

**Supplementary  
Submission  
No 116a**

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

**Organisation:** Inland Rivers Network

**Date Received:** 26 April 2021

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I N L A N D  
R I V E R S  
N E T W O R K

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26 April 2021

### **Supplementary Submission**

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

Viability of the proposed Dungowan Dam and Pipeline Project

#### **Introduction**

The Inland Rivers Network (“IRN”) is a coalition of environment groups and individuals that has been advocating for healthy rivers, wetlands and groundwater in the Murray-Darling Basin since 1991.

IRN lodged a submission to this Inquiry in September 2020 and gave a presentation, in person, at the hearing held on 29 October 2020 at Parliament House.

At the public hearing we stated that IRN trusts that this Inquiry will investigate the important issue of funding sources, business cases and the viability of the projects.

We wish to supply further information in regard to the viability of the proposed Dungowan Dam and Pipeline Project on the Peel River above Tamworth. There is also a key issue of ownership of the proposed new dam and concerns regarding user pays.

It is imperative that the final business case for the Dungowan Project is released to the public prior to the final decision or construction.

Information in this submission is sourced from:

- The Australian Government Productivity Commission draft report on National Water Reform, February 2021
- Information supplied through Parliamentary papers
- Information supplied through a Treasury GIPA
- Responses to questions in Budget Estimates Committees March 2021

## **SUMMARY:**

- 1.** The Dungowan Project was announced to cost \$484M. The DPIE capital works summary has estimated the cost could rise to \$870M.
- 2.** Productivity Commission has reported that any increase in construction cost is likely to result in the project becoming unviable.
- 3.** There is acknowledgement that costs and engineering challenges will be far more significant than envisaged.
- 4.** Only \$40M has been committed through the National Partnership Agreement provided key milestones are met.
- 5.** WaterNSW is in financial stress through carrying debt for the project
- 6.** The NSW Government has assumed that WaterNSW is the owner of the asset while negotiations are still underway with Tamworth Regional Council.
- 7.** The detail of who will eventually pay for the project is still unclear. The user pays principle under IPART is a key issue for Tamworth ratepayers.
- 8.** It is in the public interest that the final business case for the Dungowan Dam and Pipeline Project is released before any further investment decisions are made.

## 1. Draft Productivity Commission Report

In 2020 the Australian Government Productivity Commission commenced a second triennial assessment of jurisdictions' progress towards achieving the objectives and outcomes of the National Water Initiative signed in 2004. A draft report was released in February 2021.

Under Chapter 13 '*Government investment in major water infrastructure*' the draft report noted that:

- *Under the National Water Initiative (NWI), all jurisdictions agreed that proposals for new and refurbished water infrastructure (such as dams and irrigation distribution networks) would be assessed as both economically viable and ecologically sustainable prior to any investment occurring, and that costs would be recovered from users in most cases.*
  - *Failure to abide by these requirements can burden taxpayers with ongoing costs, discourage efficient water use and result in long-lived impacts on communities and the environment.*<sup>1</sup>

The draft report also notes that:

*'commitments of public funding before publication of robust business cases (which substantiate whether the infrastructure is in the public interest) put governments in a situation where they are unlikely to back away from these commitments, even if a project is shown to impose significant costs, creating a risk that projects that are not in the best interests of the community are funded.'*<sup>2</sup>

And that:

*'Indeed, it is common for the costs of major water infrastructure projects to increase substantially between early feasibility work and final construction.'*<sup>3</sup>

The draft reports states that: ***'The process to date for the proposed Dungowan Dam (on the Peel River in New South Wales) characterises many of the above failings in project assessment and selection'***<sup>4</sup>

In summary the draft report notes that:

- Any further increases in construction cost would likely result in the project becoming unviable.
- the cost of securing Tamworth's water supply by directly purchasing general security entitlements is estimated at just 2 per cent of the Dungowan Dam construction cost
- the 2017–19 drought highlighted that the seasonal water allocation process under the catchment water plan was not as effective as it could be in protecting town water security, even with significant investment in water security infrastructure to date
- in the year prior to Tamworth's level 5 restrictions, more water was allocated to general security licence holders than for urban water use (WaterNSW 2019).

