



## **Submission**

### **Draft Murray Regional Water Strategy**

#### **Introduction**

The Inland Rivers Network (IRN) is a coalition of environment groups and individuals that has been advocating for healthy rivers, wetlands and groundwater in the Murray-Darling Basin since 1991.

IRN welcomes the opportunity to engage in the process of developing a Regional Water Strategy (draft RWS) for the Murray River catchment.

The sustainable management of NSW water resources is the most important responsibility of the NSW and Federal Governments. Water is a scarce resource in Australia, more than any other inhabited continent on earth.

We note that new climate modelling and updated hydrological modelling for the Murray catchment has not been completed and only indicative climate prediction information is provided in the draft RWS. It is critical that the community receives access to new modelling information before the strategy is finalised.

Water management in the NSW Murray Region is highly complex with Inter-Governmental Agreements for water sharing in the southern connected basin, the Murray-Darling Basin Authority responsibility for managing the jointly owned assets (waterways, storages, weirs and locks) of the Murray River system in accordance with the Murray-Darling Basin Agreement and the Snowy Mountain Scheme with a review underway of the Snowy Water Licence. These various commitments need careful interaction to provide for improved environmental outcomes in water management.

The objectives of the Regional Water Strategy process appear to be weighted towards fostering growth in water dependency rather than focussing on the sustainable use of limited available water resources.

The process appears to counter the objectives of the NSW *Water Management Act 2000* that prioritises environmental health of water sources.

The NSW Murray River supports seven nationally important wetlands, including two Ramsar sites and many threatened and iconic species, including the southern bell frog and corroboree frog, the Australasian bittern and Australian painted snipe, as well as native fish species like

the Murray cod, Australian bass, river blackfish, trout cod, golden perch and southern pygmy perch.

A key recognised challenge for the region is the degradation of riverine and floodplain ecosystems due to river regulation, that has led to a loss of native vegetation and wetlands and a decline in the condition of fish communities and waterbird habitats.

There must be a stronger commitment from the NSW Government to protect and support these significant environmental values.

Groundwater is a significant water source in the region with high use during drought and high salinity in the lower catchment. Rising water tables is a key issue. Increasing salinity between Deniliquin and Tocumwal is attributed to concentration of extraction in that area. Degradation of water quality and failure to assess or protect recharge opportunities in the context of climate change risk is also a key issue. It is irresponsible to consider increasing reliance on groundwater sources for town water security during drought. Most of the good-quality, easily accessible groundwater sources in the NSW Murray Region are fully committed.

A key emphasis of the draft RWS must be demand management for both urban and rural water use. All water sources in the Murray Region are already under stress. This will be exacerbated with predicted climate change risks of higher temperatures and evapotranspiration, prolonged drought, and lower rainfall.

The region has experienced an overall decline in inflows over the past 20 years with half of the driest years on record occurring in that time. This has reduced water availability in the region.

Poor water quality is another key challenge in the Murray Region including salinity, elevated nutrient levels, blue-green algae, hypoxic blackwater and cold-water pollution. This must be clearly addressed to mitigate impacts on the environment, human and stock use.

To improve the health of the Murray water sources, the draft RWS needs a stronger set of options to return flows to surface water, better protect groundwater, improve water sharing rules and river operations.

## **Environmental Condition**

The draft RWS recognises that heavy regulation in the Murray Region has disrupted the natural flow regimes of many rivers, wetlands and floodplains and has caused the health of the catchment's environmental assets and native species populations to decline.

The construction and operation of dams and weirs combined with extraction of significant volumes of water have negatively impacted the riverine environment, its ecosystems, and flora and fauna. In particular, the floodplain forests, and fish and waterbird populations have declined significantly in terms of their extent and resilience.

While some attention over time has been given to providing an allocation of licenced water for environmental use, the volumes and opportunities for use have not caused marked improvement in ecosystem health. There are a large number of constraints limiting the use of held environmental water and environmental water allowances under water sharing plan rules. River operations favour extractive users over best environmental outcomes.

Significant improvements are needed in the management of water for better environmental outcomes to address serious ecological degradation.

