

# Record of Decision – Off-farm Efficiency Program funding

Prepared for the Minister for Resources and Water for the purposes of *Water Act 2007*, Part 2AA  
by the Department of Agriculture, Water and the Environment

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Related Ministerial Submission Ref.: MS21-009422



## State-led Projects – New South Wales Murrumbidgee Irrigation Automation Finalisation Water Efficiency Project

# Part 1 – Purpose of this document

The Department of Agriculture, Water and the Environment (**Department**) has undertaken a comprehensive assessment of the application for funding put forward by New South Wales (**NSW**) for the Murrumbidgee Irrigation Automation Finalisation Water Efficiency Project (**Project**) described in Part 2 to ensure that funding and program objectives of the Off-farm Efficiency Program under the Water for the Environmental Special Account (**WESA**) provisions in Part 2AA of the *Water Act 2007* are met, where a decision to fund is made.

This assessment process included:

- review and assessment of the application form and supporting documentation by the Department and by an Assessment Panel comprising representatives from the Department, National Water Grid Authority and Murray-Darling Basin Authority;
- review of the Assessment Panel's report by the Department and preparation of a 'due diligence' assessment document; and
- obtaining and reviewing an independent expert report on technical elements, water savings calculations and costings for the Project.

This document is a record of the basis for decision by the Minister to grant funding under the Off-farm Efficiency Program in respect of the project described in Part 2 (**Project**) as a result of the assessment process summarised above, providing information on:

- the Project, including proposed water savings and funding amount (Part 2);
- assessment of the funding application for the Project against basic eligibility criteria (Part 3);
- assessment of the funding application for the Project against assessment criteria (Part 4); and
- the decision to grant funding under the *Water Act 2007* (Part 5).

## Part 2 – Project information

### Program name

Off-farm Efficiency Program under Part 2AA of the *Water Act 2007*.

### Proposal name

Murrumbidgee Irrigation Automation Finalisation – Water Efficiency Project.

### Relevant State

New South Wales state-led project.

### Project proponent

Murrumbidgee Irrigation Ltd.

### Purpose of Proposal – Water Act 2007 s 86AD(2)

The purpose of the Proposal is to achieve the improvement of:

- water efficiency of the infrastructure that uses Basin water resources for irrigation – *Water Act 2007* s 86AD(2)(a)(i); and
- water efficiency of any other infrastructure that delivers, stores or drains Basin water resources for the primary purpose of providing water for irrigation – *Water Act 2007* s 86AD(2)(a)(ii).

### Summary of Proposal

The Project will modernise the irrigation network for the Leeton Shire Council and Griffith City Council areas by:

- modernising 1,500 metered outlets;
- automating over 360 regulators;
- constructing a 5,000 ML surge reservoir; and
- refurbishing/replacing 20kms of open earthen channels and pipelines.

### Water savings transferrable to Commonwealth Environmental Water Holder

6,290 ML (5,472.30 ML Long Term Average Annual Yield (LTAAY)).

### Funding amount

\$126,480,000 (\$126.48 million), including \$2.48 million NSW project management costs.

## Part 3 – Assessment against basic eligibility criteria

### Sufficiency of information

The Project application includes all required information and the information provided is considered sufficient to allow assessment of the Project application against assessment criteria.

### Eligibility of proposed Project activities

The activities proposed under the Project are consistent with the descriptions of efficiency measures in item 38 (On Farm Irrigation Efficiency and Other Water Use Efficiencies) of the Murray-Darling Basin Ministerial Council's 'Register of Measures' notified under cl 7.13 of *Basin Plan 2012*.

### Reduction of water loss<sup>1</sup>

Based on documentation provided by the applicant as independently verified in a report (**AECOM Report**), prepared by AECOM Australia Pty Ltd dated 30 November 2021. The Project will reduce the volume of water lost in the process of delivering water by 7,390 ML and will return 6,290 ML/y (nominal) or 5,472.30 ML/y LTAAY of water to enhance the environmental outcomes of the Basin Plan as conveyance entitlements, which are approximately equivalent to a high security water product (s86AA (1)(a) and (b)).

