## INQUIRY INTO RATIONALE FOR, AND IMPACTS OF, NEW DAMS AND OTHER WATER INFRASTRUCTURE IN NSW

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# **Submission to NSW State Government**

Inquiry into the Rationale for, and impacts of, new dams and other water infrastructure in NSW



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Parkes Shire Council would like to thank the NSW State Government for the opportunity to put a submission into the inquiry into the Rationale for, and impacts of, new dams and other water infrastructure in NSW.

Parkes Shire Council believes that the raising of the wall on Wyangala Dam presents an opportunity for change in the way that water is managed within the Lachlan Valley.

Parkes is located in the Central West with a population of about 15,000, it boasts a strong, diverse economy underpinned by the key industries of agriculture and mining, but also has a strong transport and logistics industry, retail and public sector.

In July 2018 the NSW Deputy Premier John Barilaro announced Parkes as the State's first Special Activation Precinct. The precincts will be funded as part of the NSW Government's \$4.2 billion Snowy Hydro Legacy Fund, following the sale of the Snowy Hydro Scheme to the Commonwealth.

The Parkes Special Activation Precinct (SAP) will take advantage of its location at the only junction of Australia's two rail spines, the Inland Rail and the Trans-Australia Railway.

Already home to the National Logistics Hub, the Precinct's location will provide suppliers access to 80 per cent of Australia's markets within 12 hours by road or rail, allowing local products to be delivered across Australia and around the world.

In July this year after the completion of the Master Plan and introduction of a new SEPP, the Deputy Premier announced \$185 million in funding for vital infrastructure to enable development of the 4,800 hectare Parkes SAP.

Parkes Shire Council has been proactively working towards future-proofing water security for the Shire. To address recurring water shortages, aging infrastructure, and to plan for vulnerabilities that arise from being largely rainfall-dependent in a changing climate, Parkes Shire Council became one of the first Local Government Areas (LGAs) to undertake an Integrated Water Management Strategy (IWCM) in 2004. The IWCM identified water management issues and potential solutions, which has seen Council since spend almost \$100 million on water infrastructure upgrades and security projects. Council is currently reviewing its IWCM and introducing additional drought resilience and water security projects.

Council believes for regional communities to grow and prosper they need to;

- have ambitious plans to generate economic growth,
- + prioritise local needs with a context of nationally significant reform, including actions that drive productivity and competition,
- take a long-term approach to achieve transformative change,
- + identify the 'game-changers' and catalyst actions that will deliver a step-change in growth outcomes
- prioritise delivery
- + deliver action and reform that are additional to governments' usual operations and finally
- always be mindful to our changing environment.







The raising of Wyangala Dam, will cause less environmental impact than building a new dam within the Central West and will create an opportunity to explore how to increase the value of agricultural products being produced the in the region.

By reviewing and changing how water security is managed in the Lachlan Valley and looking to increasing the proportion of water allocated as high security water, this submission will argue that this will in turn push the value of water up, having guaranteed allocation leading to an increased investment in capital infrastructure and more water efficient crops. By managing the river water effectively, it will also lead to less pressure on the ground water aquifer and potentially lead to more water for the environment.

Where out of bank flooding may potentially reduce by the raising of the wall, the long-term replenishment of the aquifers may need to be considered to ensure the long-term sustainability/yield of those sources.

The rising of Wyangala Dam gives us time to hypothesise - to challenge the way we have always done things and to think about how we may be able to learn from countries such as the Netherlands, and create additional value from the water in the Lachlan Valley whilst implementing sustainable water management policies.

So the question we are asking the Committee to consider is:

#### What if all or part of the extra water security created by the dam wall upgrade, could be hypothecated for "higher value" purposes?

This could be the catalyst for a range of high-value industries, environmental sustainability, creating jobs and wealth in the Lachlan region. Alternatively, if the improved security created by the raising of the wall is a portion to existing users, there would only be a modicum of change and we would lose the opportunity for change.

