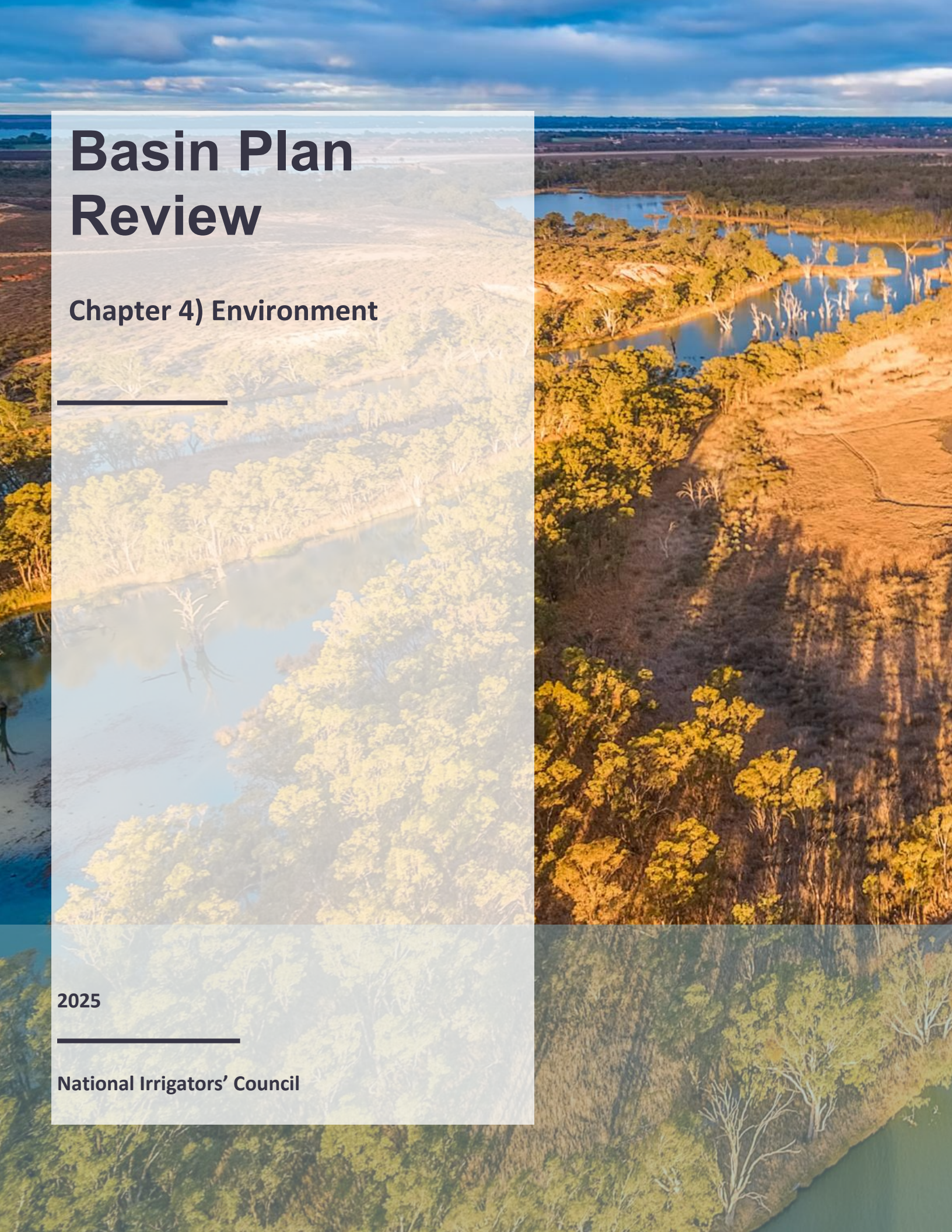


Basin Plan Review

Chapter 4) Environment

2025

National Irrigators' Council

Chapter Overview

Key findings

- The Basin Plan has led to improved environmental outcomes.
- To realise the full environmental outcomes desired, more than 'just adding water' is required . This means an investment in complementary measures – and moving from just water sharing, to integrated land and water management.

The data

- The 2025 Basin Plan Evaluation and Sustainable Rivers Audit (said to be "the most comprehensive assessment of Basin Plan implementation and outcomes to date") showed a number of very positive environmental outcomes where water for the environment has been delivered.
- There is a growing evidence-base that moving beyond "just add water" is needed saying "*Water for the environment is essential, but on its own is likely not sufficient. Factors such as water quality, riparian and floodplain management, pest control, instream habitat, river operations, constraints and works, and environmental water portfolio management are also crucial to achieve environmental outcomes*."[1]

What it means for the next Basin Plan

- With Crown 1 of the Triple Crown of Water Reform Framework completed (Flows), the next steps remain for Crowns 2 and 3 (functions and further).
- Any Basin Plan 2.0 should turn focus to investing in a strategic, coordinated and integrated package of complementary measures.
- There is an urgent need for prioritisation in Basin environmental investment – asking the question of what does the environment need most, and how can this be achieved in the most effective, efficient, and value-for-money way.
- To improve transparency on how environmental water is managed and measured, a program to benchmark measurement and reporting of environmental water should also inform the Basin Plan review. This information will be important to understand opportunity to enhance outcomes but also, manage reliability and delivery risks to all users.

[1] P 4.