### Generation of water savings<sup>1</sup>

Based on documentation provided by the applicant as independently verified in the AECOM Report, 6,290 ML/y (5,472.30 ML/y LTAAY) of the total water savings possible from the activities proposed by the Project will be transferred to the Commonwealth Environmental Water Holder before 30 June 2024. From the total 7,390 ML/y of water savings, 1.1 ML/y of water savings will be retained in the system. As part of the assessment process, the Commonwealth Environmental Water Holder confirmed that the entitlement proposed for transfer under this project is eligible for environmental water use.

The entitlements are Murrumbidgee Regulated River – Murrumbidgee Irrigation Conveyance water entitlements which are approximately equivalent to a high reliability product. In the Murrumbidgee Valley catchment, this is an important water entitlement for the Commonwealth Environmental Water Holder. The value of these high reliability entitlements is particularly important during periods of low flows and when lower reliability water products have low allocations.

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<sup>1</sup> This is an eligibility requirement set out in the document *The Off-farm Efficiency Program*, August 2021.

## Demonstrable public benefits<sup>1</sup>

Based on documentation provided by the applicant, including in relation to reduction in water loss, generation of water savings, and in relation to neutral or positive socio-economic impacts, it is considered that the Project will provide demonstrable public benefits principally by:

- increasing customer service levels and system capacity through precise water control and delivery;
- linking to on-farm efficiencies for higher overall irrigation efficiency from river to paddock;
- providing accurate metering to ensure fair accounting of water extractions from the network;
- increasing regional productivity through water use efficiency and supporting further agriculture development;
- providing further security of water supply to towns and industry;
- further enhancing delivery efficiency through having a fully automated network; and
- providing economic stimulus by investing in regional communities within the Leeton and Griffith areas through local contractors.

The infrastructure improvements will allow Murrumbidgee Irrigation to improve the efficiency and delivery of the water network and ensure water consumption is accurately measured.

The Project will retain a portion of the water savings for the scheme to mitigate potential risks relating to supply issues in delivery channels. This will help overcome delivery challenges during adverse weather conditions especially for the delivery of stock, domestic and town water, particularly in situations where water allocations may be low (ie. during drier years). Implementation of the on-ground works will be achieved through local contractors and suppliers.

## Neutral or positive socio-economic benefits<sup>2</sup>

Murrumbidgee Irrigation undertook stakeholder engagement in designing and developing the Project and the NSW Government has undertaken public consultation to address the [Murray-Darling Basin Ministerial Council socio-economic criteria](#) and the preparation of an assessment in accordance with those criteria.

The Assessment Panel reviewed the NSW Government's assessment of the socio-economic benefits of the Project and reached a view that the Project will have a neutral or positive socio-economic impact.

Part 4 below provides further information on socio-economic benefits presented by the Project.

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<sup>2</sup> This is an eligibility requirement set out in the document *The Off-farm Efficiency Program, August 2021*, but also as a substantive assessment criterion with an assessment weighting.

## Part 4 – Assessment against assessment criteria summary

The information provided in the application and supporting documents (30 documents in total) was considered by the Department and the Assessment Panel, and was subject to independent technical review from AECOM Australia Pty Ltd.

In this context, this Part 4 presents core information in relation to the assessment of the Project application against assessment criteria based on that documentation. Criteria are scored as part of the Assessment Panel report.

### Preparing for the future

**The proposal demonstrates it will better prepare the water delivery network, irrigators and communities for the future.**

The finalisation of the Project builds on Murrumbidgee Irrigation's Automation Strategy, \$348 million has been invested over the past five years in upgrading and automating the irrigation infrastructure both off-farm and on-farm under the Private Irrigation Infrastructure Operators Program Rounds 1, 2 & 3. The successful completion of the Project will continue to build on the success of these other programs of work to continue to support agricultural production, regional economies, and the environment by forming a fully integrated water supply network.

Based on the information reviewed, it is considered that the proposal demonstrates it will better prepare the water delivery network, irrigators and communities for the future.

### Regional economic stimulus, socio-economic outcomes and public support

**The proposal provides economic stimulus to the region.**

NSW commissioned Water Infrastructure New South Wales (**WINSW**) to complete an economic impact modelling and Marsden Jacobs Associates to complete an independent Cost Benefit Analysis.