## 2. Agricultural Opportunity

The Central West agricultural region is extremely rich in agricultural product. Our agricultural products are seen as **CLEAN**, **SAFE AND GREEN**. However, there is currently limited value-adding to agricultural produce in the region. A report by Regional Development Australia (RDA) Central West stated that 64% of agricultural product in the Central West leaves without being value added.

Report after report, such as the Australian Government Agricultural Competitiveness White Paper discusses the opportunities for Australian agricultural businesses.

The reports state that, for an industry of the future they need to build infrastructure for the **21st century**.

It could be argued that the way water is currently allocated and managed also needs to come into the 21st Century.

Farming needs to be smarter; it needs to access premium market needs to build on our strength and we need reduce our risks, such as the impact that drought has

risks, such as the impact that drought has on the industry. The white paper states that "Australian producers have a premium product to offer. With the right supply chain and product differentiation, a premium product gets a premium price. We may never be the food bowl for all of Asia but we do have the opportunity to be its favourite delicatessen".

The **Orana and Central West Regional Plan 2036** identifies agriculture as an opportunity it talks about building freight networks and making sure that we have a secure water supply.

Then if we start looking at megatrends around the world, we can see an opportunity for Australian products and innovation. CSIROs report entitled **Our Future World Global Megatrends**, talks about six main areas of change:

- 1. More from Less increasing amounts without limited resources
- 2. Going, going...gone protection of our biodiversity and global climate
- 3. The silk highway rapid growth
- 4. Forever young an ageing population and changing patterns
- 5. Virtually here digital technology
- 6. Great expectations imperative for innovation.







All of these things mean that we have to look differently at the way we manage our natural assets such as water. We need to look at international best practice such as in the **Netherlands** who almost two decades ago, set themselves an ambitious target of "*twice as much food, half the resources*".

Since then they have reduced their dependence on water on key crops by 90%, nearly eliminated the use of chemicals on glasshouse crops, and cut their use of antibiotics by 60%. They are currently the world's second largest food export by value behind the US, which is 270 times bigger in terms of land mass than the Netherlands..



Source PBL Netherlands Environmental Assessment Agency

The Dutch example shows what is possible to achieve when all levels of Government, the private sector, good science and the community work together to achieve sustainable long-term solutions to some of the challenges that the world is facing.

The raising of Wyangala Dam wall allows us to challenge our traditional thinking regarding water management and think about what might be possible.

## 3. Challenge of Climate Change for Growth and Sustainability

#### **Climate Change and Rain Events**

The need to think differently about how we manage water can be demonstrated by the below data.

For 132 years (1889-2012) the Parkes Shire has been collecting rain data from the MccArthur Street rain station. On average, the Parkes Shire has received an average of 559mm over 66 rain days annually.

However over the last 29 years whilst the average annual rain fall (measured at Parkes Airport) has seen a slight increase in yearly average rain to 614mm, we have seen a significant decrease in the number of rain days, reducing by nearly half to 35 annual rain days.



This shows that rain events are becoming less frequent but more intense. This means that we need bigger catchment areas to ensure that we are managing this resource effectively. Hence why projects like the raising of Wyangala Dam are so important

#### **Drought Resilience**

Whilst the last three years of drought have been crippling for many people in the Central West, Parkes Shire Council (PSC) proved that good water management and investment in water infrastructure can minimise the impact of drought and floods. In the five years leading up to the latest drought, PSC invested over \$100 million in water security programmes. This meant that as responsible and experienced water utility managers and with the capacity to implement a range of appropriate responses, Council was able to safeguard our communities' water supplies. Despite the tough conditions Parkes was not at risk of running out of water.

The raising of the wall at Wyangala Dam is just one response that the Government should be considering in managing water security other ideas should include looking at water allocations.



#### The need for Growth

Anecdotal evidences suggest that business is not coming to the Lachlan region and that towns are not expanding because of water security concerns. As a result, investment in this region development is being stifled.