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<sup>1</sup> Productivity Commission, February 2021. Draft Report National Water Reform 2020 p 167

<sup>2</sup> Ibid p 169

<sup>3</sup> Ibid p 170

<sup>4</sup> Ibid

### Box 13.1 Flawed decision making for Dungowan Dam

In 2016, the New South Wales and Australian Governments committed a total of \$150 million to the construction of Dungowan Dam on the Peel River (ANZIP 2020). The rationale for the project was that growth in Tamworth's urban water demand would affect reliability for general security irrigators in the Peel, as well as downstream licences in the Namoi (WaterNSW 2018, p. 26).

A 2017 feasibility study estimated a benefit–cost ratio of 1.06 for constructing a new dam, albeit with a far higher project cost of \$484 million (GHD 2017, p. i). The study's preferred option was to construct a new 22.5 GL dam, increasing water availability by 6 GL a year on average. Most of the anticipated benefits derive from improving Tamworth's water security, with increased irrigated agricultural production representing less than 2 per cent of the project benefits (GHD 2017, p. 68).

In 2019, the governments agreed to each provide half of the \$484 million construction cost. Early works were scheduled to commence in October 2020, with the final business case to be completed by June 2021 (WaterNSW 2020).

#### Discussion

The feasibility study underpinning this funding commitment has three key shortcomings.

- The benefit-cost ratio of 1.06 is marginal and contingent on optimistic assumptions (such as the willingness of Tamworth residents to pay for fewer water restrictions). Any further increases in construction cost would likely result in the project becoming unviable.
- Non-infrastructure options were excluded from the analysis (GHD 2017, p. 14).

Some of these options may be considerably more cost-effective — for example, the cost of securing Tamworth's water supply by directly purchasing general security entitlements is estimated at just 2 per cent of the Dungowan Dam construction cost.<sup>a</sup>

- The project scope was narrowly defined. Although the study was prompted by pressure on Tamworth's bulk water supplies during the Millennium Drought, the analysis focused on long-term water supply, rather than ensuring water security during extreme events. As noted by the NSW Water Directorate (sub. 37, p. 7), the 2017–19 drought highlighted that the seasonal water allocation process under the catchment water plan was not as effective as it could be in protecting town water security, even with significant investment in water security infrastructure to date. Indeed, in the year prior to Tamworth's level 5 restrictions, more water was allocated to general security licence holders than for urban water use (WaterNSW 2019).

In terms of these latter points, the proposed dam is a costly way to protect general security licences, relative to the value of the water. The dam is estimated to provide an additional 6 GL of water (annual average) which has a current market value of only \$11 million. By comparison, if the additional water was issued as entitlements to general security irrigators at full cost, it would be valued at more than \$60 000 ML, relative to current prices of about \$1341/ML.<sup>b</sup> Irrigators are unlikely to be willing to pay for the additional water, highlighting the poor viability of the project.

Moreover, the prospect of 'new' water is illusory. Because the proposed project is within a fully-allocated water system, it will result in an implicit (and expensive) transfer of water. Any infrastructure that improves reliability for one user will affect water availability for others. In this case, the feasibility study identified that a larger storage on the Peel would lead to the water sharing plan cap becoming binding, reducing supplementary access (water extractions during infrequent high-flow events) for Namoi River irrigators (GHD 2017, p. 19).

<sup>a</sup> Based on 75 per cent reliability and a Peel General Security entitlement price of \$1341/ML, and a maximum potential shortfall of 5.5 GL by 2065. <sup>b</sup> Weighted average 2018-19 Peel General Security entitlement price (Aither 2019).

## 2. Information received through Parliamentary papers

### Snowy Hydro Legacy Fund

DPIE discussion 29 October 2020

Dungowan Dam

Greenfield.

