



Water Infrastructure NSW Projects Overview

November 2021



Image: Glenroy Bore, near Moree.

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The data contained in this document is that of the proposing organisation. Any party planning to use this information should contact that organisation to ensure they have the most up to date information.

Project information is subject to change.

Cover image: Darling-Baaka River System, near Menindee.



Minister's foreword

Over the next 10 years, NSW Water Agencies will deliver more than \$4 billion worth of infrastructure projects in regional and metropolitan NSW. In 2020, as part of broader reforms of the NSW water sector, a new water infrastructure agency, Water Infrastructure NSW, was established within the Department of Planning Industry and Environment to improve the governance and oversight of water infrastructure planning, delivery and investment. This move brings regional water infrastructure, planning, development and delivery into one agency.

Water Infrastructure NSW is leading the planning and delivery of a significant portfolio of water infrastructure projects and programs across the state that have been developed to provide long-term water security, to enhance cultural, ecological and socio-economic outcomes for our communities.

Projects include increasing storage capacity through new dams, exploring new and innovative technologies that help improve the quality and efficient use of water and investment in infrastructure that will deliver environmental and aquatic ecology outcomes.

Water Infrastructure NSW currently has an extensive pipeline of infrastructure works in the planning and development stage which includes more than \$500mill in projects approved to be delivered. This pipeline of works is only set to increase as regional water strategies are finalised and further infrastructure solutions are identified.

To efficiently deliver these essential water infrastructure projects, we need to collaborate with our industry partners to capitalise on innovative solutions and to enable increased capacity to support the health, well-being and prosperity of our customers and communities as well as the natural environment.

Delivering on the new NSW Government Aboriginal Procurement Policy 2021, there will be a focus on Aboriginal employment and business to drive growth and investment in NSW First Nations businesses. The policy includes the Aboriginal Participation in Construction Policy and sets new targets for the proportion of contracts and the

total spend value with Aboriginal businesses. I am proud of the steps we are taking to ensure we meet this commitment and encourage your participation. Water Infrastructure NSW has already developed a draft Strategy for delivering Aboriginal Community Outcomes to ensure they maximise the opportunities for First Nations peoples associated with these projects.

The NSW Government Action Plan: a ten-point commitment to the construction sector, guides government and industry to work more effectively together on shared objectives and goals. It is an action plan for the government to be a 'best in class' client for the construction industry. In return, it expects industry to meet the highest standards of integrity, quality, innovation, diversity and inclusiveness. So, we are engaging early to allow industry feedback to inform and de-risk delivery, helping to optimise project outcomes and to ensure the procurement process is clear and transparent.

Timely industry engagement will also allow contractors and businesses to conduct forward planning of capacity and resources and allow time for joint ventures/consortia to form, particularly with regional and Aboriginal businesses.

Over the coming months we will be actively engaging with metropolitan, regional and Aboriginal-owned businesses on the opportunities presented by our pipeline of projects to outline how businesses big and small can be involved in their delivery.

Our industry engagement will also prioritise government contracts for small to medium enterprises and regional businesses, to support economic growth and jobs in regional areas where the projects will be delivered.

I am sure that working together across the public and private sectors we can deliver projects that will make a lasting difference to our communities and I am looking forward to celebrating milestones on many of these projects with you as soon as next year.

Melinda Pavey
Minister for Water, Property and Housing



CEO's foreword

Water Infrastructure NSW is responsible for leading the development and delivery of key water infrastructure projects and programs across the state with a particular focus on regional and remote NSW.

We will be engaging with industry, small and medium regional and Aboriginal businesses, and local operators, to introduce the range of procurement and employment opportunities available from infrastructure delivery to build sustainable economic growth for regional NSW.

We are committed to ensuring Aboriginal-owned businesses, and business with high Aboriginal employment, are supported to capture the economic and employment benefits for their communities. Our Aboriginal Participation Strategy aligns with the NSW Government Aboriginal Procurement Policy January 2021 and is designed to create a legacy for diversity and inclusion in NSW by growing Aboriginal participation through increased education and employment opportunities and sustainable growth of Aboriginal businesses throughout NSW via government projects.

We will be engaging with a wide range of businesses, not just businesses in the engineering, construction or building services sector, that may be able to provide services in the delivery of these projects, such as environmental, catering, accommodation, transport, waste management, cleaning, and graphic design/printing services among others. We will be conducting localised events and activities in regional locations to make it easier for businesses and suppliers to respond to anticipated needs for services to support the infrastructure delivery, and to help businesses forward plan their own investment decisions.

As part of our industry engagement, we will provide business registers and encourage businesses to register their interest in participating in procurement opportunities to supply a broad range of goods and services to support infrastructure delivery in regional and remote areas. To further support businesses that may be unfamiliar with government procurement processes, we have developed a range of 'how to guides', and businesses can book one-on-one sessions with our engagement team and procurement staff via our website to access a suite of support services.

We look forward to partnering with industry to deliver these important projects that will bring water security and reliability to communities all across NSW as well as deliver a range of positive environmental, social, economic and cultural outcomes.

Anissa Levy
CEO Water Infrastructure NSW



About Water Infrastructure NSW

Image: Sewage Treatment Plant, Junee.

Water Infrastructure NSW is responsible for leading the development and delivery of key government water infrastructure projects and programs across the state.

We are committed to delivering world-class water infrastructure projects that will contribute to the safety, security and sustainability of our valued water resources for our communities and the environment.

Water Infrastructure NSW's vision is to improve the sustainability of our valued water resources to enhance the lives of our communities. We aim to be a trusted partner that delivers water infrastructure solutions to enhance cultural, ecological and socio-economic outcomes for our communities.

We recognise and acknowledge the unique relationship and deep Connection to Country that Aboriginal people have as the Traditional Owners and First Peoples of Australia.

The wisdom and experience of local Aboriginal communities plays a critical role in informing our approach to water infrastructure projects and we have a dedicated engagement team who guide our ongoing engagement with Aboriginal communities across NSW.

We are committed to investing in our communities and are focused on engaging and procuring local businesses, creating employment opportunities and boosting the economies of the towns where our projects are being delivered.

For more information about Water Infrastructure NSW visit
water.dpie.nsw.gov.au/water-infrastructure-nsw

Meet the Water Infrastructure NSW Executive

Water Infrastructure NSW brings together significant expertise in both water management and infrastructure development and delivery to ensure projects can be delivered to generate better outcomes for our regional communities. Meet our leadership team:



Anissa Levy
CEO

Anissa is the Chief Executive Officer of Water Infrastructure NSW within the Department of Planning, Industry and Environment. Anissa leads the organisation responsible for the development and delivery of key government water infrastructure projects and programs across the state.



Jeff McCarthy
Head of Water Infrastructure Development and Delivery

Jeff is responsible for the development and delivery of all Water Infrastructure NSW projects across the state and oversees a portfolio of projects organised geographically and by scale of project. Projects range from circa \$5 million to over \$1 billion, with over 20 Project Directors / Managers across the state.



Ingrid Emery
Executive Director, Project Interfaces and Program Management

Ingrid oversees the overarching program of government funded water infrastructure works in NSW. This client-side program management covers 15 programs being developed and delivered by the Department of Planning, Industry and Environment's Water Infrastructure NSW and Environment, Energy and Science division, the Department of Primary Industries' Fisheries division and local water utilities. She is responsible for putting in funding submissions for Australian Government funding programs, negotiating funding agreements, and ensuring NSW delivers on its commitments.



Paul Wade
Head of Portfolio Management Office

Paul leads a diverse team providing support functions across all Water Infrastructure NSW business areas, including finance, procurement, commercial and contract management, work health and safety, project management systems and controls, and reporting.



Donna Awad
Executive Director, Commercial and Strategy

Donna is responsible for the development and deployment of best practice commercial approaches and strategies for water infrastructure delivery, contract management approaches and engagement practices.



Jason Gordon
Head of Technical and Advisory Services

Jason and his team lead the provision of technical leadership and expert advice for infrastructure and capital works projects and other technical and advisory services provided by the group under contracts or service level agreements. This includes engineering, planning and environmental approvals, economic and investments, water modelling, geo-spatial and mapping.



Lisa Chikarovski,
Director, Community and Stakeholder Engagement

Lisa leads Water Infrastructure NSW's Community and Stakeholder Engagement team responsible for building respectful, trusting and collaborative relationships with communities and stakeholders, including a dedicated First Nations Engagement team, to support effective project and program outcomes.



Mia Garrido
Director, Infrastructure Policy and Governance

Mia is responsible for the development and implementation of infrastructure policy across the Water Infrastructure NSW portfolio, the application of project and portfolio risk, assurance and governance, as well as leading the development of corporate strategy.



Ed Couriel
Director Manly Hydraulics Laboratory

Ed is responsible for physical and numerical modelling and monitoring of water and wastewater systems, catchments, rivers, estuaries and oceans, outfalls, intakes, reservoirs, coastal, lake and shoreline engineering, condition assessments and master planning.



