Murray Irrigation

2026 Basin Plan Review – MDBA Discussion Paper

Murray Irrigation Submission

April 2026

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Murray Irrigation

Executive Summary and Company Recommendations

Murray Irrigation supports the MDBA's efforts in undertaking such an open consultation process. We believe it will be highly effective in terms of encouraging innovative thinking about the future challenges we all face. However, we are also concerned that there may be a critical process step missing.

Right now, we believe it is unclear whether the MDBA thinks the Basin Plan should change, and if so, what changes the Authority considers should occur. This information will be critical for our Company, especially if the MDBA is recommending Basin Plan changes that negatively impact future water-use within our footprint.

In our experience, we would also advise that further consultation and collaboration with key stakeholders will be fundamental to effective implementation of any revised Basin Plan.

Murray Irrigation Recommendation One:

The MDBA must conduct additional consultation once it has a view on proposed Basin Plan amendments. This will be critical for ensuring greater community trust and confidence, and for establishing stronger partnerships with delivery agencies as the next iteration of the Basin Plan is implemented.

As requested, Murray Irrigation's submission is based around the three questions posed by the MDBA:[1]

- What do you think of the issues and options presented in the Basin Plan Review *Discussion Paper*?
- Are there other issues and options that should be considered?
- What do you see as the priorities and why?

We believe Murray Irrigation has three key priorities that directly overlap with priorities the MDBA has identified for the Basin Plan Review. These are outlined in detail in our Company's Strategic Plan[2], and are summarised here:

- Partner with farmers, community, and the environment to underpin resilience and growth.
- Maintain current and attract additional water into our footprint to off-set the impacts of water recovery.
- Ensure no reduction in the reliability of licences held by us, and held within our footprint.

Each one of these relates directly to water-use, and requires guaranteed and consistent access to a sufficient volume of water. Based on content contained within the MDBA's *Discussion Paper*, and the current lack of clarity regarding future consultation, we are deeply concerned the Basin Plan Review has the potential to negatively impact future water-use in our footprint, and do so unnecessarily.

Murray Irrigation Recommendation Two:

We request the MDBA work closely with us to ensure its Review recommendations can also allow Murray Irrigation to continue to meet its core water-use strategic priorities in a cost-effective manner.

Our submission predominantly focuses on how to deliver Recommendation Two. We provide specific examples, underpinned by a strong and reputable evidence-base. These examples show how the MDBA's principal environmental management requirements can be provided for, while also demonstrating value for money.[3]

[1] www.mdba.gov.au/sites/default/files/publications/2026-murray-darling-basin-plan-review-discussion-paper.pdf, p. 90.

[2] https://irp.cdn-website.com/ccd882c2/files/uploaded/MIL+Strategy+on+a+page+2025+-+V3.pdf

[3] The MDBA has identified that future Basin Plan implementation will be limited by a constrained fiscal environment.

Based upon content within the *Discussion Paper*, our Company's greatest exposure comes from the MDBA's preliminary assessment that the delivery of some environmental outcomes associated with our Sustainable Diversion Limit (SDL), and SDLs both near us and downstream of us, may be at risk.[4 & 5]

For our SDL, the MDBA has proposed that the primary driver of its flagged potential environmental risks is the inability to deliver water to the floodplains. The MDBA has assumed this then has a domino effect in terms of risking outcomes for some ecosystem functions, and for native fish. This seems to imply that ecosystem function and native fish outcomes can't be provided for in our footprint unless water is delivered to floodplains.

We believe we can resolve each of these matters in a way that offers direct and measurable improvement. Critically, our recommended solutions offer value for money, and require no further investment in water recovery. Based on our considerable operational expertise, we further believe that approaches like the ones we offer in this submission are directly transferable to other 'at risk' SDLs both downstream of us and across the southern Basin.

Murray Irrigation Recommendation Three:

Murray Irrigation strongly encourages the MDBA to give precedence to the delivery of environmental water through targeted flows to identified priority sites. This will avoid the need for any further water recovery.

Murray Irrigation Recommendation Four:

Murray Irrigation requests the MDBA develop a strong working relationship with our Company as the next iteration of the Basin Plan is implemented. This will allow the MDBA to build on our existing skills capacity, and community networks, to enhance water efficient environmental outcomes. It also allows for SDLs outside our footprint to learn from, and benefit from the delivery successes we've been able to achieve to date.

Complementing the above, we note that specific consideration of the Basin's water-dependent industries and communities is missing from the *Discussion Paper*. This is a disappointing oversight. We finish our submission with advice on how this can best be rectified for our footprint.

Murray Irrigation Recommendation Five:

We request the MDBA work with both Murray Irrigation, and communities across our footprint, to ensure the Basin Plan provides for our collective, long-term resilience and growth.

Murray Irrigation Recommendation Six:

Murray Irrigation recognises the Commonwealth is now a significant user of southern Basin water, assets, and delivery services; however, current cost-shares under the *Murray-Darling Basin Agreement* don't formally reflect this. These cost-shares may benefit from revision, in light of contemporary southern Basin water use.

