



SERIES/PROGRAM NAME (INSERT SPACE IF NOT NEEDED)

Detailed paper F – Murray-Darling Basin Authority and Dumaresq-Barwon Border Rivers Commission

Submission to IPART for prices from 1 July 2021 for water management services provided by the Department of Planning, Industry and Environment-Water and Natural Resources Access Regulator on behalf of the Water Administration Ministerial Corporation

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Contents

Murray-Darling Basin Authority	2
The MDBA Joint Programs	3
Efficient expenditures and transparency	3
Budgeting process and funding agreement	4
MDBA cost share principles	5
Proposed expenditures	6
Dumaresq-Barwon Border Rivers Commission Program	8
BRC cost share principles	10
Prudence of MDBA and BRC Contributions	12
MDBA and BRC cost allocation approach	12
MDBA Joint Programs deliverables, BRC functions and contribution amounts	13

The NSW Government contributes to the costs of two inter-jurisdictional water management organisations, the Murray Darling Basin Authority (MDBA) and the Borders Rivers Commission (BRC).

A portion of the NSW Government contributions to the MDBA and BRC are included in our proposed water management charges. The inclusion of \$6.47 million¹ each year in jurisdictional contributions is consistent with the ‘impactor pays principle’ and the user share of \$4.75 million each year has been determined by applying IPART determined user shares as with previous determinations.

Murray-Darling Basin Authority

The Murray Darling Basin Authority (MDBA) was established under the *Water Act 2007 (Commonwealth)* as an independent, expertise-based statutory agency. It undertakes activities that support the sustainable and integrated management of the water resources of the Basin.

The *Water Act 2007 (Commonwealth)* requires the MDBA to:

- implement the Basin Plan,
- construct and operate River Murray assets such as dams and weirs,
- advise the Commonwealth Minister for water on the accreditation of state water resource plans,
- develop a water rights information service to facilitate water trading across the Basin,
- manage water sharing between the states,
- manage all aspects of Basin water resources, including water, organisms and other components and ecosystems that contribute to the physical state and environmental value of the Basin's water resources,
- measure and monitor water resources in the Basin,
- gather information and undertake research and
- engage and educate the community in the management of the Basin's resources.

The MDBA carries out these functions directly and through the Basin states’ government agencies in partnership with the Commonwealth Government.

While implementation of the Basin Plan is fully funded by the Commonwealth Government, other activities the MDBA undertakes are cost shared with partner jurisdictions.

Basin ministers, through the Murray-Darling Basin Ministerial Council, agree the amounts to be contributed to the MDBA by each partner government and authorise this funding and the activities to be undertaken by the MDBA.

The water management services that are funded services include NSW commitments to non-Basin Plan activities of the MDBA through the Murray- Darling Basin Joint Venture, which is an interjurisdictional unincorporated body with a work program (the Joint Programs) under the control and direction of the Murray-Darling Basin Ministerial Council. The NSW Minister for Water, Property and Housing, who is also the Minister responsible for WAMC, represents NSW on that council and enters into commitments on behalf of NSW.

¹ All expenditures are expressed in \$2020-21, as required by IPART and described in the Administrative Information paper accompanying this paper.

The MDBA Joint Programs

The Joint Programs are separate to the Basin Plan, which outlines the rules that apply across the Basin, including extraction limits, risk management strategies, water trading rules, management plans, and requirements for water resource plans. Each state is responsible for implementing and operationalising these rules in their water resource plans, which are a key driver in implementing the Basin Plan at local and basin levels. Details of the work on water resource plans we have undertaken in the current regulatory period and plan to do from 2021 is set out under activities W06-01 and W06-02 in Detailed Paper E that is part of this submission.

Activities in the MDBA Joint Programs are undertaken by state constructing authorities and state agencies and are funded through a Joint Programs budget. The NSW contribution to the MDBA Joint Programs is separated into bulk water storage and supply operations (funded through WaterNSW²) and water resource management.

We recover part of NSW's contribution to the water resource management component of the Joint Programs from water users through prices determined by IPART. The amount we recover relates to protection of NSW interests - economically and environmentally - and the integration of Joint Programs with the NSW policy and legislative framework.

Efficient expenditures and transparency

In its 2016 final report when it last determined our prices, IPART noted that the NSW Government (through the Murray-Darling Basin Ministerial Council, advised by the Basin Officials Committee) has direct oversight over approval of funding of the MDBA through the annual corporate planning process, but expressed concern that MDBA activities may not be subject to a sufficient level of independent review to ensure that the proposed operating expenditure is efficient.