Owen Walker
Director, Financial and Commercial Management

As the Chief Financial Officer for Water Infrastructure NSW, Owen is responsible for the development and management of operating and capital budgets for our multi-billion-dollar portfolio of infrastructure projects. He also leads a team of commercial and procurement professionals that provide financial services to projects. Owen and his team are responsible for ensuring sound organizational financial and commercial management and governance.

Water Infrastructure programs and projects across NSW

Water Infrastructure NSW is delivering a wide range of projects and programs to provide long-term water security, improved access to quality water supplies in regional areas and to ensure water remains a protected resource.

This includes increasing storage capacity through new dams, exploring new and innovative technologies that help improve the quality and efficient use of water and investment in

infrastructure that will deliver environmental and aquatic ecology outcomes.

Our forward plan of programs and projects is summarised in Table 1 below and outlined in more detail in the following pages. The map in Figure 1 shows the locations of the range of projects across the state that are being investigated, developed or delivered.

Table 1: Overview of water infrastructure projects in NSW

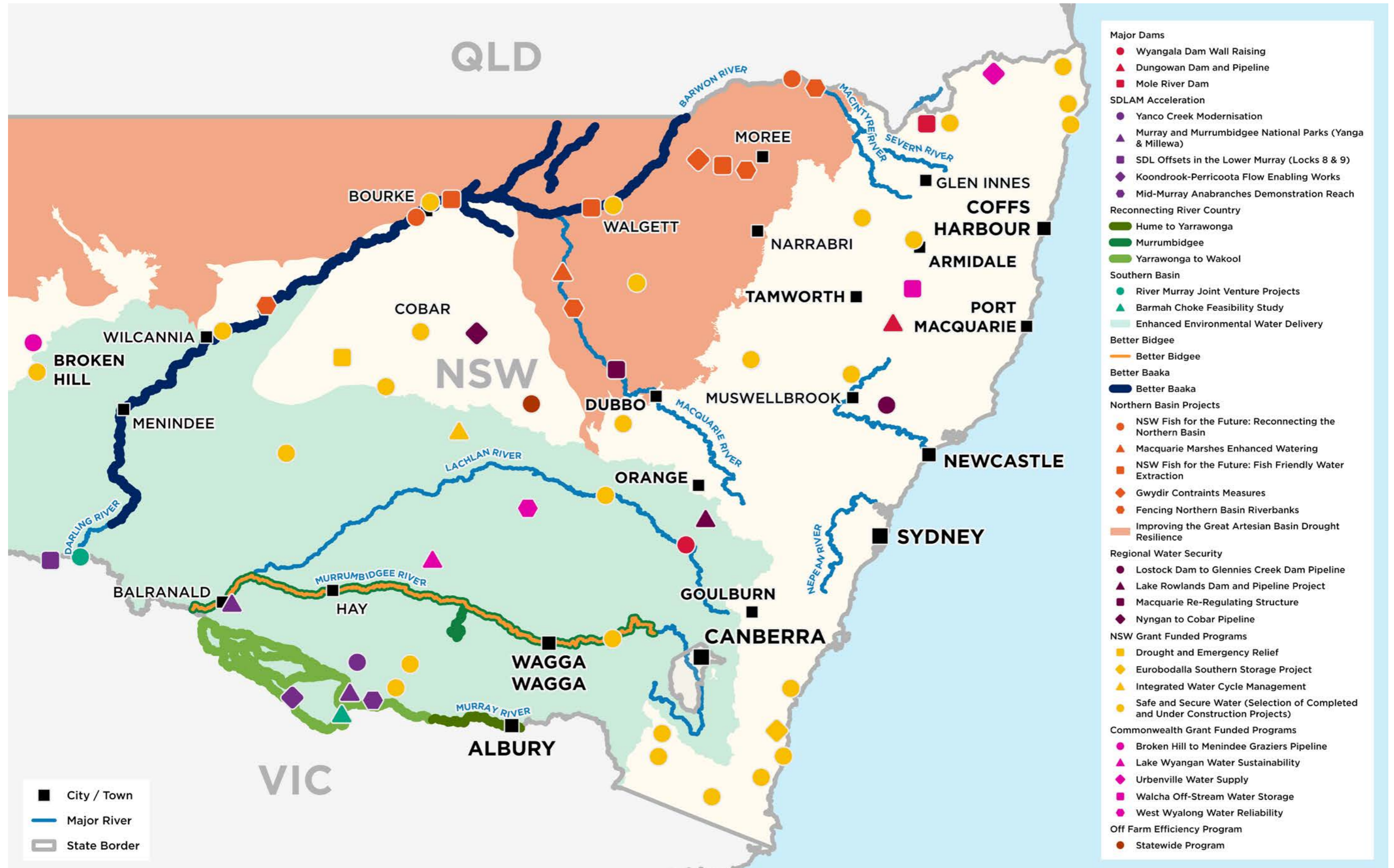
	Project Name	Budget	Status
Major dams	Wyangala Dam Wall Raising	●●●●	Final Business Case and EIS underway
	Dungowan Dam and Pipeline	●●●●	Final Business Case and EIS underway
	Mole River Dam	●●●	Strategic Business Case underway
SDLAM Acceleration	Yanco Creek Modernisation	●●	Fully funded for construction, in development phase
	Murray and Murrumbidgee National Parks (Yanga & Millewa)	●	Fully funded for construction, in development phase
	SDL Offsets in the Lower Murray (Locks 8 & 9)	●	Fully funded for construction, in development phase
	Koondrook-Perricoota Flow Enabling Works	●	Fully funded for construction, in development phase
	Mid-Murray Anabranches Demonstration Reach	●	Fully funded for construction, in development phase
Reconnecting River Country	Hume to Yarrawonga	TBC	Strategic business case underway
	Yarrawonga to Wakool	TBC	Strategic business case underway
	Murrumbidgee	TBC	Strategic business case underway
Southern Basin	Enhanced Environmental Water Delivery	●	Scoping study underway
	Barmah Choke Feasibility Study	●	Scoping study underway
	River Murray Joint Venture Projects	●	Ongoing
Better Bidgee	Yanko Offtake	TBC	Consultation and early options investigation underway
	Reconnecting the Bidgee (fish passage)	TBC	Consultation and early options investigation underway
	Fish Friendly water extraction	TBC	Consultation and early options investigation underway
	Cold Water Pollution Mitigation	TBC	Consultation and early options investigation underway
	Gooragool and Mantangary Lagoons	TBC	Consultation and early options investigation underway
	Balranald Weir/Yanga Lake	TBC	Consultation and early options investigation underway

	Project Name	Budget	Status
Better Baaka	Western Weirs - Menindee Weir Modifications - Weir renewals on the Darling - Weir modifications and assessment	●●●	Strategic Business Case underway
	Wilcannia Weir	●	Final Business Case and EIS underway
	Toorale Water Infrastructure Project	●	Construction underway
	Morton Boolka Enhancement	TBC	Consultation and early options investigation underway
	Water for Cultural and Environmental outcomes	TBC	Consultation and early options investigation underway
	Town water supply	●	Consultation and early options investigation underway
Northern Basin Toolkit	NSW Fish for the Future: Reconnecting the Northern Basin	●	Final Business Case underway and construction on early works commencing
	Macquarie Marshes Enhanced Watering	●	Final Business Case underway
	NSW Fish for the Future: Fish Friendly Water Extraction	●	Final Business Case underway and early works roll out commencing
Other Northern Basin projects	Gwydir Constraints Measures	●	Final Business Case underway
	Fencing Northern Basin Riverbanks	●	Ongoing
	Improving the Great Artesian Basin Drought Resilience	●	Ongoing
Regional Water Security	Lostock Dam to Glennies Creek Dam Pipeline	●●●	Final Business Case and EIS is being scoped
	Lake Rowlands Dam and Pipeline Project	●●	Final Business Case
	Macquarie Re-Regulating Structure	●	Final Business Case
	Nyngan to Cobar Pipeline	●●	Final Business Case
NSW Grant Funded Programs	Safe and Secure Water Program	●●●●	Ongoing
	Drought and Emergency Relief	●●●	Ongoing
Commonwealth Grant Funded Programs	Broken Hill to Menindee Graziers Pipeline	●	Pre-construction
	Lake Wyangan Water Sustainability	●	Pre-construction
	Walcha Off-Stream Water Storage	●	Pre-construction
	Urbenville Water Supply	●	Pre-construction
	West Wyalong Water Reliability	●	Pre-construction
Off Farm Efficiency Program	●●●●	Applications open	

Key

● = 0-100 Million ●● = 100-250mill ●●● = 250-500mill ●●●● = >500mill

Figure 1: Map of program and project locations in NSW



Major Dam Projects



Image: Dungowan Dam.

As part of its commitment to protect and increase the resilience of regional communities from the impact of this changing climate, the NSW and Australian Governments are currently investigating three major dam projects.

