



OFF-FARM EFFICIENCY PROGRAM

Murrumbidgee Irrigation Automation Finalisation

What We Heard report

November 2021



Published by NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Murrumbidgee Irrigation Automation Finalisation

More information

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Acknowledgements

The Off-farm Efficiency Program is funded by the Australian Government.

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Acknowledgment of Country

The Department of Planning, Industry and Environment acknowledges the Traditional Owners and Custodians of the land on which we live and work and pays respect to Elders past, present and future.

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Executive summary

A range of diverse views were provided through the public comment process. Some views related to wider Basin Plan approaches, which are outside the scope of the socio-economic assessment for this project proposal.

A total of 13 submissions were received as part of the public exhibition process, of which 62 per cent of respondents agreed or strongly agreed that the project would result in neutral or positive socio-economic outcomes, with 23 per cent strongly disagreeing. All respondents who identified as irrigators within the Murrumbidgee Irrigation Area (MIA) strongly agreed.

Key concerns about the project centred around value for money, validity of water savings, project design and the effect of the project on the river operations.

There was support for improved infrastructure that enabled targeted and more efficient use of water, leading to production benefits. These benefits are outlined as creating the potential for producers to expand their businesses due to an improved use of existing water, greater water security, and the subsequent benefits to local communities.

Background

The Australian Government's Off-farm Efficiency Program is a \$1.54 billion program designed to recover water for the environment from reducing water losses in the Murray-Darling Basin.

The Off-farm Efficiency Program invests in water delivery infrastructure to reduce water losses in the Murray–Darling Basin, providing benefits to water users and the community by sharing the water saved between water users and the environment.

Projects funded under the program will provide long-term benefits to irrigators by improving infrastructure and benefit communities by increasing water availability and creating jobs.

The Off-farm Efficiency Program provides:

- up to \$1.33 billion for state-led off-farm infrastructure projects
- up to \$60 million available for state-led, on-farm projects that have strong community support and can demonstrate neutral or positive economic outcomes, and
- up to \$150 million in the Off-farm Efficiency Grants Program (run directly by the Australian Government)

The NSW Government is working in partnership with applicants across the Murray-Darling Basin to develop projects under the state-led projects stream for funding through the Australian Government.

The state-led application process for the Off-farm Water Efficiency Program requires the NSW Government to apply the Murray-Darling Basin socio-economic test for each project, seek community comment and provide this information to the Australian Government as part of the grant funding submission.

Public comment process

The Murrumbidgee Irrigation Automation Finalisation project proposes to modernise the Murrumbidgee Irrigation Area (MIA) through the completion of control structures automation, metered outlet replacement and conversions, open channel refurbishment and piping, and construction of the Roaches surge reservoir.

The project's response to the socio-economic criteria was published on the Water Infrastructure NSW website, and was open for public comment between 20 September and 3 October 2021.

The purpose of the consultation was to gather public feedback on the expected socio-economic outcomes of the project. The NSW Government requires project proponents to have previously completed comprehensive community engagement as part of project development.

This document is a summary of the feedback received during the public comment process undertaken as part of the socio-economic assessment of the Murrumbidgee Irrigation Automation Finalisation project (the project).

Previous community engagement undertaken by the proponent

The project has been scoped following extensive consultation with customers, the local community, Regional and State representatives. Stakeholders engaged include Murrumbidgee Irrigation customers, local Councils, State Government departments, Australian Government departments, the Local Aboriginal Land Council, regional contractors and supplier businesses.

A public exhibition process was also conducted by Leeton Shire Council as part of the Roaches Surge Reservoir Environmental Impact Statement (EIS) process.

Murrumbidgee Irrigation (MI) engagement suggests that the local community is generally supportive of the project given that conveyance losses are provided for in MI's bulk entitlement and there will be no reduction in the amount of water available for consumptive use. The EIS details that MI will continue to engage with customers and the community during delivery of the Roaches Surge Reservoir project to minimise disruption and impacts and provide opportunities for feedback.

Advertising activities

The following activities were undertaken by the NSW Government to ensure interested parties were aware of the public comment process and the opportunity to provide feedback:

- Local radio advertisements
 - Hit 99.7 Griffith and Triple M 963 - and live read per morning between 20 and 24 September 2021
- Local newspaper advertisements
 - Griffith Area News on 20, 24 and 27 September 2021, and 1 October 2021
 - Leeton Murrumbidgee Irrigator on 21, 24 and 28 September 2021
 - The Land on 23 and 30 September 2021
- Electronic Direct Mail (eDM)
 - WaterNews Subscriber list, direct message – 21 September 2021
 - 4,296 successful deliveries
 - Open rate 38.3 per cent (unique opens 1,668; total opens 4,244)
 - Reminder eDM sent to peak bodies and stakeholders – 27 September 2021
 - 225 successful deliveries
 - Open rate 27.6 per cent (unique opens 62; total opens 190)
 - WaterNews Subscriber list, article – 1 October 2021
- Targeted stakeholder emails (four) and phone calls (two) to DPIE stakeholders in local area not currently receiving WaterNews, to ensure they were aware of the application and opportunity to comment.

