

# MID2030 Modernisation of Newry and Nuntin Irrigation Networks

9 November 2021



## Will the level of water in my bore decline because the channel will be replaced by a pipeline?

A: The MID2030 Modernisation program has been transforming the 100-year-old gravity-fed Macalister Irrigation District system in the past few years; and continues with Phase 2. Phase 2 is expected to be completed in 2024.

Funded by Southern Rural Water and the State and Federal governments, the pipeline, channel and outlet upgrade projects under the MID2030 program are improving the efficiency and sustainable use of available water. In turn, this is enabling environmental benefits and creating opportunities for improved productivity for SRW customers.

Research as part of the Water Balance Report analysed the water level data from six bores in the Newry district. The observations and conclusions are summarized in Appendix B of the Report – available online at <http://www.srw.com.au/projects/mid-modernisation/>

### Main Observations are:

- Water levels regularly fluctuate in the top two metres and as deep as six metres below the top of the bore.
- Bores north of Newry Creek have declined slightly.
- There are declines across all bores in dry years. This could be due to low recharge values and/or increased groundwater pumping.
- Bores to the south of Newry Creek and closer to the Macalister River recover after dry seasons.
- Groundwater levels rebound following substantial rainfall.
- Groundwater level data shows no evidence of significant recharge from Southern Rural Water channels. Available data indicates potential recharge of between 333 and 494 Megalitres from SRW channel seepage and leakage.
- This seepage and leakage would occur within 100m of SRW channels.
- There is little to no seasonal pattern to indicate significant groundwater recharge from channel seepage and leakage.
- Rainfall is the dominant groundwater recharge mechanism.

## Will replacing leaking channels with a pipeline affect access to water from stock and domestic bores?

A: Stock and domestic bores are a useful, cost-effective asset for landholders for appropriate purposes. Newry has a long history of domestic groundwater usage. Some landholders rely on brick wells and numerous steel cased bores were drilled in the region during drought in the early 1980s.

The State's database of stock and domestic bores is not reliable at a property scale - information prior to the 1990s is unreliable, many bores are not registered, have incorrect coordinates and are missing details about depth and design.

Southern Rural Water engaged SMEC to assess potential impacts from channel modernisation on groundwater and the surface water users at Newry. The potential impacts arise from:

- Potential reduction to groundwater recharge from irrigation channel seepage.
- Removal of channel outfalls from the Newry River Channel system that discharge to the Newry Creek, other drains and depressions

Recent numerical groundwater modelling of the Gippsland groundwater systems indicates that rainfall, irrigation and potential channel seepage is between 93% and 99% of total groundwater recharge. The remaining recharge is from throughflow (from other aquifers) and rivers when in high flow (GHD, 2010 and DELWP, 2015).

The water balance report indicates bores most likely to be affected by a potential decrease in channel seepage are sites within 100 to 200 metres of an irrigation channel.

Further investigations are recommended to:

- Collect information to improve the Victorian database of licence sites and private bores.
- Observe groundwater levels post-construction to identify any changes/depressions

## How will Newry Creek environmental values be identified and protected?

A: All the stakeholders involved with the Newry pipeline upgrade are genuinely concerned about the environmental values of Newry Creek. In 2020, members of the Newry community approached WGCMA staff and members of the Macalister Environmental Water Advisory Group (EWAG) to find out more about how environmental water is used in the Macalister system.

Following a community meeting with SRW and the WGCMA, members of the WGCMA Water Team offered to convene an out-of-session EWAG meeting with representatives of the Newry Creek community, to discuss environmental values, long term objectives and potential options for enhancing and protecting environmental values along Newry Creek.

The purpose of this initial meeting is to:

- identify shared environmental values for Newry Creek and its associated wetlands,
- identify the longterm community vision for Newry Creek environs, and
- discuss potential watering options in the Newry Creek catchment.

## Why the Macalister EWAG?

Established in 2016, the Macalister EWAG is a long-term group representing the broader community views about management of water for the environment in the Macalister River, below Lake Glenmaggie. Membership of EWAG aims to reflect the interests and views of the community, landholders, Traditional Owners, agency and industry representatives and selected community groups, who all have an interest in the management of environmental water in the Macalister River.

## Newry irrigators have been participating in a farm planning process. What is the purpose of the farm planning process?

A: Southern Rural Water's MID2030 modernisation program is underway in the Newry district. The Newry Farm Planning Project is a collaboration between the Victorian Government's Sustainable Irrigation Program, implemented in Gippsland by the West Gippsland CMA and Agriculture Victoria, and SRW's MID2030 modernisation program.