We further note the MDBA's *Discussion Paper* gives specific consideration to future Basin Plan regulatory design. We'll provide our advice on this matter as part of our involvement in the *Commonwealth Water Act* review.

Once more, we thank the MDBA for this important feedback opportunity. We welcome you to visit our footprint, to gain first-hand insight into the local context facing our primary producers and communities.

[4] https://library.mdba.gov.au/data_product/sw8-sdl-assessments - MDBA's findings for the NSW Murray.

[5] https://library.mdba.gov.au/data_product/sw6-sdl-assessments - an example of MDBA findings for a downstream SDL.

Murray Irrigation
Water Delivery Network

Murray Irrigation Limited operates Australia's largest private water supply network.

We play a critical role in the delivery of water within the Murray-Darling system, supplying the irrigation water that sustains our food-producing farms and local ecosystems.

Our open channel water delivery system delivers critical, productive irrigation and environmental water across 724,000 hectares in the Southern Riverina.

Murray Irrigation is an Australian unlisted public company, limited by shares, that works within the Murray-Darling system.

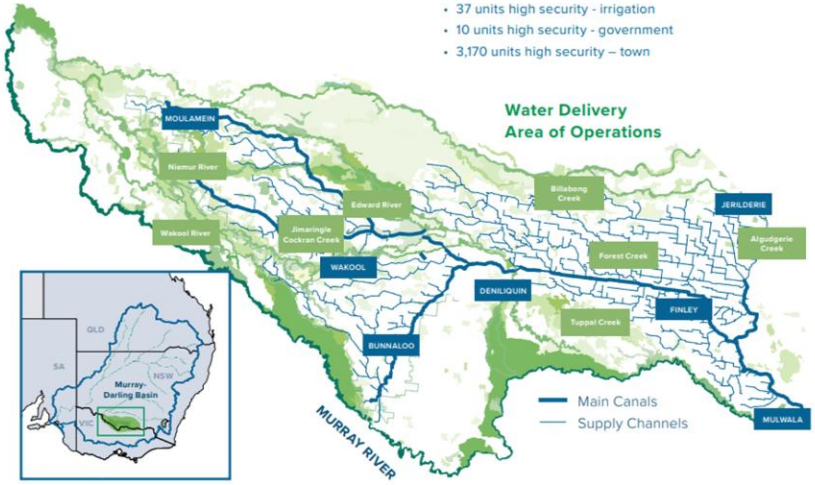
Located in southern NSW, Murray Irrigation uses approximately 2,755km of gravity-fed earthen channels to deliver irrigation water to our landholders, through efficient management of our NSW Murray Regulated River Water Access Licences (WALs).

Corporate structure
Established 1995 (formerly government owned)
Australian unlisted public company, limited by shares

Head office	Deniliquin
Customer centres	Deniliquin and Finley
Depots	Deniliquin, Finley and Wakool
Staff	121.57 (FTE)

Water access licences
NSW Murray Regulated River as at 30 June 2025:

- 768,431 units general security – non-government
- 203,889 units general security – other
- 279,786 units conveyance
- 121,704 units supplementary water
- 37 units high security - irrigation
- 10 units high security - government
- 3,170 units high security – town



Murray Irrigation

728GL	**water use on farm** (5-year average droplet on crop)
1.4 million	units of NSW Murray Regulated River Water Access Licences
4,292	supply points (including unmetered)
2,060	landholdings supplied with water
2,755km	gravity-fed earthen channel supply system
724,000ha	area of operations
25,000ha	sub-surface drainage catchment
1,422km	gravity-fed earthen channel drainage system

Murray Irrigation

1 Applying Environmental Water In Our Footprint – Our Advised Approach.[6]

Alignment with Murray Irrigation Priorities.	☑	**Doesn't disrupt economic activity. Keeps water in our footprint. Protects licence integrity for all licence holders.**
Meets Environmental Management Requirements.	☑	**Permissible under the *Commonwealth Water Act*. Highly suited to increased variability under climate change.**
Provides Value For Money.	☑	**Ensures investment in approaches that have continued to demonstrate environmental improvements along the Murray for decades.**

As noted, the MDBA is suggesting that our Sustainable Diversion Limit (SDL) is at risk, and that the primary driver of this risk is the inability to *deliver water to the floodplains*.[7] This finding presumably falls under the MDBA's assessment theme of 'flows and connectivity'. We have some questions about the finding for this theme that we would like to work through with the MDBA, once the current consultation period ends:

1. For the 'flows and connectivity' theme, the MDBA's assessment suggests it's likely this outcome is already being delivered.[8] However, the MDBA has undertaken further internal analysis, after which, this theme has been rated as critical. We would like to understand the data that was used to significantly escalate this theme, and why it wasn't deemed sufficient enough to shift the rating in the headline table on page 3 of the assessment.
2. Alongside this, the MDBA suggests that a deficiency in 'flows and connectivity' is impacting *Living Murray* (TLM) sites within our footprint.[9] Drawing on long-term TLM monitoring data for these sites, the Barmah Millewa Forest has been in either good or excellent condition for the past 10 years.[10] In addition, while Koondrook-Perricoota has consistently been rated as needing attention, this has been driven by challenges associated with optimising project delivery, which have now been resolved.[11] Given the outcomes of the MDBA's TLM data, we would like to understand why these sites have been rated as critical as part of our SDL assessment.

