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Submission of Objection

Dungowan Dam and Pipeline Project SSI - 10046

Tamworth Water Security Alliance represents community groups and individuals who support cost effective, diverse and sustainable water supply options for Tamworth Regional Council.

Climate change predictions of lower rainfall, less runoff and higher evaporation rates will negate the investment in a new larger Dungowan Dam. Public money will be better spent on securing Tamworth's water security through more efficient use, recycling, storm water harvesting, water tanks and many other options that have not been fully assessed.

Tamworth is a large city on a small river that cannot keep giving up more water. The Peel River is part of the broader Namoi and Darling River catchments. Water sharing arrangements and agreements under the Murray-Darling Basin Plan must be considered.

Many options are available to improve the security of Tamworth's water supply that don't put additional pressure on the health of the Peel River, its native fish, platypus and other species.

Tamworth Water Security Alliance strongly objects to the proposed new Dungowan Dam but does support the replacement of the existing leaky pipeline. The Environmental Impact Statement (EIS) for the project is highly inadequate and fails to comply with the Secretary's Environmental Assessment Requirements (SEARs).

The project fails to meet the three strategic objectives, particularly the objective to provide efficient and affordable bulk water supplies to Tamworth.

This submission outlines the key reasons for Tamworth Water Security Alliance objection to the project and offers alternatives that would meet all three strategic objectives.

This submission recommends that the project not be approved in its current form and that a combination of cheaper, more efficient and more timely options be adopted. These could be funded by the \$600 million secured by NSW Treasury towards Tamworth water supply.

Key issues with project assessment:

1. Failure to assess all options

The EIS does not ‘*contain sufficient detail to enable an understanding of why the preferred alternative was selected over other options(s) considered for achieving the project strategic objective.*’ as required by the SEARs.

The document refers to the Summary Business Case and to a range of previous studies. It does not provide any fresh evidence or consider alternative options under current conditions.

The documents referred to in the EIS include the *Tamworth Bulk Water Supply Long-term Augmentation Option Review* undertaken by Hunter H2O in 2015. This report, now 7 years old, analysed a range of options that did not appear in subsequent documents or in the Business Case.

The short-list of options in the 2015 report with capital cost estimates at that time included:

- Keepit Dam transfers – \$65.4m estimate to supply 6.8 GL/y
- Upgrade Dungowan Dam – \$150m plus \$34m for pipeline to supply 6 GL/y
- Off-river storage - \$140m to supply 4.8 GL/y
- Peel Alluvium - \$22m to supply 5.8 GL/y

The report also examined a range of other options including potable reuse (estimated capital cost \$133m) but referred to lack of community support – although no consultation was undertaken at the time.

Other reports referred to in the EIS as the ‘*options development pathway*’ include:

- The 2017 GHD Feasibility Report commissioned by WaterNSW that focusses only on the new Dungowan Dam and pipeline project.
- The 2020 SMEC report that analyses concept designs for a new Dungowan Dam; and
- The 2022 Summary Business Case that short-lists only three options:
 - Keepit pipeline
 - Dungowan Dam
 - Increased urban reserve

The Summary Business Case admits that the proposed \$1.3 billion new Dungowan Dam and Pipeline project will not solve Tamworth’s water security problems into the future and that additional options will be identified through the Namoi Regional Water Strategy.

The Summary Business Case refers to the option for potable water reuse but again dismisses it arguing the long lead time to adequately engage and gain community support. However, 7 years have lapsed since this same issue was raised in the Hunter H2O Report, with no effort to commence community education on the benefits of and technical advances made for purified recycled water treatment. Meanwhile there has been a groundswell of community support for this rainfall independent option, especially since the failure of the Chaffey Dam augmentation to protect Tamworth water security from recent extreme drought events.

Water Services Association Australia released a document in 2020: ‘*All Options on the Table*’ Tamworth Regional Council is a member of WSAA but has ignored consultation advice.

The process to develop options to improve Tamworth water security has been politically biased towards a new Dungowan Dam even though this project fails to meet the NSW Treasury guidelines for benefit cost ratio (BCR). The Summary Business Case reports a very low BCR of 0.09 (7% discount rate) or 0.27 (3% discount rate) and admits that the economics of the project challenge traditional government investment decision making that requires a BCR of > 1 .

Tamworth Water Security Alliance recommends that the NSW Government assess all available options to be able to properly compare the BCR of each option and also assess a combination of suitable options that will improve Tamworth Water Security in a more efficient and cost effective manner without causing additional environmental harm to the Peel River and its dependent aquatic species.

2. Misrepresentation of timeline for delivery of outcomes.

In the justification for the project, much is made about the project being the only “shovel ready” option that is capable of delivering water security for Tamworth. This statement is contestable. At an optimistic assessment of project completion time, it will not be until at least 14 years before the goal of water security is to be delivered. The EIS documentation does not address this time window of no action to address water security. No interim measures are addressed. This is a complete failing in the project planning.

The option of industrial water recycling could be actioned in under 4 years reducing water demand by 45 %. Such actions being specifically excluded from consideration in the EIS.

3. Failure to assess the Tamworth Regional Council industry recycling project

Tamworth Regional Council has a shovel ready project costing approximately \$100 million to establish an industrial water recycling plant. Three large meat processing operations currently use up to 50% of Tamworth’s potable water supply and are included within the definition of critical human needs under drought declarations.