We note that over the 2016 determination period, the MDBA and jurisdictions has implemented independent review and transparency measures to enhance transparency and efficiency.

Governance arrangements in place to ensure efficiency of Joint Programs expenditure include that:

- major components of the Joint Programs focus largely on the continued delivery of longstanding, well-defined and accepted resource management targets, including sharing and delivering water in the River Murray system, an agreed maximum level of salinity in the River Murray, and restoration of iconic riparian environmental assets,
- all new projects are subject to cost-benefit analysis, and jurisdictions can step outside the cost sharing arrangements if they believe particular projects are not cost efficient,
- the Joint Programs Budget and Performance Committee reviews expenditures and provides advice to the Basin Officials Committee, including assessment of business cases for capital items in the Joint Programs and on the draft annual work plans and budgets for the Joint Programs, and also works with the MDBA and the River Murray Operations Committee to prepare each year's Joint Programs budget and
- programs endorsed by the Joint Programs Budget and Performance Committee, River Murray Operations Committee and Southern Connected Basin Environment Committee are subject to further review by the Basin Officials Committee, prior to final consideration and approval by the Murray-Darling Basin Ministerial Council.

² This is not a WAMC activity so does not form a part of WaterNSW's separate submission for to IPART for WAMC prices

Further, the Commonwealth Government has committed to undertake triennial independent reviews of River Murray Operations costs to provide greater transparency and assurance to the Joint Venture governments and water users that the River Murray Operations Joint Programs expenditure is reasonable. This was decided by the Murray-Darling Basin Ministerial Council in August 2019.

The December 2019 report by an independent consultant, Cardno, engaged by the MDBA to undertake this review concluded that the costs are overall reasonable.³ The MDBA has made this report public. The report's recommendations are at the time of writing being considered by the Basin Officials Committee. When finalised, these will be collated into an implementation plan that will be delivered by the relevant stakeholders.

While the focus of the review was River Murray costs only (which are largely funded by WaterNSW bulk water prices, not WAMC, as described later in this Detailed Paper), the review is representative of a broader move by the MDBA to improve transparency in its processes and reporting.

In relation to Non-River Murray programs, which we do fund, the MDBA began publishing annual report cards on its website in December 2018, including on Living Murray Program icon sites. This program comprises around 75% of annual NSW Non-River Murray Joint Programs contributions that we propose to include in the water management charges from 2021. The report cards contain links to environmental monitoring reports, site condition reports and annual program reports.

IPART also said in its 2016 Final Report:

"We remain concerned about the lack of information on MDBA expenditure and note stakeholder concerns on the transparency and efficiency of these contributions. Any expectation that users should contribute to these costs through water management prices should be matched by an appropriate level of transparency and scrutiny."⁴

In its February 2020 letter to us identifying areas of focus for the 2020 WAMC pricing review, IPART requested that our submission provide detailed information on proposed contributions to the MDBA and explain why these expenditure levels are prudent and efficient. In the accompanying Submission Information Package - further details of which are provided in the Administrative Information document that is part of this submission - IPART requested that we provide in this submission information on transparency of Murray Darling Basin (MDB) costs.

In addition to the scrutiny and transparency measures undertaken by the MDBA over the period, the MDBA has provided information to us about its costs and we will make this detailed information available to IPART as it conducts its review so IPART is able to assess the prudence and efficiency of our proposed expenditures. Transparency of MDBA costs is a matter for decision by the MDBA and we as one of the member jurisdictions do not intend to make public any information on costs other than that made available by the MDBA.

Budgeting process and funding agreement

The Murray-Darling Basin Ministerial Council, of which the NSW Minister for Water is a member, is the ultimate decision-maker regarding Joint Programs expenditures and activities.

³ Cardno, Review report 2B3BRiver Murray Operations Cost Review, December 2019, available at <https://www.mdba.gov.au/publications/independent-reports/review-mdba-river-murray-operations-costs>

⁴ IPART, Review of prices for the Water Administration Ministerial Corporation - Final report, 2016, page 4

The Basin Officials Committee advises the Ministerial Council and can exercise responsibility for high level decision making regarding river operations, including setting objectives and outcomes to be achieved by the authority in River Murray operations. NSW's representative on the Basin Official's Committee is the Chief Executive Officer, Water (Deputy Secretary).

While there are a number of committees that report in to and advise the Basin Officials Committee, the three most important committees with regard to Joint Programs expenditures and activities are the Joint Programs Budget and Performance Committee, the River Murray Operations Committee and the Southern Connected Basin Environment Committee (which has specific oversight of natural resource management programs.) NSW has representatives on each of these committees. The Joint Programs Budget and Performance Committee is specifically tasked with oversight of budgets and forecasts for the Joint Programs.