More broadly, for our SDL assessment, the MDBA flags 'delivery inabilities' as the key limiting factor.[12] We would like to work with the MDBA to decide how this limitation is best overcome. We note the *Commonwealth Water Act* outlines the purposes of the Basin Plan's Environmental Watering Plan (EWP), as well as the content requirements of the EWP.[13] Section 28(2)(e) in particular is reasonably open in terms of how environmental water should be 'applied'. We further note the Commonwealth Environmental Water Holder (CEWH), recognises two water application types for achieving Basin Plan objectives: (i) overbank flows; and (ii) targeted watering.[14] We've illustrated in Appendix A to this submission how these application types are translated in our footprint.

We recognise with commencement of the 2012 Basin Plan, governments had an arguably admirable aspiration of generating overbank flows along large sections of rivers across the southern Basin, including along the mid-Murray, where our footprint is located. The Commonwealth made upwards of $200 million available to achieve this task.[15]

6

☑ POSITIVE IMPACT	☒ NEGATIVE IMPACT	☒ ☑ DELIVERY METHOD DETERMINES IMPACT

7 https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14), p. 1.

8 https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14), p. 3.

9 https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14), p. 4.

10 https://www.mdba.gov.au/sites/default/files/publications/20-years-of-the-living-murray_1.pdf, p. 5.

11 https://www.mdba.gov.au/sites/default/files/publications/20-years-of-the-living-murray-koondrook-perricoota-forest_0.pdf

12 https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14), p. 1.

13 https://www.legislation.gov.au/C2007A00137/latest/text, Part 2, Division 1, Section 28.

14 https://www.flow-mer.org.au/basin-themes/river-flows-and-connectivity#Meeting-Basin-Plan-Objectives

15 https://www.dcceew.gov.au/sites/default/files/documents/third-review-wesa-report-sep-2025.pdf, p. 22.

Despite the best efforts of governments since 2012, and almost full expenditure of available funds, the generation of overbank flows along large sections of the mid-Murray has not occurred.

By comparison, as illustrated in Appendix A, Murray Irrigation's *Restoring Murray Waterways* project (RMW)[16] takes a targeted approach to applying environmental water. Enhancements to our existing delivery infrastructure move water directly to priority sites, as identified by environmental water holders. This requires the use of hundreds of megalitres of water per day, as opposed to overbank flows, which can require volumes in the tens of thousands. This is the same delivery principle that has successfully achieved environmental outcomes for decades under TLM.[17]

We strongly advise the MDBA to work with us on solutions that deliver water to floodplains and wetlands in a way that we can already demonstrate is highly successful. We encourage you to make use of our existing operational and infrastructure expertise to deliver targeted environmental outcomes across our footprint, and ideally beyond.

Complementary to this, we note the *Commonwealth Water Act* requirements for the MDBA to consult with certain persons in implementing the EWP to develop periodic watering schedules, including consulting with the 'owners' of environmental assets.[18] We would like to explore with the MDBA how this sub-section of the Act might allow for better recognition of environmental outcomes being achieved on private property in our footprint. Where necessary, this requires being done in a way that recognises the primacy of that land as a productive, working farm.

HOW MURRAY IRRIGATION CAN HELP
The MDBA can immediately access our operational expertise to overcome the delivery issues it seems to have identified in our footprint. We have solutions we know will work. Their success has already been demonstrated, repeatedly, over the last two decades.

2 Resolving the MDBA's Assumed 'Domino Effect' Within Our SDL Assessment.

Alignment with Murray Irrigation Priorities.	☑ ☒	**Acknowledgement of the reality of water quality and native fish management in our footprint would allow for adoption of solutions that will benefit all water users.**
Meets Environmental Management Requirements.	☑ ☒	**A reliance on the delivery of overbank flows in the NSW Murray will all but guarantee sub-optimal outcomes for water quality and native fish.**
Provides Value For Money.	☑ ☒	**Continued attempts to deliver outcomes via a sub-optimal approach could be seen as poor value for money in a fiscally constrained environment.**

As noted in previous sections of this submission, the MDBA's assessment of our SDL seems to imply that if water isn't being delivered to floodplains and wetlands across our footprint, then it's not possible to achieve Basin Plan requirements for the themes of water quality, and native fish. In this section of our submission, we test the accuracy of this assumed 'domino effect', and offer practical solutions for the delivery of real-world outcomes.

