

Report Part 1: Wyangala Dam

Introduction

The NSW Government recognises the need to invest in long-term water security to build the resilience of our regional communities, improve water availability and increase water reliability for businesses. Investment in critical water infrastructure is a priority for the NSW Government and the inquiry has emphasised the need to ensure sound investment decisions are made.

This response to the *Rationale for, and impacts of, new dams and other water infrastructure in NSW: Part 1* report by the Legislative Council Portfolio Committee No.7 Planning and Environment, is focused on the proposed raising of the Wyangala Dam wall. Separate responses will be provided to other parts of the report when they are released by the inquiry.

This response provides further information about the Wyangala Dam Wall Raising project and responds to the recommendations made in the report.

Raising the Wyangala Dam wall

Water security has been a challenge in the Lachlan Valley historically, and the region has some of the poorest levels of water security and reliability in NSW, both in terms of irrigation and urban water supply.

In the most recent drought, the storage level of Wyangala Dam fell as low as 9 percent during the summer of 2019-20, and by February 2020 the Lachlan Valley was declared to be in Stage 4 Critical Drought under the [NSW Extreme Events Policy](#).

At that time, if the drought conditions were to have continued and there were no further inflows, major regional towns, such as Cowra and Forbes, would have had less than 18 months until their only available water source ran out.

The lack of water security in the region has been recognised as limiting economic growth, with towns subject to severe water restrictions, and long periods of little or no general security allocations as well as restricted access to high security water, impacting on agricultural production.

At the other extreme, the Lachlan Valley has also been impacted by severe flooding. Farms and communities suffered extensive flooding in 2012 and 2016, with crop losses in 2016 alone valued at \$500 million.

Within this context, the Wyangala Dam Wall Raising project is intended to provide water users and their communities in the Lachlan Valley region with improved water security, increased drought resilience and improved flood mitigation. More generally, the project is expected to:

- secure the urban water supply in the region, stimulating the growth of the regional economy and supporting future population growth
- improve production of primary industries
- enhance drinking and wastewater amenities in regional towns to meet contemporary standards and better cater for future population growth, and
- provide greater certainty around water availability to support additional investment by businesses, particularly in the mining and agricultural sectors, including allowing a transition to higher yield agricultural products and increased stock levels.

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The NSW Government recognises that raising the Wyangala Dam wall is not without impact. An important part of the project will be to undertake a comprehensive Environmental Impact Statement process. This will play a critical role in identifying, evaluating and proposing measures to mitigate the environmental, social, and economic impacts of the project.

Further, rigorous assessments of the costs, benefits and financial impacts of the project, as well as an analysis of the water yield benefits, are currently being undertaken as part of developing the Final Business Case.

All material issues raised by the committee will be evaluated and incorporated in the Final Business Case and the Environmental Impact Statement.

Recommendations

Recommendation 1

That the NSW Department of Planning, Industry and Environment finalise the Lachlan Regional Water Strategy and investigate how it can expedite funding and policy proposals for projects which improve water security and sustainability and help mitigate the impacts of climate change.

SUPPORTED

The NSW Government is developing a series of [Regional Water Strategies](#) to bring together the best and latest climate evidence with a range of tools and solutions to plan and manage the water needs in each NSW region of the next 20-40 years.

The draft Lachlan Regional Water Strategy was released in September 2020 and identified 54 options that could improve water security, ensure the sustainability of waterways in the region, and build community resilience to climate change. These options included dams, water recycling, improved water efficiency, environmental and water quality projects, as well as policy, regulatory and operational changes.

Public consultation on the draft strategy was undertaken between September and December 2020. During this consultation, further information was provided on the opportunities and challenges associated with each of the options and feedback was sought to help inform their assessment.

The Department of Planning, Industry and Environment is currently analysing the submissions and community feedback that was provided during this consultation period and are assessing the range of different options put forward to identify a shorter, prioritised list of options. This shorter list will be presented in a second round of public consultation to ensure regional communities have a say in every step of the process, as plans are made for the future of the region.

Developing this shorter list of options involves an options assessment process based on a decision-making framework and a Rapid Cost Benefit approach. This process considers environmental values, costs and implications to ensure ecological sustainability is considered in the decision-making process, as well as the cumulative impacts of options or packages of options. This will enable options to be compared and an initial assessment of the viability of each to be considered. The Department recognises that additional work will be required to further quantify the costs and benefits of certain options to a higher level of detail before significant investment decisions can be made.

The Department is planning to have the Lachlan Regional Water Strategy to align with the completion of the Final Business Case for the Wyangala Dam Wall Raising project. This work is being undertaken in parallel to ensure the strategy reflects the more detailed consideration of, and decision on, the Wyangala Dam Wall Raising proposal.

It will also allow for consideration of cumulative impacts and benefits, including the requirement to limit the increase in long-term annual average yield from any water infrastructure projects (and/or in combination with non-infrastructure options) to within the Sustainable Diversion Limit for the Lachlan Valley under the Basin Plan.

