

**Submission  
No 43**

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

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Robyn Bird

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

I give permission for this submission to be published on the submission website.

Dear Committee members,

Please accept my submission for this inquiry. I oppose the construction of the new Dungowan Dam in the Peel River Valley.

I and am a retired pharmacist, live in suburban Tamworth and have spent most of my working life as a locum working in Tamworth, other areas in the North West and Upper Hunter regions. Since retiring I have spent some time farm sitting in Victoria and NSW.

There are three dams already to serve the Water needs of Tamworth.

Chaffey Dam which is owned by and controlled by NSW government with a capacity of 100GL  
Tamworth Regional Council has high security licences to use 16.4 GL

Dungowan Dam which is owned by Tamworth Regional Council with a capacity of 6.3GL  
Tamworth Regional Council has a high security license to use 5.6GL

Calala Dam which has a capacity of 120ML

The average annual use of water by Tamorth is 10 GL when there are no water restrictions.

I oppose the construction of the new Dungowan Dam for the following reasons:

1. It is irrational and unethical to propose a project without a business case.

There has been no business case made for the proposed new Dungowan Dam. In fact the latest Water NSW notice states that the estimated time of the final business case will be in June 2021. It is necessary that the citizens of NSW know the cost of the project and the reasons for that cost ie transparency is essential.

2. It is unjust to expect taxpayers' money to be spent on a project where there has not been any public consultation.

There has been no community consultation about the proposed new Dungowan Dam and only limited information is available.

Water NSW provided 1 of 3 webinars in August this year for the public to attend. The webinars were only advertised once in the local paper .Water NSW, being a government department, stated that the project will proceed regardless and they were only able to give limited information. This same information is available on the Water NSW website. We were informed at the seminar that the type of dam construction was not known yet. I saw the webinar on 31/8/2020.

3. It is totally unknown what entity will own , control, pay for and maintain the proposed new Dungowan Dam.

It is essential that the ownership of the new Dungowan Dam is known before the project proceeds any further because if Tamworth Regional Council owns and controls the Dam, it's waters can only be used by the residents of Tamworth and the villages of Kootingal and Moonbi. If the NSW government owns that dam then the Water will go to mines, abattoirs, farms , citizens of Tamworth, Kootingal and Moonbi and anyone else the State wishes to give water to. Tamworth Regional Council owns the existing Dungowan Dam which has a capacity of 6.3GL and this water is available for Tamworth and the surrounding villages. See Nothern Daily Leader Editorial 12th August 2019.

Will Tamworth Regional Council own and control the Dam or will the State of NSW own and control the Dam?

Will every Australian taxpayer fund the Dungowan Dam , or will it only be the NSW taxpayers ? In either case how much will it cost the ratepayers of Tamworth Regional Council ?

Who will be responsible for the management and maintenance of the new Dungowan Dam ? That these questions remain unanswered , and that preliminary works have begun is deplorable.

4. The amount of water available to Tamworth from this proposed dam is unknown.

Tamworth Mayor, Col Murray , has said it may be \$480 million spent for nothing.

<https://www.smh.com.au/national/nsw/500-million-on-bugger-all-mayor-queries-dam-benefit-20200728p55g8e-hm>

5. Water allocation policy in the Peel Valley is now based on Inappropriate Data , has been based on Inappropriate Data in the past and there is no transparency in the quantity of water which leaves Chaffey Dam and the purpose for which this water is used.

The present Peel Valley water-sharing plans submitted to the Murray-Darling Basin Authority do not include the data from the last drought . I was present at a meeting held in Tamworth by the NSW DPW when these plans were queried. There are many other references to the present water-sharing plans including an article in the Northern Daily Leader , "Meeting fails to result in change" on 7/8/2020

There is further information about water-sharing plans in a Sydney Morning Herald , "Revealed:water plans ignore drought data "on 17/12/2020 .This article mentions in part that "in 2014 then water minister Kevin Humphries pushed through an amendment to the laws to consider only droughts up to 2004 in assessing the worst drought on record...."

