

# Draft framework for delivering the 450 GL of additional environmental water

Survey response  
4th March 2024

## **SECTION 1: Delivering the 450 GL target - Water recovery toolbox: leasing opportunities**

The Murray-Darling Conservation Alliance (MDCA) does not own water entitlements, and so did not respond to questions in section 1 of the survey. We would, however, like to make comments on leasing arrangements.

### **Commonwealth leasing water from irrigation**

#### **1. Leases aren't suited to delivering the enhanced environmental outcomes the 450 GL is intended to achieve.**

The 450 GL target aims to address constant, known watering needs. While the water will provide valuable outcomes for the entire system, the 3200 GL target is critical for maintaining salinity levels in the Coorong and Lower Lakes.

The Productivity Commission has noted that the purchase of entitlements is most effective for addressing constant known watering needs. Leasing allocations, like the purchase of seasonal allocations, is better suited to less-constant demands.

There is no doubt that some level of flexibility and a diverse portfolio is useful for the CEWO. For example, recent leasing water upstream of Narran Lakes enabled the completion of a pelican colony. While this averted the risk of nest abandonment, it is striking that a Ramsar-listed wetland isn't supported by reliable entitlements.

Leasing arrangements might be better suited toward allocations that aren't highly valued by water users but still valuable for river health (eg. supporting small to medium sized flow events in Autumn and Winter).

#### **2. Long-term valuation of leases is unclear.**

The 3200 GL figure was estimated as a long-term annual average. While the long-term annual average yield of entitlements is estimated based on conditions over the last 115 years, there is an understanding that the water share volume will be provided so long as these water governance regimes exist. Accounting for short-term leases in this LTAAY/LTDLE framework is less clear.

### **3. Value-for-money must be achieved.**

A fundamental difference between the purchase of entitlements or seasonal allocations and leases is the transaction cost. Leases, particularly considering the short-term value they provide, are relatively cumbersome to negotiate and manage. For example, both entitlements and seasonal allocations have established markets. Leases, on the other hand, present a significant administrative burden — considering the expenditure necessary to identify and negotiate boutique contracts with sellers. Additionally, there is a burden upon portfolio managers dealing with additional complexity.

These costs must be compared to the relative efficiency of open-tender buybacks.

Additionally, there is a need for expertise in valuing leasing options. Short-term leasing arrangements should consider the relative value of allocations during the water year. For instance, the value of allocations made after January in a wet year might have a diminished value in the southern Basin.

### **4. Long-term impacts should be assessed.**

Companies that lease water are typically aiming for a stable revenue stream and a hedge against low allocation prices while enjoying the appreciation of the underlying asset. It is reasonable to assume that a company leasing water owns both water and land. If the last five years is any indication, high reliability water shares and agricultural land are increasing dramatically in value.

It is reasonable to assume that a company with the capacity to lease would leverage the appreciation of the land's value while using the revenue stream from the lease arrangement to pursue an overall strategy of aggregation or consolidation. In effect, a large-scale leasing approach may result in a rebound effect similar to that brought about by irrigation infrastructure subsidies: increasing extraction, supporting large-scale corporations and potentially intensifying trends in the distribution of water use, closer to the Sunraysia region, which has wrought environmental damage upstream and carries significant conveyance losses.

### **Commonwealth leasing water to irrigation**

Leasing water to irrigators would seem to provide the benefit of avoiding shocks to the system. Leasing a portion of entitlements back to irrigators serves as a form of compensation while allowing a period of time to determine the best pathway for future investment. Further, it would provide revenue for the CEWH to deliver enhanced environmental outcomes — for example, by investing in the constraints program to ensure this water can flow across the floodplain at the end of the lease term.

Nevertheless, the institutional challenges of the past decade must be considered. Infrastructure investment created an imperative to sustain the viability of those assets, increasing dependence on external support, while more difficult, structural reforms were neglected.

Like infrastructure investment, lease-back arrangements could become ineffective because they attempt to achieve too many different objectives with a single instrument (water recovery, compensation, structural adjustment and an opportunity to delay necessary reforms). Therefore we are concerned too much focus on lease-back arrangements could detract from other more targeted solutions to the ecological and socio-economic challenges in the Basin.

## Murray-Darling Conservation Alliance



### About the Murray-Darling Conservation Alliance

The Murray-Darling Conservation Alliance consists of conservation councils in every Basin state.