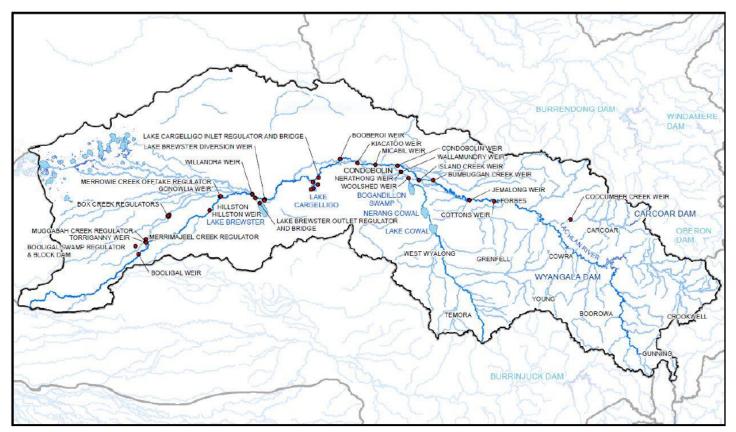
The Wyangala Dam upgrade provides an opportunity to leverage water security as a catalyst to spur economic growth and stability in the region. The prospect of redistributing water security to additional High Security Entitlements and Local Water Utilities is supported by current data and sound analysis.



### 4. Things to Consider

A number of key economic drivers will be enabled with the implementation of this proposal, relating to water reliability and prosperity in the region. The key outcomes for this proposal are as follows:

- 1. Stabilise water reliability in the Lachlan Valley and the wider Central West.
- 2. Increase the amount of High Security water available in the Lachlan valley without disadvantage to the General Security entitlement holders.
- 3. Increase value-adding of agricultural produce and the viability of industry by increasing the reliability and volume of High Security water





## **5. Regional Connect**

The Lachlan Valley is believed to have some of the poorest levels of water security and reliability in the state in terms of regulated/licensed irrigation and urban water supply.<sup>1</sup> The Valley has been subject to severe town water restrictions with long periods of little or no general security, agricultural water availability and restricted High Security water. The vulnerability of the Valley has most evident during the recent drought.

Extensive studies have been undertaken over the past decade including:

- + CENTROC Water Security Study in 2009
- 2014 NSW State Infrastructure Strategy Lachlan Valley identified as high priority catchment due to low drought security and low flood management capability
- + Phase 1 Lachlan Valley Water Security Investigation by WaterNSW commenced 2014
- Phase 2 of the Water Security Investigation started 2016 Wyangala Dam wall raising identified as one of top 4 options
- Dam Safety Upgrade is already required at Wyangala to provide acceptable flood capacity management in accordance with Dam Safety Guidelines. Cost of this estimated over \$200M.
- WaterNSW 20 Year Infrastructure Options Study in 2018 identified Wyangala Dam upgrade as a project to improve water security and reliability.
- 2018 NSW State Infrastructure Strategy reconfirmed Lachlan is a high priority catchment for drought security and flood management.

All of these studies have recommended the need for additional storage in the catchment and have analysed a range of long-term infrastructure options developed to address water supply security and reliability.

In the most recent study, Phase 2 Lachlan Valley Water Security Investigations by WaterNSW, raising the wall at Wyangala Dam was shown to be superior to other options, including construction of a new dam near Cranky Rock on the Belubula River, in terms of cost, hydrological modelling, construction risk and environmental sustainability.

The investigation found raising Wyangala Dam wall and construction of a pipeline between Lake Rowlands and Carcoar Dam could provide improved water security for the region.

From the extensive work undertaken by the region in water security, the view of the CNSWJO Board is that with the right storage and pipe network, there is plenty of water for town water supplies for Central NSW communities, and to enable substantive growth in high value agriculture- it's just a matter of getting it to the right place, at the right time and for the right price.