If approved, these dams will be one of the largest investments in water supply infrastructure in NSW and will provide a range of regional communities with more reliable, secure and resilient water supplies for future generations.

For more information on these projects visit
water.dpie.nsw.gov.au/water-infrastructure-nsw/dam-projects

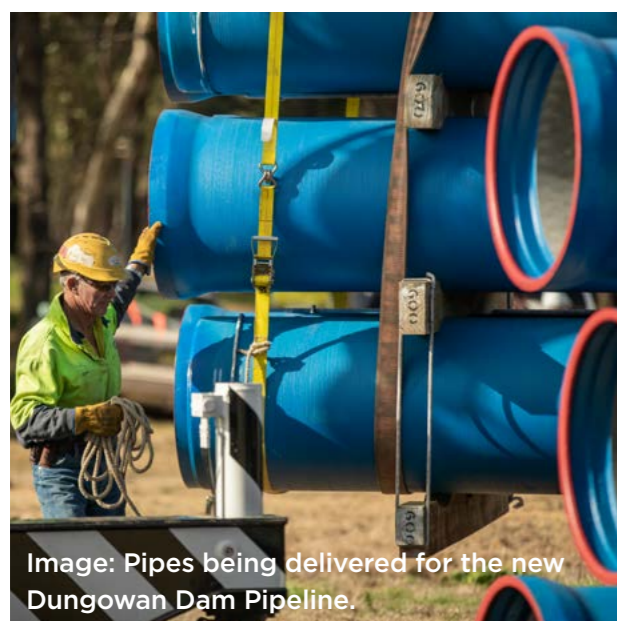


Image: Pipes being delivered for the new Dungowan Dam Pipeline.

New Dungowan Dam and Pipeline

The proposed Dungowan Dam project would secure the long-term water supply security for the regional city of Tamworth.

The project involves building a new 22.5 GL dam approximately 3.5 km downstream of the existing Dungowan Dam, connected to the Calala Water Treatment Plant via a new 55 km pipeline, replacing the 70-year old existing pipeline that is reaching end-of-life.

Concept design for the dam has been completed with detailed design currently underway. Work to complete the Final Business Case and Environmental Impact Statement (EIS) continues, with the EIS expected to be on exhibition in the first half of 2022.

Phase

Final Business Case and EIS underway

Location

Peel Valley

Scope

- A new proposed 22.5 GL dam approximately 3.5 km downstream of the existing Dungowan Dam.
- Partial decommissioning of the existing Dungowan Dam.
- A new proposed 55 km pipeline from the new Dungowan Dam to the Calala Water Treatment Plant.

Benefits

The proposed dam is expected to:

- improve town water supply security and levels of service for Tamworth residents and businesses
- reduce the risk of severe town water restrictions during times of drought
- reduce the risk of there not being sufficient general security allocations for agricultural users during times of drought
- deliver water savings from reduced transmission losses associated with the old pipeline
- provide a broad range of opportunities for local businesses.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/dam-projects/dungowan-dam

New Dungowan Dam Pipeline

The new pipeline will be 55 km long and will run from the proposed new Dungowan Dam to the Calala Water Treatment Plant. It replaces the 70-year old existing pipeline that has reached its end-of-life and will improve water security for Tamworth and the Peel Valley even before the dam is built.

The contract for the construction of the pipeline was awarded to MPC Kinetic in February 2021. The final pipeline route was announced in October 2021 and will be built in two stages, with construction expected to commence on stage one in the first half of 2022.

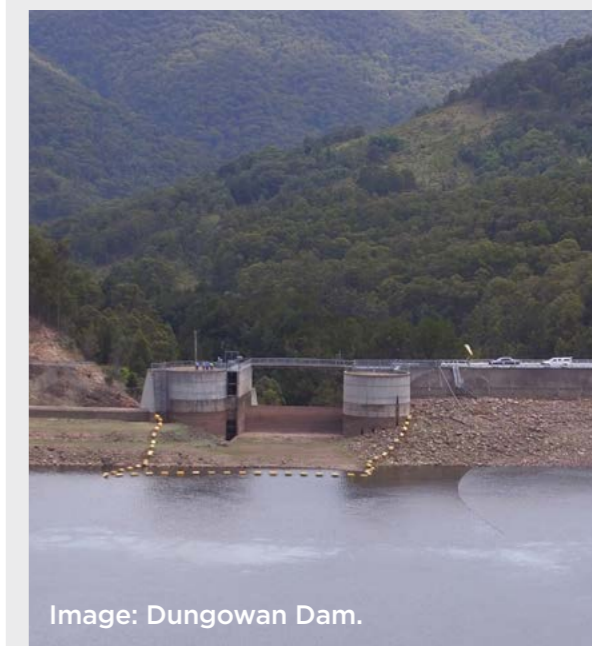


Image: Dungowan Dam.

Wyangala Dam Wall Raising and water treatment plant

The Wyangala Dam Wall Raising project is a once-in-a-lifetime opportunity to deliver critical infrastructure that will improve water security for the people of the Lachlan Valley for many generations to come. The project involves raising the existing dam full supply level by 10 metres to create capacity for an additional 650 GL, or 53 per cent more storage.

A concept design for the dam is completed. A construction alliance selection process is underway with two shortlisted proponents (Acciona and Seymour Whyte). Work to complete the Final Business Case and EIS is proceeding. Construction of the Wyangala Water Treatment Plant is expected to commence in early 2022.

Phase

Final Business Case and EIS underway

Location

Wyangala and Lachlan Valley

Scope

- Dam storage capacity will be increased by 53 per cent.
- An additional 21 GL per annum estimated yield will be achieved for general security license use.
- Wyangala Water Treatment Plant.

Benefits

Project benefits would include:

- securing the region's water supply, stimulating the growth of the regional economy and supporting future population growth
- improving productivity of primary industries
- providing greater certainty around water availability to support additional investment by businesses and allow a transition to higher yield agricultural products
- improved flood attenuation for the Lachlan Valley
- local business and employment opportunities throughout the project
- creating more than 600 direct and 1100 indirect jobs.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/dam-projects/wyangala-dam

Wyangala Water Treatment Plant

A new water treatment plant will be built to supply clean drinking water to Wyangala and Wyangala Waters Holiday Park. The Australian and NSW Governments are funding the \$4 million plant which will deliver up to 800,000 litres of clean drinking water each day. The plant is the early work package for the Wyangala Dam Wall Raising project and construction is expected to start in the first half of 2022.



Image: Wyangala Dam.

Mole River Dam

The Strategic Business Case for the proposed Mole River Dam is investigating a new rockfill dam to deliver improved water security and environmental benefits for water users in the Border Rivers region.

Phase

Strategic Business Case underway

Location

Border Rivers Region of NSW.

Scope

- Development of a strategic business case.
- Development of a concept design and environmental assessments.

Benefits

Project benefits would include:

- improvements in on-farm productivity as a result of more reliable and secure water supply
- increased reliability for agricultural production which will help secure existing jobs and create new opportunities.
- local business and employment opportunities throughout the project.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/dam-projects/mole-river-dam



Image: Wyangala Dam.

SDLAM Acceleration Program

Image: Wetlands at Millewa Forest.

The NSW and Australian Governments recently announced more than \$330 million to accelerate the delivery of five key projects under the Sustainable Diversion Limit Adjustment Mechanism (SDLAM) Acceleration Program.

The SDLAM Acceleration Program will deliver up to 45 GL of the amount needed to reach the 605 GL target required from NSW under the Murray-Darling Basin Plan. Importantly, these projects will provide numerous opportunities for local businesses, generating an estimated 450 direct and 850 indirect local jobs and providing a boost to regional economies.

Concept designs for each project's multiple packages of work – including weirs, fishways and low-level bridges – are currently underway with multiple opportunities for business coming to market starting early next year.

Construction activity is expected to start mid next year and continue until mid-2024.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam

Yanco Creek Modernisation Project

The Yanco Creek Modernisation Project is a series of initiatives aiming to improve the flexibility and management of over 800 km of interconnected waterways at several locations on the Yanco, Billabong, Colombo and Forest Creeks.

Phase

Fully funded for construction, in development phase

Location

The Yanco Creek System links two of Australia's largest rivers – the Murrumbidgee and the Murray. The projects are close to the towns of Morundah, Jerilderie, Conargo and Wanganella.

Scope

- Four re-regulating weirs.
- More than seven additional hydrographic stations.
- Over 20 gates and flow structures.
- More than 10 new fishways.
- In excess of 10 access improvements/upgrades.
- Multiple ancillary culverts, pump structures, coffer dams and temporary works, infrastructure modifications and decommissioning of weirs.

Current status

Construction to commence late 2022 through to mid-2024.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam/yanco-creek-modernisation-project

Yanga National Park and Millewa Forest Projects

The Yanga National Park and Millewa Forest projects will provide improved environmental watering regimes to enhance environmental and cultural outcomes.