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## *Answers for the survey*

### **SECTION 2: Delivering the 450 GL target - Water recovery toolbox: land and water partnerships**

No response to questions 3 to 9 of section 2 as we are not landholders in the Basin.

#### **Q10 - Do you have any feedback on the potential criteria we could use to guide land and water purchase or partnership investment decisions?**

Land and water packages are likely to be relatively costly. This makes it critical to consider the ability to deliver environmental watering needs. In particular, priority should be given to:

**1. Providing First Nations outcomes.** There are significant benefits for effective partnership agreements with Traditional Owners. Watering plans like the partnership between Nari Nari Tribal Council (NNTC) and CEWH at Gayini Nimmie-Caira and the cultural water management plan to establish cultural flows on Tati Tati Country provide direction for policy and governance changes required for settler institutions. Partnership agreements with First Nations groups should be aligned with the principles of The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Further, any combined land and water purchase should be held and managed by First Nations or their nominated representative organisations.

**2. Relaxing constraints.** Voluntary land purchases would be a useful asset in relaxing constraints. In particular, these might target areas where infrastructure upgrades might be required or where landholders dealing with existing flood damage may prefer to leave, or where ongoing compensation might not be practical. Nevertheless, it seems that easements — the most discussed option to date — are likely to be the most popular instrument in reaches targeted by the constraints program. The principle of value for money and confronting the reluctance by states to act on constraints relaxation should remain central priorities.

**3. Acquiring larger parcels.** The water market has been changing. While the number of entitlement trades is increasing, the average parcel size is decreasing. This should draw attention to the role of off-market water exchange. Active investors have noted that larger parcels are typically only available when land and production assets are offered for sale. Additionally, this strategy might also consider properties where large on-farm storages — which are often improperly unaccounted for — might see larger volumes returned to the environment.

In any land and water package, like the negotiation of leases, it is worth considering the significant administrative cost for the negotiation. Additionally, and perhaps more significantly, there is the administrative cost of managing the land. There will undoubtedly be a political imperative to shift this burden to private stewardship, which may reduce the public value while introducing a risk of double-counting within other restoration initiatives.

While partnerships with parks services should be explored, we submit that transfer of these packages to First Nations or their nominated representative organisations — along with management funds — will likely go the furthest towards providing First Nations self-determination and improving water management in the Basin.

**Q11 Is there any other information you wish to share that might help us in considering a potential land and water purchase program or partnership?**

Opportunities for the Commonwealth to enter into land and water partnerships with Traditional Owners should be considered in all catchments, especially those with Ramsar wetlands.

**SECTION 3: Delivering the 450 GL target - Understanding impacts on communities**

## **1. What are key lessons learned from previous water recovery programs that can inform practical approaches to minimising socio-economic impacts in the future?**

Expensive, ill-conceived programs to recover water through infrastructure investment are a consequence of attempting to achieve multiple objectives with a single instrument. While it remains critical to identify opportunities for water recovery that maximise public benefits, economists have concluded that two separate policies would be more efficient and equitable to provide water for the environment and support jobs and incomes in the Basin (*Wittwer, G 2020*).

Rural and regional communities are experiencing challenges that are strongly influenced by climate change and drought in combination with decreased commodity prices. Attempts to support regional communities through a hotter, drier future requires policy addressing the fundamental drivers of change.

In communities like Warren in the Macquarie catchment, cotton production has been regularly breaking its own recently set records in the time that the Basin Plan has been in place. The industry has expanded significantly and now dominates all northern cropping regimes, leading to smaller properties being amalgamated and as a result a sharp drop in local population. Innovations such as genetic modification and square bales have slashed the need for a workforce.

Attempts at recovering water through irrigation efficiency upgrades often have the perverse outcome of increased water extraction. This is for various reasons, including growers expanding the land under crops, and when channels are lined, being able to order water when there is a much lower water determination per ML entitlement announced.

To avoid these perverse impacts, Investments in Water Use Efficiency should prioritise targeted, strategic rationalisation through irrigation authorities. This included the contraction of channel networks by closing parts of the distributions system while modernising the 'backbone' or abandoning some assets altogether.

All identified public savings must be transferred to the CWEH (representing a reduction in the participant's licensed extractive entitlement). These entitlements should achieve value for money and reduce consumptive use, which will have the additional benefit of avoiding distortion of the market price and result in inefficient investment decisions.