Changes in crop types and lack of land use planning provisions has placed further stress on the river ecology. The rapid growth of the almond industry is a result of poor water trading rules and the policy emphasis on water use going to the highest economic value.

The associated increased water demand arising from recent increases in permanent plantings in the lower Murray River has offset reductions in consumptive water use in the lower Murray that were expected from recovering environmental water from consumptive use under the Basin Plan.

While water has been recovered to improve the condition of Murray River environmental assets effective delivery of environmental water is a challenge because of:

- physical constraints and barriers
- associated flow management within the regulated river
- demand and timing of water delivery to a large number of users whose needs are prioritised over the needs of the environment.

## **SDLAM Projects**

IRN considers that the SDLAM projects in the Murray will not provide improved environmental benefits in the long term. They do not address the changes in natural flow regimes and many, in fact, continue to increase the negative impacts of regulation in the river system.

The implementation of the Reconnecting River Country Program (RRCP) fails to meet the flow targets in the Murray as notified in the original Constraints Management Project factored into the SDLAM environmental equivalence test.

The notified flow target of 50,000 ML/day downstream of Yarrawonga has been lowered to 40,000 ML/day and the notified flow target of 40,000 ML/day at Doctors Point has been lowered to 30,000 ML/day in scenarios for community consultation.

The focus of the RRCP is now on what is palatable to the local community rather than what will produce the optimum environmental outcomes. This is at odds with the objects of the *Water Act 2007*, the Murray-Darling Basin Plan and the NSW *Water Management Act 2000*.

It is critical for the RRCP to be completed with the notified flow targets to achieve the delivery of the Basin Plan in full.

## **Options**

### **1. Improving water management for Aboriginal people**

IRN strongly supports options 1 – 7 to improve the water management framework to meet the needs and aspirations of Aboriginal people.

### **2. Improving riverine and floodplain ecological health**

IRN strongly supports options 26 – 34 with particular emphasis on option 30 to improve flows to important ecological sites. This option should also include flows to enhance native fish breeding opportunities.

### **3. Town water security**

IRN strongly supports options 20 & 21 to encourage water recycling opportunities for all urban areas in the catchment.

Small, isolated rural communities should be encouraged to adopt SOURCE hydropanels<sup>1</sup> through funding assistance. Other options to improve demand management for urban water use need to be considered. Large water dependent industries relying on potable water use should be required to compete for water licences on the open market.

IRN strongly objects to the following options:

Option 22 aimed at reliance on groundwater sources for town water supply is not sustainable in the context of the current over-allocation and overuse of groundwater in the Murray Region and the poor condition of groundwater sources.

Option 23 aimed at maintaining water-related amenity during droughts is in direct conflict with the needs of the natural environment and should not be a consideration in the draft RWS.

Option 25 proposes groundwater desalination for town water and industry that will drive an increase in groundwater use.

### **4. Current water sharing arrangements**

IRN gives in principle support to options 8 – 13 to review current water sharing arrangements. However, this must only be in the context of improved outcomes for environmental health.

Options 11 and 12 relating to groundwater extraction and sustainable use are strongly supported.

### **5. Improved research and knowledge of regional water sources and climate risk**

IRN gives in principle support to options 35 - 44 excluding option 41.

We strongly oppose any expansion of cloud seeding in water catchments. A better option would be research and reporting into the efficacy & cost of the current cloud seeding program in the context of climate change predictions.

### **6. Missing options**

IRN recommends that the following options be included in the draft RWS to improve water management in the Murray Region:

- Improved channel sharing arrangements for environmental water releases
- Review of the Basin Plan pre-requisite planning measures rules and implementation
- Improved seasonality and size of environmental flows to enhance native fish breeding opportunities
- Demand management actions for urban and industry water use. This includes alternatives to flood irrigation practices in the agricultural industry

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<sup>1</sup> <https://www.source.co/>

- Assessment of increased water capture and use through investment in on-farm and off- farm efficiency measures
- Opportunities for diversification away from water dependent industries in the Murray Region.

## **Contact**

For more information about this submission contact:

