

From: [REDACTED]
Sent: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: SUBMISSION - FNC Water Strategy

Attention: NSW Department of Planning, Industry and Environment
CC: [REDACTED]
RE: SUBMISSION - FNC Water Strategy

Rather than complete the submission template I have written my own submission in response to the draft Far North Coast Regional Water Strategy, which is on public exhibition until [REDACTED]

Hello, I am a resident of The Channon, NSW. I moved here 25 years ago, from Canberra, because of a love for the natural surroundings.

I celebrate the DPI's commitment focus points in the 'Draft Regional Water Strategy, Far North Coast - Long list of options' (October 2020), on: maintaining and diversifying water supplies; protecting and enhancing natural systems; supporting water use and delivery efficiency and conservation; strengthening community preparedness for climate extremes.

I have read the report: Rous Regional Supply: Future Water Project 2060 - Integrated Water Cycle Management Development: Assessment of Augmentation Scenarios, By Hydrosphere Consulting (2020), and this report is solely referenced throughout my submission for brevity's sake.

My interest in the Far North Coast Water Strategy is based on opposition to Rous County Council's proposed - Dunoon Dam. My arguments against the dam, and its alternatives here are based on the document: 'Rous Regional Supply: Future Water Project 2060 - Integrated Water Cycle Management Development: Assessment of Augmentation Scenarios', By Hydrosphere Consulting (2020).

In summary, I do not support report's primary focus - The Dunoon Dam, and list my preferences for Water Strategies below:

1st preference - Demand Management.

For example;

- * Water loss management.
- * Smart metering.
- * Recycled water.
- * Rainwater tank rebates.

I conclude from the report that the best way to supply the increasing population is more fully exploring Demand Management of our existing sources. Although the report states "the level of water conservation in the community already achieved means that there is less opportunity for further reduction in consumption", I don't believe the figures were explored fully for this option, especially in residential and industrial rainwater collection. A further study on Demand Management especially on the potential for storage of urban rainwater as an augmentation option would be prudent, this report doesn't attempt any analysis of this subject.

2nd preference - Wastewater recycling.

Indirect potable reuse to surface waters & Dual reticulation (urban), as per the recommendations in the report. It is one of the options that passed the Coarse Assessment test in Table 3) - Wastewater Recycling & Indirect potable reuse. These two options passed the report's Coarse Assessment test, and were stated as Climate resilient water sources, but the quantity of water available has not been confirmed. I think this needs further research.

3rd preference - Desalination.

A desalination plant, in Byron Bay, where the water is used seasonally and is near the source of excess demand would be the most efficient way to provide future water needs of the growing coastal population - however not in the present form of the technology, but is an option in the future, when the technology has become more power efficient and less polluting to the environment. As per the report's Coarse Screening Assessment, which recommends: Desalination as a "Climate resilient water source but with significant power requirements and brine management constraints to be addressed.", but that "improvements in technology are likely to improve the attractiveness in future".

I disagree with the report's recommendations that there are only two potential source augmentation scenarios to provide water security to 2060:

Scenario 1 – Groundwater (with Marom Creek).

Scenario 2 – Dunoon Dam.

And I disagree with both Scenario 1: Groundwater, and Scenario 2: Dunoon Dam for the following reasons:

Scenario 1: Groundwater (with Marom Creek) I oppose this option as groundwater environments can have high biodiversity, and the ecological importance of caves and aquifers is well-known, as per this Australian Government factsheet <https://www.environment.gov.au/system/files/resources/1f3ca8af-a881-4c3a-b6bb-07d7e8aef0ca/files/what-are-the-ecological-impacts-of-groundwater-drawdown.pdf>. For example, in Table 3: Summary of a multi-criteria analysis (MCA) outcomes, in Scenario 1: Groundwater (with Marom Creek) the report states "Groundwater has the most favourable scenario based on the MCA"... "the most favourable scenario is groundwater and the groundwater scenario has a lower NPV", but still "include impacts on threatened ecological communities, flora and fauna, Aboriginal heritage and cultural sites, non-Aboriginal heritage sites, acid sulphate soils and sensitive receptors for noise and waterways".

Scenario 2: Dunoon Dam

In Table 3 Scenario 2A: Dunoon Dam (20 GL) and 2B: Dunoon Dam (50 GL) The report states: "There is a trade-off between the high initial cost and environmental/social impact of the dam and the long-term cost-effectiveness and certainty provided", and regarding the Dunoon Dam Option in the Coarse Screening Assessment: "Environmental and cultural heritage impacts will need to be assessed and potentially offset". - I find this trade-off unacceptable, the report itself states "Cultural heritage impact assessments undertaken for Dunoon Dam have identified significant Aboriginal cultural heritage values and sites. This remains a key risk to be addressed for this scenario". The national cultural and environmental significance of this site as above is too high to be "offset".

In summary, I disagree with the report's findings that recommend the source augmentation options of 1) Groundwater (with Marom Creek) and 2) Dunoon Dam, for securing our regional water supply.

I support further investigation of the following options, mentioned in the report, but not fully realised in the research:

- * Demand Management, and
- * Indirect potable reuse (treated wastewater from constituent council wastewater treatment plants transferred to RCC surface water supplies).

I see future potential in Desalination, but not in its current state of technology as "improvements in technology are likely to improve the attractiveness in future". And that drastic, culturally and environmentally damaging options like the two main scenarios currently being explored in this report could be one day eclipsed by a new and emerging technology such as environmentally improved desalination techniques, and in the mean-time we should make use of Water Management and Wastewater Recycling before embarking on the huge, costly and irreversible project that would be Dunoon Dam.

My personal connection to the Dunoon Dam proposal:

I have undertaken projects with Landcare at Coronation Park and have worked on rehabilitation of Rocky Creek 800 meters below the proposed dam wall site in a project that received a Fish Habitat Grant from the NSW Department of Primary Industries. "Hydrosphere Consulting (2020c) considered that the proposed dam will present a barrier to both upstream and downstream fish migration". Platypus and Koala populations have also been documented in the area. We have worked long and hard to care for Rocky Creek, the proposed works will entail a disruption initially and potentially forever. I know full-well the high environmental value of the land that will be inundated from personal experience.

Forest ecology: The environmental destruction of the remnant "Big Scrub", rare rainforest in the footprint of The Dunoon Dam is also another reason I am opposed to the dam.

Fauna Habitat: The Koala, Platypus and fish species that exist within the footprint of the Dunoon Dam, as well as adjoining, adjacent, upstream and downstream will be at risk habitat disappearance and degradation. These reasons are well documented and I don't feel the need to list the here.

Destruction of significant Indigenous Heritage sites. The documentation of these sites has been made, and like Rio Tinto's recent destruction of sites in the Northern Territory, the disregard of Rous Water of Significant Cultural Heritage, including burial sites, which would be completely submerged, is a massive failing of modern governance of indigenous heritage.

Thankyou for reading my submission.

I give permission for my submission to be made public and my contact details made available also.

Joanna Pitt

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