Economic Impact Modelling conducted by WINSW investigated the direct impact of the Project to the local area of Leeton and Griffith. The modelling concluded that Murrumbidgee Irrigation is expected to directly spend \$54 million in the local region in total – resulting in 132 jobs, \$10 million in wages and salaries, and \$18 million in the economic value added to the region (gross regional product). The flow on impact in the supply chain is expected to result in an additional spend of \$36 million – resulting in 92 jobs, \$7 million in wages and salaries and \$13 million in the economic value added to the Griffith and Leeton region. With a total spend of \$90 million in the local economy, this Project is expected to add \$30 million to the economic value of the region.

Based on the information reviewed, it is considered that the Proposal provides economic stimulus to the region.

**The proposal has neutral to positive socio-economic outcomes due to water efficiency improvements.**

The Project has been assessed against the Murray-Darling Basin Ministerial Council's socio-economic criteria by NSW. The Assessment Panel has reviewed the NSW assessment and reached a view that the Project will have a neutral or positive socio-economic impact.

Water savings are generated by reducing conveyance losses across the Murrumbidgee Irrigation network. Water is not removed from the consumptive pool, therefore there will be no water reductions or increases to either traded or regulated water prices. The conveyance losses include escape flows as a result of channel control, evaporation, seepage and leakage in open channels and meter error in legacy metered outlets. Conveyance losses are provided for in Murrumbidgee Irrigation's bulk entitlement. There will be no reduction in the amount of water available for consumptive use and Murrumbidgee Irrigation's net water balance will be increased by water savings exceeding the volume of water provided to the environment. This ensures there are no negative impacts on current water allocation enhancements traditionally provided to Murrumbidgee Irrigation irrigators.

Based on the information reviewed, it is considered that the Project has no negative impact on customers or the consumptive pool for the region, and has neutral to positive socio-economic outcomes due to water efficiency improvements.

**The proposal has sufficient support from its direct stakeholders where applicable, from directly affected stakeholders (such as customers within the water delivery network, potential individual rationalisation customers, where applicable, and third parties with assets affected by the proposal).**

The Project was scoped following extensive consultation with customers, the local community, and Regional and State representatives. Stakeholders engaged include Murrumbidgee Irrigation customers, local councils, State Government departments, Federal Government departments, the Local Aboriginal Land Council, regional contractors and suppliers.

The Assessment Panel noted in the Closing the Loop Report, there were only 13 public submissions during the consultation period and more than 60 per cent agreed that the Project would result in neutral or positive socio-economic outcomes. There was no specific feedback from local traditional owners in the Closing the Loop report and there were some concerns on value for money from respondents during the public consultation period, however, directly affected stakeholders in the region were supportive of the Project.

The local community were generally supportive of the Project given that conveyance losses are provided for in Murrumbidgee Irrigation's bulk entitlement and there will be no reduction in the amount of water available for consumptive use or increases to either traded or regulated water prices.

Based on the information reviewed, it is considered that the Proposal has sufficient support from its direct stakeholders where applicable, from directly affected stakeholders.

## Water savings shared between the environment and water users

### **The proposal has independently verified water savings.**

Information provided for assessment shows water savings calculations in line with the NSW Water Savings Protocol methods. The calculations of expected water savings have been independently verified in the AECOM Report.

Based on this, it is considered that the Project has independently verified water savings.

### **Where appropriate, the proposal describes the sharing of water savings between the environment and water users resulting from the project.**

The Project will reduce the volume of water lost in the process of delivering water by 7,390 ML of which, it is proposed to transfer 6,290 ML (5,472.30 ML LTAAY) of Murrumbidgee Regulated River - Murrumbidgee Irrigation Conveyance water entitlements to the Commonwealth Environmental Water Holder.

It is considered that the sharing of water savings between the environment and water users resulting from the Project is satisfactory.

### **The proposal delivers eligible water entitlements that can be transferred before 30 June 2024.**

The Commonwealth Environmental Water Holder confirmed that the 6,290 ML (5,472.30 ML LTAAY) entitlement proposed for transfer under this Project is eligible for environmental water use. The Project will be finalised and eligible water entitlements will be transferred to the Commonwealth Environmental Water Holder by June 2024.

