

SUBMISSION on the Draft FNC Water Strategy

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PLEASE DO NOT PUBLISH MY PERSONAL DETAILS

To:

NSW Department of Planning, Industry and Environment

Water In NSW

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To Whom It May Concern,

My family and I have lived in the Byron Shire since 1985. The main reason that we chose to live in this area was because of the natural qualities of the local environment, specifically the landforms, the flora and fauna.

I have taught Environmental Education for many years in both Primary & High Schools, Field Study Centres and for Councils. As part of my work in this area, I conducted water audits in schools. I gained valuable information on how to retrofit water outlets and how to educate students to use water efficiently, to prevent unnecessary wastage of water.

I want to thank the DPIE for developing the Far North Coast Water Strategy, which is covering many options & aiming to provide a reliable water supply for the future of the Far North Coast.

I agree with the focus points for the list of Options provided in the draft Strategy:

1. maintaining and diversifying water supplies
2. protecting and enhancing natural systems
3. supporting water use and delivery efficiency and conservation
4. strengthening community preparedness for climate extremes
5. recognising Aboriginal people's water rights, interests and access to water.

I am submitting that the FNC Strategy should not rely too much on the 'Future Water Project 2060' by Rous County Council, as this project depends too heavily on the construction of the contentious Dunoon Dam.

I do not support Option 14, in Table 5. Long list of options: the construction of the Dunoon Dam on Rocky Creek. I object to this option for the following reasons:

Environmental Damage from the Proposed Dam

One of the 5 Objectives of the Regional Water Strategies is to:

“Protect and enhance the environment Improve the health and integrity of environmental systems and assets, including by improving water quality.”

Flora

The Channon Gorge contains approximately 180 acres of lowland rainforest, that was documented in the previous survey of the area for the dam proposal in 2012-14. This type of rainforest is part of the Big Scrub Rainforest, 99 percent of the Big Scrub has previously been cleared. The 62 ha of Endangered Ecological Community (EEC) of Lowland Rainforest that would be lost by the dam proceeding, represents a significant portion of the 1% of the Big Scrub (approximately 940 ha) that now remains. It is vitally important to retain this area, as it represents some of the largest blocks of Big Scrub remnants in existence.

The remaining patches of The Big Scrub are extremely precious, they are the last remnants of this once huge rainforest. All efforts should be made to preserve it, as the last vestige of a national ecological treasure.

The proposed site for the dam at the Channon Gorge, has an endangered ecological community of Lowland Rainforest on sandstone. (SMEC Australia: Terrestrial Ecology Impact Assessment, 2011). 7 ha of the rainforest adjacent to Rocky Creek is growing on a sandstone base. This makes it doubly important, as this type of riparian warm temperate rainforest on sandstone is unique in NSW. However, the proposal is to clear almost all of this Endangered Ecological community, i.e. 6 ha. (Nan Nicholson, Rainforest Botanist, Echonet Daily 7/9/20). This is unconscionable destruction and is not acceptable by any standard, neither environmentally nor morally.

“ecologists have been excited by many rare plant species still thriving along his section of Rocky Creek, including large old river gums, pepperberry, hairy joint grass, white beech, red cedar, black wattle, bauple nut trees and kauri.” (Jules Petroff, Echonet Daily, 10/8/20).

Fauna

Fish in Rocky Creek will be negatively impacted by a dam at this location. The loss of water flow will be detrimental to migratory fish which require the flow of the creek to complete their life cycles. For example, the Rainbow Fish and Archer Fish migrate up the creek from the ocean. The Eel-tailed Catfish also depends upon the flow of the creek and shallow water to lay their eggs on the sandy bottom. Rare fish species such as the Clarence River Cod, the Rainbow Fish and Australian Bass. These species could become extinct if the dam is built at this location. (Jules Petroff, Echonet Daily, 10/8/20).

There are platypus living in this section of the creek and they are also at risk if the dam goes ahead. Platypus need shallow creek water of 1-3 metres to forage in. They will not survive in the dam. Platypus are on the brink of extinction and are particularly threatened in NE NSW

according to a recent study at UNSW. An ABC news article states that the study found the following:

Platypuses have been found dead in dried up creeks in NSW due to drought and human activity such as damming and water harvesting

[https://www.abc.net.au/news/2020-01-20/platypus-on-the-brink-of-extinction-national-call-to-action/11882584#:](https://www.abc.net.au/news/2020-01-20/platypus-on-the-brink-of-extinction-national-call-to-action/11882584#:~:text=Key%20points%3A,of%20feral%20pests%20and%20livestock)

~:text=Key%20points%3A,of%20feral%20pests%20and%20livestock

The Lowland Rainforest in the Channon Gorge provides food and habitat for many species, including the iconic Koala, which has a healthy population located there and in surrounding areas. The proposed dam will cut an important Koala corridor in half. This will be extremely detrimental to the local communities of Koala and to the health of Koala communities in Northern NSW. (Nan Nicholson, Echonet Daily 7/9/20). Koalas are also under the threat of extinction, especially since the devastating bushfire season of 2019 – 2020:

Koalas are on track to face extinction in NSW as early as 2050 based on current trends and expert knowledge, without a significant reduction in tree clearing, mitigation of climate change and major expansion of protected areas.