<sup>&</sup>lt;sup>1</sup> WaterNSW, 20 Year Infrastructure Options Study- Rural Valleys, June 2018, page 38



## 6. Status Quo

The Lachlan River Catchment is widely recognised as the most unreliable catchment in NSW. In fact, the average allocation of general security water is 28%, the lowest in NSW!

Entitlement Type Volume of Share Enviro holding Reliability entitlement ML **Entitlement %** ML General Security 592.801 88.92% 124,519 28% 27,680 4.15% 95% High Security 2,638 15,545 Local Water Utility 2.33% 100% Domestic 12.762 1.9% and Stock Conveyance 17,911 2.69% 100% Total 666,699

Water entitlements within the Water Sharing Plan cap of 666,699ML are

In the current scenario, the Lachlan Valley has a total volume of water entitlements of 666,699 ML on issue. Almost 89% of this entitlement is classified as General Security (GS). This classification is the most unreliable of the 5 entitlement classifications in terms of water security.

Currently, High Security (HS) entitlements represent 4.2% of all entitlements on issue in the Lachlan Valley catchment. This is slightly higher than the average across all catchments at 3.9%. Comparatively, the Hunter and Murrumbidgee catchments have the greatest proportion of High Security Entitlements at 9% and 10% respectively. We have relied on this upper-bound figure as a precedent to request that consideration be given to the proportion of High Security entitlements in the Lachlan Valley being raised to 10% as part of our assessment.

Local water utilities entitlements represent 2.33% of the available entitlements, compared to 3% in the Macquarie Catchment

The upgrade of Wyangala Dam will provide a one-off opportunity to reset the entitlement distribution in this region providing greater water reliability for high-value industries and water utilities.



#### What does Return on Investment look like for water?

It is hard to put a value on water - it is a need not a want. But by increasing the value of water and its reliability, it can be argued that it will drive people to find more efficient and sustainable ways of using it.

#### Value of Water

Please note that all the following figures are indicative and need to be tested, they are intended as an example of how we can look to value the economic return on water and drive change within different industries.

#### Towns Water

If we take for example the regional centres of Parkes and Orange both of whom are in the Lachlan valley and do some indicative calculation, we can see from the table below the return on investment for water from regional towns.

Towns	Towns Annual Water Use ML		Gross Return \$/ML	
Orange 5,500		\$2.7	\$490,909	
Parkes 2,2000		\$0.8	\$363,636	

#### Current Value of Mining

Mine	Annual Water Use ML	GRP (\$) billion	Gross Return \$/ML
Northparkes Mines	2,500	\$0.35	\$140,000



#### Agricultural product

Сгор	Annual Water ML/ha	Farm Gate Return \$	Gross return \$/ML
Tree Nut 1ha	6	\$28,000 (4t@\$7000/t)	\$4,667
Cotton - 1 ha	6.8	\$5,330 (8.2 bales/ha @\$6.50/bale)	\$784
Rice - I ha	12.1	\$4,000 (10tha@\$400/t)	\$331
Housed Tomato- 1 h	10	\$3,750,000	\$375,000

Based on the assumptions above - let us assume for the submission the following

Gross Return per M/L

Сгор	Annual Water ML/ha
Town	\$300,000
Mine	\$100,000
Nuts	\$4,667
Cotton	\$780
Rice	\$330
Protected Cropping	\$350,000



#### What does it look like if we increase High Security Water?

As part of the Western Sydney Airport Aerotropolis development there is a proposal for 500ha of protected cropping. By challenging the allocation of water security why could this not happen within the Lachlan Valley - more secure water will mean that business will be willing to invest in higher value agricultural products.

Using the figures above the business case is obvious:

500ha of best practice water efficient protected cropping would use 5000 ML/ annually (need a source here)

At a value of \$350,000/ ML the gross return would be - \$1.75 billion

The same amount of water used on Cotton would result in a return of \$3.9 million

Currently due to the lack of security in water investor are not willing to commit capital for higher value more water efficient crops - this is where the raising of Wyangala Dam and the ability to increase the Water Security becomes so important.