Who we heard from

The NSW Government received 14 responses providing comment on the Murrumbidgee Irrigation Automation Finalisation response to socio-economic criteria – 12 via the online feedback form and

two as formal submissions. One respondent provided two responses – these responses were combined, resulting in a total of 13 unique responses.

The feedback was received from the following stakeholder categories:

- Four Murrumbidgee Irrigation customers that are irrigators (including a research organisation)
- Four Murrumbidgee Irrigation customers that are not irrigators (including Local Governments)
- Two irrigators who are not Murrumbidgee Irrigation customers
- One Research organisation that is not a Murrumbidgee Irrigation customer or irrigator
- One recreation organisation
- One Australian Government organisation – Commonwealth Environmental Water Office (CEWO)

Summary of feedback

What we heard about socio-economic outcomes

Of the 13 responses, 62 per cent agreed or strongly agreed that the project would result in neutral or positive socio-economic outcomes, with 23 per cent strongly disagreeing. All respondents who identified as irrigators within the Murrumbidgee Irrigation area strongly agreed.

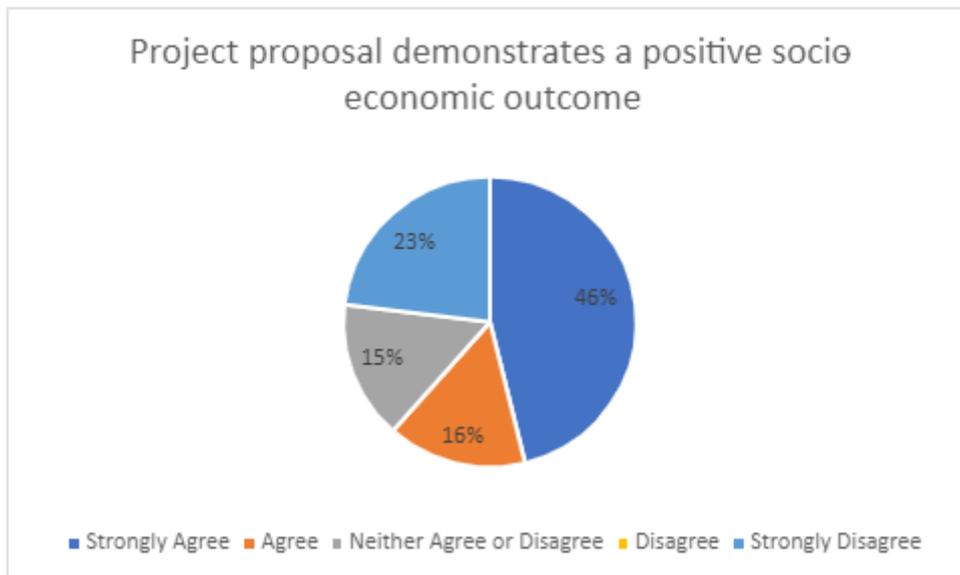


Figure 1- Agreement that the project demonstrates a positive socio-economic outcome.

There were several themes that emerged from the survey responses:

- Outcomes for primary producers and the community
- Project design
- Value for money
- Outcomes of previous funding

Outcomes for primary producers and the community

A number of respondents supported the project's effect on local producers and the community. The responses suggest that the works will benefit local producers through more accurate metering and improved infrastructure. The respondents believe the activities detailed in the proposal will ensure the MI is a fully automated system, which will result in long-term benefits through water savings and better management of a scarce resource. They suggest that:

"There is a need to address some of the aging and dilapidated infrastructure... replacement with pipelines would eliminate wastage and ensure accurate delivery of the water"

"Many irrigators in the Murrumbidgee Valley have installed high flow layouts and automation is becoming industry standard".

Respondents noted the benefits of Roaches Surge Reservoir (the reservoir) to minimise notification shutoff will ensure irrigators are able to maximise the benefit, efficiency and flexibility of their systems, meet the needs of crops and save water. They suggested that a single reservoir is more beneficial than numerous individual farm storages within the system. The potential benefits of a reservoir during environmental watering events was also discussed. One respondent expressed concern that the reservoir would benefit adjacent properties rather than customers across the whole system.

