

Environment Victoria submission in response to *Planning our Basin future together*

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Introduction and summary

We appreciate the opportunity to provide feedback on Victoria's approach to the Basin Plan as articulated in the document *Planning our Basin future together: A prospectus to safeguard Victoria's environments and communities*.

Environment Victoria is the leading not-for-profit environmental advocacy organisation in Victoria. With 40 grassroots member groups and over 200,000 individual supporters, we've been representing Victorian communities on environmental matters for over 50 years. Through advocacy, education and empowerment, Environment Victoria seeks significant and enduring solutions that will safeguard the environment and future wellbeing of all Victorians. We have been campaigning on river health for many decades, focusing on the Murray-Darling in particular, and are a founding member organisation of the newly created Murray-Darling Conservation Alliance, which includes conservations councils in NSW, QLD, Victoria and South Australia.

Rebuilding the resilience of northern Victoria's water-dependent ecosystems depends on the full implementation of water policy and management reforms in the Murray-Darling Basin Plan (**Basin Plan**). These interventions are critical for promoting not just the Basin-wide objectives of the *Water Act 2007 (Cth)* (**Water Act**), but commitments by the Victorian government to promote the recovery of at least 140 Victorian threatened species. For these birds, frogs, fish and plants, the delivery of environmental flows is the only way to provide for breeding opportunities, habitat maintenance and connectivity.¹

Last year's *Water Amendment (Restoring Our Rivers) Act 2023 (Cth)* (**Restoring our Rivers Act**) provided several significant reforms, including extending Basin Plan timeframes by three and a half years. This provides an opportunity to return to a pathway of ecological resilience, acknowledging the previous decade's challenges of 'reductions in the amounts of environmental water recovered, pauses in Basin Plan implementation and neglecting to account for the consequences of climate change [which] have postponed any major environmental improvements.'²

In this respect, elements of the Basin prospectus set out a promising approach. Perhaps most encouraging is the Victorian government's reinvigorated commitment to investigating rationalisation options for irrigation networks: contracting the footprint of irrigation districts by decommissioning parts of the distribution system. Beyond recovering water for the environment, worthwhile projects will provide opportunities for farmers to transition to a hotter, drier and more erratic climate.

At the same time, the proposed approach carries notable risks. The approach appears to have been designed, above other relevant objectives, with the aim of preventing a 'Swiss cheese' effect – a phenomenon of irrigators exiting, leaving others to pay for the upkeep of the

¹ Environment Victoria, 'Doomed without a drink,' 15

² Koehn, 'Restoring sustainability to Murray-Darling Basin freshwater fish and aquatic ecosystems,' 168

system. In its hasty characterisation of the causes and impacts of the Swiss cheese effect, the prospectus advances a limited focus on rationalisation and complementary measures.

This approach is unlikely to deliver for regional economies or the environment. First, because the stated approach is not suitable for the stated aim. This has been most clearly articulated by the Productivity Commission, which found that ‘the case for targeting the buyback to prevent a Swiss cheese effect or to pursue system rationalisation is weak.’³

Second, because it is generally ineffective to attempt to achieve multiple objectives through a single instrument. If rationalisation is the only tool available, what will guide trade-offs between the environmental benefits of water recovery, the mitigation of water allocation prices, minimising increases to delivery fees and charges, and providing for structural adjustment and wider social outcomes? It would be preferable to clarify these objectives, then design distinct instruments to pursue them effectively and efficiently.

This is not to say that rationalisation is an inadequate approach for water recovery. On the contrary: meeting Basin targets efficiently likely requires a ‘mix of system rationalisation and geographically-dispersed water sales.’⁴ **Rationalisation is useful – so long as it does not impede other effective options, namely purchasing entitlements from willing sellers.**

This is our key recommendation in response to the Victorian government’s new prospectus:

Recommendation 1: Geographically-dispersed open-tender water purchases (buybacks) are an essential component of efficient and cost-effective water recovery, and must be allowed to proceed unimpeded, with irrigation rationalisation as a useful and complementary approach. Irrigation rationalisation and open-tender purchases should proceed together without delay.

Similarly, the aim to conduct a nuanced, comprehensive assessment of the challenges and opportunities in irrigation districts, regions and river reaches is immeasurably valuable. The prospectus aims to consider, among other factors, ‘patterns in water use, water trade, infrastructure asset condition, agricultural activity, demographic trends and land use change.’ This assessment would allow for the development of a number of discrete strategies: communicating the benefits of floodplain outcomes with efficient water recovery and constraints relaxation; minimising the effect of irrigator exit; and developing a strategy for agriculture based on a thorough investigation of terms of trade indicators, assessing farm costs and input prices.

³ Productivity Commission, ‘Market Mechanisms for Recovering Water,’ 194

⁴ Ibid., xxxiii

Response to key principles

Key principle in Prospectus

Summary of Environment Victoria's response

Demonstrated environmental benefits in and for Victoria

Constraints relaxation is essential to achieving environmental benefits for Victoria. Complementary measures should be considered as that – complementary, not as a substitute for environmental flows and genuine water recovery. Victoria's approach to the Basin Plan must consider threatened species and biodiversity to be consistent with recent amendments to biodiversity laws.