The follow scenario explores what is possible if we start to look at the changing the allocation of water security for the Lachlan Valley:



#### Scenario 1

Driving up the value up the output of water naturally drives great efficient use of water (for the sake of the scenario let's assume that the return per megalitre of water for the agricultural product is \$20,000 which is a lot more conservative than the examples above)

- + 39,000ML General Security converted to High Security
- + General security apportionment goes from 88.9% to 83.1% (-5.8%)
- High Security apportionment goes from 4.2% to 10% (+5.8%)
- + If 39GL use for high value ag (+\$20k/ML) = 39,000 x 20,000 = \$780m
- + If 39GL use for cotton (+\$0.84k/ML) = 39,000 x 814 = \$31.7m
- + Uplift in water value (GS @\$616/ML ⇒ HS@\$1372/ML) = \$29.5m

This means we are seeing an extra **\$748.3 million** in agricultural product and the value of water licences to the NSW State Government have increased by **\$29.5 million** 

		Current		Scenario # 1	
General security	592,801	88.9%	553,801	83.1%	
High security	27,680	4.2%	66,680	10.0%	
Local Water Utility	15,545	2.3%	15,545	2.3%	
Stock and domestic	12,762	1.9%	12,762	1.9%	
Conveyance	17,911	2.7%	17,911	2.7%	
Total	666,699	100.0%	666,699	100.0%	



#### Scenario 2

As per Scenario 1

+ 39,000ML General Security (GS) converted to High Security (HS)

Additional

- 9,546ML GS converted to Local Water Utility (LWU)
- + GS apportionment goes from 88.9% to 81.6% (-7.2%)
- + HS apportionment goes from **4.2% to 10%** (+5.8%).
- + LWU apportionment goes from 2.3% to 3.7% (+1.4%)
- If 39.0GL use for high value ag (+\$20k/ML) = 39,000 x 20,000 = \$780m
- If 9.55GL use for town water (say +\$20k/ML) = 9,546 x 20,000 = \$190m
- + 48.5GL Total = \$970m
- If 48.5GL use for, say, cotton (+\$0.84k/ML) = 48,546 x 814 = \$40m
- + Uplift in water value (GS @\$616/ML ⇒ HS@\$1372/ML) = **\$37m**
- + Uplift if improved security increases prices similar to Macquarie valley water value (GS @\$1136/ML
   ⇒ HS@\$3013/ML) = \$90m
- + LWU apportionment of 9,546ML would support = 75,000 people

So in summary **39,000ML** additional High Security (HS) for high value purpose will create up to **\$780m** Gross value add for the region. Reallocating **9,546ML** of water to Local Water Utility (LWU) will create **\$200m** Gross value add for the region and allow for an addition **75,000** people plus would possibly create a value uplift of up to **\$100m** for the NSW State Government through the sale of the water licenses.

	Current		Scenario # 1		Scenario # 2	
General security	592,801	88.9%	553 <mark>,</mark> 801	83.1%	544,346	81.65%
High security	27,680	4.2%	66,680	10.0%	66,680	10.00%
Local Water Utility	15,545	2.3%	15,545	2.3%	25,000	3.75%
Stock and domestic	12,762	1.9%	12,762	1.9%	12,762	1.91%
Conveyance	17,911	2.7%	17,911	2.7%	17,911	2.69%
	666,699	100.0%	666,699	100.0%	666,699	100.0%



### 7. Current Water Situation and Studies for Parkes

Communities also must take responsibility for their water security. Being remote from natural water sources, Parkes' water supply would be vulnerable without managed intervention. In addition, key sectors that underpin the local economy such as mining and agriculture are heavy water users, placing additional demand on our supply.

