

January/ February 2022 | ISSUE #32

## **\$124 million to deliver water savings in the Murrumbidgee**



Murrumbidgee Irrigation, supported by Water Infrastructure NSW, has been awarded \$124 million from the Australian Government to modernise its irrigation infrastructure and deliver water savings.

The project aims to modernise Murrumbidgee Irrigation's (MI's) infrastructure by upgrading 1,500 metered outlets, automating 360 regulators, refurbishing 20 kilometres of open earth channels and constructing a new 5,000 ML surge reservoir. This will generate 6.3 GL per year of water savings for the environment and 1.1 GL for water users and their community.

Water Infrastructure NSW supported MI to develop the proposal and seek community comment. Our expert panel then reviewed the application against socio-economic criteria developed by the Murray-Darling Basin Ministerial Council to ensure the project will deliver positive outcomes as part of the Australian Government's \$1.54 billion Off-farm Efficiency Program.

The NSW Government will continue working with local communities, industry and the Australian Government to identify further opportunities under the program.

For more information visit [the Off-farm efficiency program webpage](#).

## Stage one of new Dungowan Dam pipeline underway



*Mayor of Tamworth Regional Council, Councillor Russell Webb and Minister for Lands and Water Kevin Anderson at the launch of stage one pipeline work.*

Construction is underway on the first stage of a new 55 kilometre underground pipeline which will deliver greater water security for Tamworth and the Peel Valley by connecting the new Dungowan Dam to Tamworth's Calala Water Treatment Plant.

Minister for Lands and Water Kevin Anderson and Deputy Prime Minister Barnaby Joyce visited the site to announce start of work on 10 February.

Bulldozers and excavators will be shifting dirt and installing steel pipes over the next 18 months, with the first stage of the route being laid on Council land in Tamworth before moving onto private property.

The once-in-a-generation project will help drive economic growth and investment for the region, with the pipeline generating revenue for up to 30 local businesses and creating 70 new jobs during construction, injecting millions into the local economy.

Meanwhile, the final business case for the new Dungowan Dam and the last stage of the pipeline is due to go before the NSW Government in the next few weeks, with the environmental impact statement scheduled to go on display before the end of the year.

Stay up to date by visiting the [website](#) and [signing up to receive updates](#) by email.

## Almost three quarters of 2020 group comply with new metering rules





The Natural Resources Access Regulator (NRAR) found that 69 per cent of water pumps that were required to be fitted with accurate meters, independently certified and connected to telemetry in December 2020, are now fully compliant. In addition, 80 per cent of inspected water pumps in the 2020 group now have accurate meters in place.

Water users are expected to have made efforts to comply with the [new metering rules](#) before their deadline, and to have entered a formal arrangement with a meter installer.

Do you need to comply? Check the rules, using the department's [metering guidance tool](#), and meter your supply.

## Modern fish screens: good for fish, good for farms



The NSW Department of Primary Industries is helping water users adopt [modern fish-protection screens](#). The technology replaces outdated 'trash racks' on water

pumps and channels.