Minimised impact on water availability for towns, industries and agricultural production

More suitable criteria would be effectiveness and efficiency of water recovery. This would highlight other opportunities such as addressing the expansion of permanent horticulture plantings in the lower Murray, which is the major driver of entitlement prices throughout the Southern Basin. Targeting purchases to address this problem would reduce ecological damage of unseasonably high summer flows in the Goulburn while reducing conveyance losses.

Proactive structural change to support a sustainable future for irrigators and communities

The description of why this principle matters focuses on irrigation infrastructure. However, irrigation infrastructure is not necessarily the best mechanism for ensuring the future viability of farming or communities. More transparency is needed on past irrigation efficiency projects.

Supports progress towards Traditional Owner self-determination in water access and management

The approach needs to move beyond merely improving engagement and consultation towards true self-determination, as articulated in the UN Declaration on the Rights of Indigenous Peoples. It should respect First Nations sovereignty and material requirements (including substantial water rights).

List of recommendations

1. Geographically-dispersed open-tender water purchases (buybacks) are an essential component of efficient and cost-effective water recovery, and must be allowed to proceed unimpeded, with irrigation rationalisation as a useful and complementary approach. Irrigation rationalisation and open-tender purchases should proceed together without delay.
2. Commission an independent review to disentangle the factors that characterise the perceived impact of water recovery. This includes the impact of water reform (unbundling and financialisation of water rights), the Basin Plan (water purchases) and broader variables (climate change risk, mechanisation and terms of trade). Identify objectives and structural obstacles related to achieving a reliable income, high standard of living and pathways toward diverse, resilient economies.
3. Commission an independent review interrogating the historical development of a 'Swiss cheese' effect, identifying its causes and impacts. If averting a Swiss cheese effect is determined to be a priority, consider the full range of available instruments.
4. Supplement the development of a Constraints Relaxation Implementation Roadmap by appointing a panel of independent experts to find a workable pathway. This should include consideration of a wider range of options for landholders to participate, including time-limited easements and voluntary land purchases. Additionally, public engagement would be supported by publishing and expanding on the feasibility work explored by the Consultative Committee exploring the benefits of the program in the Murray and Goulburn Rivers.
5. Deliver complementary measures without positioning these projects as 'substitutes' for water recovery – which is anathema to their function as 'complementary' measures.
6. Commission independent research assessing 'additionality' among Victorian SDLAM projects, evaluating whether works and measures provide outcomes additional to those likely to be delivered through the constraints program. Further, utilise empirical evidence from existing works and measures, accounting for environmental risks (e.g., salinity and blackwater), likely impacts of climate change and water availability on the ability to deliver stated outcomes, and an assessment of negative impacts from proposed offsets on the wider floodplain.
7. Prioritise effective and efficient water recovery: evaluating how well water recovered delivers stated environmental objectives and maximises net benefits to the community. This criterion is more suitable than aiming to minimise the volume of water taken from the consumptive pool.
8. Explore opportunities for efficient and effective water recovery which address uncovered permanent horticultural demand as a major driver of entitlement prices

and trade of water not attached to land, arbitraging the water market.

9. Clarify objectives to minimise risks of stranded assets, recognising the risk of 'gold plating' assets that may subsequently become stranded while perpetuating a dependence on external support.
10. Disclose a list of previous irrigation infrastructure investment projects, including project recipients, details, costs and water savings per project. Commission an independent report investigating how these costs and benefits compare to other instruments for water recovery and sustaining rural economies.
11. Aim to respect First Nations sovereignty and the material requirements (including water access, use and ownership) to exercise moral obligations to care for Country. This should ensure that the Victorian government's approach imports the legal standard of free, prior and informed consent.

Comments on the approach to mitigating socio-economic impacts and effective water recovery

The approach set out in the Basin prospectus proposes rationalising irrigation infrastructure in order to avert and mitigate the perceived impact of geographically dispersed purchases from willing sellers. This assessment lacks rigour and nuance. Consequently, it deters and detracts from effective solutions. This includes a mix of system rationalisation and geographically dispersed water sales which would be appropriate for effective water recovery.

Nevertheless, the assumptions in the prospectus suggest laudable objectives. An effective approach would clarify these objectives and design distinct instruments to pursue them effectively and efficiently. These objectives appear to include:

1. **Minimising the effect of farmer exit.** The prospectus aims to achieve this by minimising increasing allocation prices and delivery fees.
2. **Designing effective solutions for structural adjustment.** The prospectus aims to achieve this by centralising water sales.
3. **Delivering environmental outcomes.** The prospectus aims to achieve this by system rationalisation.

1. Minimising the effect of farmer exit

The prospectus repeatedly centres the effect of different water recovery mechanisms on allocation prices and delivery fees. While the drivers are distinct, the prospectus assumes they are impacted disproportionately by untargeted water purchase programs, posing significant consequences. It is worthwhile to address these factors in turn.

a. Recontextualising the effects of allocation prices

Minimising allocation prices appears to be central to this prospectus, aiming to deliver a 'proportional reduction in the demand for irrigation water' alongside water recovery.