Another noted that water efficiency savings of this type are targeted to the area's agricultural operations and suggested the project does not directly benefit town supply or manufacturing. The respondent stated that towns will economically benefit where enhanced efficiency and business growth options are available for primary producers. Another suggested that:

"The future prosperity of the City of Griffith and other communities within the Murrumbidgee Irrigation Area are critically dependent on making the best use of our most precious resource, water. This project will achieve tangible and measurable benefits for all of us..."

NSW Government response

The responses suggest positive socio-economic benefits for producers and the wider community are the anticipated result of this project.

The project proposal details that the reservoir will optimise the whole MIA system through the storage of water to enable improved access at critical time points. This will benefit all customers. There is no evidence to suggest that the reservoir will benefit select customers.

The reservoir will complement high flow events as MI will be able to supply off the grid without needing to take water from the river system during high flows, allowing for greater flows down the river. MI is an in-storage (off-river) system that stores water that MI has ordered. This storage could provide CEWO with further positives and the NSW Government suggests that CEWO explore these benefits with Murrumbidgee Irrigation.

There are both direct and indirect benefits to town water systems and manufacturing through water security from the reservoir. Storage enables MI to disconnect from the river but still ensure town water supply for a few months. The NSW Government notes that some manufacturers source water from MI, not town water, and therefore there is a direct benefit of water security for those businesses.

Project design

One response stated:

"There is limited information on exact sites and to make any valid comment would require specific local knowledge. It is difficult to comment on the general river health when it is not clear just what is planned".

This respondent questioned if automation projects result in saved water and whether the reservoir would increase the consumptive use of water. It noted that the MI proposal states that the project could 'potentially expand the irrigation footprint' and suggests this is not an aim of the Basin Plan and that any proposals that result in expanded irrigation operations should not be considered for funding.

Another respondent expressed concern that only 45km of works were proposed for piping and canal lining, suggesting that more works should be done in the MI system to upgrade canals to manage evaporation and seepage losses.

The responses from the CEWO noted that the reservoir project has potential to provide flexibility in environmental water delivery during managed environmental events but questioned the lack of clearly articulated operating rules as part of the MI project proposal. This ambiguity makes it difficult to assess the effect that enlarging MI internal storage may have on environmental water manager's abilities to meet mid-Murrumbidgee wetlands Environmental Water Requirement's during supplementary access periods.

NSW Government response

The proposal provides maps, details the project area and contains detailed information on the proposed activities. All activities will be undertaken within the MI system, not on-river, and will not negatively affect river health or environmental watering events. Given that the MI is an off-river system the suggestion that operating rules be established requires further discussion with CEWO. The proposal will result in more water for the environment which will positively impact river health.

There is a large volume of research that shows automation will result in more efficient use of water. This project will complete the automation of the MI system, along with further works to continue to pipe and line the extensive channel of networks in the MI system. Final reports of previous MI projects are available on the Australian Government [website](#).

MI's statement that the irrigation footprint may be expanded relates to the ability for existing MI customers to expand their businesses due to water efficiencies, and those customers on the edge of MIA to consider converting parts of their property from dryland farming areas to irrigation areas. This does not mean more water is used, but rather that there will be better use of existing water. This will result in more productive businesses, with benefits that will flow on to local communities. These outcomes directly address the socio-economic criteria that were agreed to by all Basin State Ministers.

Value for money

A number of respondents were concerned with the high price per megalitre in this project, noting that the Murrumbidgee Irrigation Automation Finalisation Project claims water savings at nearly \$20,000 per megalitre.

One respondent suggests that buying water back from willing sellers' costs around \$2,000 per megalitre and that MI proposal represents a cost ten times greater than simply buying back the water.

Respondents note that in prior on-farm efficiency projects farmers did not receive such a high price for water transferred to the environment, with one respondent suggesting that the funding would be better spent paying irrigators that were not fairly compensated for water returned to the environment in other irrigation areas in the past.

Respondents note that neither the costs or water savings estimates come with any calculations or references, and thus it is unclear how these figures have been arrived at, how they will be verified and audited into the future, or how the savings can be authenticated.

One respondent noted that water savings can only be genuine if infrastructure owners were not going to undertake the investment without the Government's assistance. The proposal documents states that MI "has begun delivering the program of works" and they therefore suggest that:

"Based on the proposal documents, it appears that MI will undertake this investment without government assistance".

While another suggests:

"In the decades to come, public opinion will confirm that the decision by Government to fund the Murrumbidgee Irrigation Automation Finalisation Project was a wise investment".

NSW Government response

The NSW Government will review this application within the parameters of the Off-Farm Water Efficiency Program set by the Australian Government. Concerns regarding previous projects and decisions made by the Australian Government are not directly related to this project proposal.