An annual workplan and associated three-year budget for the Joint Venture is developed by the Basin States, Commonwealth and the MDBA. This is reviewed and endorsed first by the three committees listed above, then reviewed and endorsed by the Basin Officials Committee, then reviewed and approved by the Ministerial Council.

The NSW contributions to the Joint Programs are also reviewed periodically by the NSW Cabinet Expenditure Review Committee.

Proposed MDBA Joint Programs expenditure is scheduled by the Murray-Darling Basin Ministerial Council through a 4-year rolling corporate plan process. NSW agrees funding on a year-to-year basis, and in-principle agreement is given for out-year budget forecasts, allowing us to undertake independent annual review of the project portfolio before further funds are committed.

Although funding is officially agreed annually, we are committed under the Murray Darling Basin Agreement⁵ to pay for Joint Venture expenditures according to cost sharing arrangements.

MDBA cost share principles

Funding for the MDBA Joint Programs depends on contributions from the Commonwealth and each of the Basin states, with contributions divided amongst the states according to agreed cost shares decided by the Murray-Darling Basin Ministerial Council in 2006.

Cost sharing of the annual Joint Programs budget is based on the consumption and benefit received by each of the constructing States (NSW, Victoria and South Australia.) The Australian Capital Territory and Queensland Governments pay a fixed contribution. The objective of the cost shares is to ensure that contributions by each of the Basin States contribute to the benefit of the basin as a whole rather than a particular state.

MDBA Joint Programs expenditures are categorised as being River Management (RM) or Non-River Management (Non-RM) programs.

The RM program focuses on running the River Murray, with the primary directive of delivering and accounting for water shares to each Basin Government. River management is broken down by the MDBA into functions of:

- river operations - asset management,
- salt interception schemes, and
- environmental works and measures – operation and maintenance.

⁵ The MDBA Agreement is Schedule 1 to the Water Act 2007 (Commonwealth), which is available at <https://www.legislation.gov.au/details/c2007a00137>

Non-River Management programs encompass several natural resource management programs with a focus on improving environmental outcomes through monitoring, analysis, and reporting. This is broken down into functions of:

- the Living Murray Program – restoring health of the River Murray system,
- environmental monitoring and evaluation,
- basin salinity management,
- water resource modelling,
- metrological assessment,
- water markets and inter-state trades and
- Indigenous engagement in the Basin.

For the Non-RM contributions, the Commonwealth and constructing States each pay an equal 25% share, after removing the fixed contributions of the ACT and Qld Governments.

RM cost shares are based on several technical factors including asset, cost type, and state capped entitlements. RM contributions are outside the scope of this review and are not described in detail here.

MDBA cost share principles were last reviewed in 2014 when an independent expert determined that the principles were an appropriate method of working out the Basin States' contribution shares from the overall Joint Programs budget.⁶

WAMC pricing submissions have historically sought recovery of the user share of the State's MDBA Non-RM programs. Currently around \$6 million⁷ a year is recovered from water users via WAMC charges. RM contributions are passed on to water users via WaterNSW's rural bulk water pricing determination.

Assigning the contributions in this way reflects that the MDBA RM functions most closely align with the bulk water storage and supply activities of the WaterNSW rural bulk water pricing determination. The Non-RM natural resource management functions of the MDBA align with the bulk water management activities of the WAMC pricing determination. In doing this, the proposal applies the MDBA's categorisation of RM and Non RM activities, described above, to allocate costs between the WAMC and Bulk Water regulated prices.

Assigning the contributions to the respective IPART price determinations - ours and WaterNSW's - enables transparency in the calculation of user shares and the distribution of costs across the relevant valleys, in line with IPART endorsed cost-drivers and user shares. We propose to maintain this approach for the 2021 WAMC Determination by IPART.

Proposed expenditures

In its 2016 final report, IPART accepted that the MDBA Joint Programs activities were water management services that were government monopoly services as defined in the IPART (Water Services) Order 2004 and therefore allowed DPI Water to recover a share of the costs of the water management activities funded through the MDBA Joint Programs from water users. IPART decided that the efficient annual average costs of DPI Water's MDBA contributions during the 2016 regulatory period were \$8.8 million in \$2015-16 (equivalent to \$9.7 million in \$2020-21) and that the user share of that was \$4.9 million in \$2015-16 (or \$5.4 million in \$2020-21.) IPART stated this was "after taking into account stakeholder

⁶ Buckley M, 2014, Final Report – Review of Cost Shares for Joint Activities, page 4

⁷ All expenditures are expressed in \$2020-21, as required by IPART and described in the Administrative Information document accompanying this Detailed Paper.

concerns with the efficiency of MDBA contributions”⁸ and after scrutinising the expenditures and applying an efficiency dividend.