Parkes Shire Council has been proactively working towards future-proofing water security for the Shire. To address aging recurring water shortages. infrastructure, for and to plan vulnerabilities that arise from being largely rainfall-depended in changing а climate, Parkes Shire Council became one of the first LGAs to undertake an Integrated Water Management Strategy (IWCM) in 2004. The IWCM identified water management issues and potential solutions After a decade of forward planning and extensive community consultation. Council embarked on the Parkes Integrated Water Infrastructure Renewal Program; a once-in-a-lifetime



overhaul of Parkes urban water supply and wastewater schemes in one package of works valued at over \$100 million dollars which included a new Lachlan River Intake System, refurbishment of bores, new water and sewage treatment plants, an upgrade to Lake Endeavour Dam and the installation of an advanced water recycling facility and a new purple pipeline throughout town.

IWCM strategy is usually a document which predicts growth out to 30 years, however due to the significant amount of water projects undertaken by Parkes Shire Council and the considerable developments announced for the community such as the State Government's Parkes Special Activation Precinct and the expansion of Northparkes Mines with a vision of a century of mining, these demand projections needed to be revised.

These increased demands require the amplification of the Lachlan River to Parkes supply pipeline, and the planning of structures along this route through a coordinated IWCM process. These packages of work are summarised below:

#### Critical Drought Water Infrastructure Program - Value \$4 mill

Parkes Shire Council has successfully been granted \$4 million from the New South Wales Government's Critical Drought Initiative to implement the Parkes Water Security Project - Stage 1a.

The Parkes Water Security Program is a series of strategic water infrastructure renewal initiatives intended to 'future proof' the Parkes Shire water supply and is informed by the Parkes IWCM and the 2009 CENTROC Water Security Study. The aim of the Parkes Water Security Program is to account for significant industrial



and residential growth and development in a changing climate, whilst ensuring water extraction is sustainable and spread across a variety of available sources.

This project is instrumental in working towards securing a reliable water supply for Parkes Shire, especially with the current drought conditions continuing.

Parkes Shire Council has progressed this project, in conjunction with Forbes Shire Council and Central Tablelands Water County Council and the concept design and investigation into the CENTROC Water Grid Pipeline, which has informed broader Parkes Water Security Project (PWSP).

PWSP - Stage 1a is a catalyst for the remaining PWSP which includes a REF and approval by the Parkes and Forbes Council areas. A Utilities working group has been set up to help guide the project:

The project includes the:

- + Refurbishment of existing Parkes bores 1, 2, 4, and 5.
- Approvals and construction 8.6km pipeline from Forbes Bore 3 to Parkes Eugowra Road Pumping Station Site

#### Forbes to Parkes to Gooloogong Water Pipeline

The Parkes Integrated Water Cycle Management strategy (2004, 2015, 2020) and the 2009 CENTROC Water Security Study recommended a pipeline connection between Forbes, Parkes and Gooloogong in order to transfer water between the local water utilities and enhance water security. This project also includes the initial engineering and preliminary environmental studies for:

- + 39km pipeline from Parkes Eugowra Road PS
  - to Central Tablelands Water (CTW) Gooloogong bores site.



- A pumping station at the Eugowra Road PS with two sets of pumps, one for transferring water to Forbes and the other to Gooloogong.
- A pumping station at Gooloogong Bores site to transfer water to Parkes Eugowra Road PS.

#### Safe and Secure Water Business Case - State Funding \$2 million

Parkes Shire Council have received just over a \$1mill worth of funding matched by Council to develop a business case for Infrastructure NSW (INSW). The business case along with a suite of supporting documents will examine the economic and social impacts of projects identified in Parkes IWCM and CENTROC Water Security Study with the final aim to secure funding for detailed design, approvals and construction of these water projects.



The business case will also examine the duplication of the existing raw water infrastructure from the Lachlan River and Forbes Borefield to the Parkes WTP as well as the preliminary environmental studies.

### 8. Regional Economic Opportunities

The NSW Government announced the establishment of Special Activation Precincts as part of its 20-Year Economic Vision for Regional NSW.

