Lostock Dam to Glennies Creek Dam Pipeline Project

Briefing to Business
Hunter's Regional
Infrastructure Committee

Shaun Guilfoyle Project Manager 02 August 2023





What is Water Infrastructure NSW?



- Water Infrastructure NSW is responsible for leading the development and delivery of key government water infrastructure projects and programs across the state.
- Water Infrastructure NSW will collaborate across the water sector, with industry partners and stakeholders, to deliver innovative infrastructure and water management solutions, with a focus on outcomes that support the health, well-being and prosperity of our customers and communities as well as the natural environment.
- Water Infrastructure NSW is a part of NSW Department of Planning and Environment and is collaborating with Hunter Water on this project.

Final Business Case



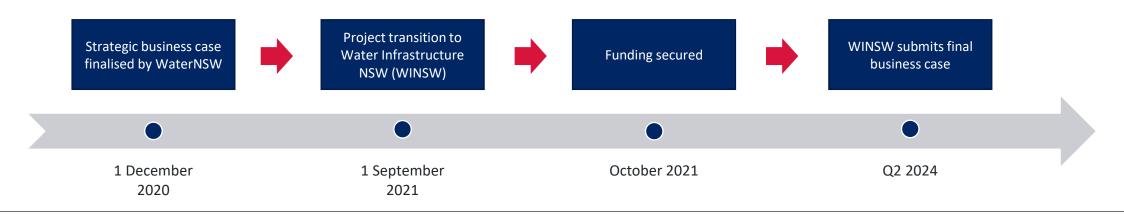
- Water Infrastructure NSW is developing a final business case for a two-way transfer pipeline between Lostock Dam and Glennies Creek Dam with pumping stations and associated ancillary works
- In April 2022, the NSW Government and Hunter Water released the Lower Hunter Water Security Plan, which recommended the project consider Hunter Water's **Paterson River Connection** in the final business case. In October 2022, Paterson River Offtake was included into the development of the final business case.
- This **final business case** builds on the analysis of options from the strategic business case to produce a more comprehensive analysis of the proposal.
 - All major infrastructure investment decisions taken by the NSW Government are required to be supported by a final business case.
- The partners will investigate a range of engineering, environmental, cultural heritage, economic and other technical factors as part of developing the final business case, as well as continue ongoing community and stakeholder engagement activities.

Project background



Recommended as a long-term water security project in:

- State Infrastructure Strategy 2018-2038
- Greater Hunter Regional Water Strategy 2018
- Lower Hunter Water Security Plan 2022
- Singleton Integrated Water Cycle Management Plan



Project objectives



Overall Goal: Improve the long-term water security, resilience and reliability for Hunter Valley to effectively manage climatic, economic and social changes in the Hunter region

Possible Outcomes:

- Water flexibility to assist and mitigate climate change
- Water resilience across the Upper Hunter and Lower Hunter
- Increase in water security for current and future water users
- Supports economic diversification of the region
- Improves water security to town water supplies
- Provides high water security for high security holders and reliability for general security water users
- Supports an increase in agricultural production, resilience in mining and energy production and new industries entering the market
- Provides opportunity for Hunter Water to improve drought resilience

Hunter Region Water Storages



Western zone

Glenbawn Dam

Full supply level = **750 GL**

Dam catchment = 1300 sq. km

Average annual inflow = 132 GL/yr

Average annual inflows five times <u>less</u> than dam capacity.

Glennies Creek Dam

Full supply level = 283 GL

Dam catchment area = 223 sq. km

Average annual inflows = 45 GL/yr

Average annual inflows six times <u>less</u> than dam capacity.



Eastern zone

Lostock Dam

Full supply level = 20 GL

Dam catchment = 277 sq. km

Average annual inflows = 114 GL/yr

Average annual inflows five times \underline{more} than dam capacity.

Water Demand



As part of the Final Business Case, we are currently assessing the existing and future water demands for the Hunter and central coast regions in order to understand the service need, objectives, impacts, beneficiaries and opportunities that this project may realise.