NSW notes that water prices are significantly higher in the current water market than in previous project rounds and suggest that claims that water costs are 10 times greater does not consider the value of High Security water in today's market. To do so would suggest a ratio closer to 1:3 than 1:10. This does not consider the additional benefits of investment for the local community through the project – which have been articulated in the project proposal. The NSW Government has also commissioned further work to verify the economic benefits of the project on the economy. The outcomes of these studies will inform the NSW Government review of the project proposal.

The Australian Government has suggested they are willing to consider proposals with a market multiplier greater than was used in previous rounds. The market multiplier tolerance is a matter for the Australian Government and processes to verify water savings and value for money are undertaken as part of the Australian Government assessment.

In any project proposal, the proponent holds the risks that the price of water remains sufficiently consistent to ensure the value for money is not negatively affected and that they can deliver the nominated water savings.

Full water savings calculations and data are not made publicly available as this is commercially sensitive information used during the calculations.

Water savings will be independently verified by the Australian Government as part of the proposal assessment process and will also be audited by the NSW Government as part its project management framework.

While MI may decide to progress automation without Government involvement it is likely that this program of works will take substantial time to deliver within the financial constraints of the business. The \$15 million in planning already invested by MI was a decision to proceed without any certainty of funding through this program, given that these works needed to be completed in 2021. Finalising the automation of MI will ensure all customers have an opportunity to realise the benefits of automation and grow their businesses through more efficient use of water.

If the Australian Government decides not to fund this project, MI may decide to proceed with finalising its automation given the customer demand, however this will take considerably longer delaying realisation of its benefits, affect producer's productivity, limit the socio-economic benefits to the community and will not result in additional water for the environment.

Environmental impacts

The CEWO's response provided general advice for any efficiency project in its submission, noting that:

- Held Environmental Water (HEW) should not substitute for water currently meeting Environmental Watering Requirements or be required to mitigate other environmental risks

resulting from implementation of the project. Project implementation should not create a demand on HEW.

- Real water savings generated through infrastructure works should not reduce the volume of available water in the entitlement pool or impact Planned Environmental Water within the catchment or across the Southern Connected Basin.
- Implementation of infrastructure works should, where relevant, allow for greater operational flexibility with environmental water deliveries and complements the Reconnecting River Country Program.

A respondent questioned the impacts of the project on the river system and the Lower Mirrool Creek.

NSW Government response

MI is a closed system therefore any water MI returns to the Australian Government are real savings and there will be no demand on HEW. The reservoir will increase on-river efficiency, meaning there will be more entitlement available in the resource pool. This project will allow greater flexibility in the system.

Given that all activities are within the MI system, not on-river, there will be no impacts on the river system or Mirrool Creek.

As detailed above, the reservoir can complement high flow events as MI will be able to disconnect from the river and meet supply demands internally – which assists the river to achieve the high flow rates required for environmental flow events. This can lead to further benefits in the river system that MI is willing to explore with CEWO.

Outcomes of previous funding

Some respondents questioned the results and feedback from previous funding in regard to value and stakeholder satisfaction, and whether the funding delivered the desired outcomes.

NSW Government response

Final reports on all previous projects are available on the [Australian Government website](#). The final reports detail the outcomes and benefits to customers and the community. Case studies of Murrumbidgee Irrigation customers also detail the benefits of previous projects.

The Australian Government commissioned an independent review of the overall economic effects of water recovery programs in the MIA, and to estimate the long-term economic effects of projects. The review concluded that:

“The investment of the Commonwealth in construction activities through PIIOP and OFIEP has a significant effect on local value added particularly the years during and immediately following the investments. The effects of the infrastructure investment continue to ‘wash through’ the local economy for many years. The ongoing on-farm productivity gains from the investments supplement these gains and collectively bolster the local economy.” (p.ES.i)

As part of previous projects, the Australian Government implemented monitoring and evaluation frameworks. A monitoring and evaluation plan, including audits, will be established for every project under this program.

Next steps

The NSW Government has established an Expert Panel (the panel) to review proposals against the socio-economic criteria. The panel includes water experts from the Department of Planning, Industry and Environment, experts in socio-economic analysis both from within the NSW Government and externally, as well as an independent probity advisor. This report was submitted

with the Murrumbidgee Irrigation Automation Finalisation application to the panel for their consideration in late October 2021.

The NSW Government will prepare a Statement of Reasons identifying why NSW Government support is or is not provided for the project, and this will be published on the DPIE website.

NSW Government supported applications will be submitted to the Australian Government. The outcomes of the NSW Government's review will form part of the application. The Australian Government will then assess the application and make a recommendation to the Minister for Resources and Water on whether to provide funding for the project.

Further information

For further information regarding the Off-farm Efficiency Program please visit water.dpie.nsw.gov.au/water-infrastructure-nsw or contact Water Infrastructure NSW via:

- Email: winsw.programs@dpie.nsw.gov.au
- Phone: 1300 081 047