For many farmers, the increasing cost of water sits alongside others: from energy to diesel, fertiliser and chemicals, fodder, seed, haulage, rising interest rates, mortgage repayments and labour. For some, these coincide with lower prices for their product.

While some insulation from these price increases is often advocated for, it is critical to interrogate whether minimising water recovery is the most effective opportunity to maximise farm viability.

It is relatively straightforward that water purchases reduce the supply of water available for irrigation. Should demand remain constant or increase, this may result in increased water

allocation prices. For example, a recent ABARES study (June 2024) estimates that a 4% reduction in the supply available for consumptive use would increase average allocation prices by 10%.⁵

These expected price increases would arise within regional and seasonal variability and volatility. In dry years, for example, prices might increase \$402/ML.⁶ **In this context, a \$45/ML increase from potential water purchases is far less significant than changing seasonal conditions.**⁷

Similarly, allocation prices are impacted by demand-side drivers. The expansion of the almond industry has already increased prices by \$25/ML, with an additional \$15/ML expected in the coming years.⁸ While these changes will manifest gradually, it is also worth considering the impact individual farmers experience with profit margins eroded by water market intermediaries, or the impact on reliability resulting from the large-scale entrance of institutional investors and non-water users in the market.⁹

It is essential to consider each of these drivers, for three reasons.

First, because of their relative impact. If the overarching concern of increasing water prices is farmer exit, the most fundamental challenges are not water recovery. **Rather, farmer exit is driven by drought and climate change in combination with decreased commodity prices.**¹⁰ Industries like dairy suffer from trade sanctions while prolonged drought and market competition drive up water prices. These factors play a significant role in farm exits.¹¹

Second, because it may support clarifying the overall objective. While we have assumed the aim of averting farmer exit, it is also possible that objectives might include maximising agricultural production or productivity, farm income and manageable risk, a diverse mix of farm types, or sustainability. Many of these measures do not correlate with increasing water prices.

Third, because if insulation from price increases is designated as a critical objective, this should draw attention to effective opportunities on the demand-side. Addressing the unsustainable growth of the almond industry would also provide opportunities to alleviate environmental impacts resulting from high, sustained unseasonal flows.

Overall, there is little evidence that farmers will be meaningfully insulated from price increases by the Victorian government's attempts to minimise water recovery. While this

⁵ Downham et al, 'The impacts of further water recovery,' 8

⁶ Whittle, 'Analysis of economic effects of water recovery,' 5

⁷ Downham et al, 'The impacts of further water recovery,' 8

⁸ Whittle, 'Analysis of economic effects of water recovery,' 5

⁹ Hamilton and Kells, 'Sold down the river,' 189

¹⁰ Wheeler, 'Debunking Murray-Darling Basin water trade myths,' 7

¹¹ Wheeler et al, 'Modelling the climate, water and socio-economic drivers of farmer exit,' 551

approach would provide little in the way of intended benefits, it would carry straightforward, cascading ecological consequences.

Recommendation 2: Commission an independent review to disentangle the factors that characterise the perceived impact of water recovery. This includes the impact of water reform (unbundling and financialisation of water rights), the Basin Plan (water purchases) and broader variable (climate change risk, mechanisation and terms of trade). Identify objectives and structural obstacles related to achieving a reliable income, high standard of living and pathways toward diverse, resilient economies.

b. Reevaluating the causes of the Swiss cheese effect

Within the prospectus, an additional justification for an exclusive focus on rationalising irrigation infrastructure is to minimise increasing delivery fees. The assumption is:

‘Where untargeted water purchase programs have occurred across northern Victoria in the past, they have resulted in a patchwork of reduced irrigation throughout districts. Because reductions in water use were dispersed throughout the system, targeted works to remove infrastructure and reduce costs were not possible.’

In other words, if irrigators were to terminate their delivery shares in a patchwork way, other customer prices would be expected to increase to pay for long-term infrastructure costs. For many irrigators, these fees are already significant. In the Goulburn-Murray Irrigation District (GMID), the prospectus warns of increases upwards of 9-15%.

The prospectus then argues an approach targeting consolidating water purchases and infrastructure is less likely to lead to a Swiss cheese effect.

Nevertheless, it does not follow that alternative approaches lead (or have historically led) to a Swiss cheese effect. As with increasing allocation prices (above), there is insufficient evidence to conclude that water recovery is the cause of challenges within an irrigation district. If open-tender buybacks did not cause a Swiss cheese effect, then there is no reason to preclude them.

In fact, these claims are undermined by evidence that farmers participating in tender processes only sold a portion of their entitlement. This generated cash-flow to pay off long-term debts and invest in their business.¹²

Further, these claims depend on the disproven, simplistic assumption that a reduction in farm water use is proportional to farm irrigated hectare production. In fact, farmers adapt and restructure following the sale of a portion of their entitlement.¹³

¹² Wheeler et al, ‘Submission to the Murray-Darling Basin Royal Commission,’ 3

¹³ Wheeler et al, ‘Identifying water-related economic values,’ 18

While open tender buybacks may not be the cause of a Swiss cheese effect, as with the factors discussed above (terms of trade indicators) impacting production and farm returns, it may be worthwhile to disentangle various contributing causes.