The entitlements are Murrumbidgee Regulated River – Murrumbidgee Irrigation Conveyance water entitlements which are approximately equivalent to a high reliability product. In the Murrumbidgee Valley catchment, this is an important water entitlement for the Commonwealth Environmental Water Holder. The value of these high reliability entitlements is particularly important during periods of low flows and when lower reliability water products have low allocations. It is considered that the risk of water entitlements not being transferred by 30 June 2024 is low. NSW has undertaken to complete all water transfer requirements relating to entitlements being returned to the Commonwealth ahead of those being retained in the network or for other uses. The Federation Funding Agreement milestone stipulations ensure this risk is adequately addressed. NSW is responsible for providing any shortfall of water not achieved via the works, which is also a condition of funding and outlined in the funding agreement.

It is considered that the Project will deliver eligible water entitlements that can be transferred before 30 June 2024, and it is a condition of funding that the transfer occur by this date.



## Overall value for relevant money

**The proposed funding for the infrastructure required to achieve water savings is demonstrated through a budget based on eligible activities that represents value for money.**

The cost of the Project has been reviewed in the assessment of the Project and verified for current market costs by the independent technical review by AECOM Australia Pty Ltd. The costs of the infrastructure and construction activities are consistent with current and expected market rates.

In addition to the return of high reliability, high security water entitlements that can be used at key sites across the Murray-Darling Basin by the Commonwealth Environmental Water Holder, the Project will deliver immediate and longer-term social and economic outcomes.

Based on the information reviewed, it is considered that the proposed funding for infrastructure to achieve water savings has been demonstrated in a manner which represents value for money.

**The proposal results in a market multiple that balances the request for funding and the value of the water entitlements returned to the Commonwealth.**

The market multiple calculated for this Project is 2.84, which is consistent with other infrastructure and off-farm efficiency measures investments to recover water for the environment under the Murray-Darling Basin Plan.

It is noted that the market multiplier is only one indication of how the Project compares to the prevailing water market price at the time of assessment. This recognises that an investment in infrastructure delivers much greater social and economic benefits to the region than would otherwise be possible from purchasing water entitlements.

Based on the information reviewed, it is considered that the Proposal results in a market multiple that balances the request for funding and the value of the water entitlements returned to the Commonwealth.

**The overall project risks are identified with appropriate risk mitigation strategies.**

Project risks were considered to be well understood and well described, with appropriate treatments and controls in place. Risks were also reviewed as part of the AECOM Report.

Key risks are:

- insufficient time available before 30 June 2024 for Project delivery due to program delays and construction processes reducing water recovery volumes;
- onsite work, health and safety issues including work site death or serious injury;
- Project opportunities for water recovery do not offer value for money due to infrastructure costs or rising water entitlement prices, reducing water recovery; and
- lack of 'social license' for the water recovery program.

Proposed governance and Project oversight arrangements involving Project Control Groups with Murrumbidgee Irrigation, NSW and departmental representation as well as a senior

executive-level Steering Committee between NSW and the Commonwealth are effective in providing sufficient Project oversight to manage any emerging risks.

Based on the information reviewed, it is considered that the overall Project risks are identified and that appropriate risk mitigation strategies are in place to control these risks.

## Part 5 – Decision consistent with statutory objectives

Having regard to the activities, funding level and water savings eligible for transfer as presented in the Project application and associated documents, and having regard to the Assessment Panel report and AECOM Report, the Minister has determined to approve the provision of funding for the Project from the WESA under the *Water Act 2007* and consistently with the *Public Governance, Performance and Accountability Act 2013*, on the basis of an assessment demonstrating that:

- the Project furthers the objects of Part 2AA of the *Water Act 2007*, as set out in s 86AA of the *Water Act 2007*;
- the proposed funding for the Project is consistent with the purposes of the WESA set out in s 86AD(2) of the *Water Act 2007*; and
- the WESA can be debited for the purposes of the Project in accordance with s 86AD(4) of the *Water Act 2007*.