Chapter 4: Environment

Celebrating successes

Finding 4a) The Basin Plan has achieved significant environmental outcomes (however, challenges and barriers remain to realising a full range of benefits).

The Basin Plan has achieved considerable environmental outcomes from the environmental water already held (in combination with natural events). It will be important for the review to highlight these, and celebrate success so far.

2025 Basin Plan Evaluation and Sustainable Rivers Audit

The 2025 Basin Plan Evaluation and Sustainable Rivers Audit is said to be "the most comprehensive assessment of Basin Plan implementation and outcomes to date"[2].

Importantly, the Evaluation recognised that "most of the original targets for water recovery have been met"[3], and that "many aspects of the Basin's environmental health have improved since the Millennium drought".

It is also recognised that "… It should be noted that a considerable time lag is expected between short term positive outcomes from water for the environment and full observable benefits to fish populations"[4], meaning we may still be yet to see the full range of environmental benefits.

However, it also made a clear case that 'just adding water' is not enough on its own. For example:

- "Water for the environment is essential, but on its own is likely not sufficient. Factors such as water quality, riparian and floodplain management, pest control, instream

[2] 2025 Basin Plan Evaluation | Murray–Darling Basin Authority
[3] P 32
[4] P 48.

habitat, river operations, constraints and works, and environmental water portfolio management are also crucial to achieve environmental outcomes."[5]

- "When the Basin Plan commenced it was assumed that water for the environment to key sites would be sufficient to maintain ecological health across the Basin. We have learnt it is more complex and challenging than this…"[6]
- "…deliveries of water for the environment alone are not sufficient. Other measures, such as water quality management, riparian and floodplain management, pest control, instream habitat, river operations, constraints and works, and environmental water portfolio management are crucial to the achievement of long-term environmental outcomes."[7]
- "The management of flow regimes, particularly the timing and patterns of flow, is vital to achieving outcomes for native fish. However, flow management is only one component of the suite of integrated management activities needed to build fish population resilience. Complementary management actions such as introduced species control, re-establishment of threatened and non-threatened species, improved fish passage solutions, and habitat protection and restoration are also important for improving fish outcomes across the Basin."

This is consistent with the findings in the SRA (see below table), which generally show very good, good or fair outcomes for those indicators that are water-volume based (such as connectivity and freshes and bankfull flows), but poorer outcomes for indicators like native fish which are being impacted by non-water-volume based threats (such as invasive species, barriers to fish passageways, cold water pollution, habitat degradation, etc).

[5] P 4.
[6] P 4.
[7] P 42.

Valley	Longitudinal connectivity	Freshes and bankfull flows	Low floodplain connectivity	High floodplain connectivity	Floodplain tree stand condition	Fish species expectedness	Fish nativeness	Fish recruitment
Border Rivers	**Very good (Stable)**	Good (Variable)	Fair (Increasing)	Good (Increasing)	Good (Stable)	Good (Stable)	Fair (Variable)	Fair (Variable)
Castlereagh	NA* (NA)*	**Very good (Variable)**	Fair (Variable)	Fair (Variable)	Fair (Variable)	Poor (Stable)	Fair (Variable)	**Very Poor (Variable)**
Condamine	Fair (Stable)	Good (Variable)	Poor (Variable)	Fair (Variable)	Fair (Variable)	Fair (Stable)	Good (Variable)	Poor (Decreasing)
Darling	Good (Variable)	Good (Variable)	Poor (Increasing)	Fair (Decreasing)	Good (Stable)	Poor (Stable)	Fair (Stable)	Fair (Stable)
Gwydir	**Very good (Stable)**	**Very good (Stable)**	Poor (Variable)	Fair (Increasing)	Fair (Variable)	Fair (Stable)	Fair (Increasing)	Fair (Decreasing)
Macquarie	**Very good (Stable)**	**Very good (Variable)**	Fair (Variable)	Fair (Decreasing)	Good (Stable)	Poor (Stable)	Fair (Increasing)	**Very Poor (Variable)**
Namoi	**Very good (Stable)**	Good (Variable)	Fair (Variable)	Fair (Variable)	Poor (Variable)	Fair (Stable)	Fair (Variable)	Poor (Stable)
Paroo	NA* (NA)*	NA* (NA)*	Fair (Variable)	Fair (Decreasing)	Good (Stable)	Poor (Stable)	Poor (Stable)	Poor (Stable)
Warrego	**Very good (Stable)**	**Very good (Variable)**	Poor (Variable)	Fair (Decreasing)	Fair (Variable)	Fair (Stable)	Fair (Decreasing)	Poor (Stable)
Avoca	NA* (NA)*	NA* (NA)*	Fair (Variable)	Fair (Increasing)	Fair (Decreasing)	Poor (Stable)	Poor (Variable)	**Very Poor (Decreasing)**
Broken	Poor (Variable)	Good (Stable)	Good (Increasing)	Fair (Increasing)	Fair (Stable)	Poor (Stable)	Fair (Variable)	**Very Poor (Stable)**
Campaspe	**Very good (Variable)**	**Very good (Variable)**	Good (Increasing)	Good (Increasing)	Fair (Stable)	Poor (Stable)	Poor (Variable)	**Very Poor (Variable)**
Central Murray	Good (Variable)	**Very good (Variable)**	Fair (Variable)	Fair (Variable)	Fair (Stable)	Poor (Stable)	Fair (Variable)	Poor (Variable)
Goulburn	Good (Variable)	**Very good (Stable)**	Fair (Variable)	Fair (Decreasing)	Good (Stable)	Poor (Stable)	Poor (Variable)	**Very Poor (Decreasing)**
Kiewa	NA* (NA)*	NA* (NA)*	Good (Variable)	NA* (NA)*	**Very good (Variable)**	Poor (Decreasing)	Poor (Increasing)	**Very Poor (Increasing)**
Lachlan	**Very good (Stable)**	**Very good (Variable)**	Fair (Increasing)	Fair (Increasing)	Fair (Decreasing)	Poor (Stable)	Fair (Variable)	**Very Poor (Increasing)**
Loddon	Good (Variable)	**Very good (Variable)**	Fair (Variable)	Fair (Increasing)	Poor (Decreasing)	Poor (Stable)	Fair (Variable)	**Very Poor (Stable)**
Lower Murray	Fair (Variable)	Fair (Variable)	Fair (Variable)	Fair (Variable)	Fair (Variable)	Poor (Stable)	Fair (Stable)	Poor (Increasing)
Mitta Mitta	NA* (NA)*	NA* (NA)*	Good (Variable)	NA* (NA)*	**Very good (Variable)**	Poor (Stable)	Poor (Variable)	**Very Poor (Stable)**
Murrumbidgee	**Very good (Stable)**	Good (Variable)	Good (Increasing)	Good (Increasing)	Poor (Decreasing)	Poor (Stable)	Poor (Variable)	**Very Poor (Variable)**
Ovens	**Very good (Variable)**	**Very good (Variable)**	Good (Decreasing)	NA* (NA)*	Good (Stable)	Poor (Stable)	Fair (Variable)	Fair (Increasing)
Upper Murray	NA* (NA)*	NA* (NA)*	Good (Variable)	NA* (NA)*	Good (Stable)	Poor (Stable)	Fair (Variable)	**Very Poor (Increasing)**
Wimmera	NA* (NA)*	NA* (NA)*	Fair (Variable)	Fair (Increasing)	**Very good (Variable)**	Fair (Stable)	Fair (Variable)	**Very Poor (Variable)**