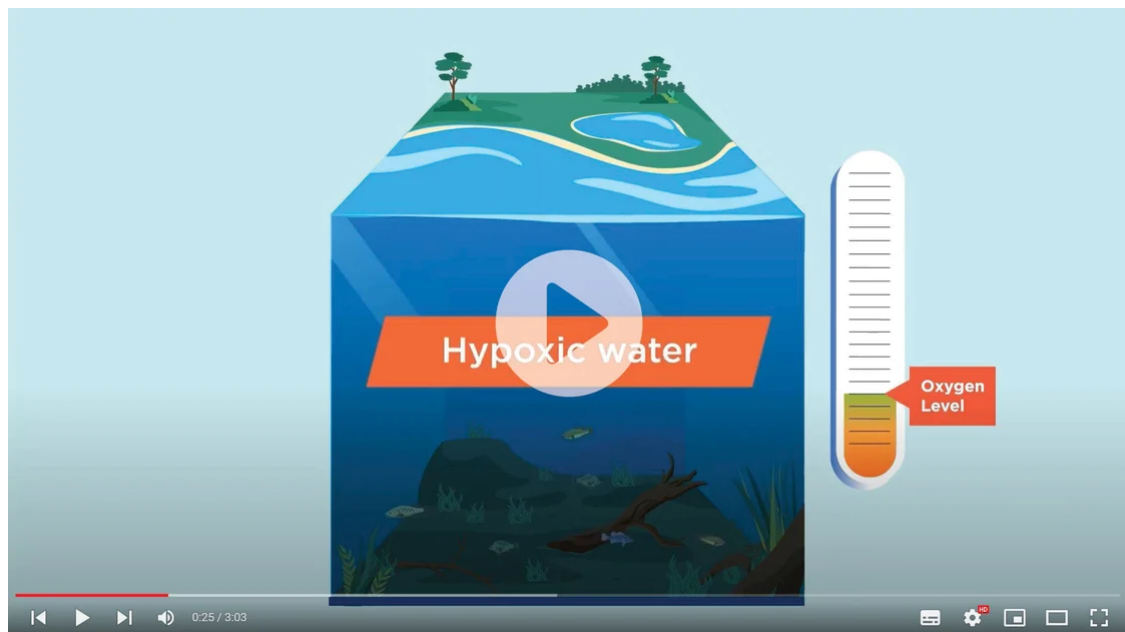
Scientist Dr Craig Boys, who has been leading the project, says “We know modern screens work. They protect 90% of fish and exclude virtually all debris, without impacting pump performance.”

Modern, self-cleaning screens are available to suit any type of diversion of any size. Over 20 sites have already been modernised and water users are already [reporting benefits](#).

The technology represents a [new best practice](#) for water users. Dr Boys says, “Funding is becoming available to help water users install modern screens. That’s great, because this technology has real and direct benefits for both [fish](#) and [farms](#).”

Watch this [video to learn about how the screens work](#) and visit the [Fish Screens website](#) for more information.

## Water update



As of 22nd February, the Menindee Lakes are at 103.2% capacity (1,790 GL) with large flows making their way to the lakes. Releases over the summer reduced the Menindee Lakes storage to create 400 GL of available space. This means further inflows can be captured and ensures the water level across the storage system remains below the maximum permissible levels.

The releases are being managed this way to avoid flooding and damage to infrastructure and to minimise the risks of hypoxic blackwater. As the inflows recede the lake level is forecast to peak by the first week of March.

There are pros and cons to the large amounts of water we are seeing in the system. With high river flows and more rain to come, native fish, crayfish and other animals in the food chain are enjoying a feeding bonanza. Leaves, grass and other organic matter are flushing from the floodplains into our waterways, providing food for bacteria, and benefiting the whole river ecosystem.

However, warm temperatures can see the high loads of organic matter decompose too fast and deplete the oxygen in the water. Native fish and other animals need this oxygen to survive.

There are two major risks over the coming weeks. The first is that floodwaters low in dissolved oxygen levels keep moving into the Menindee Lakes. The second is the potential for these low oxygen floodwaters on the lower Darling floodplain to flow into the lower Darling River.

As the water moves through the system, WaterNSW is trying to mitigate the effects of low dissolved oxygen in both the Lakes and the lower Darling. WaterNSW is also aiming to ensure the Lakes are full at the end of the inflows. Releases from Menindee Lakes into the lower Darling are being reduced.

This will allow low dissolved oxygen water, returning from the lower Darling floodplain, to start mixing. This will dilute it before the blackwater front flowing downstream from the Barwon-Darling is released from Lake Wetherell.

Releases from the other lakes will continue into the lower Darling via Weir 32 to help dilute the water being released from Lake Wetherell and to provide smaller, higher dissolved oxygen, refuge areas. The smaller lakes will act as a refuge for fish, particularly Lake Tandure. This will allow fish to move into these areas to escape low dissolved oxygen water in Lake Wetherell. WaterNSW are currently targeting a flow of 9.5 GL/day from Menindee Lakes at Weir 32.

The department, with WaterNSW and other agencies, is continuing to monitor the event closely to actively manage the impacts when it is feasible to do so. We are publishing regular [water quality updates](#).

For the most up-to-date information on Menindee Lakes and Lower Darling operations, please visit the [WaterNSW Water Insights Portal](#).

Learn more about hypoxic (low oxygen) water by visiting our [website](#) and watching our [explainer video](#).