Additionally, it may be worth interrogating whether a Swiss cheese effect has, on the balance, a negative impact. Contemplating farmer exit, the Productivity Commission noted that a 'Swiss cheese' effect opens 'holes' – opportunities for farmers to diversify their operations.¹⁴ This has historically been lauded by the National Farmers Federation as an opportunity for water efficiency, with neighbours 'using their existing entitlements over a larger area of land.'¹⁵

If it is determined that averting a Swiss cheese effect is a priority for agriculture or regional development objectives, the ACCC advises that properly considered termination fees and delivery prices provide effective approaches. This advice is hedged, however, with the acknowledgement that there may be a social utility in allowing any Swiss cheese effect to serve as a price signal – providing an incentive for rationalisation rather than 'insulating irrigators from price increases to an inappropriate degree.'¹⁶ Similarly, an investigation of whether delivery charges are set appropriately – considering the variable costs of delivery, from irrigators on the main channel to those at the fringes – may prove fruitful for providing equitable delivery fees.

Recommendation 3: Commission an independent review interrogating the historical development of a 'Swiss cheese' effect, identifying its causes and impacts. If averting a Swiss cheese effect is determined to be a priority, consider the full range of available instruments.

2. Designing effective solutions for structural adjustment

The approach set out in the prospectus aims to enable the identification and mitigation of socio-economic impacts, controlling some variables by consolidating interventions geographically. But while effective packages may be developed for irrigators interested in rationalising irrigation systems, it does not follow that rationalisation is the most effective solution for structural adjustment.

The prospectus assumes negative socio-economic impacts from further water recovery is inevitable. There is simply insufficient evidence to arrive at this conclusion. To briefly reiterate the arguments above:

- **The increasing cost of water is primarily driven by climate conditions, while increasing demand from permanent horticulture plays another significant factor.**

¹⁴ Ibid., xxxii

¹⁵ National Farmers Federation, 'Submission to Market Mechanisms for Recovering Water,' 9

¹⁶ ACCC, 'Water Charge (Termination Fees) Rules,' xvi

- The increasing cost of water sits alongside others (terms of trade factors). In combination with drought, decreasing commodity prices are the fundamental driver of farmer exit.
- Most irrigators participating in tender processes only sell a portion of their water entitlement. This means they do not terminate their delivery rights, but rather continue irrigation – sometimes purchasing seasonal allocations on the temporary market.
- It is inaccurate to extrapolate wider economic impacts based upon an incorrectly assumed proportional relationship between farm water use and farm irrigated hectare production. Indeed, previously commissioned reports taking this approach have been described in peer-reviewed analysis as ‘low quality and unreliable to be used in policy advice.’¹⁷
- If farmer exit is not tied to water purchases, then the assumed negative socio-economic impacts require additional clarity – particularly following several successive years of record-breaking production.

Supplementing these arguments, it is useful to recognise recent historical conditions. The Water Act ‘was introduced at a time that Australian farmers were losing competitiveness due to a soaring Australian dollar resulting from the mining boom’ and when ‘the Basin was in drought, which brought community stress.’¹⁸ These factors have coalesced with a range of others described above, leading economists to conclude that ‘buybacks have become a scapegoat for adversity within the Basin.’¹⁹

Additionally, it is worth recognising that the benefit of water purchases has not been adequately accounted for. While incorrectly applied regional multipliers have often been used to extrapolate the value of infrastructure investment on jobs across the region, it is worth contextualising their approach. These multipliers are ‘not reliable indicators of net benefits to the broader community’ and do not ‘reveal anything intrinsic about the productive use of the funds.’²⁰

If resources move to alternative productive uses, then similar impact can be expected from any investment of funds. Water has been taken out of the consumptive pool, however billions of dollars have been put into communities. While infrastructure-based approaches are often touted as an alternative to water purchases, they are ultimately still a form of ‘buyback’. They are, however more restrictive: the payment provided must be invested in irrigation infrastructure.

Reiterating **Recommendation 2** above, it is critical to develop an accurate understanding of socio-economic impacts in order to identify appropriate solutions and effective policy instruments.

¹⁷ Wheeler et al, ‘Identifying water-related economic values,’ 88

¹⁸ Wittwer, ‘Modelling variants of the Murray-Darling Basin,’ 7

¹⁹ Ibid.

²⁰ Productivity Commission, ‘Market Mechanisms for Recovering Water,’ xxxiv, 341

Effective and efficient approaches for regional development are, simply, unlikely to overlap with water recovery mechanisms. For example, modelling has revealed that ‘each dollar spent on human services creates four times as many jobs within the Basin as infrastructure upgrades spending.’²¹ **Consequently, economists have concluded that separate policies would be more efficient and equitable to provide water for the environment and support incomes in the Basin.**²²

3. Delivering environmental outcomes

The fundamental aim of this approach is to deliver environmental outcomes. While the extended approach to community consultation and project delivery may be permissible with the extended deadlines of the Restoring our Rivers Act, ecological imperatives mean we must act swiftly.