That there is no transparency in the quantity of water released from Tamworth's main water supply, Chaffey Dam, is illustrated in the article , " TRC water probe on Chaffey Dam "in the Northern Daily Leader on 18/8/2019. This article refers to the fact that Chaffey Dam was approximately 95% full in December 2016 and 60% of Chaffey Dam 's water was released by June 2019 and that Councillor Mark Rodda was requesting that the council ask the Minister for Water to give" an explanation of the Water releases from Chaffey Dam from December 1, 2016 to June 30, 2019. The mayor did not wish to send such a request. To my knowledge no explanation has ever been given.

6. This Dam was apparently rejected previously.

\_\_\_\_\_ , a former resident of Tamworth stated this at the Water NSW Dungowan Dam Webinar held on Monday 31st August 2020.

\_\_\_\_\_ had the report of the dam's unsuitability and promised to send it to Water NSW as requested by the spokesperson at the webinar. I attended this webinar.

It would be Essential that members of the committee obtain a copy of that report to find out why the Dam was rejected.

In a report, Report for Water NSW Dungowan Dam and Peel Valley Feasibility Study 2126500/19 . Appendix E technical note Removed due to Cabinet in confidence. Is this significant?

6. The proposed new Dungowan Dam will not ensure water security for Tamworth.

Increasing the capacity of Chaffey Dam by 38.5GL to 100GL in May 2016 did not improve Tamworth's water security. Chaffey Dam was at almost capacity in late December 2016 yet by 20th November 2019 it was only 16.5% capacity . This was reported in the article "FALL TO 15%" in Northern Daily Leader on 20/11/2019. According to Mr Bruce Logan, Tamworth Regional Council water director, on an average year without water restrictions Tamworth uses about 10GL of water..This was reported in an article, "Will old dam be decommissioned?" in the Northern Daily Leader on 17/10/2019. In this same article Mr Logan said an expanded original Dungowan Dam of 22.5GL , would increase Tamworth's yearly capacity by about 6 GL. The proposed new dam would be of the same capacity, 22.5GL so it would not even give Tamworth one years supply of water.

Increasing the capacity of Chaffey Dam did not improve Tamworth's water security and the proposed new Dungowan Dam will not either because in the latter case the ownership and use of the Water is unknown and it would yield less than one years supply of water for Tamworth.

7. This new Dam should not be built because Climate Change has not been considered.

The average global temperature has risen by 1.1 degrees since pre-industrial times and the last 5 years have been the hottest on record. Tamworth's climate will be hotter and drier overall. Last summer Tamworth had many days over 40 degrees and smoke from bush fires was in the city for weeks. The drier and hotter it gets less water will be flowing in streams and less water will flow into dams. A hole in the ground does not create water. The hotter the temperature the greater the rate of evaporation will be from stored water in dams. Any water stored in a dam means less water upstream and less downstream as well which results in poorer soil.

Tamworth citizens have been on severe water restrictions since 23/9/2019 when each citizen was only permitted to use 150 litres per day., many of us are managing with less. It means using shower water and hand basin water to flush the loo and laundry water to water trees and plants. Many residents have lost trees, shrubs, vegetables and flower gardens. Since late August /early Sept 2020 residents have been able to use 200 litres per day but most are still using much less. There is still no outside use of water permitted. Another Dam will make no difference to water security. Holes in the ground do not make rain. We have to make better use of the water we already have.

Tamworth residents have to continue to use water wisely, adapt lifestyles e.g. the way we garden, the way we build our houses, farm sheds, public buildings and recreation facilities to the evolving climatic changes and take measures to prevent further climate change.

8. There is no justification for this project to be designated as a Critical State Significant Development under the NSW Water Supply(Critical Needs) Act 2019 and to be fast tracked.  
A local politician says that this project is important because it will create jobs. These will be short term jobs digging a hole in the ground. Other methods of reducing water use and using what we have in more efficient ways will create long term jobs.  
Tamworth does need water security because of Climate Change but building another dam will not give us this, other permanent changes to existing water use will.