The following findings and assumptions seem to have contributed to the severity of the MDBA's assessment of our SDL:

- It's the reduced frequency of overbank flows that has caused poor water quality in our footprint.[19]
- Altered flow regimes are the reason native fish outcomes in our footprint are considered to be of critical concern.[20]

[16] https://www.murrayirrigation.com.au/project/restoring-murray-waterways
[17] https://www.water.vic.gov.au/our-programs/murray-darling-basin/victorian-murray-floodplain-restoration-project
[18] https://www.legislation.gov.au/C2007A00137/latest/text Part 2, Division 1, Section 29(b).
[19] https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14) p. 5.
[20] https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14).

The same queries raised previously in this submission also apply here. For the themes of water quality and native fish, the MDBA's headline assessment[21] suggests it's likely the required Basin Plan outcomes are already being achieved. It's only after further internal work that the MDBA has escalated the findings for these themes to 'high concern' and 'critical'. In order to help contribute to solutions development, it's important we have the opportunity to consult with the MDBA to understand the data that was used to significantly escalate these themes, and why it wasn't deemed sufficient enough to shift the ratings that these themes received in the headline table on page 3 of the assessment.

With regard to water quality, flow-driven solutions have failed to deliver good outcomes time and again. By comparison, targeted water delivery, such as that which is already occurring under RMW and TLM has proven over decades that it can efficiently direct flow, and provide fit-for-purpose water quality outcomes. For example, under dry conditions, when allocations to all licence types are low, projects like RMW direct water to refuge sites with the highest ecological value.

In addition, in high-flow years, Murray Irrigation's infrastructure has been used to create oxygenated refuges for native fish, as the large floods moving through our footprint were causing poor water quality.

This approach is also in-line with current specifications within the Basin Plan confirming that water quality targets are not mandatory.[22] This means governments are not required to take additional water from the consumptive pool and attempt to dilute an event of poor water quality.

While the MDBA may be suggesting in its *Discussion Paper* that it wants to strengthen water quality objectives and targets, for continued clarity and certainty it's fundamental that section 9.11 of the current Plan remains. We would further note that any attempt to make Basin Plan water quality targets mandatory would likely trigger section 6.14, which protects the existing reliability of water allocations.[23 & 24]

For native fish, we strongly question the MDBA's assumption that poor outcomes are being driven by altered flow regimes. In its more detailed assessment, based on its own internal data, the MDBA seems to imply that this is the reason why expected native fish species are absent.[25] We're highly concerned that this is misleading.

Right now, the CEWH is advising that carp makes up approximately 90% of all fish biomass across the Murray-Darling Basin.[26] Until this number reduces, it's unlikely that anything else will prove to be of material benefit to native fish. The CEWH further notes that carp benefits more from natural flooding, than it does from targeted flows like those being delivered under RMW. The CEWH suggests that the right amount of water, at the right time, at the right place, does a better job of providing positive ecological conditions for native fish.

We recognise that biological control, through release of the carp virus is still a long way off.[27] Until then, we believe many valuable opportunities already exist in our footprint to do the following:

- Explore the right types of small, targeted environmental flows that provide the best benefits to native fish.
- Consider the feasibility of installing carp exclusion screens at wetland sites across our footprint.
- Use our infrastructure to better understand carp movement, to ensure the virus release is optimised if it goes ahead.

[21] https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14). p. 3.
[22] Basin Plan 2012 - Federal Register of Legislation, section 9.11.
[23] https://www.legislation.gov.au/F2012L02240/asmade/text/explanatory-statement , page 5. Water quality and salinity targets are aspirational (s9.11).
[24] https://www.legislation.gov.au/F2012L02240/asmade/text/explanatory-statement , pages 30 and 42. Nothing in the Basin Plan changes the reliability of allocations (s6.14).
[25] https://library.mdba.gov.au/data_product/sw8-sdl-assessments, (SS14) p. 5.
[26] https://www.dcceew.gov.au/cewh/manage-water/water-for-environment/seasonal-issues/carp-murray-darling-basin
[27] https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/pest-animals-and-weeds/carp-biological-control-program/national-carp-control-plan

HOW MURRAY IRRIGATION CAN HELP
The Company's infrastructure already delivers water quality outcomes for the NSW Murray, especially during high-flow and low-flow events. Our channel system could be used to better understand carp within the operational realities of a working irrigation company.

In sections 1 and 2 of this submission, we've offered the MDBA solutions to all of the potential issues it has flagged with our SDL. These solutions can be implemented immediately. At this point in the Basin Plan's implementation, we also believe these solutions offer much better value for money than any further environmental water recovery.

In the next section of our submission, we'll explain how implementation of the solutions we've put forward can be extended to other 'at risk' SDLs across the southern Basin.

We strongly believe that if the MDBA takes our advice, water purchases could cease immediately, and SDLs across the southern Basin would not need to be reduced for any reason.