Phase

Fully funded for construction, in development phase

Location

Yanga National Park is located near the town of Balranald. It covers an area of 66,734 hectares which includes 1,932 hectares of Yanga Nature Reserve and has a frontage of 170 km on the Murrumbidgee River.

The Millewa Forest precinct forms the NSW portion of the Barmah-Millewa Forest and is located within Murray Valley National Park. It is the largest river red gum forest in Australia and is located between the townships of Tocumwal, Mathoura and Deniliquin on the Murray River floodplain.

Scope

Yanga Project

- More than five new or refurbished regulators and new fishways.
- More than 20 km of access tracks.
- A range of sills and culverts.
- Around 3 km of pipeline.

Millewa Project

- More than 10 new regulators and a new fishway.
- More than 15 sills and culverts.
- Around 10 km of earthworks.

Current status

Construction to commence early 2023 through to mid-2024.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam/millewa-forest-project

industry.nsw.gov.au/water/plans-programs/sdlam/yanga-national-park-project



Image: Koondrook-Perricoota Flow Enabling Works Project.

Koondrook-Perricoota Flow Enabling Works Project

The Koondrook-Perricoota Flow Enabling Works Project involves installing regulators, channels and levees to divert and control flows from the Murray River through the forest, while also protecting private landowners from the impacts of these increased flows.

Phase

Fully funded for construction, in development phase

Location

Koondrook-Perricoota is an internationally significant site consisting of an extensive forest of river red gums and woodland. It covers 33,750 hectares along the Murray River and is located south-west of Deniliquin between the towns of Echuca (in the east) and Barham (in the west). Work will be undertaken at several locations throughout the forest area.

Scope

- Constructing more than 6 km of levees.
- Removing and replacing several bridges.
- Removing and replacing a number of block banks and structures.
- Replacing regulators and culverts.

Current status

Construction to commence late 2022 through to mid-2024.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam/koondrook-perricoota-forest-project

Mid-Murray Anabranches Project

The Mid-Murray Anabranches Project will help restore the health of the creek systems and allow native fish populations to recover. This will be achieved by improving the flow regimes and removing barriers to fish movement, while also ensuring private land is protected from the impact of increased flows.

Phase

Fully funded for construction, in development phase

Location

The Mid-Murray Anabranches are in southern NSW near the towns of Deniliquin and Tocumwal. They form the northern boundary of the Murray River floodplain and the eastern boundary of the Edward River floodplain.

Scope

- More than 30 farm bridges.
- Approximately five light vehicle crossings.
- Up to 10 rock causeways and crossings.
- Over 100 fence crossings.
- Approximately 25 km of levee works.
- More than 120 km of access tracks.

Current status

Construction to commence mid-2022 through to late 2023.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam/mid-murray-anabranches-project



Image: Lock 9 on the Murray River, near Wentworth.

Locks 8 and 9 Project

The Locks 8 and 9 Project involves replacing existing fixed crest weirs with new structures encompassing regulators with overshot gates and vertical slot fishways. In addition, two block banks will be established requiring the installation of gated, reinforced concrete box culverts.

Phase

Fully funded for construction, in development phase

Location

The project area is in the lowland reaches of the River Murray and Darling Rivers in south-west NSW. It incorporates environmental assets associated with Lake Victoria and Frenchmans Creek, the Carrs, Capitts and Bunberoo Creek systems in NSW, and the Mulcra and Wallpolla Island areas on the Victorian floodplain.

Scope

- A number of fishways and regulators of different sizes and structure.
- Various new access tracks.
- New bridges.

Current status

Construction to commence mid-2022 through to mid-2024.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam/locks-8-and-9-project

Reconnecting River Country Program

Image: Darlington Point, Cookoothama.

The Reconnecting River Country Program aims to improve environmental, social, economic and cultural outcomes for communities along the Murray and Murrumbidgee River systems. The program focuses on delivering local community benefits first and foremost, as part of the NSW Government's continued commitment to delivering sensible, community driven Murray-Darling Basin Plan outcomes.

The project would:

- connect rivers to flood plains through efficient delivery of existing environmental water
- provide an estimated saving of 60 GL of water for the environment
- invest in infrastructure and on-farm works to protect private land from the impact of increased flows
- improve cultural flows and outcomes for Aboriginal communities.

Phase

Strategic Business Case underway

Location

The program focuses on relaxing or removing some of the constraints or physical barriers impacting the delivery of water for the environment in the following areas in the southern-connected Murray-Darling Basin:

- Hume to Yarrawonga (Murray River)
- Yarrawonga to Wakool (Murray River)
- Murrumbidgee River.

Scope

Preparation of a Strategic Business Case for the project.

If approved to proceed, the works that might be undertaken could include:

- creation of easements
- new or modified access roads
- new or modified road crossings and bridges
- infrastructure and equipment relocation
- riverbank works
- drain removal or installation.

Current status

- Preparation of Strategic Business Cases.
- Conducting case studies with landowners, First Nations and the wider community.
- Hydrological modelling to assess inundation area and estimate potential landowner impacts.
- Environmental risk and benefit assessments.
- Policy development.
- Development of a 'co-design' model to work with the community to identify additional infrastructure works opportunities.

For more information visit

industry.nsw.gov.au/water/plans-programs/sdlam/reconnecting-river-country-program

Southern Basin Projects

Image: Murrumbidgee River, southern-connected Basin.

River Murray Joint Venture Projects

The Murray-Darling Basin Joint Venture Program undertakes program and project management activities to support NSW responsibilities under the Murray-Darling Basin Agreement and the NSW Water Management Act 2000.

Under the Joint Venture Program, there is an annual program of works valued at approximately \$10 million, and the Program is responsible for managing approximately \$66 million in assets and infrastructure.

Phase

Ongoing

Location

- The program delivers and operates works within the Murray and Murrumbidgee Valleys with a focus in and around Lake Victoria near the South Australian border and works in the upper Murray and Tumut Rivers.

Scope

- Managing Lake Victoria and Joint Venture owned Salt Interception Schemes (SIS).
- Delivering the Hume to Torrumbarry and Upper Murray River Works programs.
- Delivering the Living Murray program.
- Undertaking Basin Salinity Management.
- Implementing and delivering works and activities as detailed in the Tumut River Works Plan and the Upper Murray Streamside Restoration Plan.
- Managing, maintaining and operating the State-owned salt interception scheme: Billabong SIS.

Current status

Work on the program is ongoing.

For more information visit

mdba.gov.au/about-us/partnerships-engagement/joint-programs

Barmah-Millewa Choke Project

The Barmah-Millewa Choke project is a feasibility study funded by the Australian Government to identify options to take pressure off the Barmah-Millewa Choke, support future system capacity and reduce the risk of shortfalls in water delivery. Water Infrastructure NSW is overseeing the funding arrangements, with the Murray-Darling Basin Authority delivering this project on behalf of the Basin States. It is currently in the planning stage and a business case is expected to be completed by late 2022.

It will undertake an assessment of technical Investigations, designs and costings and policy implications, including the potential risks of the options. This feasibility study will provide initial recommendations alongside a summary of stakeholder engagement.

Phase

Scoping Study underway

Current status

Scoping study underway and business case expected to be completed by late 2022.

For more information visit

mdba.gov.au/publications/report/barmah-choke-study-investigation-phase-report

Enhanced Environmental Water Delivery (EEWD) Project

The Enhanced Environmental Water Delivery Project involves a suite of changes to how we operate the river to deliver environmental water more effectively in the southern-connected basin. It is a joint project between Victoria, New South Wales and South Australia with the Murray-Darling Basin Authority (MDBA) leading the project.

The project will significantly improve the forecasting, planning and coordination of environmental water use to maximise downstream and system-wide connectivity and environmental outcomes.

The changes will build on existing efforts and learnings about how to ensure the most effective use and delivery of environmental water in the southern-connected Basin. To achieve the maximum possible supply offset under the SDLAM package, this project needs to be delivered in conjunction with projects to relax physical constraints to water delivery including the Reconnecting River Country, SDLAM Acceleration, Better Baaka and Better Bidgee programs.

Phase

Scoping Study

For more information visit

mdba.gov.au/sites/default/files/EEWD-factsheet-4-May-2018.pdf

Better Bidgee Program

Image: Offtake on the Murrumbidgee River.

The Better Bidgee program is investigating a range of initiatives, including new and improved infrastructure along the Murrumbidgee River system.

A key focus for the program is improving native fish access to more than 1,000 km of the Murrumbidgee system by installing fishways at key sites where fish movement is impeded, addressing cold water pollution discharges from large dams, and installing screens on pumps and diversions to save tens of millions of fish annually.

The Better Bidgee program now incorporates elements of projects and programs such as the rescoped Yanco Offtake Project. It also includes projects included in the NSW Government's Fish for the Future Strategy via the Reconnecting the Bidgee (fish passage) project. In addition, the program is considering new Fish Friendly Water Extraction, Gooragool and Mantangary Lagoons, and Balranald Weir and Yanga Lake initiatives.