*"The reduction in recoverable return flows to groundwater, streams and rivers must be accounted for when assessing the net effects on stream and river flows as a result of subsidised changes or upgrades to irrigation infrastructure intended to increase irrigation efficiency. (Williams & Grafton, 2019)"*

## **2. How can local knowledge be captured and applied to develop practical approaches to minimising socio-economic impacts in program design and delivery?**

The strategic identification of communities that are relying on irrigation schemes that may already be unviable is critical. Rather than persist on a path of on and off farm efficiency projects along irrigation schemes that are (for example) over 500 km of uncovered channels in a flat arid/semi arid landscape, these communities deserve a chance to diversify to mitigate the impacts of more-frequent droughts. This process requires collaboration with those communities without assuming the desired pathways of economic diversification and community development.

Social impact assessments of communities are required to assess the unique challenges and opportunities in each community. Opportunities for investment include those listed in Section 4 Q3 below.

## **SECTION 4: Delivering the 450 GL target - Proposed Sustainable Communities Program**

### **1. Do you have any feedback on the draft program principles?**

The stated purpose of the Sustainable Communities Program:

- **Prioritise the Resilient Rivers Program to maximise non-water purchase recovery options**

MDCA for reasons stated above and in various submissions strongly recommends prioritising voluntary water purchases over non-water purchase recovery options.

Investment of public funds on private property to achieve water efficiency benefits are unlikely to be able to contribute substantive volumes to the 450 GL target, or represent value for money savings.

We note for example that the NSW Government spent over \$110m upgrading all of the major water delivery areas in the late 1990s prior to the gifting of the infrastructure to users.

Subsequent on-farm/in-system water use efficiency programmes for groundwater and surface water users have all had difficulty identifying on-farm and in-system projects that can provide significant public benefits. Surely after nearly 30 years of governments subsidising water use efficiency programs there can be no reasonable expectation that further investment will achieve any significant new savings. Indeed all it is likely to do is replace or upgrade infrastructure previously subsidised by government, which should in itself highlight to the Framework managers the fact that water use efficiency programs based on infrastructure ultimately require ongoing maintenance and upgrading, and/or the enduring application of water use behavior contract conditions.

- **Allow more time to consult with industry, irrigation infrastructure operators and communities about minimising socio-economic impacts and designing community adjustment assistance.**

Ground truthed socio-economic data and reports on the impacts of water purchases on communities that have a reliance on irrigation, such as the work of Professor Sarah Wheeler, must be used as a basis for consultations with water using industries. As the recent MDBA-commissioned review of water economic studies found, reports by political consultancies that assume a unit elastic response (e.g. a 1% decrease in water extractions leads to an equal 1% decrease in irrigated hectares) are such poor quality they are 'unreliable to be used for policy advice'. The findings of these reports should be dismissed as unreliable evidence.

Overall, economic activity in the Basin has increased since the implementation of the Basin Plan. “.. *the gross value of irrigated agricultural production in the Basin increased by about 12% between 2013 and 2018, despite the volume of water used in irrigation declining by more than 16% over the same period*” (Productivity Commission Dec 2023).

There are many more areas to be assessed than simply the bottom line impact on the water extracting industries themselves, for example:

- ★ benefits and savings of the ecosystem services provided when rivers, aquifers and wetlands are healthy dynamic ecosystems that can hold and clean water in the environment;
- ★ the social and economic benefits of buy backs to downstream communities.
- ★ the benefits to farmers who want to sell part of their water entitlement to finance diversification into dry land farming.

MDCA is concerned that the NSW Water Minister confirmed that NSW have not started assessing communities who may benefit from community support packages, so strong is the NSW government's hostility to voluntary water purchasing.

- **Prioritise voluntary water purchase options that have the least unintended socio-economic impacts.**

MDCA strongly supports water purchases that will be most beneficial to the environment, in line with the objectives of the Water Act, while representing the best value for public money.

Previous Commonwealth water purchases have historically involved entering the market as a single dominant buyer with an offer period. This helped the relevant government staff and water users to develop their understanding of the market, licence transfer processes etc. and is consistent with equity market rules concerning takeovers. However for the balance of the 450 GL there is no reason to restrict purchases to that preliminary model.