3 Suitability of Our Advice for Downstream SDLs.

Alignment with Murray Irrigation Priorities.	☑	**If the MDBA accepts and acts upon our advice, we're confident we can continue to meet our Company's core water-use strategic priorities.**
Meets Environmental Management Requirements.	☑	**Our solutions are permissible, and encouraged under the *Commonwealth Water Act*. They offer immediate benefit for at risk SDLs outside our footprint.**
Provides Value For Money.	☑	**We believe our solutions:** • **Offer better value for money when compared to further water recovery.** • **Are fit-for-purpose across the heavily regulated River Murray system.** • **Have more delivery certainty, and shorter start-up, than overbank flows.**

The MDBA suggests that four SDLs located either near us, or downstream of us, are not currently delivering existing Basin Plan requirements, and as such are considered 'at risk'.[28] Table One provides a summary, presented on the next page.

Based on Table One, Murray Irrigation notes that it will reserve any of its comments about the Lower Darling for the separate submission that it will provide into the Menindee Review.[29]

Beyond this, we can see from Table One that there are some key patterns emerging. At the broadest level, it appears the MDBA has made some significant value judgements in determining that the other three SDLs may be at risk. For each one, it's likely that all of the identified themes of concern are already deliverable. For each SDL, the MDBA has needed to actively source additional data to make the case that risks do indeed exist.

[28] 2026 Murray–Darling Basin Plan Review Discussion Paper, p. 24.

[29] Menindee Review | Murray–Darling Basin Authority

Table One: SDLs Close To And Downstream Of Murray Irrigation's Footprint That Have Also Been Flagged As At Risk.

SDL	MDBA CONCERN & RATIONALE
1. VICTORIAN MURRAY.[30]	Similar to the NSW Murray, the **inability to deliver water to floodplains** is likely the key driver of all risks. Lack of connectivity is causing **poor water quality** and **native fish outcomes**. Based on the headline assessment (page 4), it's likely that all at risk outcomes are already being achieved.
2. GOULBURN.[31]	Limits to the volume of in-channel flows, and an **inability to deliver water to floodplains** is likely leading to **poor outcomes for water quality and native fish**. Based on the headline assessment (page 3), it's likely that all at risk outcomes are already being achieved.
3. LOWER DARLING.[32]	Insufficient flow and impacts to **connectivity** during low flow periods are **impacting water quality and native fish**. Based on the headline assessment (page 3), it's unlikely that Basin Plan requirements for connectivity and water quality are being met; however, it may already be likely that native fish outcomes are supported.
4. SA MURRAY.[33]	**Limited floodplain connectivity**, and insufficient dilution flows to the CLLMM[34] are **impacting water quality, as well as outcomes for native fish**, water birds and other species. For all matters that have been flagged as being of concern, the headline assessment (page 4), suggests it's likely that they're all, already, being achieved.

As already noted in relation to the NSW Murray SDL, we believe it's incredibly important for the MDBA to engage more thoroughly on the data-sets and rationale it has used to create the impression that much of the southern Basin remains at risk when it comes to the delivery of selected environmental outcomes. Given the emergence of a very significant value-for-money metric in relation to the discharge of future Commonwealth funding, it's vital that investment decisions be made from a robust and commonly agreed upon demonstration of need. We don't believe that currently exists for the southern Basin SDLs that we have considered as part of this submission.

Beyond this, we remain extremely confident that outcomes for floodplain connectivity, water quality, and native fish can already be delivered through economically efficient methods that are currently operational today.

The CEWH can actively engage with those who deliver environmental water to trial targeted flows that deliver the greatest benefit to native fish. Wetlands across the southern Basin can also be assessed for the feasibility of installing carp exclusion screens. In addition, if the virus is released, a detailed logistical understanding of how carp populations move through regulated and unregulated systems can only aid in its eventual success.

Further to this, based on our own lived experience under a range of water availability scenarios, it's evident that some form of infrastructure will likely always be needed to address water quality at sites across the southern Basin. There will never be sufficient dilution flows available to adequately deal with the water quality challenges the Basin may face.[35]

Everything above is enhanced if the MDBA gives precedence to environmental water delivery through targeted flows.

More broadly, targeted delivery also requires a reasonably high level of precision from environmental water planners. They need to be able to specify the exact site-specific outcomes they want to achieve, given prevailing seasonal conditions. System operators then incorporate this information into their broader decision-making to deliver multiple-benefit and cost-effective outcomes for all the water users they provide services to.

We believe this type of approach deserves greater emphasis, and should be added to the options already being considered in Chapter Four of the *Discussion Paper: Maximising the Benefits of Water for the Environment*. Based on the options already in this Chapter, we believe planning can only go so far towards addressing the inefficiencies identified.

[30] Sustainable Diversion Limit surface water assessments for Victorian Murray Water Resource Planning Area - Data products - MDBA Library (SS2).
[31] Sustainable Diversion Limit surface water assessments for Northern Victoria Water Resource Planning Area - Data products - MDBA Library (SS6).
[32] Sustainable Diversion Limit surface water assessments for NSW Murray and Lower Darling Water Resource Planning Area - Data products - MDBA Library (SS18).
[33] Sustainable Diversion Limit surface water assessment for SA River Murray Water Resource Planning Area - Data products - MDBA Library (SS11).
[34] Coorong, Lower Lakes and Murray Mouth (CLLMM).
[35] 39_department_of_environment_land_water_and_planning.pdf , p. 8.