River Red Gum forests require floods at least every three years for maintenance. Black Box woodlands require flooding every three to seven years for growth and flowering.²³ Despite recent successive La Niña years, waterbird populations have continued to significantly decline. 41% of wetlands observed in the extensive Eastern Australian Waterbird Aerial Survey supported no waterbirds,²⁴ while the total population has fallen by as much as 90% in the last four decades.²⁵ Native fish populations have declined by more than 90% in the past 150 years,²⁶ while not a single adult Murray cod was detected in a recent comprehensive monitoring survey of the lower Darling-Baaka.²⁷

The growing pressure of climate change will bring further hydrological stress. It is critical that the Victorian government delivers on stated water reform and ecological recovery initiatives – and does not impede those underway.

In this respect, the proposed approach elicits several concerns.

1. It is likely to be a lengthy process. Consequently, it is not suitable as an alternative to open-tender water purchases.

The identification of projects is likely to prove challenging as the ‘low-hanging fruit’ has already been picked. The prospectus recognises that ‘large-scale projects to increase water use efficiency and modernise infrastructure have largely been done.’

Moreover, rationalisation requires complex negotiations. Working from the ground up to achieve community consensus is worthwhile. Yet, unanimous buy-in will be difficult to

²¹ Ibid., 25

²² Ibid., 18

²³ Roberts and Marston, ‘Water regime for wetland and floodplain plants,’ 15, 49

²⁴ Porter et al, ‘Eastern Australian Waterbird Aerial Survey,’ 2

²⁵ Casben, ‘Waterbird population has fallen by as much as 90 per cent in Australia’s east’

²⁶ Morton and Readfearn, ‘State of the environment’

²⁷ NSW DPI, ‘Preliminary report into the 2023 fish deaths,’ 7

achieve. The decisions to decommission the Campaspe Irrigation District, discussed in this report, had around 70% support.²⁸

2. Perverse impacts may arise from information problems.

Any strategic approach to water recovery generates problems of information and coordination. This is not to say that they are not worth pursuing. Rather, it is important to recognise which parties might be well-positioned to take advantage of these opportunities and to retain a measured estimation of flow-on effects.

For example, large corporate entities have historically been 21 times more likely than family farms to secure irrigation subsidies.²⁹ It is not improbable that agribusinesses will be well positioned to earn a premium for their water, with the ability to invest in irrigated agriculture elsewhere – continuing to put upward pressure on prices.

While decommissioning infrastructure provides a useful control, it is worth highlighting that paying well above market price for water – as has been common for infrastructure-based approaches – imposes substantial costs elsewhere.

3. Rationalisation without geographically-dispersed water sales (buybacks) is unlikely to result in efficient outcomes for agricultural productivity.

The Productivity Commission has historically designated this as ‘a blunt approach that disregards the efficiency of individual irrigators in different locations.’³⁰ Inevitably, there will be inefficient irrigators excluded from buybacks and efficient irrigators in areas targeted for closing down.

Acknowledging existing political imperatives, this blunt approach seems unlikely to result in an expansive closure of areas with efficient irrigators. Rather, it seems more probable that only the most outdated distribution systems will be addressed. Again, this is not to say rationalisation is not worthwhile – only that it may not prove effective in the absence of open-tender purchases.

4. The total volume of water proposed is only a small part of the 450 GL.

The prospectus provides estimates for potential water recovery: at the lowest (8 GL), medium (55 GL) and high (110+ GL). Concerningly, these ‘opportunities’ for water recovery do not represent specific projects or proposals.

5. The relationship of water recovery estimates to Basin targets is unclear.

Additionally, the volumes above ‘show where a certain volume of water recovery for the environment may start to open up opportunities to make more fundamental changes to how

²⁸ Ker, 'Parched farmers vote to abandon irrigation'

²⁹ Wheeler et al, 'The rebound effect on water extraction from subsidising irrigation infrastructure,' 2

³⁰ Productivity Commission, 'Market Mechanisms for Recovering Water,' 195

water is managed at the catchment scale.’ This approach appears to be the wrong way around – it should first start with assessing what water the environment requires.

The fundamental tool the Water Act provides to address the problem of over-allocation is a scientifically assessed limit on the water that can be taken from rivers – set at a level that does not compromise the Basin’s environmental values. This is an environmentally sustainable level of take (**ESLT**) reflected in a sustainable diversion limit (**SDL**) that caps extraction. It is well-established that in determining the existing Basin-wide ESLT, the Murray-Darling Basin Authority (**MDBA**) ‘failed to act on the best available scientific knowledge.’³¹

Nevertheless, water recovery required to reach this limit includes the remaining target of the 450 GL to deliver enhanced environmental outcomes (~424 GL) and the likely shortfall for incomplete projects within the Sustainable Diversion Limit Adjustment Mechanism (**SDLAM**) (190-315 GL). Targets for water recovery should therefore first be based on a Basin-wide ESLT, rather than the volume which will ‘open up opportunities’.