We propose expenditures of \$5.7 million per annum during the 2021 regulatory period, a reduction from the average annual actual costs during the 2016 regulatory period of \$10.9 million and the \$9.7 million annually that IPART had decided was efficient for that period.

This reduction is not due to a reduction in the total MDBA expense. Rather it reflects the outcomes of applying the MDBA’s categorisation of RM and Non-RM activities between the WAMC and Bulk Water (WaterNSW) regulated prices. We have assigned MDBA’s river management activity costs to WAMC prices and non-river management costs to Bulk Water (WaterNSW) regulated prices. This results in a reduction in the WAMC proportion as the MDBA characterise the salt interception scheme (SIS), which are included in WAMC prices in the 2016 regulatory period, as RM costs. As such we propose that SIS costs be recovered in the bulk water submission.

If this principle is not supported by stakeholders and IPART, the allocation of costs can be rebalanced as the two price reviews are being undertaken in parallel.

The following table shows MDBA costs and our proposed expenditures.

Table 1. NSW Contributions to the MDBA Joint Programs included in the WAMC Revenue Requirement (\$2020-21 ‘000)

	2016-17 to 2019-20	2021-22	2022-23	2023-24	2024-25	2021-22 to 2024-25*	Change
	Average Actual	Proposed	Proposed	Proposed	Proposed	Average Annual	Average Annual
Total NSW MDBA contribution	31,265	30,954	33,126	33,126	33,126	32,583	+4%
WAMC contribution	10,887	5,668	5,727	5,727	5,727	5,712	-48%
User share of WAMC	6,042	4,005	4,047	4,047	4,047	4,036	-33%

*No budget available after 2023-24, final year of work plan budget rolled forward

We recover our contributions to the MDBA Joint Programs (and BRC) through WAMC prices. To establish the impactor pays user share and the amount to be recovered through user charges, we allocate our contributions to the WAMC activities that most closely align with the MDBA and BRC programs, and this means we assign some costs to WAMC activity codes that since 2016 have been delivered by WaterNSW, namely WAMC activities W01-01, W01-03 and W02-01. To be clear, we use these WAMC activity codes only as a mechanism for assigning the user share. Their use does not mean these are WaterNSW costs and does

⁸ IPART, Final Report, Review of Prices for the Water Administration Ministerial Corporation from 1 July 2016, page 90. Available at <https://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Rural-Water/Prices-for-WAMCs-water-management-services?qDh=2>

not mean we are delivering water management activities that WaterNSW should be delivering.

The WAMC contribution relating to MDBC Joint Programs expenditures is shown by activity code in the following table.

Table 2. Total MDBA Joint Programs expenditures set out in WAMC activities (\$2020-21)

	2016-17 to 2019-20	2021-22	2022-23	2023-24	2024-25	2021-22 to 2024-25	Change
	Average annual actual	Proposed	Proposed	Proposed	Proposed	Average annual proposed	Average annual
W01-03	616	251	253	253	253	253	-59%
W01-05	1,780	1,370	1,384	1,384	1,384	1,380	-22%
W04-01	277	470	475	475	475	474	71%
W05-01	82						-100%
W05-03*		2,898	2,928	2,928	2,928	2,921	+100%
W06-02	2,790						-100%
W06-07*		228	231	231	231	230	+100%
W07-01	5,342	451	455	455	455	454	-91%
Total	10,887	5,668	5,727	5,727	5,727	5,712	-48%

*MDBA contributions were not assigned to activities W05-03 and W06-07 for the 2016 regulatory period. The addition of these activities reflects the environmental water focus of the The Living Murray Non-RM Program during the 2021 regulatory period.

Dumaresq-Barwon Border Rivers Commission Program

The Dumaresq-Barwon Border Rivers Commission (BRC) was constituted under the New South Wales-Queensland Border Rivers Agreement made between the NSW and Qld Governments on 27 August 1946. This agreement was ratified by NSW by the New South Wales-Queensland Border Rivers Act 1947 and is a schedule to that Act.⁹

The purpose of the BRC is to implement the agreement in relation to:

- sharing the waters of the rivers and streams which either form or intersect the boundary between the two states and the associated groundwater resources and

⁹ Available at <https://legislation.nsw.gov.au/#/view/act/1947/10>

- investigating, constructing and operating works to conserve and regulate those waters where considered desirable.