For more information visit
dpie.nsw.gov.au/better-bidgee

SDLAM Yanco Offtake Project (Rescoped)

This rescope will see a substantially revised Yanco Creek Offtake SDLAM project, moving away from the original plan that proposed to raise the existing water level upstream of Yanco Weir by up to 2.5 m (under normal operating conditions).

Instead, the project is focusing on a range of smaller scale options to deliver improved operational flexibility and environmental outcomes. These options range between a 0 to 1.2 m rise to the existing water level upstream of Yanco Weir under normal operating conditions.

Phase

Consultation and Early Options Investigation

Benefits

The project is expected to deliver:

- increased flows to Yanco Creek
- greater control of water flows in the system
- improved fish passage and environmental outcomes
- a better balance of outcomes between Yanco Creek System and the Murrumbidgee River.

For more information visit
water.dpie.nsw.gov.au/_data/assets/pdf_file/0004/475294/bidgee-yanco-offtake-fact-sheet.pdf

Reconnecting the Bidgee (fish passage) initiative

The Reconnecting the Bidgee (fish passage) initiative would support the health of waterways and the many unique native fish species living in the Murrumbidgee River. We are investigating the construction of fishways at five high priority sites:

- Berembred Weir
- Gogeldrie Weir
- Hay Weir
- Maude Weir
- Redbank Weir.

Phase

Consultation and Early Options Investigation

Benefits

These projects would deliver a range of benefits including:

- restoring fish passage at priority barriers allowing for the natural movement of fish along the system
- improving native fish access to nearly 1,200 km of mainstem waterway from the main dam storages to the Murray Junction
- supporting the recovery of native fish populations including Golden Perch and Murray Cod
- increasing opportunities for recreational fishing and tourism, boosting economic activity.

For more information visit
water.dpie.nsw.gov.au/_data/assets/pdf_file/0003/475293/bidgee-reconnecting-fact-sheet.pdf



Image: Mundarlo Bridge on the Murrumbidgee River.

Fish Friendly Water Extraction initiative

Communities, businesses and farmers extracting water from the river can inadvertently cause harm to fish sucked into pumps and diverted into channels, where they are lost from the waterways.

The proposed Fish Friendly Water Extraction initiative would deliver a major program of installing modern fish screens and other infrastructure works to stop fish and debris entering pumps and diversions.

Phase

Consultation and Early Options Investigation

Benefits

This initiative would have significant environmental and economic benefits including:

- up to 90 per cent reduction in fish loss from irrigation infrastructure, saving millions of native fish each year
- reduced operating costs to farmers with less money and time spent maintaining their pumps
- potential water savings, as less debris in supply lines means more water efficient delivery.

For more information visit
water.dpie.nsw.gov.au/_data/assets/pdf_file/0010/475291/bidgee-fish-friendly-water-extraction-fact-sheet.pdf

Gooragool and Mantangary Lagoon

The Gooragool and Mantangary Lagoons are an integral part of the Mid-Murrumbidgee Wetland system, and this project would help achieve better outcomes in these wetlands using less environmental water. The Gooragool and Mantangary Lagoons are located to the east of Darlington Point within the Murrumbidgee Irrigation Area (MIA).

This initiative would investigate options including:

- exploring land and water use options
- potentially relocating and building of new on-farm water storage infrastructure
- decommissioning works of a redundant regulator.

Phase:

Consultation and Early Options Investigation

Benefits

The potential benefits from this initiative include:

- improved delivery and reliability of water into the wetland system
- the expansion of NSW's conservation estate
- improved native fish outcomes through securing critical refuge and breeding habitats.

For more information visit

water.dpie.nsw.gov.au/_data/assets/pdf_file/0011/475292/bidgee-gooragool-and-mantangary-lagoons-fact-sheet.pdf

Image: Offtake on the Murrumbidgee River.



Balranald Weir and Yanga Lake initiative

The proposed Balranald Weir and Yanga Lake initiative would complement and enhance the benefits of the SDLAM Acceleration Yanga Park Project. The initiative would investigate options to augment flow into Yanga Lake including managing the pool height of Balranald Weir. It would improve fish passage within the Bidgee and between the River and lake. The initiative would include refurbishing, upgrading or decommissioning structures within the Yanga National Park to more efficiently direct water into Yanga Lake.

Phase

Consultation and Early Options Investigation

Benefits

The potential benefits include:

- supporting community and tourism outcomes through maintaining an improved water regime in Yanga Lake
- improving the condition of high value ecological assets including part of Yanga National Park
- reinstating fish passage to support fish breeding and movement.

For more information visit

water.dpie.nsw.gov.au/_data/assets/pdf_file/0008/475289/bidgee-balranald-weir-and-yanga-lake-fact-sheet.pdf

Better Baaka Program

Image: Darling-Baaka River System, near Menindee.

The Better Baaka program is investigating a range of initiatives, including new and improved infrastructure, to deliver outcomes for the Darling-Baaka river system. The Better Baaka program rescopes the previous Menindee Lakes SDLAM project, and also includes other complementary measures to improve river health, connectivity, and provide positive outcomes for Aboriginal communities.

A range of initiatives are currently being explored including the survey and assessments for possible changes and modifications to weirs, improvements to and construction of fish passageway, and building new recreational facilities, new amenities and roadworks to deliver better outcomes to communities along the river system.

The Better Baaka program consists of several initiatives which include elements of existing projects and programs such as the Wilcannia Weir project, the Western Weirs program and the Toorale Water Infrastructure project as well as proposed initiatives such as the Morton Boolka enhancement project and the Weir renewals on the Darling project.

For more information visit

dpie.nsw.gov.au/better-baaka

Wilcannia Weir Replacement Project

The NSW and Australian Governments have announced \$30 million for a new, state-of-the-art weir at Wilcannia. Leading engineering, construction and architectural company GHD has been awarded the detailed design contract, building on the months of planning, investigations and other work carried out to enable construction to start in 2022.

Phase

Final Business Case and EIS underway

Location

The new weir will be located 5 km downstream of the existing weir in Wilcannia.

Scope

- Construction of a new weir to raise the water level to one metre above existing Full Supply Level, nearly doubling the accessible storage capacity.
- A 115 m long fish passage that will allow native fish to migrate and create environmental benefits.
- Improvements to Union Bend Road to enable better access to the new weir site.

Benefits

The new Wilcannia weir is expected to:

- improve water management of the weir pool and enhance water security
- increase tourism opportunities and investment
- allow better recreational amenity to walk, swim, picnic and fish
- improve native fish migration.

Current status

- Finalisation of Environmental Impact Statement.
- Detailed design underway.
- Early works on Union Bend Road to commence early 2022.
- Main works construction to commence 2022.

For more information visit:

water.dpie.nsw.gov.au/water-infrastructure-nsw/regional-projects/wilcannia-weir



Image: Darling-Baaka River System, near Menindee.

Western Weirs Program

Water Infrastructure NSW is investigating 28 weirs along the Barwon-Darling and Lower Darling Rivers and adjoining tributaries as part of the Western Weirs program.

Phase

Strategic Business Case underway

Benefits

A range of opportunities are being considered to:

- improve system connectivity allowing water to move through the landscape
- improve water security for towns serviced by the Darling-Baaka, including Aboriginal communities supplied by those towns
- adapt the operation of current river infrastructure to improve town water security
- investigate weir ownership and future funding arrangements to ensure sustained and affordable services.

For more information visit:

water.dpie.nsw.gov.au/water-infrastructure-nsw/regional-projects/western-weirs-program

From this work, the following initiatives have been identified:

Weir renewals on the Darling

The Weir Renewals on the Darling proposal would deliver improved town water security and fish passage through upgrading three existing weirs at Pooncarie, Bourke and Collaranebri.

Weir Modifications and Assessments

The proposed Weir Modification and Assessments initiative is investigating a number of weirs along the Darling-Baaka to assess and identify modernisation opportunities for infrastructure, improve water management and reduce impacts on local fish habitat.

Assessment scope will include weirs such as:

- Brewarrina
- Mungindi
- Tilpa
- Louth (town and non-town weirs)
- Bourke (non-town weir)
- Calmundi
- Barnaway
- Presbury
- Camillaroy.

Menindee Weir modifications

The Menindee Weir Modifications proposal would improve fish passage connectivity along the lower Darling-Baaka and increase the flexibility of the river system.

Toorale Water Infrastructure Project

The project aims to ensure the important values of Toorale National Park, near Bourke, are maintained or enhanced, while achieving greater flexibility to pass more water to the Darling River in certain circumstances. We are partway through the construction of new and upgraded water infrastructure at Homestead and Boera Dams on the Warrego River.

In addition to the removal of Peebles Dam (completed in 2019) the project involves modifying Boera and Homestead Dams to install fishways and pass higher rates of flow to:

- improve fish passage
- support important environment values within Toorale National Park
- increase maximum flow rates into the Darling River
- support and maintain First Nations cultural values.

