

Macalister Avon Irrigation Development Project

What is the Macalister Avon Irrigation Development Project?

The Macalister Avon Irrigation Development project aims to determine the feasibility of extending the Macalister Irrigation District pipeline network to an area of agricultural land along the eastern side of the Avon River.

It builds on feasibility studies previously undertaken through the Southern Victoria Irrigation Development Project that focussed on developing prospective areas throughout Central and West Gippsland.

How was this area identified as having potential to support irrigation development?

Over the past five years Southern Rural Water has undertaken two significant pieces of work to investigate and assess possible opportunities within Central and West Gippsland.

This work was co-funded by the National Water Infrastructure Development Fund and the Victorian Government. These packages of work undertook broad-scale water resource availability and land capability assessments to determine areas where suitable land coincided with potentially available water.

Following this, pre-feasibility work was completed to prepare preliminary concept designs of new water delivery systems, water demand assessments, desktop environmental and cultural heritage assessments, economic and cost-benefit analysis to further prioritise areas.

More recently we furthered this work to include a more detailed assessment of demand for water in the identified area and assess customers willingness to invest and pay.



What regional benefits could this offer?

Studies to date have indicated the Macalister Avon Irrigation Development Project is estimated to deliver \$58 million in benefits and an estimated 440 direct, on-farm full-time equivalent jobs, as well as local flow on employment of 495 full-time equivalent jobs.

The project has the potential to relieve irrigation pressure (extraction) on the unregulated Avon River.

Horticulture is expanding in the Boisdale area. Currently, the area experiences a season 'shut down' in winter between May and August. The Macalister Avon Irrigation Development Project could provide the Boisdale area with a year-round supply that would benefit food and fibre production.

The Macalister Avon Irrigation Development Project will help us to better understand the reality of these potential benefits.

How many customers could the project service and how much water could be delivered?

Previous studies assessed an area of 6,000 hectares for suitability for more intensive irrigation activities. A demand assessment of current users suggests between six and 10 gigalitres of demand for water.

This demand estimation was developed from a sample of current users who currently irrigate a total of around 2,000 hectares.

Through the Macalister Avon Irrigation Development Project, we will determine the volume of water that can be realistically delivered via a pipeline network that considers

system constraints, and we will also determine the likely pipeline route.

How much is it going to cost and who is going to pay for it?

Through this study we hope to understand the costs more clearly as we move from a concept design of the distribution network and balancing storage to a functional design.

Findings from the pre-feasibility work suggest that to construct a new distributions network and balancing storage could cost \$35 million. However, this preliminary assessment was completed early in the pandemic and the cost of materials has increased significantly.

Following the outcomes of technical assessments, Southern Rural Water may progress to the development of a business case. Through this process, we determine more accurate cost estimates and will assess different funding models.

Where is the water coming from?

Irrigation development is likely to be supported by access to water savings created via modernisation works recently undertaken. Southern Rural Water acknowledges there will be a future conversation to be had with irrigators in the Macalister Irrigation District to discuss the allocation of these water savings.

This project will undertake modelling to determine the availability of these water savings under different climate scenarios.

Will the project result in environmental impacts?

The Macalister Avon Irrigation Development project is guided by a set of principles that aims to ensure decision making is sound, equitable and protects existing users – this includes the environment.

This phase of work focusses on further understanding the potential impacts to environmental values within the area, as well as understanding the potential for positive environmental outcomes such as reducing the pressure on the unregulated flows of the Avon River, through reduced consumptive use.

Will the project impact cultural heritage or cultural values in the area?

The Macalister Avon Irrigation Development project is guided by a set of principles that aim to ensure decision making is sound, equitable and protects existing users – this includes cultural heritage and values of the area. Where possible we will seek to enhance cultural values and access to Country.

Southern Rural Water will partner with Gunaikurnai Land and Waters Aboriginal Corporation to undertake the necessary field-based cultural heritage and values assessments and the outcomes of this will inform the pipeline network design and future works. A Cultural Heritage Management Plan will also be required should development go ahead in the future.

How will you manage nutrient run-off?

As a part of the technical works packages, we will investigate the impacts of increased irrigation. Any future irrigation will need to have regard to relevant legislation and the Irrigation Development Guidelines prepared by the West Gippsland Catchment Management Authority.

Will current water users be negatively impacted?

No. The Macalister Avon Irrigation Development project is guided by a set of basic principles that aim to ensure decision making is sound, equitable and protects existing users. Users include both consumptive users such as customers, and non-consumptive users such as the environment and water that supports cultural values.

What work does this project involve?

The Macalister Avon Irrigation Development project will be undertaken in several phases.

The first phase of work will involve undertaking a range of technical assessments that allow us to better understand the available water resources now and into the future and the impacts of climate change.

These assessments will also help inform a functional design for a pipeline network and balancing storage, water savings and losses, channel operation and service, environmental and cultural heritage considerations, as well as identifying project costs and completing economic analysis.

In addition to these technical assessments, Southern Rural Water will be engaging with customers and relevant stakeholders to keep them informed and seek valuable feedback.

Following the completion of the technical work packages, and contingent on the findings, Southern Rural Water will seek to prepare a business case that will focus on Investment Logic Mapping, potential funding models, pricing and tariff structure.

How long will the current work take?

We anticipate completion of the technical feasibility work by mid-2023.

How will you involve customers and stakeholders in the process?

We have established a Customer and Stakeholder Reference Group (CSRG) comprising of irrigators east of the Avon River and in the Macalister Irrigation District (MID), peak bodies, agencies, local government, and traditional owners to support our work.

We believe in genuine engagement and are confident our CSRG can provide the right specialist advice and local knowledge to ensure project outcomes are technically sound.

The Macalister Avon Irrigation Development Project will be undertaken in several phases. We will engage the CSRG to report on progress and present findings at key milestones, and keep our customers in the loop via e-news updates.

When will the development take place?

At this stage there is no commitment to undertake the proposed irrigation development. The aim of this phase of work is to understand the potential and feasibility of such a development and provide Southern Rural Water and the Victorian Government the information they need to consider future decisions.



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