HOW MURRAY IRRIGATION CAN HELP
The MDBA can already access our operational expertise to overcome delivery issues across the southern Basin. The MDBA can directly transfer solutions we are already implementing to other SDLs that are suggested to be at risk.

4 Ensuring Our Collective Long-Term Resilience and Growth.

Alignment with Murray Irrigation Priorities.	☑	**Allows our Company to meet all of its strategic water-use priorities, in a way that is positively supported by Basin Plan requirements.**
Meets Environmental Management Requirements.	☑	**Acting on our advice will not prevent the delivery of Basin Plan environmental outcomes, and will allow this to be done in a way already permissible under the *Commonwealth Water Act*.**
Provides Value For Money.	☑	**Given the fiscal constraints that have been identified, shifting focus to equal prioritisation of environmental, social, and economic needs will ensure all remaining funding is spent in the most efficient and cost-effective way.**

As noted in our submission's introduction, it's disappointing that social and economic aspects of Basin water-use were ignored in the MDBA's *Discussion Paper*. We will finish our submission with specific advice on how this can be rectified.

We share the views that are held throughout the irrigation sector that long-term environmental water recovery has had a devastating impact.[36] For our footprint, we have been exposed to repeated state and federal water reform since our Company's establishment in 1995. A key aspect has been large-scale environmental water recovery. As a result, average water delivery to our customers has halved – from 1,200 GL in 1995 to around 600 GL today.

As average customer delivery has halved, local irrigation-dependent industries such as dairy and rice have also declined. For example, between 2001 and 2016, the population of the Wakool region in the western part of our footprint declined by 45.6%. Alongside this, total farm employment in this region fell by around 72%. We have written repeated submissions on this vital topic, which can be accessed on our web-site.[37]

Our first two recommendations in this submission relate directly to further consultation, in part because we believe it's fundamental here. Right now, we have no way of knowing if the Basin Plan will be amended in a way that takes more water out of our footprint. We've provided all the solutions that we have as a way of preventing this from happening.

At a minimum, both the MDBA and the Commonwealth Government must do a better job of recognising the impact that water recovery is having. This must be done in detail, and at the scale of communities who are heavily water-dependent. Averages at scales higher than this have the strong potential to be misleading.[38]

For example, we acknowledge key socio-economic research remains outstanding from the 2025 Basin Plan Evaluation.[39] In particular, the contribution of downstream industries like transport, processing and export facilities, as a multiplier on raw commodities produced in our footprint would be highly valuable to know and understand. Given the time available between the completion of this submission process, and the due date for the MDBA's final advice, there is time to conduct this specific piece of research to inform relevant decisions being made at the end of the 2026 calendar year.

More broadly, we believe the combination of the *Discussion Paper*, full compliance with all Basin SDLs[40], and the upcoming *Commonwealth Water Act* review bring us to an interesting point in this reform journey.

[36] National Irrigators' Council - Socio Economic

[37] About Murray Irrigation

[38] 2025 Review of the social and economic impacts of the Basin Plan

[39] 2025 Review of the social and economic impacts of the Basin Plan, p. 43.

[40] Annual Water Take Report 2023–24, p.4.

For a long time, discussions about where social and economic needs sit within the Basin Plan structure seem to have hinged on the delivery of particular environmental outcomes. The objects of the *Commonwealth Water Act*[41] suggest that economic and community priorities can't be actively pursued by the MDBA until: (i) extraction is occurring at an environmentally sustainable level; and (ii) certain ecological values and services are provided for.

We believe the MDBA's *Discussion Paper* demonstrates extraction is now environmentally sustainable. Based on this submission, we're confident that ecological values and services are being, and can be, provided for.

This means it's time the Basin Plan incorporates a broader suite of Water Act objects, particularly those that maximise the net economic return from irrigation, and ensure water security is provided for, for all users within delivery systems.

The best way to do this will vary substantially from community to community. As such, Basin Plan solutions that achieve these particular outcomes must be done through co-design with those who have a stake in their success.

For example, for our footprint, we've participated in approximately 30 years of external independent scrutiny, which has repeatedly confirmed we use our water within legal limits. This has most recently been in part through the compliance arrangements associated with the NSW Murray SDL. Water use in the NSW Murray has never exceeded its SDL.

Going forward, we encourage the MDBA to think comprehensively about the SDL being an 'overs and unders' mechanism that cumulatively accounts for credits and debits each year. As such, ensuring legally available water is fully utilised would go a long way towards delivering water security and maximised regional economic returns. It would be beneficial for the Basin Plan to require the MDBA and Basin Governments to foster this utilisation in a co-designed way.

Related to this, we also note that the MDBA will be doing a comprehensive climate change analysis between the completion of this Basin Plan Review, and the one proposed for 2036. Fundamental to this work is the importance of an established MDBA understanding that allocation processes across the NSW Murray already cater for climate variations on a rolling annual basis. As such, they do not need further consideration under any future iterations of the Basin Plan.

As a final note, we recognise Chapter Nine of the *Discussion Paper* has opened the door for an important conversation about the future sustainability of southern Basin water delivery infrastructure. We support in-principle the MDBA's view that fit-for-purpose assets, in operable condition, is essential. We would highlight however, that Basin governments pay for River Murray assets, and in NSW, most of its cost-share is passed directly on to Murray Irrigation's customers.

Before anything proceeds, it will be important to identify who predominantly uses the assets and services that may receive future government investment. This should essentially inform who pays. For example, the Commonwealth is now a significant user of southern Basin water, assets, and delivery services; however, current cost-shares under the *Murray-Darling Basin Agreement* don't formally reflect this. A revisiting of these funding cost-shares, in light of contemporary southern Basin water use, may be timely.

Alongside this, irrigation water use has also substantially reduced as a result of Commonwealth recovery for the environment. As such, current assumptions about use and affordability – for irrigators in our footprint – should be tested for their accuracy. Funding arrangements that don't reflect the operational and fiscal realities of contemporary Basin water use would substantially undermine the Company's ability to deliver on its strategic priorities.

HOW MURRAY IRRIGATION CAN HELP
We are available to work with the MDBA and Federal Water Department to implement immediate solutions that will shore-up what is left of our consumptive pool. We are extremely well-networked across our footprint, and can help facilitate the exchange of critical local knowledge that will ensure productive and water efficient farming systems can continue across the NSW Murray, into the future.

[41] https://www.legislation.gov.au/C2007A00137/latest/text (Part 1, Section 3).

Appendix A:

Applying Environmental Water: A Comparison of Overbank Flows and Targeted Watering

Diagram A: Overbank Flows

General Principles: ***Overbank flows occur when large volumes of water move through a river, causing it to break its banks. This water then flows out into connected floodplains and wetlands.***

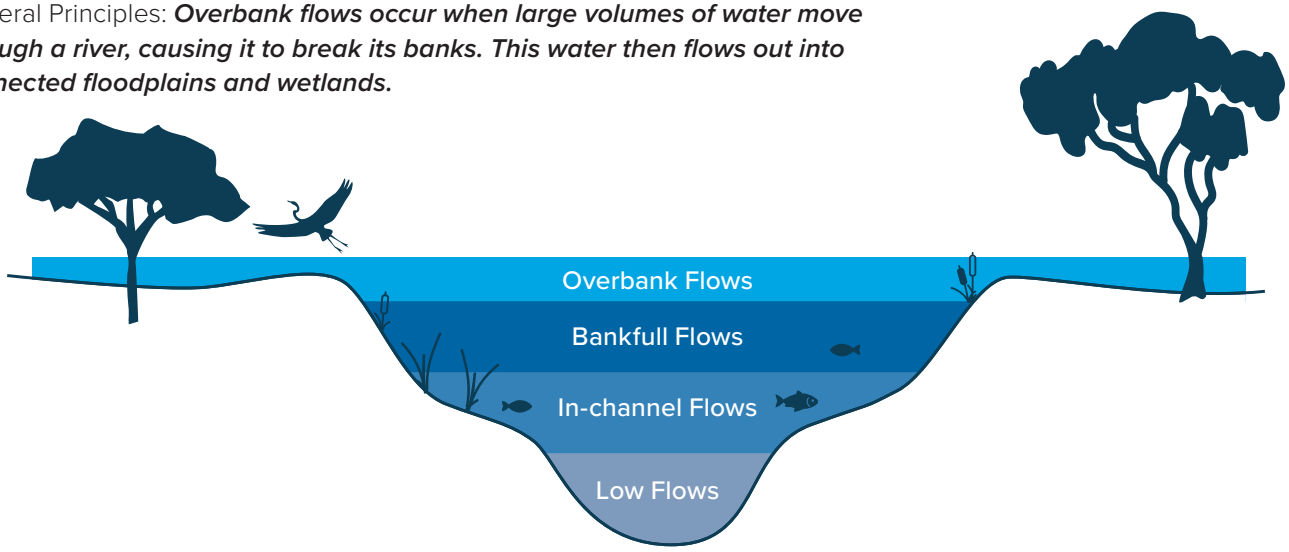


Diagram B: Proposed Application of Overbank Flows in Murray Irrigation's Footprint

Large volumes of overbank flows required to deliver water to high ecological value wetlands and floodplains.