Location

The Toorale Water Infrastructure Project is located in Toorale National Park about 65 km south-west of Bourke in north-western NSW.

Scope

- **Phase 1:**
Removal of Peebles Dam (complete).
- **Phase 2:**
Boera Dam - replacement of pipes with a gated culvert regulator and vertical slot fishway
Homestead Dam - replacement of pipes with a fixed crest weir and rock ramp style fishway.

Current status

- Phase one is complete.
- Phase two construction is underway and due for completion in mid-2022.
- Operational arrangements for the infrastructure are currently being prepared.

For more information visit

environment.nsw.gov.au/topics/water/water-for-the-environment/planning-and-reporting/toorale-water-infrastructure-project

Morton Boolka Enhancement Project

Morton Boolka is an area rich in First Nations history lying between Lakes Menindee and Cawndilla. It is of great importance to Water Infrastructure NSW that the Morton Boolka enhancement takes into consideration the significance of the site and the need to reduce impacts on the Barkindji's cultural heritage.

The proposed Morton Boolka Enhancement initiative would look at options of a Cawndilla Creek weir and pipeline to maintain a reliable flow of water into the Cawndilla Creek. This work would allow Traditional Owners to participate in cultural watering activities in Cawndilla Creek. The works would create some physical separation between the lakes to improve management of the lower and upper lakes while ensuring almost permanent water in Cawndilla Creek and supporting First Nations employment and local tourism.

Phase

Consultation and Early Options Investigation

For more information visit

water.dpie.nsw.gov.au/_data/assets/pdf_file/0010/475273/baaka-morton-boolka-enhancement-fact-sheet.pdf

Northern Basin Projects

Image: Gwydir River, near Moree.

Northern Basin Toolkit Program

The Northern Basin Toolkit is a suite of projects, or 'toolkit measures', agreed to by state and Australian Governments to support the 70 GL reduction of water recovery targets under the Murray-Darling Basin Plan.

NSW Fish for the Future: Reconnecting the Northern Basin

As part of the Northern Basin Toolkit, the Australian Government has announced a commitment of \$56.75 million to the NSW Fish for the Future: Reconnecting the Northern Basin project. It aims to reinstate fish passage at priority sites in the northern Basin. This major infrastructure program will address barriers to fish passage at major weirs, providing a connected 'highway' for fish, such as Golden Perch and Murray Cod, to make critical migration runs.

The project will focus activities on the Barwon-Darling and Border Rivers providing valuable linkages for fish to access mainstem habitat.

Phase

Consultation and Early Options Investigation

Location

This project prioritises sites in the Barwon-Darling and Border Rivers.

Benefits

The project will provide significant environmental, social-economic and cultural benefits to the northern Basin, including:

- catchment-scale connectivity to improve the distribution and abundance of migratory native fish species
- major job creation and investment in regional communities through the construction phase and increased tourism opportunities as native fish populations increase
- sustainable management of agricultural and water resources as essential infrastructure for water supply and delivery such as dams, weirs and regulators are retained, whilst ecological impacts are
- enhanced cultural heritage values, as native fish are an important part of First Nations culture.

Scope

- Construction of fish passage at priority sites.
- Removal of instream barriers to fish passage at priority sites.

Current status

- Early works program being finalised.
- Project plan for the full program delivery underway.

For more information visit

awe.gov.au/water/policy/mdb/basin-plan/northern-basin-toolkit#1-nsw-fish-for-the-future-reconnecting-the-northern-basin

Macquarie Marshes Enhanced Watering

The Australian Government has announced a commitment of \$2.69 million to construct flow enabling works to support ecological outcomes within the Macquarie Marshes. This will improve the effectiveness of environmental water delivery to the Macquarie Marshes by reducing the volume of water bypassing key assets.

Proposed works include construction on Oxley Break no.3 in the southern Macquarie Marshes.

Water Infrastructure NSW is working in partnership with the Department of Planning, Industry and Environment's Environment, Energy and Science division to deliver this project.

Phase

Consultation and Early Options Investigation

For more information visit

mdba.gov.au/basin-plan/northern-basin-projects/northern-basin-toolkit-measures

NSW Fish for the Future: Fish Friendly Water Extraction

The Australian Government has announced a commitment of \$20.48 million to the Fish Friendly Water Extraction Project. Water Infrastructure NSW is working in partnership with the Department of Primary Industries - Fisheries (Fisheries) to deliver this project. We will work with water users, irrigation engineers, local screen manufacturers and anglers to design, manufacture and install modern diversion screens at several priority diversions on the Barwon-Darling and Gwydir Valleys. The final installation sites will complement other fish passage works and diversion screening activities being undertaken in NSW and Queensland.

Phase

Consultation and Early Options Investigation

Location

Barwon-Darling and Gwydir Valleys

Scope

- Installation of fish screens on several irrigation offtakes.
- Ancillary works.

Current status

Delivery program, EOI process and guidelines being finalised.

For more information visit

mdba.gov.au/basin-plan/northern-basin-projects/northern-basin-toolkit-measures

Gwydir Constraints Measures Project

The Australian Government has committed \$1.6 million for NSW to fast track delivery of a Final Business Case for the Gwydir Constraints Measures Project. Water Infrastructure NSW is working in partnership with the Department of Planning, Industry and Environment's Environment, Energy and Science division to deliver this work.

The project aims to address the third party impacts that can occur when watering the Gwydir floodplain to maximise ecological outcomes from all environmental water flows (planned and held) for native fish, vegetation, waterbirds and river flows, while recognising and managing impacts on local landholders. The project focusses on three areas:

- Gingham Watercourse
- Lower Gwydir Watercourse
- Mehi River.

Phase

Final Business Case

Location

- Gwydir Valley

Scope

- Easement negotiation and land purchase.
- Civil works including levees, crossings, bridges and bank works.
- Ancillary works.

Current status

Australian Government investment decision pending.

For more information visit

environment.nsw.gov.au/topics/water/water-for-the-environment/gwydir/northern-basin-toolkit-gwydir

Other Northern Basin Programs

Image: Glenroy Bore, near Moree.

NSW Fencing Northern Basin Riverbanks Program

The NSW Government has secured \$7.5 million in funding to deliver the Fencing Northern Riverbanks Program. It aims to improve outcomes for fish by working with landholders to fence off environmentally sensitive areas of northern Basin waterways from livestock, improving water quality.

Water Infrastructure NSW engaged NSW Local Land Services to deliver the Fencing Northern Basin Riverbanks Program.

Phase

EOI and contract negotiation

Location

Priority reaches are within the Gwydir, Border Rivers, Barwon-Darling and Macquarie Valleys.

Scope

Riparian fencing and additional activities include:

- the installation of off-stream stock watering points
- measures to control exotic woody weeds
- minor erosion control works
- revegetation and river re-snagging.

Current status

- EOIs have been received and contracts are under negotiation with the first round of landholders.

For more information visit

<https://www.nsw.gov.au/what-we-do/our-major-projects/fencing-northern-basin-riverbanks-program>

Improving the Great Artesian Basin Drought Resilience Program

The NSW and Australian Governments have jointly committed funding to a four-year program to improve water security and drought resilience for Great Artesian Basin (GAB) landholders. The program is a \$22.1 million investment in infrastructure, education, awareness, research and monitoring.

The Improving Great Artesian Basin Drought Resilience (IGABDR) program is underway and follows on from the work already carried out during the Cap and Pipe the Bores Program.

Landholders within the GAB catchment with failing or uncontrolled bores constructed before 1965 were eligible through an Expression of Interest process for efficient piped water supply systems. These projects will replace artesian bores identified as a high priority for rehabilitation to improve drought resilience and water security.

Phase

Ongoing

Location

The Great Artesian Basin is one of the largest and deepest underground freshwater resources in the world and extends into Queensland, South Australia, NSW and the Northern Territory. IGABDR includes projects in towns such as Bourke, Brewarrina and Walgett.

Scope

- Bore capping.
- Piping.
- Investigative drilling.

Current status

- Rolling program of ongoing works.

For more information visit

<https://www.industry.nsw.gov.au/water/basins-catchments/gab>

Regional Water Security Projects

Image: Lake Rowlands

Our regional program focusses on delivering key major water infrastructure projects to improve water security in regional areas and achieve cultural outcomes.

Lostock Dam to Glennies Creek Pipeline

Currently in the initial planning stages, the proposed Lostock Dam to Glennies Creek Dam Pipeline project aims to enhance water security and reliability within the current system and support improved drought resilience and water connectivity in the Upper Hunter catchment. Water Infrastructure NSW is currently preparing a Final Business Case for the proposed pipeline. The business case is expected to take approximately two years to develop, after which time the NSW Government will decide whether to proceed to construction.

Phase

Final Business Case and EIS is being scoped

Location

Lostock and Glennies Creek Dams are located in the Hunter region.

