

Edward River Council
Berrigan Shire Council
Federation Council
Murray River Council



May 29, 2024

Murray Regional Strategy Group
Submission
Draft Regional Drought Resilience Plan

Key Message

MRSG urges the councils within the NSW Murray Valley to adopt the NSW Murray Valley Adaptive Road Map as part of their Regional Drought Resilience Plan

Background

MRSG was formed in late 2018, after Federal Member for Farrer Sussan Ley and State Member for Murray Austin Evans attended a Water Crisis Meeting at the Deniliquin RSL. The event, which was held in the auditorium, was so well attended there was standing room only. During this meeting, both members advised that the NSW Murray Valley need a united voice on water advocacy.

One of the first projects MRSG worked on was developing a solution we could all take forward to Governments, being the NSW Murray Valley Adaptive Road Map. The Road Map has support from all major representative organisations involved in water in Murray Valley, from Albury to Swan Hill.

Developing Water Security:

The Southern Riverina region of NSW typically experiences variable climatic conditions, with medium to high rainfall years and periods of low rainfall or short-term drought.

Since European settlement, notable short-term droughts included 1914-1916, 1918-1920, 1963 – 1968 and 1982 – 1983, with weather patterns now described as El Nino conditions. Prolonged drought was noted 1895-1902 (Federation Drought) 1939 - 1945 (World War 2 drought) and the Millennium Drought (2000 to February 2010).

Early settlers recognised the benefits of the Murray Valley rivers and creeks and supplemented water supplies for drought periods and water security through windmills and large underground water tanks. While many towns were located adjacent to waterways, in times of drought water availability was supplemented to households serviced by water carts (eg JT Close Finley; JF Furphy & Sons Shepparton).

The River Murray Waters Agreement in 1915 established pathways for regulating the Murray River and establishing shares between the three States, NSW, Victoria & South Australia. As part of early stages of Murray River regulation, Lock 1 at Blanchetown was constructed in 1913.

The establishment of Hume Dam in 1925 began the journey to higher water security for the region. River regulation provided reliable stock and domestic water supplies and the development of irrigation provided a buffer for short or medium term drought cycles impacting agricultural production.

Between 1933 and 1964, the NSW Government also invested in NSW's largest irrigation network, Murray Irrigation Area and Districts.

Irrigation water usage was capped in 1997 to 1993 levels of extraction and since then, water policy changes have increasingly reduced water for irrigation purposes to secure more water for towns and the environment. This includes changes to the Murray River Agreement, NSW State Water Sharing Plans and through the Murray Darling Basin Plan.

Subject to conditions already required under the River Murray Agreement, the NSW Murray and Lower Darling Water Sharing Plan also specifically protects key priorities, prior to any water being allocated for irrigation purposes. These include:

1. Environmental rules
2. Basic Landholder Rights
3. 100% of access license share for domestic and Stock licenses, local water utility access licenses.

Murray Valley Drought Resilience:

The capacity of the Murray Valley communities to meet the challenges of drought are being cumulatively eroded by Federal and State Government policies on water. This is compounded by changes in water ownership, including the separation of land and water with resulting changes to previous water storage and delivery patterns in the Murray River.

The Federal Government's Murray Darling Basin Plan (2750GL) focused water recovery for the environment on the Southern Basin and NSW Government also encouraged its NSW share of additional flow targets to South Australia to be primarily sourced from the Murray Valley.

The Federal Government has now prioritised the recovery of a further 450GL which is no longer subject to social and economic neutrality conditions, and this further exacerbates the risks associated with drought. This poses significant challenges not only for irrigated agriculture, but also for major changes to how the Murray and Edward River systems will be operated. Additionally, there will be extreme social and economic impacts across the region, including urban areas, as numerous studies have shown.

With recovery of the additional 450GL, more environmental water will be stored in Hume and Dartmouth Dams with higher demand on the Murray River system to deliver new environmental flow targets to South Australia. Irrigation entitlements converted to environmental entitlements

now means water recovered for the environment will have a higher focus on release patterns in Spring and reduced flows for the Murray River in Summer and Autumn.

Flow-on impacts include tourism and elevated regional flooding risks occurring on a more frequent basis. In recent years we have seen the huge cost of flooding to public and private infrastructure across the region, and more regular flood events can be expected under current Federal Government policy. This should be of concern to all Councils participating in this Drought Resilience Plan, because effective water management must be a key focus of any drought planning.

The NSW Murray Valley relies on irrigated agriculture, a key economic driver that creates multiple flow-on benefits through processing, the service sectors, and so forth. The double-edged sword is that the Murray Valley is also impacted by the storage of environmental water in upstream storages and its subsequent release and usage.

We need growing recognition of the cumulative and compounding consequences of focusing water recovery from the Southern Basin, including impacts to reliability of remaining entitlements, particularly in the Murray system. The Murray Darling Basin Authority and NSW Water authorities, in an attempt to offset reliability impacts to irrigators, increasingly operate dams with reduced airspace; as a result, there is less room to mitigate flooding during high rainfall events.