Moving forward: complementary measures

Furthering environmental outcomes will require moving beyond 'just add water', and looking to complementary measures. I.e. moving from Crown 1, to 2 and 3.

The outcomes of the Basin Plan Evaluation are consistent with a growing evidence base calling for a pivot to complementary measures.

NIC strongly agrees with the position in the Early Insights Paper that:

"Providing water for the environment has been essential to achieving Basin management outcomes, but 'just adding water' is not sufficient."[8]

This is consistent with scientists who:

"argue that while recovering water will provide good outcomes, as a sole intervention, it is not enough to deliver the desired environmental benefits of the reform".[9]

These scientists propose 10 complementary measures to assist with environmental watering programs in the Basin:

1. Integrated aquatic pest control (such as carp control)
2. Sustainable agricultural infrastructure (such as fish screens)
3. Habitat restoration
4. Addressing cold water pollution
5. Enhancing fish passage
6. Enhancing nutrient cycles
7. Improving sediment transport
8. Addressing salinity
9. Re-establishing threatened species
10. Integrating complementary measures into Basin-scale flow delivery strategies.[10]

There is an increasing view that the next phase of Basin water management must turn focus to strategic investment in a coordinated package of complementary measures.[11]

"Moving forward, there is a compelling case that holistically improving environmental health in the Basin requires complementary measures alongside environmental water reform. To be clear, this is not to belittle the significant and important feat which has been achieved through water management reform in the MDB, which has led to positive ecological

[8] Basin Plan Review - Early Insights Paper

[9] Ten complementary measures to assist with environmental watering programs in the Murray–Darling river system, Australia - Charles Sturt University Research Output

[10] Ten complementary measures to assist with environmental watering programs in the Murray–Darling river system, Australia - Charles Sturt University Research Output

[11] Take it as a compliment: integrating complementary measures as the next chapter of Murray–Darling Basin water management: Water International: Vol 49 , No 3-4 - Get Access

outcomes, nor is it to diminish the important role of active environmental watering. However, it does show the role that integrated components must have alongside water management… This need is being increasingly recognised by stakeholders, but is yet to be encompassed within policy settings, which still remains predominantly flow-based."[12]

Capon et al[13] similarly propose nine priority actions, which (in addition to water recovery), includes riparian revegetation, removal or modification of fish barriers, installation of cold-water pollution device on priority large dams, installation of fish diversion screens on all irrigation pumps, and the restoration of riverine connectivity through constraints management (the latter is included in the Basin Plan, as part of the SDL Adjustment Mechanism).

While NIC notes the limitation raised that "*the Water Act limits the Basin Plan to matters relevant to the regulation of water resources*", NIC is of the view that this should not stop future Basin scale management initiatives from moving beyond 'just add water'. The need for legislative change has not stopped other changes occurring in the past.

NIC also agrees with the Early Insights Paper that:

"The Authority could also exercise stronger leadership by proposing recommendations in the Review that incentivise Basin governments to take a more holistic approach to land and water management."

However, in addition to Basin governments, the Federal Government must have a role in ensuring sufficient funding is available for these works, and their delivery in a strategic and coordinated way.

Complementary measure case studies

Case study 1: Fish screens

Fish screens are important to protect native fish from entering pumps, and are now considered best practice. This technology now means native fish losses from pumps can be reduced by 90%.

A summary of outcomes indicates from the Australian Fish Screens website indicates:

[12] Take it as a compliment: integrating complementary measures as the next chapter of Murray–Darling Basin water management: Water International: Vol 49 , No 3-4 - Get Access

[13] **SJ Capon et al, 'Repairing Australia's inland river and groundwater systems: nine priority actions, benefits and the finance gap' (2025) 76(4) *Marine and Freshwater Research*.**

• NSW invested $20M to provide screens on 28 pumps, from Moree to Wilcannia which is estimated to protect ~791,000 native fish per annum.
• QLD invested $6.6M on 5 Screens with 3 more manufactured, to protect ~231,000 native fish per annum.

This means that for less than $30M nearly 1 million native fish can be protected from extraction annually, providing more opportunity for native fish to populate our rivers. This presents significant value for money – for comparison, the equivalent investment in water would result in approximately 2.4GL of NSW Border Rivers (Geneal Security A) entitlement (noting that this in not the long-term equivalence or actual water, these numbers would be even less) or 3GL of Lower Namoi General Security entitlement (again the number would be less) that doesn't guarantee to protect native fish, and also has low reliability (i.e. low or no availability in dry years).

Whilst this is a very positive outcome, demand for the screening program exceeded supply, due to insufficient funding, and the program targeting only select geographic zones.
Fish screening has also been part of State Government programs, such as the Macquarie River Screening Program. Modern screens are being installed on over 20 pumps across 7 sites, which will protect over 566,000 native fish every year, and generate an estimated $31m/yr of public benefits.[14]

Fish screen Australia website now has 41 sites modernised with more than 1M native fish per year protected.

More information is available.[15]

[14] Macquarie River Screening Program
[15] The scientific evidence of fish losses in Australian rivers - Fish Screens Australia

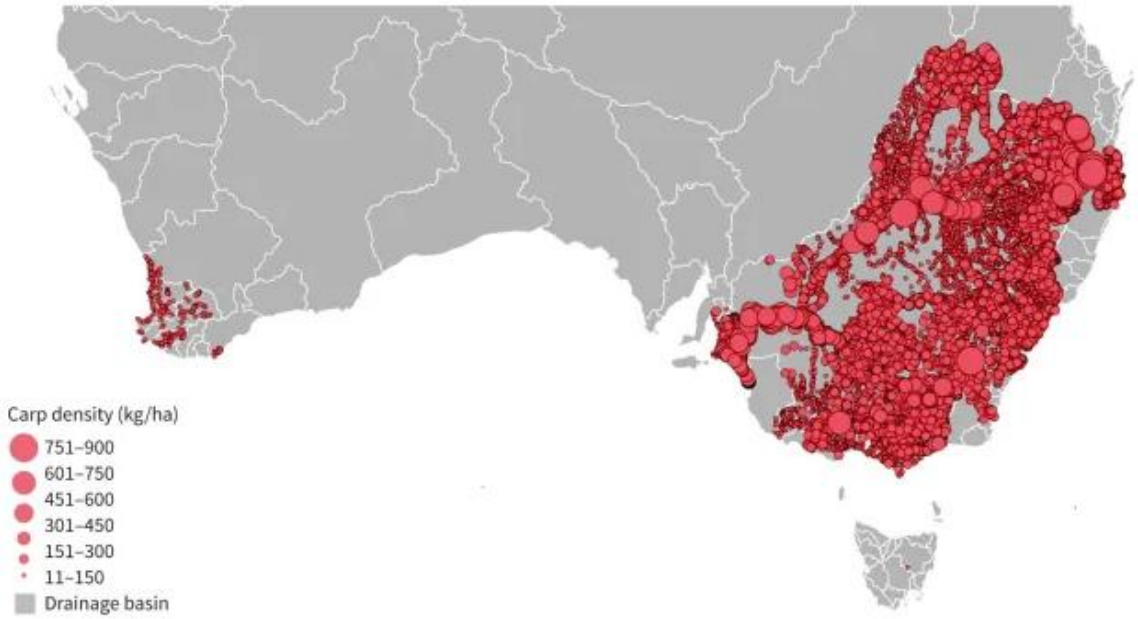
Image source: Fish Screens Australia[16]

Case study 2: Invasive Species (carp)

Carp are a significant contributor to environmental degradation in the Basin. They now account for up to 90% of fish biomass in some areas of the Basin.[17]

[16] Better Farming, Better Fishing.
[17] Carp and water for the environment - DCCEEW

The national biomass of carp ranges from 200,000 tonnes and possibly up to approximately 1 million tonnes under ideal breeding conditions featuring consecutive high rainfall years.[18]