[https://www.wwf.org.au/ArticleDocuments/351/pub-Koala-extinction-risk-NSW-28sept18.pdf.aspx#:~:text=Koalas%20are%20on%20track%20to,major%20expansion%20of%20protected%20areas.](https://www.wwf.org.au/ArticleDocuments/351/pub-Koala-extinction-risk-NSW-28sept18.pdf.aspx#:~:text=Koalas%20are%20on%20track%20to,major%20expansion%20of%20protected%20areas)

There are many bird species dependent on the riparian rainforest in the Channon Gorge and many of these species are regionally significant. Other important resident species are a rare legless skink and turtles. (Jules Petroff, Echonet Daily, 10/8/20). There has not been a thorough assessment of the threatened species within the gorge. This must be carried out as an urgent priority before any consideration of a dam is made.

"Overall, nine threatened flora and 17 threatened fauna species would be impacted by the dam." Nan Nicholson. We must do everything possible to protect the habitat of these threatened and regionally significant species. They are the very few that have survived the mass clearing of the Big Scrub Rainforest and it is our responsibility to preserve them, if not for their own sake, then for the future generations to enjoy and most importantly for the health of our regional biodiversity.

Destruction of important Indigenous cultural heritage

There are aboriginal artefacts and burial sites within the gorge which must be preserved. (Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011)

If the dam proceeds it demonstrates ongoing disregard for First Nations' heritage. Does the DPIE and Rous County Council want to be held responsible for their destruction? This is especially pertinent considering this specific Objective of the Regional Water Strategies:

"Recognise and protect Aboriginal water rights, interests and access to water, including Aboriginal heritage assets."

The 21st century is about a suite of smart water options

This dam would be a lost opportunity to make our system fit for the 21st century. It would swallow all resources in one big expensive project. The dam would encourage continued inefficient and often wasteful water management by local governments. They would have no incentive to do things differently. It would represent a lost opportunity to invest in system-wide water efficiency - this is the cheapest & fastest way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an additional 950,000 residents without a rise in consumption. (Metropolitan Water Plan 2006, NSW Government)

<https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0>

Providing water for an increased population

The small population increase predicted for the four Rous-supplied councils of 12,720 between 2020-2060 does not justify such a large and destructive dam.

The dam risks being an expensive white dinosaur, diverting expenditure away from more sustainable, flexible and effective solutions. NSW Department of Planning, Industry and Environment 2019, 'NSW population projections', Sydney, viewed 03 August 2020, <<https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections>> scroll down to "Local Government Factsheets".

Higher prices for consumers

Due to a 4x increase in the cost of water. The Rous General Manager, in response to a question from Councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built. This an unacceptable increase for water costs. Rates in the Byron Shire are the highest on the North Coast & further increases for water are unsustainable for a large proportion of the population.

Another Objective of the Regional Water Strategy is to consider affordability:

"Identify least cost policy and infrastructure options."

Negative Impacts on the Channon Community

The Channon/Dunoon community would become an Industrial/construction zone for the two and a half years of dam construction. There would be noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.

Further to that, when the dam is completed there is the potential for catastrophic flooding downstream in the worst floods, particularly for the first 3 kilometres below the dam.

(Environmental Flows Assessment Proposed Dunoon Dam, 30 Aug 2012, Eco Logical Australia).

I support these alternatives:

System Wide Water Efficiency, as per Professor Stuart White's Review of Rous Water supply augmentation proposal:

<https://drive.google.com/file/d/1knun42rhXOPuOgImBz-VTunMQ3I-fiu7/view>

and <https://drive.google.com/file/d/1F9WYqZ4luyxMljp9iJlHl5oAhaUK5OM/view>

System Wide Water Efficiency needs to be analysed and costed by the DPIE and Rous Council. These figures must be made available to the public.

Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience already exists regarding potable reuse of water as set out in Water Research Australia's report, Potable Water Reuse: What can Australia learn from global experience?

<https://www.waterra.com.au/publications/document-search/?download=1806>

Water harvesting (urban runoff; rain tanks):

Water tanks on all new (and existing) developments.

This builds community resilience - much needed, as the recent extreme bushfire season has shown.

The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.

<https://www.yourhome.gov.au/water/rainwater>

Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.

Groundwater, where this is environmentally safe

The Australian government provides a lot of information on the ecological impacts and groundwater usage.

<https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown>

Conclusion

For all of the reasons I have outlined above, I strongly object to the construction of the Dunoon dam. The environmental, cultural & social consequences are far too high and I consider them to be totally unacceptable. The dam does not meet three out of five of the key Objectives for Regional Water Strategies, therefore it doesn't reach the aim for the Strategy to deliver on all the objectives in a balanced way.

There are other alternatives which can provide adequate water for the region, as outlined above. The System Wide Water Efficiency methods must be researched and implemented before the construction of another dam is considered.