Its operational area of responsibility includes:

- Glenlyon Dam on Pike Creek in Queensland,
- the border rivers, which include the parts of the Dumaresq, Macintyre and Barwon Rivers that constitute the boundary between New South Wales and Queensland from Mingoola to Mungindi, and
- the intersecting streams, which include the Moonie, Bokhara, Narran, Culgoa, Ballandool, Warrego and Paroo Rivers and their effluents and tributaries, and any stream or watercourse which forms part of the Darling River drainage system and crosses the New South Wales-Queensland border west of the town of Mungindi.

The statutory functions and duties of the BRC are, in summary, to:

- determine the anticipated quantity of water available each year from the border rivers and from the dams and weirs controlled by the BRC and notify the states of the portion of that water they may divert and use,
- control the construction, operation and maintenance of works taken over or constructed by the BRC under the New South Wales-Queensland Border Rivers Agreement, i.e. Glenlyon Dam and Boggabilla Weir as well as other weirs and regulators on the border rivers and intersecting streams,
- undertake investigations considered necessary by the BRC to enable it to exercise the powers and discharge the duties conferred upon it by the New South Wales-Queensland Border Rivers Agreement,
- report and make recommendations from time to time to the governments of New South Wales and Queensland regarding the sharing of the waters of the intersecting streams, the sharing of groundwater and other matters set out in the New South Wales-Queensland Border Rivers Agreement,
- investigate the practicability of constructing, maintaining and operating additional storages,
- arrange for the construction, operation and maintenance of gauging stations to record the flow in the Dumaresq River at Mingoola and at such other places as deemed necessary by the BRC and
- arrange for the construction, maintenance, operation and control of an effective system of monitoring groundwater.

In addition to its statutory functions the BRC carries on a coordinated program to monitor water quality in the border rivers and the intersecting streams.

In our 2015 submission to IPART for WAMC prices, we flagged a review of the Border Rivers Intergovernmental Agreement and *New South Wales–Queensland Border Rivers Act 1947* during the current regulatory period, to streamline institutional arrangements. This has not occurred, however the BRC has in train a program of business improvement initiatives that it expects to result in operational efficiencies. These include:

- a cost price review for all service providers – these are specified businesses that undertake water management activities for the BRC, such as SunWater, which undertakes asset management and WaterNSW, which undertakes a range of river management tasks - that will be completed in 2021,
- securing more commercial agreements to be put in place leading to improvements in services and a possible reduction in costs,

- reviewing major service provider arrangements, including invoicing and the application of overheads to labour costs,
- reviewing all BRC obligations and responsibilities to determine if work is being undertaken that it is not required and to ascertain if the BRC is acting in a ‘bona fide’ manner,
- developing a long-term financial plan (10-year outlook) to provide more forward certainty in call-up amounts and
- working towards aligning better to NWI principles.

Equal contributions from the NSW and Queensland governments fund the BRC. Cost recovery for water delivery activities is the responsibility of WaterNSW, and cost recovery of water planning and management activities are the responsibility of DPIE Water.

BRC cost share principles

The BRC is funded by equal contributions from NSW and Queensland governments. This funding is received by an annual call-up from each state via the issue of an invoice by the BRC, in accordance with the *New South Wales-Queensland Border Rivers Act 1947*. The call-up for 2019-20 is \$1.8 million, up from \$1.3 million in 2018/19.¹⁰

Currently, in the 2016 regulatory period, the NSW Government recovers from users around 35% of the annual call-up via the WAMC price determination and 65% via the NSW Rural Bulk Water price determination (through WaterNSW.) The split is based on historical natural resource management and river operations costs.

For the 2021 regulatory period, we propose to revise the split to reflect the BRC’s current forward work-plan, resulting in an increasing percentage recovered from WAMC users. Adopting the BRC’s five-year forecasts would result in 42% of BRC costs being recovered via the WAMC pricing determination, with 58% being recovered via the NSW Rural Bulk Water pricing determination. If this principle is not supported by stakeholders and IPART, the allocation of costs can be rebalanced as the two price reviews are being undertaken in parallel.

The proposed revised split reflects that forward expenditure on river operations activities are forecast to decrease slightly, while natural resource management costs aligning with WAMC activities are forecast to increase in the 2021 regulatory period. In line with IPART’s impactor pays principle, we have allocated a higher proportion of costs to those activities that align with the natural resource management activities of the BRC.