Benefits

The proposed pipeline would:

- make the best use of current dam infrastructure and catchment rainfall by transferring water from the Lostock area in times of high yield and storing it in Glennies Creek Dam for use in dry periods
- improve reliability for water users supplied by the two dams and will also reduce the demand on nearby Glenbawn Dam.

Scope

The proposed pipeline package of works includes:

- a new two-way water transfer pipeline between the Lostock Dam and Glennies Creek Dam. Depending on the preferred route, the pipeline may be between 22 and 34 km long
- a new pumping station located upstream of Lostock Dam wall comprising submersible pumps and large booster pumps within the station
- a new pumping station located at Glennies Creek Dam (its location will be dependent on the route taken)
- a submerged pipe and diffuser discharge arrangement below the water surface at each dam
- electricity transmission and road infrastructure improvements.

Current status

Work to complete a Final Business Case is currently underway.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/regional-projects/lostock-glennies-creek-pipeline

Lake Rowlands Dam to Carcoar Dam Pipeline

Water Infrastructure NSW is preparing a Final Business Case to explore the option of building a water transfer pipeline from the Central Tablelands Water-operated Lake Rowlands Dam to the larger Carcoar Dam. This follows recommendations by Infrastructure NSW in the 2018 State Infrastructure Strategy and the NSW Government's Lachlan Valley Water Security Study.

Phase

Final Business Case

Location

Lake Rowlands and Carcoar Dams are located in Central Tablelands region of NSW.

Benefits

The proposed pipeline would:

- result in efficient, long-term storage of available water
- increase operational flexibility for urban and rural water supply.

Scope

- A proposed two-way pipeline to transfer water from Lake Rowlands Dam to Carcoar Dam when appropriate volumes are available.
- Potential augmentation of the Lake Rowlands Dam.

Current status

Work to complete a Final Business Case for the project is currently underway.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/regional-projects/lake-rowlands-dam-to-carcoar-dam-pipeline

Macquarie River Re-regulating Storage

Water Infrastructure NSW is developing a Final Business Case for a proposed re-regulating storage including a fishway structure on the Macquarie River. This structure will contribute towards improving water access reliability and resilience for the region and follows recommendations by Infrastructure NSW in the 2014 State Infrastructure Strategy and the NSW Government's 20 Year Infrastructure Options Study.

Phase

Final Business Case

Location

200 m downstream of the existing Gin Gin Weir between Warren and Dubbo on the Macquarie River.

Benefits

Benefits of the project would include:

- improved long-term water security strategic objectives in the Macquarie Valley
- improved delivery efficiency to customers downstream of Gin Gin
- reduced transmission losses when transferring and delivering water through the river system on an annual basis
- maximised available water for general security customers within the sustainable diversion limits set under the Murray-Darling Basin Plan.

Scope

- Re-regulating storage including a fishway structure on the Macquarie River.
- Full or partial decommissioning of the existing Gin Gin Weir is being considered.

Current status

Work to complete a Final Business Case for the project is currently underway.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/regional-projects/macquarie-river-re-regulating-storage

Nyngan to Cobar Pipeline

Water Infrastructure NSW is developing a Final Business Case for a proposed pipeline between Nyngan and Cobar. The existing pipeline and pumping stations are nearing the end of their design life, which presents a risk to water security and reliability for the township and mines in the area.

Phase

Final Business Case

Location

Nyngan and Cobar are located in the Central-West region of NSW.

Benefits

The proposed pipeline project will:

- improve water security and reliability for the Nyngan and Cobar townships
- increase water accessibility and reliability for industries including agriculture and mining
- improve long term regional water security, economic prosperity and drought resilience for Cobar and surrounding regions
- improve the use of technology including pipeline monitoring.

Scope

- Replace 100 km of existing pipeline.
- Upgrade pumping infrastructure at three locations.

Current status

Work to complete a Final Business Case for the project is currently underway.

For more information visit

water.dpie.nsw.gov.au/water-infrastructure-nsw/regional-projects/nyngan-to-cobar-pipeline-project



Image: Lostock Dam

NSW Grant Funded Programs

Image: Sewage Treatment Plant, Junee.

Safe and Secure Water Program

The \$1 billion Safe and Secure Water Program provides NSW Government co-funding to help regional towns reduce risks and issues to water quality, water security, and the environment. Funding is provided for water treatment, securing town water supplies for future droughts and wastewater treatment. The funds are provided to local water utilities based on a robust, transparent, risk-based approach. Funding is also provided to local water utilities for the preparation of detailed, robust strategic planning documents known as an Integrated Water Cycle Management (IWCM) Plans.

The program also provides funding to select high-risk dam safety projects, water utility strategic infrastructure and drought management planning, including:

- Dumaresq Dam near Armidale
- Gosling Creek Dam near Orange
- Winburndale Dam near Bathurst
- Imperial Lake Dam in Broken Hill.

To date \$745 million has been approved or committed to over 220 projects across regional NSW.

Over the next few years, the NSW Government plans to invest \$200 million on solutions such as new or improved water treatment plants, wastewater treatment plants and much needed pipelines to help future proof regional towns. Some examples are outlined below.

For more information visit

industry.nsw.gov.au/water/plans-programs/infrastructure-programs/safe-and-secure-water-program

Examples of Safe and Secure Water Program Underway

Finley Water Treatment Plant

NSW Total funding: \$4,000,000

Berrigan Shire Council (BSC) owns and operates Finley Water Treatment Plant (WTP). Finley WTP is a conventional water treatment plant that was constructed in 1940. There are a number of problems with the plant which do not allow BSC to achieve minimum service needs and present a significant operational risk to BSC. The project involves upgrading Finley WTP to a 2 ML/d Dissolved Air Flotation Filtration water treatment plant.

The proposed project will deliver significant benefits to the town of Finley including:

- securing plant capacity under all raw water conditions
- providing the required redundancy for reliable and secure operation of the plant
- providing a treatment plant that will meet the need to produce safe drinking water for the next 25 years
- reduced operating costs for Finley WTP.

The design and construction contract has been awarded and detailed design work is currently underway, with construction completion due early 2023.

More information visit

industry.nsw.gov.au/water/water-utilities/infrastructure-programs/safe-and-secure-water-program

Eurobodalla Southern Storage

NSW Total funding: \$25,610,000

The Eurobodalla Southern Storage project directly supports the development of the National Water Grid. The project will create assets to provide long-term water security to the Eurobodalla region, respond to the effects of climate change and create a level of resilience to droughts.

The project will improve water availability and security for the region, increasing storage capacity by 3,000 ML and provide an estimated additional 581 ML per annum for downstream irrigators and stock watering.

For more information visit

esc.nsw.gov.au/council/major-projects/current-projects/roads-and-bridges/southern-water-supply-storage

Dumaresq Dam Safety Upgrade Project

NSW Total funding: \$4,050,000

Dumaresq Dam is a 400 ML dam built near Armidale in 1896 by NSW Public Works and was the original water supply dam for the town of Armidale. In 1971, when Malpas Dam was constructed, the dam ceased to be used as water supply to Armidale. The dam is in relatively poor condition with the wall suffering from degraded concrete. The outlets are also beyond repair and need replacing.

Dumaresq Dam is above the 'limit of tolerable risk' for safety due to the dam's inability to withstand a major flood and the potential loss of life and property damage that could result from dam failure. Making the dam safe is one of the top priorities for the NSW Dam Safety Committee.

The dam does not meet current standards and guidelines in terms of structural factors of safety due to inadequate spillway capacity, its slender profile and lack of a sub-structure cut-off wall or under-drains to relieve hydrostatic uplift.

The construction tender was awarded in November 2020 and it is due for completion in early 2022.

More information visit

industry.nsw.gov.au/water/water-utilities/infrastructure-programs/safe-and-secure-water-program

Integrated Water Cycle Management Plans

The Safe and Secure Water Program (SSWP) co-fund Integrated Water Cycle Management (IWCM) and Regional Town Water Strategy (RTWS) planning via a dedicated funding stream. Co-funding provided by SSWP assists eligible local water utilities (LWU) to have a comprehensive and achievable long-term strategy and business plan covering all current operations and proposed improvements over a 30-year timeframe.

There are currently 93 local water utilities in NSW and 33 deeds signed so far to co-fund the development of IWCM and Regional Town Water Strategy planning strategies.

For more information visit

industry.nsw.gov.au/water/water-utilities/best-practice-mgmt/iwcm

Drought and Emergency Relief Funding

Water Infrastructure NSW oversees the Emergency relief for Regional Town Water Supplies which is available to local water utilities to help meet the cost of water carting or water supply works during periods of emergency. Where the source of supply is at very high or imminent risk of failure, or has failed as the result of an extreme event, undertaking emergency capital works may be the recommended course of action. Works can include constructing emergency bore supplies, creating a temporary or permanent connection to another water source or water supply scheme, temporary emergency capital works or developing new emergency water sources. The NSW Government may also offer to reduce the cost of design and construction of approved emergency works to a local water utility through financial assistance.