The opportunity to isolate this industrial water use from domestic demand will automatically improve the security of Tamworth water supply with no impact on other water users or the environmental health of Dungowan Creek and the Peel River. It is a failing of the EIS and the Dungowan Dam Business Case to ignore this immediate solution.

The Tamworth industry recycling project meets all the strategic objectives set by the NSW Government, has a better BCR and will not impact on water price for other customers.

4. Failure to assess social and environmental benefits of other options

The Tamworth community has already experienced the impact of fly-in-fly-out construction workers building the Stage 1 replacement pipeline from Calala Treatment Works to Dungowan Village. The acute labour shortage at a regional, state and national level has not been adequately addressed in the EIS.

Tamworth Region does not need a dam construction project to stimulate the local economy. Immediate infrastructure investment into fixing the regional road network severely damaged by recent extreme flood events should be top of the NSW Government priority list.

Numerous social and environmental benefits can be achieved through considering a combination of infrastructure and non-infrastructure solutions that can be implemented at a much faster rate than the predicted 6 years of construction for a new Dungowan Dam and up to 20 years for it to fill, depending on climate extremes.

Non rainfall dependent options should be top priority for securing urban water supply. These options are more likely to have a positive BCR with fewer social and environmental impacts.

The EIS Social Impact Assessment has identified local community concerns about loss of flows in the Peel River and the increased impacts on native fish populations. There is also concern from First Nations people about loss of cultural connections and loss of place.

5. Biased reporting on community consultation and support for project

The repeated statements by politicians and Water Infrastructure NSW that 85% of the Tamworth community support the new Dungowan Dam project is based on very limited community surveys conducted in September 2020 and February 2021 and commissioned by WaterNSW.

The stated aim of the surveys was to refine communication and engagement strategies to support delivery of the Dungowan Dam project.

The Pulse survey conducted in February 2021 was based on phone calls to 200 people including in areas that are not supplied water from Tamworth. This survey was conducted prior to the community knowing that the proposed dam would cost \$1.3 billion.

Reporting on consultation through regular monthly webinars and public meetings fails to identify that the majority of people attending did not support the project and sought detailed information about the impacts. There was frustration with the webinar process in that many questions taken on notice were not followed up and reporting on the meetings was limited if it all.

It appeared to be highly irregular to have Water Infrastructure NSW staff actively promoting the project at field days and at the Tamworth Country Music Festival. Having bureaucrats working at public expense to run street stalls advocating for a project appears to be a first in NSW. If the project stacked up it would not have needed the extensive promotion and advocacy work undertaken by Water Infrastructure NSW staff.

The political influence in the community engagement process has been excessive.

A public meeting held by Tamworth Water Security Alliance in September 2022 was attended by over 90 people, mostly from the local community, who demonstrated an appetite to discuss and be consulted on a range of options to secure Tamworth water supply.

Better options than a new Dungowan Dam

Tamworth Water Security Alliance has engaged closely with the development of a Namoi Regional Water Strategy. A number of alternative options to a new Dungowan Dam have been submitted through that process. It is critical that the NSW Government prioritise

effective solutions to Tamworth water security before investing in a very expensive project that has been demonstrated to not solve the problem in the long term.

The options submitted to DPE-Water planning team developing the Namoi Regional Water Strategy are:

- Fund the repair of the existing Dungowan Dam
- Fund the second stage of the pipeline upgrade
- Fund the full industry water recycling program for abattoirs using town water supply
- Account for the savings made through current and future demand management and efficiency measures, and through the recycling and reuse of industrial water
- Add the volume of saved water to the Year 2 allocation for Tamworth water licence under the available water determination (AWD) process for Chaffey Dam.
- Decouple the inclusion of Dungowan Dam storage above 50% from the AWD
- Assess a range of scenarios for the use of the Chaffey Dam pipeline, including increased use during wet years.

In addition to these options that can be implemented immediately, we also offer the following options for further assessment:

- Updated analysis of the rules and constraints for increased access to groundwater
- Analyse opportunities for mixing various water supply sources at Calala Treatment Works
- Immediate investment in a community education program on purified recycled water
- Consult the community on willingness to increase permanent water use restrictions to Level 1 or Level 2 with accounting for the benefits of these water savings on long term security

The 2015 Hunter H2O Report recognises that: ‘*Recycled effluent would provide a reliable, rainfall independent source of water to Tamworth that would diversify the cities supply sources and provide more robust TWS security.*’ Also that: ‘*this is likely to be a future option that could be revisited*’.

Tamworth Water Security Alliance maintains that now is the time to consult with the Tamworth community on purified recycled water options. As described above, a recent public meeting demonstrated an interest in ongoing community conversation on all available options to ensure future water security in a drying climate.

This option is likely to become more acceptable once the industry recycling project demonstrates the advantages of water recycling for improving long term water security in extreme drought scenarios.

Conclusion

Tamworth Water Security Alliance strongly objects to the proposed new Dungowan Dam and the lack of unbiased assessment of alternative options.

While both Chaffey and Dungowan Dams are full and spilling there is time to look at immediate dam operations protocols to improve the security of the existing maximum water supply so that the poor management decisions made in 2016 – 18 are not revisited.

Your sincerely

Dr Lyn Allen

On behalf of Tamworth Water Security Alliance