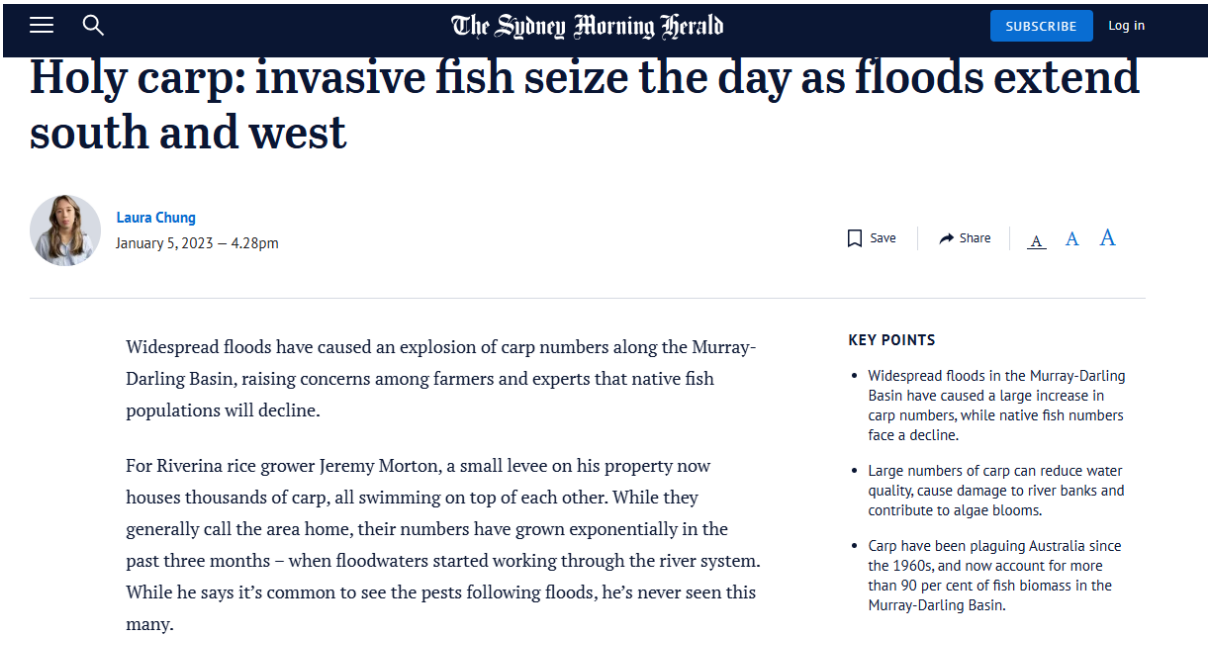


Density of carp in Australian drainage basins. ARTHUR RYLAH INSTITUTE FOR ENVIRONMENTAL RESEARCH

The impacts of carp include that they outcompete native species, reduce water quality, and cause river bank damage.

[18] The National Carp Control Plan

There is increasing public concern surrounding the impacts of carp.[19]



The Sydney Morning Herald

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Holy carp: invasive fish seize the day as floods extend south and west

Laura Chung
January 5, 2023 — 4.28pm

Save Share A A A

Widespread floods have caused an explosion of carp numbers along the Murray-Darling Basin, raising concerns among farmers and experts that native fish populations will decline.

For Riverina rice grower Jeremy Morton, a small levee on his property now houses thousands of carp, all swimming on top of each other. While they generally call the area home, their numbers have grown exponentially in the past three months – when floodwaters started working through the river system. While he says it's common to see the pests following floods, he's never seen this many.

KEY POINTS

- Widespread floods in the Murray-Darling Basin have caused a large increase in carp numbers, while native fish numbers face a decline.
- Large numbers of carp can reduce water quality, cause damage to river banks and contribute to algae blooms.
- Carp have been plaguing Australia since the 1960s, and now account for more than 90 per cent of fish biomass in the Murray-Darling Basin.

"It looks like boiling, bubbling up and boiling, all on top of one another, hundreds of thousands of carp in a tiny spot," said Morton, who is also the National Irrigators Council chairman.[20]

Jeremy Morton
@Jeremy_Morton_ · Follow

Billions of European #carp have bred during recent #flooding in the #MurrayDarling Basin. #floods
@tanya_plibersek @theCEWH @MD_Basin_Auth

8:45 AM · Jan 4, 2023

[19] Carp plague: Invasive fish seize the day as floods extend south and west

[20] https://x.com/Jeremy_Morton_/status/1610391886128369664?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1610391886128369664%7Ctwgr%5Ed14431c12c7a3e0ffdd62314d047d9396881bf1b%7Ctwcon%5Es1_c10&ref_url=https%3A%2F%2Fwww.smh.com.au%2Fenvironment%2Fweather%2Fholy-carp-invasive-fish-seize-the-day-as-floods-extend-south-and-west-20230105-p5caje.html

While a National Carp Control Program has been developed, little progress has been made in implementation.[21] For those living in the Basin, carp are by far considered as the largest environmental issue.

Case study 3: Fish passageway

There is an estimated 10,000 barriers to fish migration in the Basin.[22] These have been attributed as a major contributor to the 90% decline in native fish species in the Basin.
All native fish migrate to complete key life stages, with migration scales ranging from a few kilometres (e.g. River Blackfish) to entire river catchments (e.g. Golden Perch).

The CEWH has said:

> *"Lack of fish passage at these sites constrains the ability of the CEWH to maximise the effectiveness of using Commonwealth environmental water to support the outcomes of the Basin Plan."*[23]

There has been some progress towards this. For example, in NSW a new NSW Fish Passage Strategy is being developed, "*which is a coordinated 20-year plan to proactively restore unimpeded fish passage to 165 high priority weirs, which will significantly improve native fish access to 8,885 km of mainstem rivers and key off-channel habitats below all major storage dams in the State*"[24].

However, a major barrier to the installation of fish passageways is the significant cost involved. This has prevented fish passageways from being installed.

Moving forward: partnerships

Finding 4b) Partnerships offer an integral way forward, for both further environmental outcomes, and building community support and trust.