6. The prospectus does not properly consider the impact on biodiversity and threatened species, as required by Victoria’s key biodiversity law.

We have elaborated on this point in the next section, but it is worth flagging here as well. The *Flora and Fauna Guarantee Act 1988* (Vic) (**FFG Act**) was recently amended and now imposes a duty on Ministers and public authorities to properly consider the impact on biodiversity when exercising their functions, but this prospectus does not appear to discharge this duty. Victoria’s approach to the Basin Plan as stated in this prospectus may therefore be unlawful.

³¹ Walker, ‘Royal Commission Report,’ 54

Comments on proposed key principles

1. Demonstrated environmental benefits in and for Victoria

This principle is useful in the abstract – indeed, the full delivery of Basin Plan reforms including water recovery and constraints relaxation will produce demonstrable benefits for Victoria. However, the approach outlined in the prospectus does not currently live up to this principle as explained below.

a. Constraints relaxation is essential to realise the benefits of water recovered

Relaxing constraints on river flow is essential. Without these projects, ‘achieving so-called enhanced environmental outcomes will either not happen, or will result in limited outcomes.’³²

In effect, these projects are critical to realising the greatest benefit from water that has been recovered. The failure of state governments to implement these measures has, in the broader water management context, meant that only 7% of the wetland area in targeted river valleys receives effective environmental flows.³³

The prospectus adopts this position, but not without significant subversion, asserting that ‘further water recovery will have little benefit for rivers.’ This argument has been put forward even though the same government department is charged with implementing the program. The slow rate of progress on projects is, indeed, concerning and has led academics to conclude that ‘the appetite for ambitious constraints relaxation projects by state governments appears to be relatively low.’³⁴

While a range of instruments and options are available, governments have proposed that easement sales allowing water to flow over the lowermost floodplain remain voluntary.³⁵ This allows individual landholders to block the delivery of the program.

Fundamentally, the frequent appearance of this chicken-and-egg argument should serve as an indicator that the constraints program must be accelerated to deliver the full benefit of historical recovery.

This will not only communicate the benefits of the Basin Plan, but will provide additional co-benefits. For example, the delivery of the constraints program will provide forward planning for infrastructure to protect communities from larger floods as well as more sophisticated early warning systems. The physical works needed to make roads and bridges accessible in smaller environmental flows will prove beneficial in larger, unplanned events. Similarly,

³² Walker, ‘Royal Commission Report,’ 60

³³ Chen et al, ‘A trickle, not a flood,’ 601

³⁴ Kahan et al, ‘Using an ecosystems approach to reframe the management of flow constraints, 12

³⁵ Pittock et al, ‘Evidence-Based Conservation of the Northern Victorian floodplains, 113

updated modelling and measurement, incorporating observations from flooding, will provide a better understanding for how water will flow across the landscape.

Recommendation 4: Supplement the development of a Constraints Relaxation Implementation Roadmap by appointing a panel of independent experts to find a workable pathway. This should include consideration of a wider range of options for landholders to participate, including time-limited easements and voluntary land purchases. Additionally, public engagement would be supported by publishing and expanding on the feasibility work explored by the Consultative Committee exploring the benefits of the program in the Murray and Goulburn Rivers.

b. Complementary measures are complementary to environmental flows, not a substitute.

The prospectus acknowledges the value of dealing with ‘the damage caused to waterways by river regulation,’ identifying the impact of outdated infrastructure in particular. Yet, these opportunities are frequently held up as an alternative to water recovery, with the stated aim that complementary savings may reduce the ‘scale of water purchase required to achieve [the] same outcomes.’

While the Restoring our Rivers Act allows states to propose new works and measures projects within the SDLAM offset program, opportunities identified in the prospectus – like removing barriers to flow and fish passage – fundamentally serve to enhance the outcomes of environmental flows.

While the SDLAM program is deeply flawed, ‘experimental and unprecedented,’ any attempt to advance the logic of offsetting outside of its notification and reconciliation process extends the risks of double counting.³⁶ Existing projects already face this problem, as they were modelled in ‘packs’ without a robust analysis of additionality. In particular, it may be difficult to tell how measures to restore natural flow regimes are contingent upon, or provide additional outcomes to, those likely to be delivered through the constraints program.

Recommendation 5: Deliver complementary measures without positioning these projects as ‘substitutes’ for water recovery – which is anathema to their function as ‘complementary’ measures.

Recommendation 6: Commission independent research assessing ‘additionality’ among Victorian SDLAM projects, evaluating whether works and measures provide outcomes additional to those likely to be delivered through the constraints program. Further, utilise empirical evidence from existing works and measures, accounting for environmental risks (e.g., salinity and blackwater), likely impacts of climate change and water availability on the ability to deliver stated outcomes, and an assessment of negative impacts from proposed offsets on the wider floodplain.

³⁶ Walker, ‘Royal Commission Report,’ 57

c. Victoria's approach to the Basin Plan must consider threatened species and biodiversity to be consistent with recent amendments to biodiversity laws.