For more information

industry.nsw.gov.au/water/water-utilities/technical-assistance/emergency

Commonwealth Grant Funded Projects

Image: Irrigation infrastructure, near Narromine.

National Water Grid Connections Pathway Fund

Water infrastructure projects under the New South Wales Connections package include the construction and upgrade of new pipelines and water storage facilities. These projects will enable the expansion of the agriculture industries, provide adequate water supplies and address storage and quality issues.

For more information visit

nationalwatergrid.gov.au/program/new-south-wales-connections-package

Urbenville Water Supply Project

The more than \$1.5 million Urbenville Water Supply Project will build resilience to future droughts and potential climate change impacts of extended droughts and variable temperatures.

The project will deliver three new raw water tanks, investigate and access new groundwater sources, refurbish the offtake jetty and remove the concrete silo wet well to ensure the community has access to a safe, high-quality water supply.

The project is being delivered by Tenterfield Council using joint funding from the Australian Government's National Water Grid Connections Pathway Fund, the NSW Government and Tenterfield Council.

Phase

Pre-construction

Current status

The project is expected to start construction in late 2021.

Lake Wyangan Water Sustainability Project

The almost \$7 million Lake Wyangan Water Sustainability Project's objective is to pump treated and disinfected reclaimed water into Lake Wyangan to allow farmers access to an additional sustainable water source via a new recycled water pipeline.

The scope of the project includes:

- a UV disinfection unit
- chlorine contact tank and reclaimed water storage tank modifications
- reclaimed water pump station
- 5.2 km pipeline to Lake Wyangan South – consisting of canal crossing and a railway crossing.

The project is being delivered by Griffith Council with funding from the Australian Government's National Water Grid Connections Pathway Fund and Griffith Council.

Phase

Pre-construction

Current status

Construction is expected to begin in early 2022.

Broken Hill to Menindee Graziers Pipeline Project

The \$11.5 million Broken Hill to Menindee Pipeline involves the construction of a new pipeline from the existing Stephen's Creek Dam to supply graziers along the existing Menindee pipeline. The new dedicated Graziers Pipeline will supply water at an improved level of reliability and quality, eliminating operational issues to the customers.

The project is being delivered by Essential Water through funding from the Australian Government's National Water Grid Connections Pathway Fund and Essential Energy.

Phase

Pre-construction

Current status

The project is expected to take six months to complete and will employ up to 20 full time local workers. Construction is expected to begin in late 2022.

West Wyalong Water Reliability Project

The \$9 million West Wyalong Water Reliability Project involves the construction of a new standpipe reservoir, 15 km pipeline and a new transfer pump station.

The project objective is to improve the low-pressure issues within the areas of Wyalong and West Wyalong, which has been a challenge in development or expansion beyond its existing service area.

The project is essential to facilitate and support the agriculture and gold mining operations.

The project is being delivered by Goldenfields Water thanks to joint funding including \$4.5 million from the Australian Government's National Water Grid Connections Pathway Fund, and \$2.25 million each from Goldenfields Water and Bland Shire Council.

Phase

Pre-construction

Current status

Construction on the project is expected to begin in mid-2022.

Walcha Off-stream Project

The \$11 million Walcha Off-stream Storage Project involves the construction of a 300 ML off stream storage dam, 7.5ML/day river off-take pumping

station and modifications to existing water supply infrastructure to integrate new and existing systems. The objective is to store water abstracted from the Macdonald River to secure Walcha's future water supply.

The project is being delivered by Walcha Council funded with \$9 million from the NSW Government's Regional Stimulus Package and NSW Drought Response Fund and an additional \$2 million from the Australian Government's National Water Grid Connections Pathway Fund.

Phase

Pre-construction

Current status

Construction on the off-stream storage is expected to commence in early 2022.

Off-farm Efficiency Program

The Australian Government's Off-farm Water Efficiency Program is a \$1.54 billion initiative to upgrade water infrastructure to reduce water losses and increase water available for the environment.

The program has two streams, one being \$1.33 billion for state-led projects and the other is \$150 million for grants provided direct to applicants. A further \$60 million is available for on-farm projects proposed by states that have strong community support and can demonstrate neutral or positive economic outcomes.

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 program aims to:

- improve and modernise water delivery systems and reduce water losses to increase the volume of available water for the environment, irrigation networks, irrigators and communities
- drive employment and create infrastructure opportunities for local communities through funding arrangements for suitable projects
- deliver on the NSW Government's commitment to the Murray-Darling Basin Plan to contribute to the return of 450 GL to the environment by June 2024.

NSW will work in partnership with applicants across the Murray-Darling Basin to deliver projects under the state-led projects stream.

For more information visit

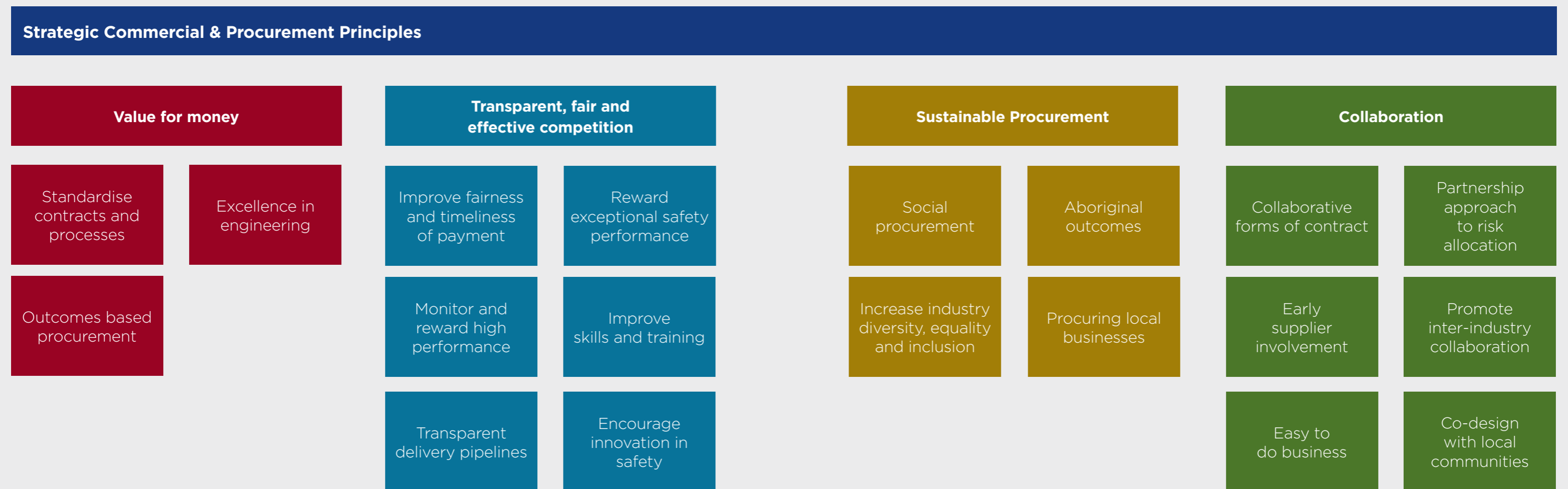
dpie.nsw.gov.au/water/water-infrastructure-nsw/off-farm-water-efficiency-program

Working with Water Infrastructure NSW



Water Infrastructure NSW will engage with suppliers and businesses guided by our strategic commercial and procurement principles, outlined in Figure 2 below.

Figure 2: Water Infrastructure NSW strategic commercial and procurement principles



Types of business support needed

Water Infrastructure NSW is seeking a broad range of services to develop and deliver its projects. These include design, construction and engineering, communications and stakeholder engagement, environmental assessment, and planning expertise.

We are also keen to hear from businesses able to provide complementary services such as catering, accommodation, transport, graphic design and printing, waste management and cleaning, all of which will be essential to the delivery of our projects.

Water Infrastructure NSW is seeking to engage local contractors, businesses and people to develop and deliver its projects. This aligns with our commitment to invest in the communities where our projects are located and provide significant opportunities and economic benefits to regional businesses, First Nations businesses and local small business operators, as well as tangible outcomes for local townships and the wider community.

Water Infrastructure NSW business register

All businesses, no matter how big or small, are invited to register their interest in these projects via the Water Infrastructure NSW online business register.

Registered business will receive business-related updates and information on upcoming opportunities in the southern region and across the state.

To register your business visit

water.dpie.nsw.gov.au/water/water-infrastructure-nsw/industry-engagement



Staying in touch

For more information on Water Infrastructure NSW and upcoming business opportunities:

- visit water.dpie.nsw.gov.au/water-infrastructure-nsw
- call **1300 081 047**
- email winsw.engagement@dpie.nsw.gov.au

To receive business updates, subscribe to the **Water Infrastructure NSW** business register at water.dpie.nsw.gov.au/water/water-infrastructure-nsw/industry-engagement

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Australian Government
**Department of Agriculture,
Water and the Environment**