Recommendation 2

That the NSW Government should continue to improve the ways it provides information to individuals and communities regarding the Wyangala Dam wall raising project, especially as new reports become available.

SUPPORTED

Engagement with the community and stakeholders has been ongoing throughout the project. Even despite the challenges that COVID-19 posed to consultation activities, the project team have held numerous COVID-safe events and stakeholder briefings both face-to-face and online. An existing community and stakeholder plan underpins the engagement approach for the project.

Between January 2020 and end-June 2021, there have been:

- almost 100 stakeholder briefings held – about one briefing each week
- more than 100 meetings with landowners
- almost 26,000 website hits – about 50 hits per day
- almost 60 community events since August 2020 – about one event each week

Advertisements, newsletters, FAQs as well as factsheets have been published to ensure the community has access to information about the project as work progresses. Monthly media releases are also posted on the Department of Planning, Industry and Environment website to provide further information regarding upcoming consultation events and webinars.

Responsibility for leading the planning and delivery of government funded water infrastructure projects in NSW transitioned from Water NSW to Water Infrastructure NSW on 1 September 2021. This includes responsibility for community consultation on these projects going forward.

To better support consultation with the community, Water Infrastructure NSW has established an exclusive communication channel for the community to speak directly to the project team (1800 735 822 or wyangaladamproject@dpie.nsw.gov.au). Facebook users can also join discussions and express their views through the *Water Infrastructure NSW Wyangala Dam Wall Raising project community group*, which will be monitored by the media team.

Water Infrastructure NSW has also established a dedicated team to guide ongoing engagement with Aboriginal communities across NSW. During the past six months, this team has developed a program of engagement that will enable a better understanding of the cultural values that are of significance to Aboriginal communities. This will help ensure these values are integrated into decisions around infrastructure projects planned now and into the future.

This team will also work closely with the project team responsible for carrying out the Aboriginal cultural and heritage assessments for the Wyangala Dam Wall Raising project, providing expert advice in planning and initiating these assessments. The team will continue to facilitate engagement with Aboriginal communities as these assessments are carried out to ensure local history and culture is thoroughly considered and respected as part of the process. These changes are expected to significantly enhance and deepen the consultation with Aboriginal communities in the Lachlan region as part of the project.

Recommendation 3

That the NSW Government investigate the funding and implementation of water efficiency measures such as the upgrading of Jemalong Irrigation infrastructure, upgrading piping, stock and domestic channels and removing banks across floodplains along the Lachlan Valley.

SUPPORTED

As the Committee noted in its report, there are a range of measures that can be adopted in the Lachlan Valley to improve water security.

The Commonwealth Government has recently announced \$1.33 billion as part of the Murray-Darling Communities Investment Package for state-led projects to modernise irrigation infrastructure networks, and the Commonwealth Government is currently working with Basin governments to identify suitable projects.

Ahead of this announcement, the Commonwealth Government undertook a stocktake of potential off-farm efficiency projects, including several infrastructure options to upgrade the Jemalong Irrigation Scheme. These options included investment in automated regulators and farm offtake gates, improved telemetry and software systems, channel lining and remediation, and channel fencing to reduce stock damage that causes erosion and channel widening.

The Commonwealth Government will release detailed funding guidelines by August 2021. Once released, the NSW Government will work with Jemalong Irrigation to identify opportunities to apply for funding under this program.

The Committee's report referred to several other water efficiency measures that could be considered by the NSW Government, including upgrading piping, stock and domestic channels, and removing banks across floodplain. These options are already under consideration in the draft Lachlan Regional Water Strategy, and include:

Draft options	Description
Option 4 Expansion to the piped town water supply system	Three pipeline connections: <ul style="list-style-type: none"> • Bogan Gate to Condobolin • Gooloogong-Forbes-Parkes • Young to Cowra These projects would expand the connections between town water supplies and give towns access to more than one water source
Option 5 Replacement and upgrade of existing pipelines	Two pipeline projects: <ul style="list-style-type: none"> • Parkes Shire boundary to Tottenham, Bogan Gate and Tullamore • Cowra to Central Tablelands (bi-directional). These projects would improve the connections between town water supplies and give towns access to more than one water source.
Option 6 Inter-regional connections project investigation	Investigation of additional inter-regional pipeline connections between the Lachlan region and neighbouring regions, giving regional towns access to more than one water source (for example, during drought conditions). Conditions under which these inter-regional connections could operate would need to be assessed on a case-by-case basis

Draft options	Description
Option 8 Managed aquifer recharge investigation and policy	Investigation of possible sites for temporary storage of stormwater and river flows in aquifers to improve storage efficiencies (normally referred to as managed aquifer recharge). This option would also involve developing a supporting policy to regulate the storage and recovery of this water.
Option 17 Floodplain management works	Review of current floodplain works in the Lachlan region to assess if they pose a risk to achieving environmental, cultural and other water security outcomes
Option 25 Lower Lachlan efficiency measures	Construction of a piped scheme to more efficiently deliver water to landholders along the Muggabah, Merrimajeel, Merrowie, Booberoi and Willandra creeks. The scheme would provide an alternative water supply to stock and domestic users in the Lower Lachlan region and reduce transmission losses. This option would also need to consider downstream impacts, including on the Murrumbidgee system.
Option 26 Mid-Lachlan efficiency measures	Construction of a piped scheme to more efficiently deliver water to landholders along the Wallamundry, Nerrathong and Wallaroi creeks. The scheme would provide an alternative water supply to stock and domestic users in the Mid-Lachlan region and reduce transmission losses.