The Commonwealth should move to making on-market purchases without declaring an offer. Simply set up a trader with discretion to enter into private contracts with willing sellers – wherein the Commonwealth will not pay over market price but the efficient market price. The over subscription of previous Commonwealth offers is indicative that the Commonwealth has been paying above the efficient market price.

The draft framework principles must explicitly reference the obligation of all public sector expenditure in Australia:

- the investment in water recovery must be cost effective relative to other recovery options (ie. The price paid should never exceed market prices unless there are additional strategic benefits).

## **2. What are key lessons learned from previous community adjustment assistance programs that can inform the delivery of the proposed Sustainable Communities Program?**

Previous community assistance programs have been poorly targeted and lacked accountability and transparency.

Economic studies show there are 4 times more jobs created from every dollar invested in human services than in irrigation infrastructure. (*Wittwer, G 2020*)

## **3. What kind of investments in communities do you believe would mitigate potential impacts of water purchasing?**

Opportunities to diversify water dependent industries could be tied in with the development of Renewable Energy Zones (REZ). In particular the South West REZ in NSW and the three northern zones in Victoria - Murray River, Central North and Ovens Murray. There may be areas of land suitable for essential transmission infrastructure that also have water entitlements. Investigating this overlap could progress both water recovery and energy transition objectives.

Tourism is an industry that has scope to develop within ecological limits in the Basin.

## **SECTION 5: Delivering the 450 GL target - draft Framework**

### **1. Do you have any other feedback on the draft framework to support delivery of the 450 GL target by 2027?**

#### Northern Basin Rule Changes

Flow targets in NSW and Qld water plans that provide for flow regimes that satisfy the Environmental Watering Requirements in the Long Term Watering Plan of each catchment, and provide connectivity between the catchments would be strongly supported by the MDCA if they were achieved without compromising the environmental outcomes of the Southern Basin.

However we are currently not satisfied that there is enough information publicly available to support water recovery through rule changes in the Northern Basin.

The delivery of the 450 GL to achieve environmental outcomes in South Australia was originally modelled coming out of the Southern Basin. There were reports in the media that the Commonwealth have modelling in a publicly available report that shows there would be no substantive impact to the health of the floodplains and wetlands of the Murray if 100 GL of the



450 GL was recovered in the north (*Weekly Times 31 January 2024*). Any modelling that exists should be publicly released for independent verification.

There would need to be mechanisms in place to ensure the rules in state-based water sharing instruments that allow for additional Commonwealth entitlements (ie flow targets) are maintained. If state based rules changed, and a Water Resource Plan was no longer eligible for accreditation, extraction in that catchment should be paused.

The modelling system that NSW uses is opaque, and not calibrated with observed data. Planned Environmental Water is not clearly, uniformly or adequately defined or protected within NSW, let alone across every jurisdiction of the Basin. The Commonwealth could consider insisting that all the modelled assumptions, observed data and descriptions of Planned Environmental Water that NSW and Qld use to determine the volumes of water for recovery be available to be independently audited and verified.

The NSW Water Minister stated that reductions to irrigation entitlement due to rule changes in NSW would attract compensation. If rule changes were the dominant form of water recovery in NSW, that would mean compensation would be paid directly to irrigators under this scheme, and communities would miss out on community support opportunities. It is not clear if the funds for compensation would come from the Commonwealth or the state.

#### Claim of recovery in excess of SDL in the Macquarie and Gwydir

Opaque modelling should also subject claims of 'over-recovery' to additional scrutiny. Like model runs, cap factors, the long-term exchange rates for water rights, have been changed repeatedly. In the Macquarie valley, they have been revised several times without independent verification – or disclosure on how they were determined. In effect, this allows for an over-estimation of water that has been recovered – claiming that water delivers more reliably than it does.

The legislation proposes new measures to be used to deliver the 450 GL. These include water purchases, land and water packages as well as transferring claimed 'over-recoveries' from other targets. These transfers are not well-founded.

#### Productivity Commission Report Findings

As highlighted by the Productivity Commission, there is a substantial water recovery task ahead that includes not only the balance of the 450 GL, but the balance of the 605 GL as well. Further delaying the Basin Plan implementation is putting the Basin and the public investment made to date at risk.

#### Constraints

The lack of progress on constraints should not be used as a bargaining chip by recalcitrant state governments to oppose additional water recovery. The 450 GL must be recovered regardless of slow progress with constraints.

Lodged

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