There needs to be a paradigm shift to 'contemporised best-practice paradigms' of water management - based on partnerships, cooperation, co-beneficial outcomes, and practical integration of water users – rather than the current paradigm based on siloed water users, conflict, and managing trade-offs etc.

[21] The National Carp Control Plan
[22] Fish passage in the MurrayDarling Basin, Australia: Not just an upstream battle
[23] Online-Submission-Commonwealth-Environmental-Water-Holder-Department-of-Climate-Change-Energy-Environment-and-Water-M.-Finn-9-Dec-2024-113547336.PDF
[24] NSW Fish Passage Strategy | Department of Primary Industries

There are great successes demonstrated from partnerships in the Basin. This collaborative approach enables not only greater ecological outcomes, but also community involvement and trust in water management.

These collaborative models are now recognized as a new best-practice. Rather than earlier paradigms which saw water users as siloed, in-conflict, seeking mutually-exclusive outcomes, and requiring top-down management of trade-offs – this new paradigm sees water users as inherently integrated in practice, with a general desire to cooperate to seek co-beneficial or mutually-inclusive outcomes through participatory processes. This paradigm shift is captured below[25].

Table 1. Theoretical framework for water policy paradigms of best practice.

	Current 'best practice' paradigm (A)	Contemporised 'best practice' paradigm (B)
Model	**Theoretical Disintegration (siloes)** Theoretical siloing of water user 'types', seeing them as unintegrated or disconnected.	**Practical Integration** Recognises the integration and connection between water user 'types', in practice, particularly in developed landscapes.
Relationship between user 'types'	**Conflict** Water user 'types', are seen as in-conflict, binary and competing, thereby limiting cooperation potential.	**Cooperation** Water user 'types', have the ability and desire to cooperate towards shared objectives.
Policy objectives	**Managing trade-offs** Water policy is based on managing significant trade-offs between water users.	**Co-beneficial outcomes** Water policy is based on facilitating shared or co-beneficial outcomes for multiple water users.
Relationship between objectives	**Mutually exclusive** Environmental outcomes seen as mutually exclusive and binary to other water user outcomes.	**Mutually inclusive** Environmental outcomes seen as mutually inclusive to other water user outcomes, or further, that environmental outcomes can be enhanced by working with other users.
Means to achieve objectives	**Adjustment** Adjustment among water user 'types', such as rebalancing water sharing arrangements.	**Adaptation** Adaptation to leverage and optimise water user types' practices or operations to deliver co-beneficial outcomes. This requires a significant focus on working with people collaboratively to achieve objectives.
Measures of success	**Volume of water recovery a proxy indicator for environmental gain** Water volumes (i.e. volumes recovered from water users) used as a proxy for environmental outcomes.	**Actual/observed environmental gains** Actual/observed environmental outcomes, such as species presence, diversity and abundance, used as indicators of habitat and ecosystem health.
Governance approach	**Top-down** Government-led programmes, of which communities are informed.	**Participatory partnerships** Community or industry-led and designed programmes, supported by governments.
Scope	**Narrow view of 'environment'** Water policy that largely focuses on key environmental assets, or immediate environmental sites, such as river channels, adjacent riparian land or dedicated national parks or nature reserves.	**Broad landscape view of 'environment'** Water (and relevant land) policy that includes but moves beyond key environmental assets and immediate environmental sites, to look at the full landscape as a habitat mosaic, including private landholdings and the use of irrigation infrastructure within the landscape.
Role of water policy	**Conflict management** Managing conflict among competing interests, to force trade-offs to adjust towards objectives.	**Foundations for cooperation** Providing foundations to support cooperation between water users to adapt to achieve co-benefit outcomes.

In our view, now SDLs are established and frameworks are in place, focus must now turn towards these models.

This paper says:

"The importance of participatory approaches with landholders is increasingly recognised in the conservation and biodiversity fields (Kearney et al. 2022), but under-recognised in the

[25] Citations: Contemporising best practice water management: lessons from the Murray-Darling Basin on participatory water management in a mosaiced landscape

context of water management. Despite this, numerous examples exist of successful partnerships between environmental water holders, landholders and Irrigation Infrastructure Operators (IIOs) which enhance ecological outcomes and foster community confidence and trust. These partnerships, however, are often little known, absent from key policy frameworks, and have not yet been documented in theoretical notions of best-practice water management at the Basin scale. As the Plan nears its review, its approach to best practice must be informed by a modernised vision of success…"[26]

The paper ultimately finds that:

"The case studies demonstrate that not only are co- beneficial, participatory models (paradigm B) theoretically possible, and desirable, but such models are already successfully operating in practice. These successes should not be overlooked as a nicety, or good- news-story, but must be valued for their enormous potential to be incorporated into the main-game of contemporary water management."