The areas of the water demand assessment are focusing on includes but not limited to:

- AGL and energy sector demand
- Mining demand
- Agricultural demand
- Urban water demand
- New industries and Opportunities demand

Infrastructure



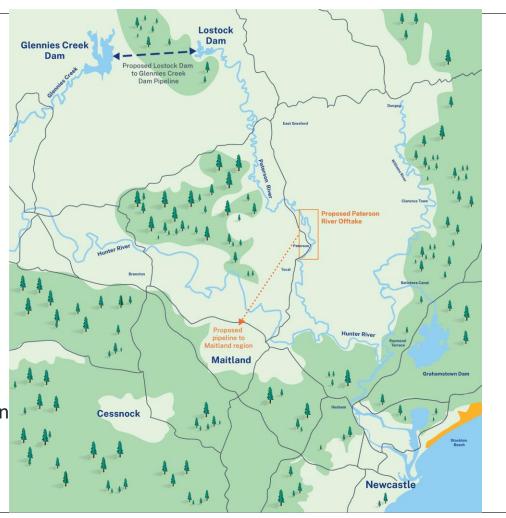
The Infrastructure required for the project may include:

Lostock Dam to Glennies Creek Pipeline Project

- Large diameter pipeline between 2 dams
- Tunnels
- Pump Stations
- Intakes and Discharge structures
- Power transmission
- Road Infrastructure (widenings, resealing, bridges, culverts)

Paterson River Connection Project

- Medium diameter pipeline from Paterson to new water treatment plant
- Water Treatment plant
- Medium diameter pipeline from new water treatment plant to a connection point near Maitland
- Road Infrastructure

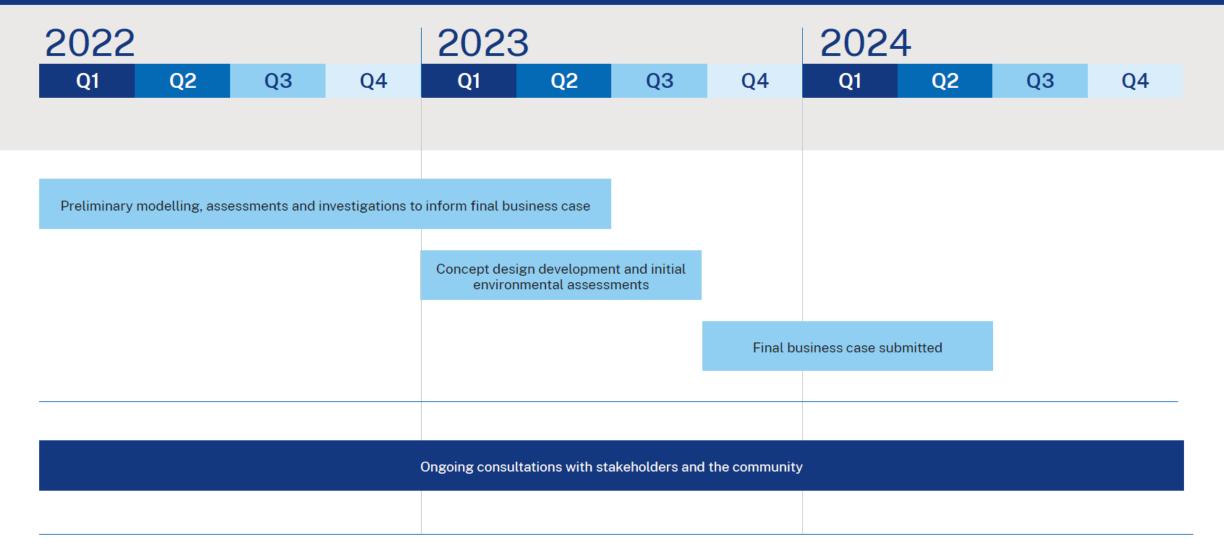


Lostock Dam to Glennies Creek Dam Pipeline Project final business case timeline









^{*} Timeframes are subject to change.

Opportunities for the Hunter



Construction Opportunities:

- Construction Jobs
- Local Industry Involvement
- Aboriginal and first nations involvement
- Training and education
- Local community benefits

Once in Operation Opportunities:

- Water security and resilience for the changing Hunter region
- Drought resilience
- Water security and demand assurance for new industries (hydrogen, renewables etc)
- More opportunities for high yield agriculture
- Visitor economy with safer roads to dams and higher dam levels
- Water security and resilience for growing Newcastle Maitland corridor

Discussion questions



- What construction opportunities for the Hunter region do you see the project providing?
- What operational opportunities for the region do you see the project providing?
- Are there opportunities to align with other projects or initiatives in the region?
- Are there opportunities for members to provide feedback from a local industry perspective to inform the final business case?

More information



For more information:

• visit dpie.nsw.gov.au/lostock-glennies-pipeline

Or get in touch:

- email lostock-glennies.pipeline@dpie.nsw.gov.au
- call 1300 081 047

Or get involved:

• Please email lostock-glennies.pipeline@dpie.nsw.gov.au if you would like to be involved