## Cultural education project fosters respect for water



Children of Jubullum were immersed in a cultural education afternoon when respected Aboriginal elder Uncle Lewis Walker sat with them alongside the Rocky River. He shared his knowledge of the interconnectedness of the rivers, why species of trees grow where they do, the animals that depend on the river, and the human connection to water. The children then enjoyed swimming in the Rocky River before taking their hands to paintbrushes and creating inspired artworks.

This pilot cultural session was part of a series of approaches to address the water scarcity that Jubullum faced at the time. A greater level of appreciation of something creates a heightened level of respect for it. The [Aboriginal Communities Water & Sewerage Program](#) will continue to build on this connection and engagement with the Jubullum community.

Caring for Water is Caring for Country.

## Studies on frogs as an indicator of ecosystem health





*A Stony Creek frog (*Litoria lesueurii*) calling on the banks of the Snowy River - Daniel Coleman DPE.*

Science teams in the department are studying frogs in the Macquarie Marshes, and the Snowy and Montane rivers.

Most frog species depend on water to complete their life cycle. This makes them great indicators of ecosystem health. Monitoring frogs can help us assess outcomes of water sharing plans, the State Water Strategy and other water management activities. Our science teams are also studying frog streamflow requirements that will inform more effective flow management for the future.

Data collection required working during the day and night. In daylight hours, water quality, tadpole and habitat data were recorded. At night, the team listened for and identified frogs by their calls.

There was a considerable amount of breeding activity at the Macquarie Marshes. Our science teams heard all six flow-responsive species they expected, including multiple adult and juvenile frogs. Three frog species were also found to be calling at the Snowy River sites. These survey results show that recent flows in vastly different areas are supporting frogs.

Learn more about our [surface water science](#) work on our website.

If you're interested in recording the frogs in your area, check out the Australian Museum's citizen science program – [FrogID](#)

## Water for the environment



*Straw-necked ibis colony in the southern Macquarie Marshes, January 2022 - Nicola Brookhouse DPE.*

## **Supporting waterbirds and communities**

Landholders, communities and waterbird colonies are benefiting from the strategic management of Burrendong Dam to mitigate flood impacts from recent rainfall.

The department's Environment, Energy and Science (EES) group is providing information to WaterNSW about the needs of significant waterbird colonies. This helps WaterNSW as they manage river flows to minimise impacts to infrastructure and property access in the Macquarie catchment.

Landholders and EES staff have identified 20 waterbird colonies throughout the Macquarie Marshes, totalling over 70,000 nests. Straw-necked ibis and intermediate egrets are the dominant species, with other waterbirds nesting include Nankeen night herons, eastern great egrets, Australian white ibis and glossy ibis.

Drawdown of the flood mitigation zone of Burrendong Dam is helping to maintain habitat and food supplies for the nesting waterbirds.

When the dam reaches 100 per cent capacity, further releases of environmental water from the dam may be needed to support colonies as they complete their breeding cycle in autumn.

Learn more about [water for the environment](#).





*Waterbird colony site at the Gwydir - CEWO*

## **Water for the environment provides platform for wetlands recovery**

After years of drought in many parts of the Murray-Darling Basin, wet conditions and water for the environment have seen a revival of many wetlands with significant waterbird breeding underway.

Having celebrated World Wetlands Day on February 2, Commonwealth Environmental Water Office staff were delighted to hear that monitoring in December and January found significant bird breeding events occurring at several wetlands across the Basin.

Site managers have observed thousands of bird nests at internationally significant wetlands like the Gwydir wetlands, Macquarie Marshes and Narran Lakes in the north of the Basin.

Following a very wet spring and summer, thousands of waterbirds are also nesting in the wetlands of the Lachlan and the Murrumbidgee. Large ibis and pelican colonies are active in Gayini wetlands and are currently being supported with water for the environment.

Fish are also benefitting with water from the north of the Basin filling Menindee Lakes, which is a native fish nursery now teeming with Golden Perch. Flows out of Menindee Lakes are helping fish disperse into the southern Basin.

Find out more on the [Commonwealth Environmental Water Office website](#).

Field days: an opportunity to have your questions answered



This year, the Natural Resources Access Regulator (NRAR) will be attending 10 field days throughout regional NSW. You will find the team at AgSmart in March, in addition to Tocal, Riverina, Primex, Mudgee, AgQuip, Henty, Murrumbateman, ProAg and Australian National Field Days.