Tamworth owns existing dam site.

\$480M funding commitment (this has changed and needs updating).

Commonwealth \$240M announced

NPA not signed yet

### DPIE Capital works summary – final draft November 2020

Dungowan Dam

SBC has been prepared and INSW Gateway Reviews for Gates 1 and 3 will be completed in November. Early works will start post INSW Review and FBC and EIS will be progressed in parallel. Contract award for main works forecast for July 2022

Greenfield, Tamworth Council owns the likely inundation area. Tamworth owns existing dam site.

Partly funded from National Water Infrastructure Development Fund and SHLF, with WaterNSW contributing to early works and project planning costs

\$480M funding commitment. Commonwealth \$240M announced. WaterNSW Debt funding FBC and early works \$42M. \$198M from Snowy Hydro Legacy fund.

ETC now forecast **\$470M-\$870M**

NPA not signed yet

Funding only secured for \$480M project cost. Need to identify additional funding either SHLF or National Water Infrastructure Development Fund for additional costs

## 3. Information received through Treasury GIPA

### Financial status of WaterNSW

WaterNSW Corporate Plan: Proposed 2020-21

Net Debt:

*Over the last 12 months there has been a significant downward shift in WaterNSW's financial projects driven by:*

- *NSW Government Directions requiring WaterNSW to debt fund the Wyangala, Mole River and Dungowan projects and other Critical Drought Projects, resulting in net debt at a time where our funds from operations are falling.<sup>5</sup>*

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<sup>5</sup> WaterNSW. (2020). *Corporate Plan: Proposed 2020-21*. Sydney: NSW Treasury p 8

## Debt Funding

*We are debt funding several Critical Drought Projects and the Critical State Significant Infrastructure (CSSI) Dam Projects (i.e. Wyangala Dam raising, Dungowan Dam, and Mole River Dam), with no agreed funding arrangements with respect to the WACC on these investments in FY20 and FY21. Beyond this period, we have assumed they will form part of the IPART determined revenue allowance and funded 100% by the NSW Government, at least initially. In this Corporate Plan we have assumed that the borrowing costs, that is the cost of debt, for FY20 and FY21 will be reimbursed to WaterNSW from NSW Treasury.<sup>6</sup>*

## Financial Risk

*There are number of risks that are noteworthy in considering WaterNSW's ability to achieve the Financial Plan outcomes:*

- The operating costs forecasts for the Rural Valley and WAMC regulatory business is significantly above current IPART-approved allowances. If allowance increases are not accepted by IPART in the upcoming pricing determinations, WaterNSW's projected capital structure, credit rating and overall financial performance will be under further pressure.*
- Whilst the Financial Plan includes financing in the form of Government Grant and debt for the 3 CSSI Dam Project business cases and early construction works (Dungowan and Wyangala), the Financial Plan suggests there is limited Balance Sheet capacity to debt fund the construction costs for the projects without equity and/or Grant revenue (refer to the scenario analysis below). It will be important to confirm the final project construction costs (including environmental offsets) and the financing arrangements over the next 12 months*
- The potential for the NSW Government and/or NSW Treasury not reimbursing WaterNSW for unfunded borrowing costs with respect to the 3 CSSI Dam Projects and drought relief projects. In addition, the Financial Plan assumes IPART will accept these investments are prudent and efficient when they review our Rural Valley pricing proposal. Should IPART determine this not to be the case WaterNSW would require ongoing reimbursement of the non-customer funded borrowing costs, noting for the 3 Dam Projects the customer is expected to be predominately the NSW Government.<sup>7</sup>*

## Target credit metrics

*WaterNSW's target capital structure is 55% net debt to RAB, where:*

- Net debt = total debt (current capital value) minus cash; and*
- RAB = regulated asset base (year-end closing value).*

*However, the achieved capital structure is higher than the target because of lower operating cashflows and higher investing cashflows.*