9. This Dam should not be built because other sources of water have not been considered by the NSW government.

a) Water recycling

Water recycling should be compulsory in this time of Climate Change when our rainfall will be increasingly unreliable.  
The two systems of water recycling should be considered and costed. One system uses recycled grey water and the other converts grey water and sewerage to potable water.  
Ballina, in northern NSW uses recycled grey water,  
<https://www.ballinawater.com.au/general-information/urban-water-cycle/recycle-water-overview.html>  
Ballina Shire Council Water and Recycled Water Services-recycled Water Overview is title of the information.

Many cities such as London and Singapore have been recycling waste water into potable water for years.

Lismore, in northern NSW, has plans for using potable water produced by recycling waste water.  
<https://www.echo.net.au/2020/07/looking-deeper-into-recycled-water>

Professor Stuart Khan, water expert from UNSW, has stated ways in which water can be recycled to produce potable water in Tamworth, in the article "What cities recycle water" in the Northern Daily Leader 5/7/2019 by Jamieson Murphy. Prof Khan said all recycling systems are uniquely designed to take local circumstances into account, usually inland cities use ozonation, then filtration through activated carbon then the recycled water is blended with another water source, which in Tamworth's case could be Chaffey Dam or the existing Dungowan Dam.

b) Demand Management and Water Infrastructure

Demand Management has been shown to be used effectively in many areas in the world.

<https://www.waterworld.com/water-utility-management/smart-water-utility/article/14180055/driving-change-in-the-water-utility-industry>

The Water Journey -Singapore and .... <https://www.hitachi.com/rev/archive/2019/r201905/gir/index.html?WTmcid=ksearch>

Overview and Examples of Water Infrastructure Solutions : Hitachi Review  
<https://www.hitachi.com/rev/archive/2019/r201905/05a01/index.html>  
I do not have any association with the Hitachi.

Demand Management would also require compliance with laws and regulations.

c) Regenerative Agriculture

Regenerative agricultural methods ensures hydration of the soil and maximum water retention in the soil. This is necessary because Australia is a dry, very old continent and generally has poor soil. Water and arable land are Australia's most valuable and scarce possessions. This method of farming should be considered because ultimately less water is used, none is wasted, land is made more drought resilient, farming is more reliable and there is less drain on the economy for drought payments and more water would be available for drinking purposes.

d) collection of rain water from residences and businesses.

Rainwater tanks have only been allowed in recent years. Residents should be encouraged to have tanks installed in existing properties and rainwater tanks should be provided to all social housing. Storm water could be collected by council and rain water could be harvested from council buildings.

e) other water saving measures.

Council could encourage all households to have ceiling fans installed. These could be used instead of evaporative air conditioners which use large amounts of water. It should be obligatory for all social housing to have ceiling fans installed. There are many water efficient appliances such as water efficient shower heads and taps, dual flush toilets and hot water system diverters. All water efficient devices should be mandatory in all new buildings, renovations and retrofitted if possible in all

10. There are artifacts belonging to First Nations People in the area to be flooded and of course it is their landscape and land. Whatever the First Nations People of this area decide should be adhered to. First Nations People are teaching us how to manage the land. We need their knowledge to better manage water.

11 There are items of historical interest from the colonial era which are in the inundation area.

12. This Dam should not be built because there is no E.I.S.

13 The presence of this Dam will adversely affect native flora and fauna.

A detailed survey of flora is required according to a report for Water NSW, Dungowan Dam AND Peel Valley Feasibility Study 2126500/19. A significant area of Box Gum woodland will be inundated and there will be loss of the Dungowan Starbush which is unique to the area,

Many native animals will be negatively impacted by loss of habitat such as the koala, the regent honeyeater a threatened species, booroolong frog and Davies Tree frog.