The Precincts will be funded as part of the NSW Government's \$4.2 billion Snowy Hydro Legacy Fund, following the sale of the Snowy Hydro Scheme to the Commonwealth (as is the proposed raising of Wyangala Dam).

\$185 million in funding was announced by NSW Government Deputy Premier John Barliaro on Wednesday 22 July 2020 for vital infrastructure to enable development of the Parkes Special Activation Precinct.

#### About the Parkes Special Activation Precinct

The precinct will take advantage of its location at the only junction of Australia's two rail spines, the Inland Rail and the Trans-Australia Railway.

With the Parkes Special Activation Precinct master plan now complete, Regional Growth NSW Development Corporation (RGDC) will take on delivery of the precinct. This includes managing the acquisition process land while leading design and construction, applications streamlined and approvals and providing a business concierge service aimed at assisting



those seeking to set up or expand in the regions.

The Parkes Special Activation Precinct will create jobs and prosperity not only for Parkes but the whole region.

The development will allow for agriculture value adding, open up opportunities for recycling and renewables, encourage a resurgence in manufacturing and provide a competitive network in terms of transport and logistics by leveraging Inland Rail and Parkes' strategic location at the cross roads of the Nation.



The Parkes Precinct covers 4,800 hectares of land which is ear-marked for a range of uses including freight and logistics, processing of food such as plant-based proteins, warehousing, plastic and e-waste recycling and cold chain storage.

The Precinct will focus on sustainability and will be Australia's first United Nations Industrial Development Organisation (UNIDO) Eco Industrial Zone. Circular economy as a foundation



Forecasts indicate that government investment in this Special Activation Precinct could generate an additional 3,000 new jobs and attract a further \$1 billion in private investment over the next 20 years.

NSW

However, this project will need a reliable water source.



## 9. Strategic Alignment

Entity	Document	Strategy		
		Creating Jobs		
Premier of	Premier's	150,000 new jobs by 2019 by Supporting Regional Development.		
NSW	Priorities	Delivering Infrastructure		
		Key regional and local infrastructure projects to be delivered on time and on budget.		
	Snowy Hydro Legacy Fund	<b>Providing water security in priority catchments</b> : recognising the Hunter, Gwydir, Macquarie, Lachlan, Richmond and Bega as the highest priority areas for water security improvements through policy and infrastructure solutions.		
		Activating regional locations for increased business investment: providing attractive locations and conditions for targeted industries to invest in regional NSW. Work is already underway to build an inland port in Parkes as a Special Activation Precinct that will leverage investment in inland rail.		
		Encouraging Business Investment		
	State Priorities	Position the state as the prime location for business growth and investment as the mining boom subsides.		
		Regional NSW		
NSW Government		Communities will grow around a hub-and-spoke network of economic regions, liked by freight and service routes to markets and suppliers in major cities. They will focus on competitive advantage in agriculture and primary resource manufacturing.		
		Better Integrating Land Use and Infrastructure		
		Coordinated investment in growth areas insures the creation of places and neighbourhoods over individual assets.		
		Connecting People and Places		
		The NSW Government will continue to invest in a transport network that can efficiently and reliably move goods around NSW.		
	Making it Happen	Program 2: Aligning Effort to Support Growing Regional Centres		
	in the Regions: Regional	The growth of regional centres – such as the Mid-Lachlan FER – is a trend that is set to continue. They are hubs for economic activity, because in areas		

The raising of the wall at Wyangala Dam aligns with the strategic priorities of NSW Government