Victoria's key biodiversity law for threatened species is the *Flora and Fauna Guarantee Act 1988 (Vic) (FFG Act)*. The FFG Act was amended in 2019, with changes coming into force in June 2020. There is now a duty at section 4B (**the 4B duty**) on Ministers and public authorities to 'properly consider' the objects of the FFG Act when exercising their functions that may reasonably be expected to impact Victorian biodiversity.

Any Victorian government policy that has the effect of blocking, opposing or delaying Commonwealth environmental water purchases likely enlivens the 4B duty in that failure to expediently return water to the environment may reasonably be expected to impact biodiversity.

Environment Victoria has obtained legal advice as to the 4B duty and how it applies to Victoria's position on the Murray-Darling Basin Plan, and a briefing note has been previously sent to the Department (DEECA), Minister for Water and Minister for the Environment. We have also formally requested the Minister for Environment to inquire into how the 4B duty is discharged on this matter.

There is currently no evidence in this prospectus that this 4B duty has been discharged, or that the Department or Minister has given proper consideration to the FFG Act in arriving at their position. Failure to discharge the 4B duty is potentially unlawful.

2. Minimised impact on water availability for towns, industries and agricultural production

Minimising the volume of water taken from the consumptive pool is likely to prove challenging in efficient systems without significant underutilisation.

More suitable criteria for water recovery might highlight effectiveness and efficiency. In other words, evaluating how well water recovered delivers stated objectives and maximises net benefits to the community.

Effective water recovery would prioritise valuable entitlement types, in particular, high reliability water shares. To the extent that a mix of entitlement types may be targeted (seasonal allocations, options contracts, leases or take and use licences), there should be a clear demonstration that this mix has been developed with respect to the aims of the Commonwealth Environmental Water Holder (**CEWH**): matching flow regimes required for particular environmental assets. The stated intention within the prospectus to prioritise low reliability water shares is unlikely to deliver environmental benefits.

Efficient water recovery would prioritise cost-effectiveness, obtaining verifiable volumes without imposing substantial costs elsewhere. Previous strategic water recovery efforts have tended to pay well above market price for water. For example, the Australian

government purchased 29 GL in the Condamine-Balonne for nearly \$80m in 2017. Not only was this 85% more than the average price for more reliable water rights, but it was 25% more than the seller's original asking price.³⁷

Recommendation 7: Prioritise effective and efficient water recovery: evaluating how well water recovered delivers stated environmental objectives and maximises net benefits to the community. This criterion is more suitable than aiming to minimise the volume of water taken from the consumptive pool.

Efficient and effective water recovery may also be attentive to third-party impacts and improved reliability throughout the system. For example, the rapid expansion of horticulture in the lower Murray is the major driver of entitlement prices throughout the southern Basin.³⁸ Under extreme dry conditions, 'there will not be enough water available in the connected Murray to support all existing permanent horticulture, even if no water is used for other irrigation purposes.'³⁹ **Targeting purchases to address uncovered permanent horticultural demand in the lower Murray would provide additional benefits, diminishing ecological damage from trade through the lower Goulburn and Barmah Narrows while saving significant conveyance losses.**

These competitive conditions have not only driven price pressures, but they have been seized upon by institutional investors and non-water users. One prominent investor business model is to accumulate permanent entitlements and carryover with the aim of extracting monopoly rents. In the words of one chairman of Duxton Water, 'this is the perfect storm.'⁴⁰ These institutional investors are providing liquidity while earning 'substantial returns arbitraging the water market.'⁴¹ Targeting purchases from institutional investors and non-water users may provide opportunities to diminish costs elsewhere by improving entitlement reliability and diminishing the impact of price gouging.

Recommendation 8: Explore opportunities for efficient and effective water recovery which address uncovered permanent horticultural demand as a major driver of entitlement prices and trade of water not attached to land, arbitraging the water market.

3. Proactive structural change to support a sustainable future for irrigators and communities

Reiterating the discussion above: it is essential to develop an accurate understanding of socio-economic impacts in order to identify appropriate solutions and effective policy

³⁷ Slattery and Campbell, 'That's not how you haggle,' 3

³⁸ Aither, 'Australian Water Markets Report: 2021-22 Review and 2022-23 Outlook,' 6

³⁹ Aither, 'Water supply and demand in the southern Murray-Darling Basin,' 1

⁴⁰ Waldman, 'The Water Trade is Booming – and Sucking Australia Dry'

⁴¹ Ibid.

instruments. Effective and efficient approaches for regional development are, simply, unlikely to overlap with water recovery mechanisms.

While this principle aims to guide rationalisation efforts, it contradictorily assumes ongoing irrigation and infrastructure modernisation as a foregone conclusion. Essentially, it aims to provide infrastructure so that water users 'can remain an important part of their regional economies for a long time to come', lining up the long-term benefit with regional development goals.