Partnership Case study 1: Renmark Irrigation Trust

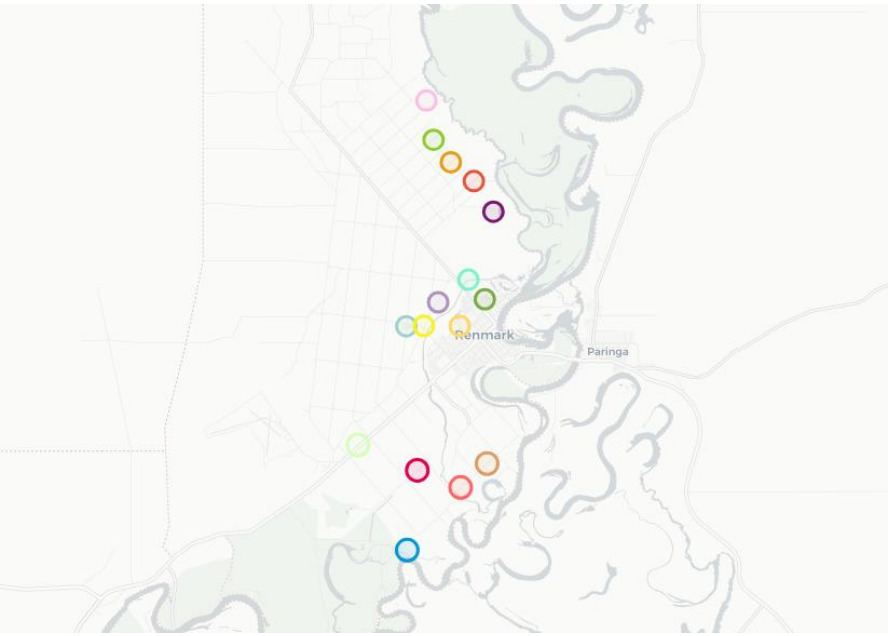
The Renmark Irrigation Trust (RIT) became the first irrigation body in Australia to enter a partnership with the CEWH, in 2016. By using the RIT water supply infrastructure, water can be delivered to where it's needed to keep the floodplain healthy.

Source: Renmark Irrigation Trust

In the 5 years up to June 2022 the Trust delivered over 2 GL to twelve sites, inundating 120 hectares. The CEWH is now one of the largest customers of RIT. The Trust has twelve active environmental watering sites which are located on Renmark Paringa Council and Trust floodplains.[27]

[26] Citations: Contemporising best practice water management: lessons from the Murray-Darling Basin on participatory water management in a mosaiced landscape

[27] Water for the Environment - Renmark Irrigation Trust



Source: Renmark Irrigation Trust

The regeneration of sections of floodplains also involves partnerships with Renmark Paringa Council, the Murraylands and Riverland Landscape Board, Department of Environment and Water and local landholders.

Further, in 2018 the RIT became the first agricultural site and first irrigation scheme in the world to be awarded gold level certification by the Alliance for Water Stewardship. The award recognises excellence in the management of water through its high standard of governance, efficient use of water for its members and partnerships with community groups in environmental restoration. In 2020, the Trust became the first irrigation scheme in the world to be awarded platinum level certification, the highest level of certification under the Alliance for Water Stewardship model. The increase to Platinum level recognises the Trust's continued activity in advocating for responsible water management and furthering innovative community partnerships in environmental management and restoration.[28]

Partnership Case study 2: Murray Irrigation

Murray Irrigation has over 2,000 private wetlands and around 2,000 km of ephemeral creeks and rivers in its footprint. MIL can deliver water straight to these rivers and creeks through at least 70 escape structures, along with hundreds of customer outlets that enable water delivery to wetlands on private property.

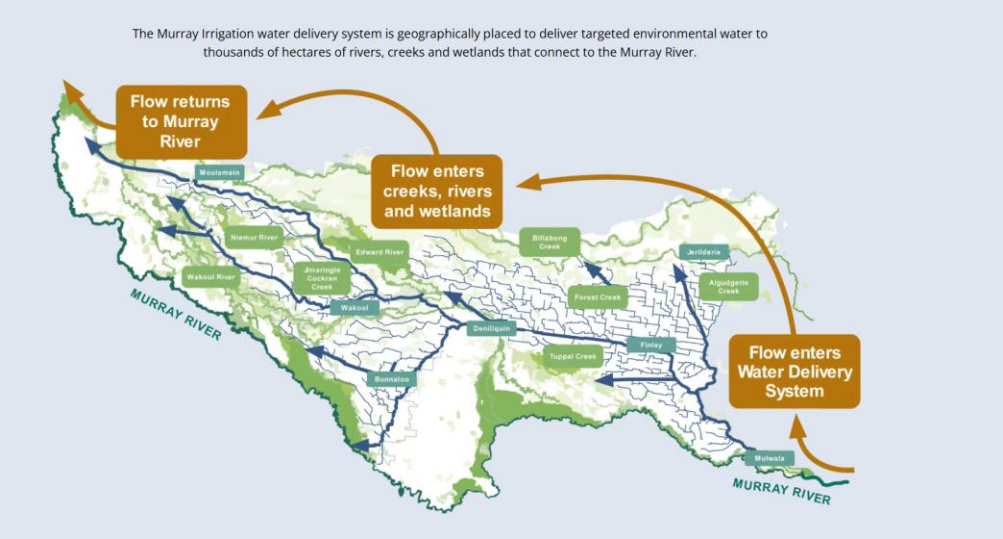
[28] Good Water Stewardship - Renmark Irrigation Trust

The Murray Irrigation *Restoring Murray Waterways Project* involves rehabilitating and connecting thousands of kilometres of riparian systems and wetlands throughout the Murray floodplain landscape, targeting at-risk ecosystems.

This is to build on and enhance e-water events by delivering water into natural assets via Murray Irrigation's channel network. The overarching objective of this project is to deliver better environmental outcomes using water already recovered through water reform.

The benefits sought include:

- Total of 74,000ha of floodplain ecosystems re-connected and rejuvenated
- 2,000km of riparian systems connected to the Murray River (20,000ha riparian beds).
- 2,000 on-farm private wetlands rejuvenated (54,000ha wetland area).