	Development Framework	of strong population growth there is also likely to be some clustering of industry.
		Program 3: Identifying and Activating Economic Potential
		There are opportunities to enliven local economies through strategic investment to change the regional economic outlook for a local area or region.
	Regional Growth Fund: Growing Local Economies	<ul> <li>GLE is open to projects that:</li> <li>Have capacity to deliver jobs and economic growth.</li> <li>Help regional communities capitalise on their strengths.</li> <li>Demonstrate benefits beyond one organisation.</li> <li>Examples of eligible projects</li> <li>Service infrastructure (e.g. water, sewer, electricity, gas) to unlock. potential for new or existing employment areas.</li> <li>Road or rail upgrades.</li> <li>Multi-user/shared research and development facilities.</li> <li>Expansion or upgrading of multi-user, open access facilities.</li> <li>Telecommunications infrastructure that enables economic growth or increases productivity for multiple businesses.</li> </ul>
	Mid-Lachlan Regional Economic Development Strategy	<ul> <li>Relevant key strategies identified in the REDS</li> <li>Improve water security constraints for the agriculture, mining, manufacturing and tourism industries.</li> <li>Address weaknesses and improve water security in the region, to enhance the sustainability of the community and business environment.</li> <li>Providing opportunities to expand current and future mining operations. Enhancing the region's infrastructure and services capabilities to assist in attracting new industry growth and expanding current high value mining production and future opportunities.</li> <li>Optimise and grow agriculture by improving supply chain efficiency and quality, market access and communication. Increasing the opportunity in refining the production of broad acre crops and livestock products to continuously adapt to domestic and export market requirements.</li> </ul>
	20-Year Economic Vision for Regional NSW	<ul> <li>Manage vital energy and water resources sustainably to ensure supply will meet long-term regional needs – Principles for future investment</li> <li>Within 5 years research and development investment in energy and water security and resilience, particularly for engine industries.</li> <li>Within 10 years investigate climate-resilient water infrastructure options</li> <li>In the next 10-20 years investigate ongoing infrastructure to provide safe and secure water to regional communities.</li> </ul>
Department of Planning and Environment	Regional Plan for the Central West and Orana	<ul> <li>Direction 2 – Grow the agribusiness sector and supply chains (2.1 and 2.2 are immediate initiatives)</li> <li>2.1 Encourage agribusiness diversification and value-adding opportunities by reviewing local plans to ensure land use zonings and definitions reflect industry requirements.</li> <li>2.2 Guide local and strategic planning to protect agricultural land, and manage the interface with other land uses.</li> <li>2.3 Facilitate investment in the agricultural supply chain by protecting assets such as freight and logistics facilities from land use conflict and the encroachment of incompatible land use.</li> </ul>



<ul> <li>Direction 10 – Promote business and Industrial activities in employment lands</li> <li>10.1 Encourage the sustainable development of industrial and</li> </ul>
employment land to maximise infrastructure and connect to the existing freight network.
Direction 11 – Sustainably Manage water resources for economic
opportunities
<ul> <li>11.1 Implement the Murray–Darling Basin Plan to ensure a balance of social, economic and environmental outcomes.</li> </ul>
<ul> <li>11.2 Finalise water resource plans and long-term watering plans for surface water and groundwater systems in accordance with the Murray– Darling Basin Plan.</li> </ul>
<ul> <li>11.3 Plan for high-water use industries in locations with water access and security.</li> </ul>
<ul> <li>11.4 Enhance the productive capacity of land in the Namoi, Macquarie and Lachlan irrigation areas by limiting encroachment of inappropriate and incompatible land uses.</li> </ul>
<ul> <li>11.5 Provide guidance for development in areas of groundwater vulnerability.</li> </ul>

### 10. Conclusion

The additional long-term water security provided by the raising of the Wyangala Dam wall is critical for the communities of the Lachlan Valley.

The additional security will provide resilience for the urban water supplies supporting the regional and rural townships throughout the valley. Without a level of even marginal growth, these communities would rapidly decline.

The added security of supply will drive greater investment in long-term fixed agribusiness enterprises yielding higher value products and thus a higher value placed on the water. This could drive investment in water efficiency and result in lower water use per land area and avail additional water within the Lachlan system supporting the downstream ecology.

For more Information Please contact PSC Economic and Business Development Manager Anna Wyllie