Adapting Victorian irrigation districts for the future

Planning our Basin future together

Irrigation communities are already adjusting to changes in water availability. A planned, community-led approach is critical for Basin Plan water recovery to happen in a way that supports productive, resilient, and sustainable Basin communities.

Irrigation districts matter

Irrigation districts play a critical role in Victoria's agricultural production. By providing a controlled water supply, irrigation districts allow access to water for food and fibre producers, reducing dependence on rainfall and lessening drought risks. In northern Victoria, the Goulburn Murray Irrigation District and Sunraysia pumped districts service 842,542 ha and 17,275 ha of agricultural land respectively. They contribute to over $3.2 billion of irrigated agricultural production annually across the Goulburn Broken, North Central and Mallee regions, making up 62 per cent of all irrigated agricultural production in Victoria.

Water recovery in irrigation districts

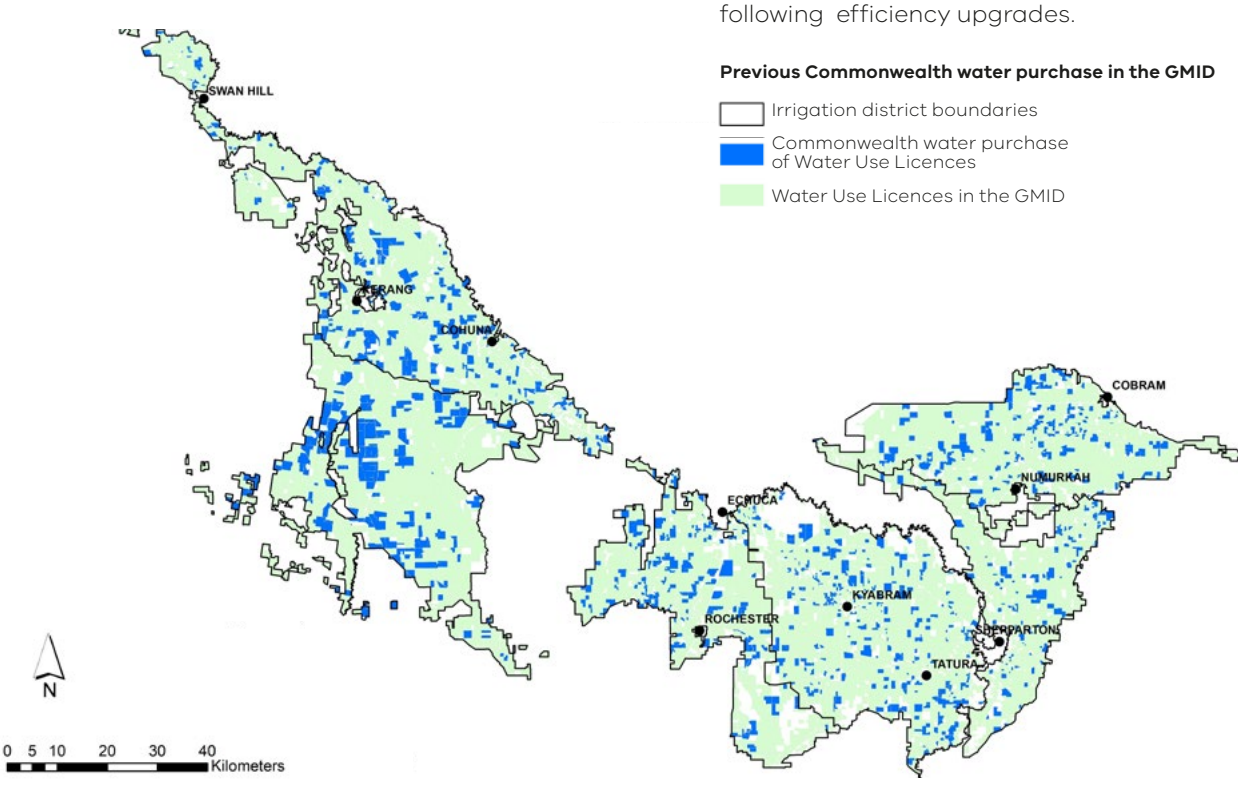
Past water recovery efforts have had both positive and negative outcomes for irrigators. Some irrigators have benefited from buybacks or on-farm programs. However, buybacks and on-farm programs have created challenges for irrigation districts and irrigators who depend on the temporary water market.