As argued above (**Designing effective solutions for structural adjustment**), while investment in regional economies is undoubtedly the aim, **'it does not follow that investment in irrigation infrastructure is the only way of achieving regional development objectives. Investment in other forms of social and economic infrastructure may be more appropriate.'**⁴²

For example, projects financed under the Living Murray initiative with this approach cost nearly 40% more than market-based measures.⁴³ It is well-documented that if investments do not meet basic cost-benefit criteria, they delay the adjustment irrigation areas will ultimately face.

This criterion may clarify its objective as aiming to 'minimise risks of stranded assets.' The prospectus already identifies this risk, but it might benefit from a more targeted recognition that infrastructure modernisation risks 'gold plating' assets that may subsequently become stranded. This perpetuates a dependence on external support, creating an imperative to sustain the viability of those assets while perhaps neglecting more difficult, structural reforms. Consequently, this approach imposes substantial costs elsewhere, burdening taxpayers.

Recommendation 9: Clarify objectives to minimise risks of stranded assets, recognising the risk of 'gold plating' assets that may subsequently become stranded while perpetuating a dependence on external support.

Additionally, this principle recognises the value of ensuring 'upfront transparency and understanding of the costs, benefits, and long-term viability of irrigated systems.'

It may be useful to revisit and reevaluate the effectiveness of previous infrastructure modernisation approaches. For example, the Foodbowl Modernisation Project emerged despite advice from the Victorian Department of Treasury and Finance that it should not progress without a feasibility plan.⁴⁴ The Victorian Auditor General similarly found that the verification of anticipating water savings and cost assumptions for the project had been

⁴² Productivity Commission, 'Market Mechanisms for Recovering Water,' xxxvi

⁴³ Ibid., xxxiv

⁴⁴ Victorian Ombudsman, 'Investigation into the Foodbowl Modernisation Project,' 39

lacking or superficial.⁴⁵ The Victorian Ombudsman also outlined the projects failings, highlighting conflicts of interest and poor transparency.⁴⁶

These approaches have also been criticised by economists as an egregious subsidy to irrigators at a huge loss to taxpayers because it was ‘such an expensive way to solve a problem.’⁴⁷ Experts confirmed there was no evidence of significant water savings and discounted broader socio-economic claims – that such projects would ensure food security – as an ‘absolute furphy.’⁴⁸ Other academics have questioned whether such approaches represent rent-seeking for upgrades which infrastructure operators had previously accepted responsibility.⁴⁹

Recommendation 10: Disclose a list of previous irrigation infrastructure investment projects, including project recipients, details, costs and water savings per project. Commission an independent report investigating how these costs and benefits compare to other instruments for water recovery and sustaining rural economies.

4. Supports progress towards Traditional Owner self-determination in water access and management

Supporting self-determination in water access and management is essential. The aim of this principle to partner with Traditional Owners on opportunities and consider Traditional Owner aspirations on their Country may also benefit from a more direct recognition of the principles included in the UN Declaration on the Rights of Indigenous Peoples (**UNDRIP**). This includes improving First Nation’s recognition, procedural and substantive rights as well as importing the legal standard of free, prior and informed consent in decision-making frameworks.

It may also be recognised that the global rights and standards for the realisation and protection of self-determination set out in UNDRIP extend well beyond effective engagement. Self-determination includes the right to autonomy or self-government, as well as the free pursuit of economic, social and cultural development. It is critical to recognise these imperatives – autonomy, sovereignty, self-determination and stewardship – because they reject uniform incorporation of Indigenous nations into the cultural and legal paradigms of the colonial nation-state. In other words, Indigenous nations retain a right to exercise sovereignty and political practices, structures and institutions based on Indigenous ontologies – ways of understanding the world – which are often incommensurable with

⁴⁵ Victorian Auditor General's Office, 'Irrigation Efficiency Programs,' viii

⁴⁶ Victorian Ombudsman, 'Investigation into the Foodbowl Modernisation Project,' 7

⁴⁷ Fyfe, 'Brumby's water plan savaged'

⁴⁸ Ibid.

⁴⁹ Marshall and Alexandra, 'Institutional Path Dependence,' 690

settler ontologies.⁵⁰ This sovereignty can be expressed apart from or within settler governance structures.

Consequently, this principle may benefit from ambition beyond improving engagement practices. It should aim to consider a more rigorous conception of First Nations sovereignty – which is more complex than Western territorial sovereignty – to ensure that sovereignty is not undermined by Victoria’s water governance approach. This should ultimately aim to respect First Nations sovereignty and the material requirements (including water rights) to exercise moral obligations to care for Country.

Recommendation 11: Aim to respect First Nations sovereignty and the material requirements (including water access, use and ownership) to exercise moral obligations to care for Country. This should ensure that the Victorian government’s approach imports the legal standard of free, prior and informed consent.

We thank you for the opportunity to provide this response. For further information on this submission, please contact Tyler Rotche at Environment Victoria, details below.

Tyler Rotche
Healthy Rivers Campaigner
t.rotche@environmentvictoria.org.au

Greg Foyster
Rivers and Nature Campaigns Manager
g.foyster@environmentvictoria.org.au

⁵⁰ Moreton-Robinson, ‘Incommensurable sovereignties,’ 259

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