Information about the process of engagement for farmers is on the West Gippsland CMA site, at [www.wgcma.vic.gov.au/for-farmers/14900-2](http://www.wgcma.vic.gov.au/for-farmers/14900-2)

The Newry Farm Planning Project aims to provide 28 irrigators connecting to the Newry Creek pipeline with the information and support they need so they can make informed decisions about potential changes to their farm. Professional irrigation design experts were contracted to work, free of charge, with Newry customers over the past year [28 irrigators is 100% of the target group].

Consultation with customers on their farm plans commenced in late 2020, and draft plans are currently being received from the farm planners, for feedback from each Newry irrigation customer involved along with WGCMA and AgVic. Final plans are due to be delivered to Newry irrigators between October to December.

The completed farm plans should enable Newry irrigators to achieve the best outcomes for their farming business, both during and after pipeline construction; and maximise the flow-on benefits of MID2030 investment for the environment and the regional community.

The Sustainable Irrigation Program will continue to provide advice and support to Newry irrigators through the implementation phase of their farm plans. This will include information from equipment suppliers and contractors relevant to the works being undertaken, again to enable Newry irrigators to make the most informed decisions relevant to their farm production systems.

## Southern Rural Water crews have been working on the West Boisdale No 1 Channel. I've noticed trenching across a paddock and then some sort of pumping station on the opposite side of the Newry-Boisdale Rd. I notice a new channel gate has been recently installed on the Main Northern Channel at Football Lane. Is that one of many upgrades or a one-off? And why was this upgrade needed? What is the work that is being done, why is it being done and what will it achieve?

A: Replacing channels with pipelines eliminates the water losses from evaporation and seepage as channels approach end of life. When combined with automated customer outlets, this allows irrigators to become more efficient with their on farm practices, improve efficiency and overall benefits to farm operations. The West Boisdale supply upgrade is one of many stages identified for modernisation.

In recent months, Southern Rural Water has been upgrading the West Boisdale Number 1 and 1 over 2 channels. This work has included replacing sections of channel with pipeline in the vicinity of Boisdale-Newry Road and the Back Valencia Creek Road, as well as replacing old manual wheels with new modernised outlets in four locations providing benefit to a number of properties.

A stock and domestic connection was also upgraded for the Boisdale Consolidated Primary School which enables them to have access to water from the pipeline under pressure.

Three regulators in the Main Northern Channel have also been upgraded, at Football Lane, Three Chain Road and Upper Maffra Road. This work allows Southern Rural Water to improve the reliability of the irrigation system overall, and better meet the demand from customers while reducing the amount of excess water flowing through outfalls.

### **What is the Deed of Variation process?**

A: Pipeline modernisation construction works requires access to private land. As part of the pipeline design process, Southern Rural Water partners with customers and contractors to provide certainty that modernisation works will proceed. As part of designing the pipeline alignment, SRW consults with customers about variations to alignment, location of above ground assets and decommissioning redundant assets. This process informs the Modernisation Works Agreement (MWA). After the MWA is signed, any changes to what has been agreed, will be outlined in a Deed of Variation.

Southern Rural Water is very satisfied with the progress of MWAs across the Newry and Nuntin project areas. Landowners engagement in this process has enabled SRW to proceed with tendering for the Newry and Nuntin pipeline projects, ensuring access for construction based on customer support.

SRW conducted an open Expression of Interest process to establish a shortlist of potential contractors with the appropriate capability, accreditations and resources to undertake the pipeline works. This shortlist was invited to submit tenders for the contract, and this part of the process is currently underway.

While the tender outcome is subject to potential contractors satisfying Federal and State government legislative and policy requirements, SRW expects to confirm the successful tenderer by late December this year.

Following this, SRW will be in touch with customers to discuss projected timelines for construction and, where applicable, their individual Deed of Variation.

SRW has received significant interest from customers to participate in co-funded works, whereby a customer chooses to complete on-farm reconnection works including decommissioning, as documented in the Deed of Variation. A co-funding payment is calculated, based on current market rates, that represents a proportion of SRW's avoided cost because the customer is taking responsibility to complete these works. The co-funding payment is intended to support further enhancement of on-farm modernisation works.

While SRW staff have begun preparing each customer's individual Deed of Variation, SRW acknowledges that the COVID-19 pandemic is affecting manufacturing, supply and delivery timelines. When SRW has confirmed the tender outcomes for the construction of the Newry and Nuntin pipelines, staff will calculate the co-funding payment based on consistent, fair and current market rates for construction and materials supply.

SRW staff will explain the Deed of Variation document and co-funding payment process in commercial-in-confidence conversations with each of the individual customers who have expressed an interest in completing on-farm works. This process will occur in the first quarter of 2022.

SRW undertakes that all co-funding payments will be calculated using the same methodology and will follow an internal approval process, to ensure consistency and fairness to all customers.