Commonwealth open tender water purchase

Open tender water purchase programs benefit individuals who sell their entitlements to government. However, this can push up water market prices when the demand for irrigation water isn't also reduced. This can happen when irrigators sell their water entitlements without the irrigation infrastructure that supplies the water being decommissioned at the same time. If water purchases are distributed across irrigation districts, infrastructure can't be removed, and maintenance and operations costs aren't reduced. This is often referred to as the 'Swiss cheese effect'. The figure below showing where previous Commonwealth water purchases have occurred throughout the GMID illustrates this.

On-farm water use efficiency programs

On-farm programs allow participants to exchange water entitlements for infrastructure upgrades to improve water efficiency on their farms. These programs were initially thought to have minimal impact on the water market but have been shown to increase allocation prices around twice as much as buybacks. This is because irrigators often increase their water use following efficiency upgrades.



Credit (above):Agriculture Victoria. Credit (in title): Mallee Catchment Mangement Authority.

Off-farm water recovery programs

Off-farm water recovery occurs through irrigation upgrades that reduce losses or rationalise infrastructure. These programs do not affect water allocation prices and should continue to be considered in any water recovery program.

Future water recovery in irrigation districts

The potential scale of Commonwealth water purchase is large. This means that rationalisation of irrigation areas needs to be considered and discussed with irrigators and the broader community. If rationalisation occurs alongside water purchases, this will avoid water market impacts because the individuals that sell their water cannot be supplied for irrigation into the future. This means that the reduced water supply is matched by fewer customers and lower infrastructure maintenance and operation costs. This also means that other impacts are concentrated in a particular area, making it easier to design effective targeted government assistance to support transition.

A system approach to water recovery

Rationalisation of irrigation areas should not be done in isolation without considering the broader system outcomes that can be achieved. By understanding the opportunities and limitations of irrigation system rationalisation in combination with broader system operations, it is possible to achieve better environmental outcomes and less socio-economic impacts.

Planning the future of irrigation districts together

Victoria wants to ensure Basin Plan water recovery happens in a way that supports irrigators and their communities to remain productive, resilient, and sustainable.

This means taking a strategic approach, learning from the past and considering the scale of future irrigation infrastructure based on current and future utilisation, operating costs, and system loss requirements.

We need to work with irrigation district customers to identify where opportunities may exist to strategically align water purchase with reconfiguration or rationalisation of irrigation infrastructure so that we can maintain the efficiency and affordability of irrigation systems.

A planned, community-led approach

In view of the Commonwealth Government's position on open tender water purchases, the Victorian Government will work with communities on the principles for water recovery, and the process to develop and deliver projects that align with those principles. You can read about our principles in the 'Planning our Basin future together' prospectus and fact sheet, available at www.water.vic.gov.au/our-programs/murray-darling-basin/planning-our-basin-future-together.

This work will require extensive community engagement and planning and the Victorian Government will be working with the Commonwealth Government to seek funding to support this.

Our experience through the Connections Project has shown us that by working together we can deliver projects at a small scale (channels) or a larger scale (whole irrigation networks or sub-systems).

Case Study – The Campaspe Irrigation District

Irrigation distribution systems must adapt over time as farm businesses respond to a changing climate, competition for water and market demands. In 2010, the Campaspe community was faced with the decision to close their irrigation district after five years of very low or zero allocations. The community considered future prices to maintain the irrigation system under a climate of low water availability and compared that with the cost of a reticulated domestic and stock pipeline. The community led the decision to close the irrigation district.

A few existing Campaspe district irrigators moved to alternative irrigation supply arrangements sourced from the Goulburn system to maintain their production. This decision to rationalise part of the system brought down ongoing costs for other GMID customers.

Credit (above):Agriculture Victoria

Having a say

The Department of Energy, Environment and Climate Action (DEECA) alongside water corporations and catchment management authorities, will be talking to communities about Victoria's approach.

You are also welcome to make comments on the prospectus and our principles. Submissions can be made via Engage Victoria: **engage.vic.gov.au**.

Contact us at rural.water@delwp.vic.gov.au.

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