Source: Murray Irrigation

Moving forwards: prioritisation

The findings of the Evaluation and SRA, combined with the above, makes clear that the priorities and expectations for environmental investment in the Basin are shifting. It will be critical that the MDBA and Basin Governments prioritise actions and investments accordingly – to ensure the best environmental outcomes can be achieved, using public assets (HEW) most effectively and efficiently, while respecting value for taxpayers' money. Prioritisation will be critical.

In response to the publication of the Evaluation, the Commonwealth Environmental Water Holder (CEWH) said in a media release: "…the Basin Plan evaluation provided insights to three of the CEWH's highest policy priorities – taking steps on operational and physical constraints relaxation, connectivity of the whole Murray–Darling Basin river system and

complementary measures like fishways that help fish move more easily."[29] This matter of prioritisation is critical. Moving forward, it will be critical to ask the questions of what the environmental priorities are for the Basin. From the available evidence, it is very challenging to see how this could be further buybacks.

The Evaluation said: *"The cost of recovering water, whether through purchases or infrastructure projects, is increasing, and previous investments in water efficiency have most likely already leveraged the most cost-effective methods. Moving forward, a considered approach will be required to minimise the negative impacts of water recovery while maximising environmental benefits and ensuring value for money*."[30] This is where prioritisation is again critical, and adopting complementary measures to ensure the public asset (HEW) can yield the best results.

Prioritisation is important not only in the Review or Basin Plan 2.0 – but in the remaining implementation of the current Plan. There are significant concerns with the remaining components of the Basin Plan, both 'the 450 GL' and the likely shortfall of the SDLAM 605 GL, in that they are no longer about environmental priorities in the Basin, but are simply a numbers game, detached from the current evidence-base for what is most required now.

As part of this review, it will be critical to ask questions like:

- Even if there is a SDLAM shortfall, is there a need to further reduce SDLs in the Southern Basin?
- Recognising the costs which would be involved in having to recover a SDLAM shortfall, could that investment be better used via an alternative approach (such as being invested in complementary measures, or to properly deliver community-supported constraints measure projects)?
- Is the buyback of the maximum volume of 450 GL of additional held environmental water the best use of taxpayers money? Is this the priority now?

There is a role for the MDBA to be an independent authority in providing evidence-based guidance on next steps to these complex issues, free from external politics. Indeed, we see the role of the MDBA in this Review, being to look at the evidence-base, and see through the politics (both current and past), and offer opportunities for collaboration and further guidance to enable 'out of the box' thinking to shape the future management of the Basin, based on evidence.

For example, in our view, the remaining funds in the Water for the Environment Special Account (WESA) should be *prioritised* – by being made available for complementary measures, and in delivering community-supported constraints measures – before any further water recovery.

Box: Commonwealth Procurement Rules

[29] **CEWH welcomes MDBA's Basin Plan evaluation - DCCEEW**

[30] Page 5

The Commonwealth Procurement Rules (CPR) require that procurement achieves a value for money outcome, in that procurement should: use public resources in an efficient, effective, economical and ethical manner; facilitate accountable and transparent decision making; and be commensurate with the scale and scope of the business requirement (amongst others). These rules also indicate that price is not the sole factor in determining value for money, and points to other factors, including (but not limited to) fitness for purpose of the proposal. This also requires consideration of the broader benefits to the Australian economy.

We encourage the review to consider matters such as value for money when determining next steps for environmental investment - considering the significant environmental water now available to the CEWH, operation of SDLs, limitations to further environmental outcomes (without complementary measures and constraints relaxation) as well as the increasing prices of further water recovery. Key points to consider include assessing whether further water recovery can be justified against the CPR given:

- The continuation of buybacks despite SDL compliance around the Basin (given buybacks were a means to this end)
- the lack of progress on constraints and supply measures to enable the delivery of this water (and the existing HEW portfolio) to intended and best effect; and
- there is no (or very little) investment in the complementary measures required to achieve the environmental outcomes from this water
- the significant premium required above market value to attract willing sellers

Moving forwards: measurement

A further step in moving forwards for environmental water, will be improving measurement and reporting.

Ensuring the basic principles of water measurement, recording and reporting apply to all water users, including the Murray Darling Basin's largest water user, is very important. As we say, if you can't measure it, you can't manage it. Measurement is critical to ensure proper management and use of this public asset.

Measurement and reporting of environmental water may require different options, but that is no reason not to do it at all.

Chapter conclusion

With Stage 1 of the Triple Crown of Water Reform Framework completed, the next steps remain for Crowns 2 and 3. It is evident that many of the most pressing challenges cannot be addressed with water sharing alone. There are great examples already of how these next stages can be progressed and achieved, but they are not yet incorporated (or they are under-incorporated) into the core of Basin water management. The Review should seek to harness

the successes from these exemplars and identify pathways forward to build on these successes.

Ultimately, NIC recommend that a Taskforce is established to prioritise environmental investments in the Basin, as part of the Review. While stakeholders welcome the commentary from the MDBA to date on the importance of complementary measures, we don't want the Review to fall short by just nodding at these measures. Our expectation, and recommendation, is that the Review provides a pathway forward by outlining such environmental priorities, the types of measures required to address them, and a roadmap forward to devising a package of specific (and strategically implemented) complementary measures.