

## 1. What is the Water Efficiency Project?

The Lower Murray Water (LMW) Water Efficiency Project is an opportunity to secure Commonwealth investment into the modernisation of LMW's rural irrigation supply infrastructure.

This investment will expand on earlier rural modernisation programs such as the Sunraysia Modernisation Programs and aligns with LMW's strategic objectives and irrigation investment priorities.

This project aims to modernise and upgrade existing channels to reduce water seepage, increase the integrity of infrastructure and provide improved service to customers. These channels are the backbone of LMW's rural irrigation systems, and while they have sufficient capacity to meet future demands, they are aged and inefficient. The project also includes upgrading outdated water meters.

Through the development of the project, LMW has engaged extensively with key stakeholders, including customer advisory groups, private diverters, regulatory authorities and industry associations.

The project is expected to cost \$37 million. LMW is seeking all project funding from the Commonwealth Off-Farm Efficiency Program, therefore customers will not be required to contribute to the project financially.

## 2. What is the scope of the project?

The scope of the project includes treating channels and meters throughout the Red Cliffs, Mildura and Merbein irrigation districts. The project's planning undertaken to date has identified the works in the table below. LMW is preparing its long-term planning framework for irrigation customers, and these works have been considered in preparing plans and future works.

The scope of these works has been determined at a desktop level and involved detailed discussions with all parts of the business. If the project receives funding, the detailed design of works on each channel will be determined following consultation with customers and authorities and will consider future opportunities to improve the level of service for customers.

During investigations, piping and channel lining was considered. The cost of piping all the channels considered under the project was not feasible due to cost constraints. Customers have made it clear that maintaining water prices is important to them. While service levels would improve under a piped system, there would be disproportionate increases in infrastructure prices.

The proposal does prioritise some pipework over channels where there are significant public safety issues and opportunities for reconfiguration of supply.

**Table 1 Project initiatives**

Asset	Works	Units
Wargan Main Channel (Merbein)	Channel lining	7.1 km
Mildura Channel K	Channel lining and some pipe	8.4 km
Mildura Channel L	Channel lining (~ 3.6km pipe)	7.8 km
Red Cliffs Channel	Channel lining and some pipe	3.9 km
Metering	Replace inaccurate and domestic and stock and Dethridge meters. Decommission inactive Dethridge meters.	~700

### 3. What are the objectives of the project?

The project aims to generate water savings while pursuing infrastructure solutions that improve the level of service and reduce ongoing cost liability. The proposed investment will generate a wide range of benefits across outcomes. The three main benefits associated with the proposed works will be:

**Water savings:** The recovery of water that is currently lost in the distribution and supply system can be recovered to deliver environmental and other benefits.

**Salinity:** The reduction of salt impacts on the environment which currently occur as a result of the channel leakage and seepage

**Productivity:** The promotion of enhanced regional productivity and the resilience of the region to climate change impacts.

### 4. How does the project's objectives align with Victoria's Murray Darling Basin Plan position and socio-economic criteria?

The Victorian Government supports Commonwealth investment in water saving infrastructure projects that deliver additional water for the environment above the Basin Plan's 2,750 GL target, in a manner that delivers neutral or positive socio-economic outcomes.

The modernisation of irrigation delivery systems and stock and domestic pipelines are important investments for Victoria. These types of projects will improve how water is supplied to private diverters and stock and domestic users and ensure Victoria's irrigation districts remain viable in the long term.

More broadly, the Water Efficiency Project helps meet Victoria's obligations as part of Murray Darling Basin Plan and avoids water buy-backs by the Commonwealth Government.

As part of seeking agreement to commence the Water Efficiency Project, LMW will consult with customers and key stakeholders to ensure the projects meet the socio-economic criteria and have the support of the community.

For more information about Victoria's approach to additional water recovery and the socioeconomic criteria see [www.water.vic.gov.au/mdb](http://www.water.vic.gov.au/mdb).

### **5. Who will get the water entitlements from the water savings delivered by the project?**

It is estimated that 2.5 GL of water will be recovered by the project. It is proposed that 1.8 GL of the water savings will be transferred to the Commonwealth Environmental Water Holder for the environment. The remaining water savings will be shared between the Victorian Government and LMW to increase urban water security for Mallee towns and support outcomes for Traditional Owners.

Victoria's water plan, *Water for Victoria 2016* and the draft Central and Gippsland Region Sustainable Water Strategy outline the Victorian Government's commitment to recognise Aboriginal values and objectives of water, including the return of water entitlements to Traditional Owners. This is the first water infrastructure proposal put forward in Victoria which seeks to recover water entitlements for Traditional Owners.

### **6. How are the expected water savings calculated?**

The expected water savings were calculated consistent with the methods described in the Victorian Government's Water Savings Protocol and technical manual for calculating water savings. The Water Savings Protocol requires water savings to be independently audited to verify works after they have been completed.

### **7. Will the project result in a reduction to the amount of water available to Water Entitlement holders?**

No, there will be no reduction in the amount of water available in the consumptive pool and available to irrigators. Water recovery from this project will be recognised by a reduction to LMW's Loss Allowance that provides for system losses incurred through evaporation, seepage and leakage in open channels and meter error and leakage in legacy meter outlet. Loss allowances are provided for in LMW's Bulk Entitlement.

Because water savings are achieved by avoiding losses and not by reducing the volume of water available to irrigators, the project will not impact the water market or increase water prices. Other factors such as the move to higher value agricultural enterprises, commodity prices and water availability will be the primary factors affecting market prices.

### **8. What will be the impacts during construction?**

Most works will take place during the annual scheduled winter shutdown period. Provision for 'by-pass' pumping will be made to ensure that any construction required outside this window will not impact customers' ability to receive water. Significant engagement will take place in 2022 with customers to understand the works and minimise potential impacts in 2023. Some preliminary construction works are likely to occur during the winter shutdown period in 2022, however the bulk of the work will take place during the winter shutdown of 2023.

The works involve significant channel lining and piping. This may have short-term impacts for landowners adjoining existing open and unlined channels. There will be significant landholder engagement to ensure minimal disruption during the delivery of works. Based on prior experience with similar works, it is anticipated works adjoining a landowner's property will take 2 to 3 days.

Some traffic delays can be expected to maintain the safety of work crews working across or near traffic.

**9. Is this increasing the size of the irrigation district or new customer demand?**

No, this project will repair and modernise the existing channels, it will not increase the amount of irrigation infrastructure. Where other planned works can coincide with these works to save money, there may be business-as-usual upgrades delivered simultaneously or some reconfiguration of the system to reduce long-term costs.

The project focuses on delivering service improvements for existing customers and modernising existing infrastructure, it will not make additional land available for irrigation or accommodate new development.

**10. What is the impact for customers where meters are replaced?**

Where customer meters are identified to be inaccurate or inappropriate for the type of use, LMW will work with each customer to ensure more suitable and effective meters are installed.

**11. Will there be other benefits to the local economy through these works?**

Yes, the size of the project is likely to require multiple work crews operating at the same time. Victoria's Social Procurement Framework is likely to apply to this project, requiring a minimal direct spend targeting local labour and suppliers.

LMW will manage the project and is likely to require additional resources to help plan and manage the works.