Flooding of private and public land has many and expensive outcomes. For our farmers, the following results are experienced in a flood event –

- Loss of stock
- Loss of crop
- Loss of pasture / feed for stock
- Restricted or no access to crops
- Ground cannot be prepared in time for sowing
- Damage to infrastructure such as fences, roads and crossings
- Spread of noxious weeds leading to expensive eradication programs

Councils, Communities and Tourism impacts are also extensive and costly

- Road damage and infrastructure impacts
- Social and economic impacts to communities
- Significant damage to tourism opportunities and related businesses

The Federal Government's determination to recover the 450GL in quantity rather than quality, with a focus on the Murray system, is extremely concerning. It places our footprint at greatest risk, please see attached Appendix A, which highlights what is at stake.

Under this regime future droughts are going to have more severe impacts on regional economies and jobs much earlier than previous droughts. Please note, as previously stated, that flood mitigation and drought planning go hand in hand. Our precious water resources need to be

effectively managed to limit the impacts of both drought and flood, and under present management practices that is not happening.

Southern Riverina Drought Resilience Plan (draft)

In preparing a Drought Resilience Plan, it is critical that water security is not further reduced.

While we appreciate that diversification is an essential tool to mitigate the Murray Valley's reliance on agriculture, the Murray Valley Adaptive Road Map provides numerous benefits to Governments, the environment, and production in our footprint.

The Murray Valley Road Map provides a pathway for practical options to meet environmental priorities set in the Murray Darling Basin Plan without the need for further water recovery from the Murray Valley. The Road Map seeks to maximise environmental outcomes, protect the remaining elements of irrigated agriculture and reduce elevated flooding risks to the Murray Valley.

Developed in collaboration with MRSRG members (Murray Irrigation, Murray Valley Private Diverters, Yarkuwa, West Corurgan Irrigation, Rice Growers Association, Eagle Creek Pumping Syndicate, and Speak Up Campaign) and an internationally respected social-ecological researcher and fish ecologist, the Road Map has been presented to other organisations in the NSW Murray Valley, along with the MDBA, NSWDPIC and local members of parliament.

The Road Map, supported by the four councils as part of their drought resilience strategy, can offer genuine environmental, social, and economic outcomes and protect the region from the impacts of further water recovery and changes in climatic conditions.

Furthermore, the Road Map could be piloted in the NSW Murray for replication across other regions across the Murray Darling Basin.

MRSRG would welcome the opportunity to discuss the NSW Murray Valley Adaptive Road Map with the councils.

The Road Map can be found here - [NSW Murray Valley Adaptive Road Map](#) and is accompanied by the [System Capacity Limitations](#).

We look forward to hearing from you and progressing our aim to work together so we can prepare our region for future dry periods.

Yours sincerely,

Geoff Moar

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Appendix A - What is at stake?

- Elevated flood risks, jeopardising private property (including business, property infrastructure and agricultural production) and public property (including levee banks, roads, bridges and even aged care facilities and hospitals), resulting in increases to insurance levels. The 2016 flood in the Murray and the 2022 flood on the Goulburn and Murray/Edward system should be evidence enough that these volumes cannot be delivered without billions in cost recovery.
- Entire Industries – once an industry falls below its critical threshold (the volume of production required to enable value adding and service supply sectors to operate efficiently) those industries will no longer be viable.
- Irrigation schemes – once an irrigation scheme falls below operational efficiency those food and fibre producers left in the system will not be able to affordably have water delivered.
- Frontier Economics has sounded a clear warning. Their 2022 report¹ concluded that even without further water recovery, we will lose 25,000ha of horticulture in the next dry sequence, and if the 450GL is recovered, they predict we will lose 95,000ha of irrigated agriculture².
- Furthermore, the Frontier report concluded that simply buying back Basin Plan shortfalls would result in over \$850 million in forgone production per year².
- The loss of \$513 million a year in Gross Value Irrigated Agriculture Production (\$855 million GVIAP if you include the Bridge the Gap component), equating to 900 on farm jobs in Victoria alone¹. Using a conservative multiplier conversion this equates to \$1.8 billion in lost economic activity a year, based on the recovery of the 450GL in buybacks.

Table 18: Estimated GVIAP reduction associated with less irrigation from a 450 GL buyback

Lost GVIAP (\$m/yr)	\$/ML GVIAP	Vic GMID (\$m/yr)	Vic Mallee (\$m/yr)	NSW (\$m/yr)	SA (\$m/yr)	Total (\$m/yr)
Perennial horticulture	2000	24	98	32	70	224
Dairy	1350	169	-	14	3	185
Mixed grazing	360	7	-	7	-	14
Irrigated cropping	600	6	-	16	-	22
Rice	420		-	35	-	35
Cotton	800		-	34	-	34
All industries total		206	98	137	73	513

Source: Analysis by RMCg, with TC&A and Frontier Economics.