The table below shows the proposed BRC contributions to be included in WAMC user charges for the 2021 regulatory period.

Table 3. NSW contributions to the BRC work program included in the WAMC Revenue Requirement (\$2020-21)

	2016-17 to 2019-20	2021-22	2022-23	2023-24	2024-25	2021-22 to 2024-25	Increase
	Average actual	Proposed	Proposed	Proposed	Proposed	Average annual	Average annual

¹⁰ Both amounts expressed in nominal dollars

	2016-17 to 2019-20	2021-22	2022-23	2023-24	2024-25	2021-22 to 2024-25	Increase
Total NSW BRC contribution	1,241	1,802	1,802	1,802	1,802	1,802	+45%
WAMC contribution	529	760	760	760	760	760	+44%
User share of WAMC	361	718	718	718	718	718	+99%

We recover our contributions to the BRC (and the MDBA Joint Programs) through WAMC prices. To establish the impactor pays user share and the amount to be recovered through user charges, we allocate our contributions to the WAMC activities that most closely align with the BRC (and MDBA) programs, and this means we assign some costs to WAMC activity codes that since 2016 have been delivered by WaterNSW, namely WAMC activities W01-01, W01-03 and W02-01. To be clear, we use these WAMC activity codes only as a mechanism for assigning the user share. Their use does not mean these are WaterNSW costs and does not mean we are delivering water management activities that WaterNSW should be delivering.

The WAMC contribution relating to BRC expenditures is shown by activity code in the following table.

Table 4. BRC total expenditures set out by WAMC activity (\$2020-21)

	2016-17 to 2019-20	2021-22	2022-23	2023-24	2024-25	2021-22 to 2024-25	Increase
	Average annual actual	Proposed	Proposed	Proposed	Proposed	Average annual proposed	Average annual
W01-01 Surface water quantity monitoring	455	649	649	649	649	649	+43%
W01-03 Surface water quality monitoring	63	104	104	104	104	104	+64%
W02-01 Groundwater quantity monitoring	11	6	6	6	6	6	-45%

	2016-17 to 2019-20	2021-22	2022-23	2023-24	2024-25	2021-22 to 2024-25	Increase
Total	529	760	760	760	760	760	+44%

Prudence of MDBA and BRC Contributions

Contributions to the MDBA and the BRC are NSW obligations under legislation. The Murray-Darling Basin Agreement appears at Schedule 1 of the *Water Act 2007 (Commonwealth)*. The legislated apportionment of costs is stated in clauses 72 and 73. The *NSW-Qld Border Rivers Act 1947* legislated cost shares arrangements appear in Section 28(3).

The programs of each of the agencies are either partly or wholly focused on correcting or managing the impactor driven impacts of bulk water extraction on the catchment river systems and aquifers. We therefore consider it prudent to recover the IPART recommended user share of a portion of the NSW contributions through water management charges, on behalf of the NSW Government.

The allocation of NSW contributions to WAMC charges are explained in the section below. The specific programs that WAMC users partially contribute to through water management charges are discussed further in tables 3 and 4 later in this section.

MDBA and BRC cost allocation approach

Our proposed contributions to the MDBA Joint Programs are based on budget forecasts included in the MDBA 2019-20 to 2022-23 work plan and budget. The budget for 2019-20 to 2022-23 is included at Attachment A to this Detailed Paper (confidential to IPART.) The final year of the budget has been rolled forward in 2020-21 dollars for two years to cover the WAMC determination period.

Our proposed BRC contributions are based on the current five-year forward work plan, which is provided as Attachment B to this Detailed Paper (confidential to IPART.)

At the time of writing, the NSW Cabinet's Expenditure Review Committee has not formally endorsed NSW contributions to the MDBA Joint Programs and BRC beyond 2021 and is not due to review them until March 2021. We have proceeded on the basis that the work plan was approved by the Murray-Darling Basin Ministerial Council in August 2019 and therefore we expect the Expenditure Review Committee to formally endorse the NSW contributions.

We have used our cost share model to calculate our proposed user-share forecasts. The model uses the following steps:

1. the MDBA work plan and budget and the BRC five-year forward budget are reviewed on a line by line program activity basis to identify costs that NSW must contribute to, then
2. for those program activities that NSW must contribute to, the agreed NSW contribution percentage is applied (MDBA and BRC cost share), then
3. for the MDBA, the NSW share of the relevant Joint Programs activities costs is then allocated to either RM or Non-RM activities, then
4. for the MDBA, most RM activity costs are recovered through WaterNSW's bulk water price determination by applying the relevant IPART determined rural user cost shares for those types of activities, then
5. for the MDBA, the non-RM activities are recovered via the WAMC price determination applying the IPART determined user shares for relevant WAMC activities that most

closely align with the MDBA activities, and for the BRC the surface and groundwater monitoring activities are recovered via the WAMC price determination by applying the IPART determined user shares for surface and groundwater monitoring activities, and finally

6. MDBA and BRC contributions are allocated to the water management charges of users in the Murray-Darling Basin and Border Rivers catchments based on water take data and monitoring site locations.

In its 2016 final report, IPART noted that our predecessor, Department of Primary Industries, had improved the quality of information provided by following the process described above and by presenting specific activities that it planned to fund with its proposed user share of MDBA contributions and by assigning MDBA contributions to cost codes within its monopoly service activities schedule.¹¹

MDBA Joint Programs deliverables, BRC functions and contribution amounts

Tables 5 and 6 describe the MDBA Joint Programs and BRC functions, the program outcomes, the WAMC activity that the program is aligned with and the WAMC user share of each.

We have presented the contributions in this way to help WAMC users and stakeholders understand the relationship between the notional contribution amounts included in the water management charges and the MDBA programs they contribute to.

The user share contribution amounts shown in the table are an in-principle amount that would be recovered under full cost recovery prices. We have chosen to pursue water management charge increases of 5% per year (real) rather than full cost recovery charges to minimise the impact of upward price pressures on users. An annual increase of 5% will return around 70% per year of the user share of the total WAMC revenue requirement.

¹¹ IPART 2016 Review of prices for the Water Administration Ministerial Corporation, p.90

Table 5. MDBA Joint Programs deliverables and contribution amounts (\$2020-21 '000)

MDBA Program	Description	Program Outcomes*	WAMC Activity	User Share	WAMC User Share (Murray, Murrumbidgee users)			
					2021-22	2022-23	2023-24	2024-25
The Living Murray Program: <ul style="list-style-type: none"> • TLM Monitoring • TLM Modelling • TLM Planning and Delivery • TLM Indigenous Partnerships 	To coordinate planning and delivery of jointly held environmental water portfolios (The Living Murray and River Murray Increased Flows - RMIF) within the Southern Basin with other environmental water to improve the health of our rivers, wetlands and floodplains. This includes coordinating the management, community engagement (including indigenous community) monitoring, evaluation and reporting of environmental water delivery at six icon sites and the use of associated environmental works and measures.	Three of the six icon sites are fully or partly located in NSW: Millewa Forrest – The release of environmental water has improved the overall health of the Barnah-Millewa Forrest Koondrook Perricoota Forrest - The health of the Koondrook Perricoota river red gum forest is declining in dry conditions. Environmental water delivered to this site is attempting to stabilise the health of the forest and habitat that it supports. Chowilla Floodplains – The floodplains are improving in health and are showing an increasing number of young Murray cod.	W01-05 Surface Water Monitoring	50%	\$701.4	\$721.2	\$721.2	\$721.2
			W04-01 Surface Water Modelling	80%	\$85.7	\$87.5	\$87.5	\$87.5
			W05-03 Environmental Water	80%	\$2,120.7	\$2,178.9	\$2,178.9	\$2,178.9
			W06-07 Cross Border and National Commitments	50%	\$88.8			

MDBA Program	Description	Program Outcomes*	WAMC Activity	User Share	WAMC User Share (Murray, Murrumbidgee users)			
					2021-22	2022-23	2023-24	2024-25
Environmental Monitoring and Evaluation	To find efficient ways to address the different environmental monitoring, evaluation and reporting obligations in the Basin Plan for mutual benefits.	Specific program objectives are agreed annually in response to environmental conditions. The focus for 2019-20 is vegetation condition improvement and fish movement and management	W05-03 Environmental Water	80%	254.4	262	262	262
Basin Salinity Management 2030	<p>This function is for implementing Basin Salinity Management 2030 (BSM2030) strategy which aims to manage the ongoing salinity risk to the environment, community and industries in the Murray–Darling Basin. The sub function includes:</p> <ul style="list-style-type: none"> implementing Schedule B of the Murray-Darling Basin Agreement, and the activities in the BSM2030 implementation plan as agreed by the Basin Officials Committee. 	Biennial audits of the salinity registers, coordinating regular reviews of register entries and investigating knowledge priorities and trialling of responsive management of salt interception schemes	W07-01 Water Management Works	80%	\$371.5	\$377.4	\$377.4	\$377.4

MDBA Program	Description	Program Outcomes*	WAMC Activity	User Share	WAMC User Share (Murray, Murrumbidgee users)			
					2021-22	2022-23	2023-24	2024-25
River Health	<p>The purpose of the River Health function is to:</p> <ul style="list-style-type: none"> • Monitor, analyse and report on physical, chemical and biological characteristics of the River Murray system. • Implement investigations and assess development applications to reduce water quality risks in the River Murray. • Improve the ecosystem of the River Murray through implementing native fish management, recovery and restoration projects. 	<p>Physical, chemical and phytoplankton monitoring data and analysis reports.</p> <p>The focus of the function is agreed periodically in response to environmental conditions. The focus for 2019-20 is to progress water quality (blue-green algae) investigation projects in Hume Dam, River Murray and Lake Victoria</p>	W01-03 Surface water Quality Monitoring	60%	\$154.7	\$157.9	\$157.9	\$157.9

MDBA Program	Description	Program Outcomes*	WAMC Activity	User Share	WAMC User Share (Murray, Murrumbidgee users)			
					2021-22	2022-23	2023-24	2024-25
Water Markets and Trade	The purpose of the Water Markets function is to resolve any interstate trade issues, reconcile interstate trades and maintain the account across the Barmah Choke. The objective is to ensure the transparency of accuracy of water markets in the Murray–Darling Basin.	<p>A consistent and transparent water trade across the Murray–Darling system. The MDBA provides information on water trading and work with Basin state and territory governments to ensure the state rules comply with the Murray–Darling Basin Plan’s trading rules.</p> <p>The MDBA regulates trade restrictions across the whole Basin, including regulating state trading rules and Irrigation infrastructure operator trading rules</p>	W06-07 Cross Border and National Commitments	50%	\$83.2	\$65.1	\$65.1	\$65.1

MDBA Program	Description	Program Outcomes*	WAMC Activity	User Share	WAMC User Share (Murray, Murrumbidgee users)			
					2021-22	2022-23	2023-24	2024-25
Core Modelling	The purpose of water resource core modelling is to provide multi-jurisdictional modelling support and technical analysis for the management and operation of the River Murray and Lower Darling by the MDBA and Jurisdictional operators.	Key projects include: <ul style="list-style-type: none"> • Ongoing development and delivery of the Source Murray Model for Basin Planning purposes. • Development and maintenance of the salinity registers underpinning the development of the BSM2030 • Provide technical support to the development of new operational and water account models 	W04-01 Surface Water Modelling	80%	\$307.5	\$300.9	\$300.9	\$300.9
Total user share					\$4,168	\$4,151	\$4,151	\$4,151
User share less deductions^					\$4,005	\$4,047	\$4,047	\$4,047

^MDBA forward budgets factor in deductions such as program under-spends that are carried forward from previous years. The forecast deductions have been factored in to the MDBA contribution amounts we propose to include in the water management charges

*Program outcomes are sourced from the MDBA Annual Work Plan 2019-20 to 2022-23 (Amended 17 December 2019)

Table 6. BRC function deliverables and contribution amounts

BRC Function	Description	Program Outcomes*	WAMC Activity	User Share	WAMC User Share (Border, Far West users)			
					2021-22	2022-23	2023-24	2024-25
Surface water quantity monitoring	The BRC measure flows in accordance with defined standards to support water resource planning and development, effective water sharing, management and delivery	Regular resource assessments of the Border Rivers catchment to calculate the volumes of regulated water in the Border Rivers available to be shared between Qld and NSW	W01-01 Surface Water Quantity Monitoring	100%	\$649.2	\$649.2	\$649.2	\$649.2
Surface water quality monitoring	The BRC's water quality program involves annual sampling at designated surface water sites for salinity, turbidity and nutrient content.	Annual surface water condition report to inform water resource planning and sharing between Qld and NSW	W01-03 Surface Water Quality Monitoring	60%	\$62.5	\$62.5	\$62.5	\$62.5
Groundwater monitoring	The BRC's water quality program involves annual sampling at designated ground water sites for salinity, turbidity and nutrient content.	Annual groundwater condition report to inform water resource planning and sharing between Qld and NSW	W02-01 Groundwater Quantity Monitoring	100%	\$6.2	\$6.2	\$6.2	\$6.2
Total user share					\$718	\$718	\$718	\$718

*Program outcomes are sourced from Dumaresq-Barwon Border Rivers Commission Annual Report 2018-19 (www.brc.gov.au)