The Department of Planning, Industry and Environment is considering these options further as it develops the final Lachlan Regional Water Strategy.

Recommendation 4

That the NSW Government address significant concerns raised during this inquiry in the business case and environmental impact studies. The Government must take into consideration both the arguments for and against the project, with particular emphasis given to:

- ***its high cost***
- ***limited water yielded***
- ***impact of climate change reducing inflows into Wyangala Dam, meaning less frequent filling of the dam***
- ***impacts on First Nations people, cultural sites and artefacts***
- ***ecological impacts on floodplains, fish and bird species and general river health.***

SUPPORTED

The NSW Government recognises that many of the issues raised by the Committee in its report will be addressed through the Final Business Case and the Environmental Impact Statement.

The Final Business Case will include a comprehensive assessment of the costs, benefits, and environmental and financial impacts. Key inputs will include:

- hydrological modelling based on paleoclimatic data and taking into consideration climate change, which will confirm the anticipated yield
- detailed cost estimates based on technical inputs

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- estimates of the impacts on ecology (terrestrial, riparian and aquatic, including floodplains, fish, birds and river health) based on detailed field studies, and the costs associated with avoiding, mitigating or offsetting these impacts
- estimates of the impacts on Aboriginal cultural heritage and the costs associated with avoiding, mitigating or offsetting these potential impacts, and
- any potential impacts on downstream users.

The Final Business Case will also include an analysis of both infrastructure and non-infrastructure options, in line with the requirements of Infrastructure NSW, Infrastructure Australia and NSW Treasury.

In delivering water infrastructure on behalf of the NSW Government, Water Infrastructure NSW must comply with relevant statutory planning assessments and approval processes as well as relevant NSW Government guidelines, including the [NSW Government Business Case Guidelines](#). These guidelines have been developed to ensure the business cases developed by government entities are robust, defensible, in line with best practice and able to provide government with the information it requires to make sound investment decisions.

Water Infrastructure NSW must also comply with NSW Gateway Policy, specifically the [Infrastructure Investor Assurance Framework](#) (IIAF) administered by Infrastructure NSW. The IIAF outlines the process the project must follow in its assessment, including independent peer review, gateway reviews, periodic health checks, risk-based reporting and monitoring by Infrastructure NSW.

Under the IIAF, the Wyangala Dam Wall Raising project is classified as a Tier 1 project. This means it will be required to pass through all seven Gates in the framework and will receive close scrutiny at regular intervals by both Infrastructure NSW and the NSW Government. Once the Final Business Case is completed it will be independently reviewed before the NSW Government considers whether to proceed with an investment decision.

In order to determine the environmental impact of the project, the NSW Government is currently undertaking a range of environmental surveys including ecological biodiversity, geological, heritage (including European and Aboriginal cultural heritage) and aquatic surveys.

The Environmental Impact Statement is currently being prepared to meet the Secretary's [Environmental Assessment Requirements](#) (SEARs) issued in July 2020 – and will specifically include the items detailed in Recommendation 4. Regulatory agencies in both the NSW and Commonwealth governments have been, and will continue to be, consulted during the preparation of the Environmental Impact Statement to ensure that impact assessments meet the SEARs and agency requirements.

The NSW Government recognises that raising the Wyangala Dam wall is likely to have an impact on the ecology and biodiversity of the Lachlan River, due to changes in hydrology and the inundation of upstream and downstream areas. Once initial hydrological modelling and biodiversity impact assessments have been completed, a second stage of modelling will be undertaken to identify potential changes to the operating regime of the raised dam to minimise impacts.

Where biodiversity impacts cannot be avoided or mitigated, offsets will be required. A number of ways are being explored as part of the offset assessment on how to mitigate impacts by amelioration, avoidance or minimisation, and where necessary through obtaining biodiversity credits.

In relation to potential impacts on Aboriginal cultural heritage, an Aboriginal Heritage Assessment Report and a Cultural Values Assessment are also currently being developed. This involves

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consultation with local Aboriginal communities downstream of Wyangala Dam to identify locations of cultural significance, so that any impacts of the project can be assessed.

Local Aboriginal communities will have the opportunity to review the report and the impact assessment before it is finalised. Once the Aboriginal Heritage Assessment Report is completed it will be shared with the Registered Aboriginal Parties for feedback.

State of New South Wales through Department of Planning, Industry and Environment 2021. The information contained in this publication is based on knowledge and understanding at the time of writing (July 2021). However, because of advances in knowledge, users should ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate departmental officer or the user's independent adviser.