Loss of flow in the Peel River already impacted by Climate Change will be exacerbated by water captured by the Dam. This will adversely affect the health of the river and its plants and animals such as the turtles and the platypus. The deaths of Peel River platypuses last summer was shown in both newspapers and on T.V. last summer.

14. International Obligations

Many fish species, such as the endangered Murray Cod, will also be adversely affected by this further loss of flow of the Peel River. The Murray Cod is listed as critically endangered under the International Union of Conservation Networks(IUCN) red list for threatened species. The results of the Biodiversity Convention; Convention on Biodiversity, Rio de Janeiro 1992 should be considered in terms of the ongoing threats to the Murray Cod.

15. The new Dungowan Dam will have adverse impacts on downstream riversystems.

The quantity of water captured by this Dam will mean less water will flow from Keepit Dam into the Namoi River. The Namoi Valley is an important Australian food bowl and this valley's water security is of immense importance. Reduced flow will then negatively impact the Barwon Darling River .

16. Any other related matter. Transparency

It is of vital importance that there is complete transparency of water allocations in NSW

Water is a scarce and precious commodity .

NSW citizens need to know how much of our water is allocated and to whom it is allocated.

The public need to know the purpose or use of that water allocation e.g., for irrigation for hay making, for cotton, for washing coal or for simply making money.

17. Any other related matter.

The fractured approach to the uses of water is problematic at best.

It appears that an Environmental flow in the Peel Valley water system does not necessary remain an Environmental flow once it reaches the next system, the Keepit Dam- Namoi Valley System. Surely consistency is essential. It beggars belief that people in Tamworth have a fast spin under the shower in order to save water for the environment and then this water can be used to wash coal in the Namoi Valley.

It would be impossible to audit water use when this inconsistent fractured approach is used.

18. Any other related matter. Compliance

It is vital that water allocations, laws and regulations are strictly adhered to. This is so important because water is scarce and will become even more so with the cumulative effects of Climate Change.

The safety of people employed in this area is paramount. Adequate staff must be employed to ensure their safety. A resident of Tamworth who was working in the compliance area concerning vegetation was murdered while simply doing his work. He was with a fellow worker who was also harmed. Everyone , even the arrogant and belligerent, has to be educated to respect compliance workers, perhaps advertising is needed .This really is a very serious issue because the compliance workers are very isolated.

19. Any other related matter. Price of water

We need some system whereby water needed by farmers isn't lost to them because an entity such as a coal mine can pay 3 times the going rate.

20 Any other matter .. Pumped Hydro Storage Project

The proponent of this project does not need the new Dungowan Dam. They are happy to use the old one. They just need a dam.

20. Any other related matter. Importance of First Nations Peoples.

I am not a First Nations Person and I don't know their wishes for this area, however it is a really important area . The area is within Gomeroi (Gamilaraay , Kamilaroi) land but borders other language groups , the Nganyaywana language group to the north , the Birapai language group to the east and the Geawegal language group to the south. These groups of people's must be consulted about proposed changes to their traditional land.

First Nations Peoples seem to have traditional land rights but not similar water rights.

<https://theconversation.com/amp/aboriginal-voices-are-missing-from-the-murray-darling-basin-crisis-110769>

[https:// Theconversation.com/amp/australia-has-an-ugly-legacy-of-denying-water-rights-to-aboriginal-people-not-much-has-changed-141743](https://Theconversation.com/amp/australia-has-an-ugly-legacy-of-denying-water-rights-to-aboriginal-people-not-much-has-changed-141743)

This inquiry is an opportunity to restore water rights to our local First Nations Peoples, if that is their wish.

Tamworth does not need the NEW Dungowan Dam , in fact it would cause harm to people and the environment. However this inquiry , I hope will also result in a better outcome for First Nations Peoples, and , Transparency of and Compliance to water allocations, laws and regulations.

Thank you,  
Robyn Bird.