*WaterNSW are required to maintain a minimum 5.5% FFO/ Net Debt to stay within the investment grade credit rating of Baa2 stable.<sup>8</sup>*

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<sup>6</sup> Ibid p 12

<sup>7</sup> Ibid p 9

<sup>8</sup> Ibid p 27

## **Ownership of Dungowan Dam**

Letter from Minister Pavey to Treasurer 31 March 2020

### **WaterNSW must be the assumed owner of the assets to avoid immediate budget impacts**

- If WaterNSW is the assumed owner of the assets it can capitalise costs in the first stage of the program. If costs are capitalised they will not impact WaterNSW's profitability and capacity to pay target dividends to the Government.
- At present, WaterNSW has advised it will not account for the costs of the Dungowan project in this way due to uncertainty on the future ownership of the underlying assets. The Tamworth Regional Council is a possible alternative owner.
- The letter to WaterNSW accompanying the direction (Attachment B) confirms the Government's intention that WaterNSW is the assumed owner of the Dungowan assets, which will allow it to capitalise these costs.

### **4. Information from Budget Estimates Committee March 2021**

Water Minister:

'The Commonwealth Government has signed funding agreements with the NSW Government under the National Partnership Agreement – National Water Infrastructure to provide the following funding provided agreed milestones are met: a. Dungowan Dam - \$40 million'

Premier:

'The costs are likely to be far more significant than we envisaged and the engineering challenges far more significant than we envisaged.'

Treasurer:

'It is government process that it is until such time as final business cases are received that final investment decisions are made.'

It may be the case when projects of whatever nature are initially announced that by the time we get to the final business case, the project may have a much higher cost to the State. Any decision to proceed needs to factor in that final business case.

I believe that governments need to have the humility at various points in time to say that this was the best intention but perhaps is not the best use of taxpayer dollars.'

### **5. User Pays: NSW IPART determination**

The ownership of the proposed Dungowan Dam is a critical issue for ratepayers in Tamworth. WaterNSW charges per megalitre are much higher than current Council costs.

IPART is undertaking a four year review of water prices for new charges up to 2025.



Water NSW has submitted a bulk water price increase to \$253.55 per megalitre for Tamworth City water license from Chaffey Dam while the cost from the Council owned Dungowan Dam is \$5.25 per megalitre.

The council argues that under the draft determination the cost of raw water in the Peel for high security license holders would be almost double the next highest priced valley in the Murray-Darling Basin.

Tamworth basically pays double the water of the next highest area and ten times higher than some.

"We pay the highest price in three states for water perhaps with the exception of one.

"It's unfair, illogical and unreasonable pricing being inflicted on residents and the ability to pay hasn't been applied." <sup>9</sup>

### **From Treasury GIPA**

*Also as the customers of WNSW will not be able to afford to pay for the dams the State and the Budget will have to pay for almost all of the annual building block revenue requirement.*<sup>10</sup>

## **6. Final Business Case**

WaterNSW has been running community consultation webinars on the Dungowan Project since the middle of 2020.

Nearly every question asked by participants is responded with 'that will be in the business case.'

There is a high level of frustration about the lack of information about the project while it was announced to be 'fast-tracked.'

The people of NSW need to know if they will be footing the bill for this project and how much that will be. There is also interest in knowing how the environmental, cultural and social impacts will be costed in a costs-benefits analysis.

The key beneficiaries of the Project, the rate-payers of Tamworth, also need to know what the likely costs will be, if they are to be charged under a user pays process through IPART determinations.

The final business case must be released as a public document, prior to the final investment decision or commencement of construction, in the spirit of transparency.

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<sup>9</sup> <https://www.northerndailyleader.com.au/story/7206823/tamworth-monopoly-outrageous-water-costs-and-statue-on-the-agenda/>

<sup>10</sup> Shu., O. (2020) *Email 29 January 2020: Cth/DPIE meeting re Dams*. Sydney: NSW Treasury. Obtained under GIPA