advised that the approaches ultimately adopted by the jurisdictions have not given rise to any specific concerns around trade rule compliance.
2. One of the assessment criteria for the MDBA's assessments is transparency. Transparency is an important component of accountability and can help ensure that the arrangements put in place to deliver the PPMs are performing as intended and delivering the expected outcomes. IRORG recognises the need for transparency to support repeatable, accountable implementation of PPMs. Whilst the PPM implementations across the River Murray, New South Wales, Victoria and South Australia are considered to provide sufficient transparency, there will be opportunities to further improve transparency of PPM implementation in the Stage 2 assessment process.

Did the MDBA effectively manage potential conflicts of interest with respect to MDBA's involvement in the River Murray PPM implementation?

IRORG has considered the protocols, described in section 2 of this report which, we understand, were followed by the MDBA to manage potential conflicts of interest. IROrg was provided with a copy of the probity advice regarding members of the assessment panel, for information. The measures were comprehensive and robust and IROrg believes that this risk was effectively managed.

5. Summary and conclusions

The MDBA has undertaken Stage 1 assessments of the River Murray, New South Wales, Victorian and South Australian PPM implementation. Overall, IROrg concludes that the MDBA has adopted a professional process, and the conclusions reached in these assessments are comprehensive, reasonable and effective. IROrg is of the view that PPMs are operable in the River Murray, New South Wales, Victoria and South Australia.