Field days are a fantastic opportunity for you to ask questions about metering, water access licences, or the conditions of your work approval. NRAR's friendly officers can provide helpful and handy information about how to comply with NSW water rules.

To learn more about NRAR and your obligations as a water user, come and meet the team at one of this year's field days or visit their [website](#).

## AdaptNSW website launch



*Myall Lakes National Park - John Spencer DPE*

The AdaptNSW website is the leading source of credible information on climate change for NSW. The website has launched with a new look and is a one-stop shop to increase your awareness of climate change and how it will affect you and your region.

The climate of NSW is changing. Average temperatures in Australia have increased 1.4 degrees since 1910 when national records began. The frequency and intensity of storms and floods is increasing as we have seen with La Nina this summer.

To adapt to storms, floods and droughts in NSW, we need to understand them and the risks they present to our communities both now and into the future.

Visit the AdaptNSW website to learn more about climate change impacts on:

- [our water resources](#)
- [storms and floods](#)
- [drought](#), and
- [rivers and wetlands](#).

## Have your say

Current and upcoming consultations and information events:

### **9 March 2022**

[Lower Murray: Locks 8 and 9 project - information session](#)

(registration is not required)

- Wentworth Grande Resort, Conference Room, 61-79 Darling St, Wentworth  
Wednesday 9 March 2022, 1:00 pm – 4:00 pm

### **8 March – 10 March 2022**

[Yanco Creek Modernisation - information sessions](#) (registration is not required)

- Morundah Hall, 66 Browley Street, Morundah  
Tuesday 8 March 2022, 8:30 am – 11:00 am
- Jerilderie Civic Hall, 33 Jerilderie Street, Jerilderie  
Tuesday 8 March 2022, 2:30 pm – 5:00 pm
- Conargo Recreation Hall, Conargo  
Wednesday 9 March 2022, 8:30 am – 11:00 am
- Wanganella Hall, Cnr Cobb Highway and Lang St, Wanganella  
Thursday 10 March, 8:30 am – 11:00 am
- Moulamein South Recreation Reserve, Endeavour Drive, Moulamein  
Thursday 10 March, 2:30 pm – 5:00 pm at

### **28 February – 1 March 2022**

[Proposed pipeline between Nyngan and Cobar - information sessions](#)

(registration is not required)

- Nyngan RSL Club, 106 Pangee Street, Nyngan  
Monday 28 February 2022, 2:00 pm – 4:00 pm



Monday 28 February 2022, 5:00 pm - 7:00 pm with First Nations communities

- Cobar Aboriginal Land Council, 43 South Railway Parade, Cobar  
Tuesday 1 March 2022, 10.30 am – 12.30 pm with First Nations communities
- Cobar Shire Council Chambers, 36 Linsley Street, Cobar  
Tuesday 1 March 2022, 2:00 pm – 4:00 pm

### **17 January – 27 February 2022**

Draft replacement water sharing plan - public consultations

- [Coffs Harbour Water Sharing Plan](#)
- [Hunter Water Sharing Plan](#)
- [Lower North Coast](#)

### **Water engagement roundup**

This monthly webinar provides updates on current consultation and engagement about important water policy and programs. Find the dates for upcoming sessions and recordings of past webinars on [our website](#).

[View all](#)

## Latest water news from the department

Latest water news from the department

- [Work begins on Dungowan pipeline](#)
- [Managing the risk of a significant hypoxic blackwater event at Menindee Lakes](#)
- [Coffs Harbour Area Water Sharing Plan open for feedback](#)
- [Hunter Unregulated and Alluvial Water Sharing Plan open for feedback](#)
- [Lower North Coast water sharing plan open for feedback](#)
- [Hypoxic blackwater in western and southern NSW](#)
- [Rising river alert – Snowy River below Jindabyne Dam](#)
- [Action plan brings water jobs to our regions](#)
- [Rising river alert – Snowy River below Jindabyne Dam](#)
- [Improving floodplain connections program](#)

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## Contact us

Water News is our monthly update on water planning, management and reform in NSW. If you have any questions or feedback contact us at:

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Phone 1300 081 047  
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