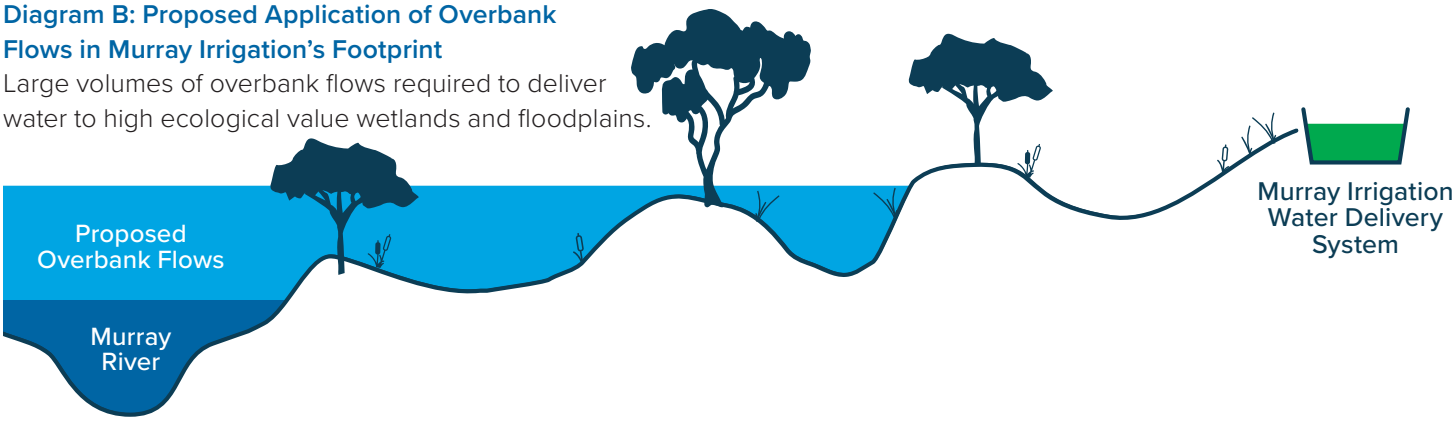
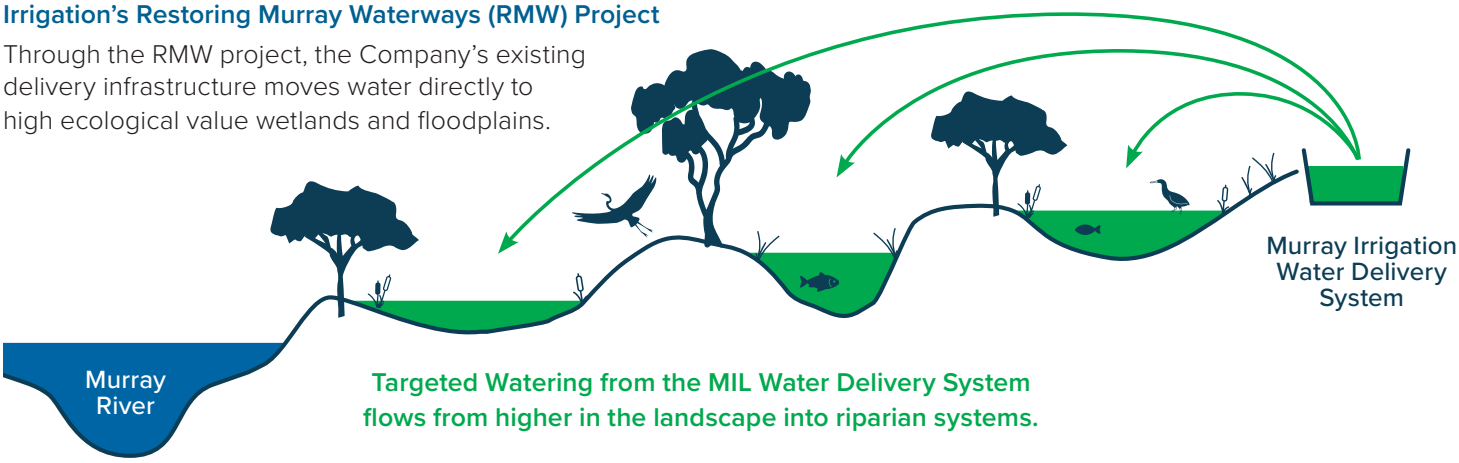


Diagram C: Targeted Watering Through Murray Irrigation's Restoring Murray Waterways (RMW) Project

Through the RMW project, the Company's existing delivery infrastructure moves water directly to high ecological value wetlands and floodplains.



- **Targeted watering requires less water** - Murray Irrigation's RMW project uses hundreds of megalitres per day. Overbank flows would require volumes in the tens of thousands to reach the same sites.
- **Targeted watering delivers to sites high on the floodplain that can't be reached any other way.**
- **Targeted watering avoids the significant economic disruption** caused by regular large-scale floodplain inundation, which impacts communities as well as agricultural production.
- **The volume of return flows that move downstream is demonstrably higher** when targeted methods deliver water to connected wetlands compared to overbank methods. For example, losses due to overbank watering in the Barmah Millewa Forest have been estimated to be as high as 30%.[1] By comparison, losses from targeted watering under Murray Irrigation's RMW project are closer to 20%.
- The **water saved** through targeted watering **flows downstream** to benefit other 'at risk' SDL areas.

[1] Smith-Mainstreaming-Env-Water-Topic-2-Paper.pdf