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

[redacted]

[redacted]

Far North Coast Water Strategy
Department of Primary Industries and Environment,
regionalwater.strategies@dpie.nsw.gov.au

To whom it may concern,

Re: The Far North Coast Water Strategy

I am writing to oppose the construction of the proposed Dunoon Dam. A 50 gigalitre dam extending 6km upstream of the dam wall, that destroys First Nations' heritage, and social and ecological assets within its footprint (and beyond) is an old world response (and not a solution) to a new world problem. The impacts of which cannot be off-set by tree planting and bicycle paths. There are alternative options including but not limited to: water efficiency, water harvesting, and water re-use that are economically viable and warrant continued investigation rather than dismissal, as Rous County Council prioritises and promotes the Dunoon Dam the top choice for water security into the future.

There are significant cultural heritage and ecological reasons for it to be scrapped, and there are smarter water options including rainfall-independent ones. We respectfully ask that the DPIE's strategy not rely on Rous's Future Water 2060 project, as it is a plan hinged on the contentious Dunoon Dam, and the Dunoon dam should no longer be an option in the strategy due to the reasons put forward in this communication.

Rocky Creek has seen child births and christenings. It has seen children tyre-riding down its waters for kms to be picked up by parents at the end of the day – enriched by nature, physically spent. It has seen the gatherings of loved ones in forested shade on 45°C Summer days. It has seen silent, dawn platypus-spotting as the mist and birdcall rises. And it has seen the ashes of loved ones loosed to its care - for we believed it would always be here for us.

We will fight to save our connection to place, we will fight to save Rocky Creek, because the provision of water and water security need not be reliant on yet another dam.

We acknowledge the complexity of providing water and water security to the region and respectfully request that alternatives to the Dunoon Dam continue to be investigated.

The reasons I DO NOT support the proposed Dunoon Dam include the following:

Lost opportunity to invest in system-wide water efficiency - the most rapid and economical way to ensure a balance of supply and demand. Sydney has demonstrated that a focus on system efficiency can allow for population growth (citing an additional 950,000 people) without a rise in water consumption. (Metropolitan Water Plan, 2006, NSW Government) [1]

There are several water efficiency options that would be preferable to The Dunoon Dam and support a system-wide approach to water efficiency. Analysis carried out by Rouse of these options and cost investment has, to date, been inadequate. (Professor Stewart White, 2020, UTS, Sydney).

Poor water management by local government would be perpetuated by the dam rather than analysis, intervention, and investment being directed into 21st century solutions for water security in the region.

Destruction of a 6-7 hectares of a listed, critically endangered ecological community of flora (Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)) – Lowland Rainforest of Subtropical Australia. Even rarer for this region as it includes warm temperate rainforest on sandstone.

Destruction The Channon Gorge and ~55 hectares of Big Scrub Rainforest remnant. Only 1% of The Big Scrub remains and this 55 hectares of Big Scrub is of huge ecological importance and value. It has avoided centuries of post-colonial destruction to now be threatened by Rous County Council for an unnecessary dam.

Disregard and destruction of First Nations' cultural heritage on Widjabal/Wi-abal country of The Bundjalung Nation**,** including significant burial sites and artifacts (Cultural Heritage Impact Assessment, 2011)*(2)*.

Destruction and fragmentation of existing habitat and wildlife corridors of high importance for the movement of fauna, as key habitat and for biodiversity of flora and fauna (including conservation species) (McNally et.al., 2000; Jensen and Robertson, 2001; Landmark Ecological Services, 2012).

The proposed dam is the antithesis of "the six guiding principles under the Part 3A assessment process (DEC and DPI 2005). These principles are, to: Maintain or improve biodiversity values; Conserve biological diversity and promote ecologically sustainable development; Protect areas of high conservation value; Prevent the extinction of threatened species; Protect the long-term viability of local populations of a species, population or ecological community; and Protect aspects of the environment that are matters of national environmental significance" (SMEC, 2011).

Offsets cannot mitigate the permanent ecological damage and changes in the ecosystem, lack of recovery, trans-boundary effects and cumulative effects this dam project will cause.

Rous is required to *avoid* this destruction because there are economically viable and more effective solutions that do not have the following:

- **Industrial/construction zone** for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- **Higher prices for consumers due to a 4x increase in the cost of water.** 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.
- **The small population increase** predicted for the four Rous-supplied councils of 12,720(5) 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".(5)
- **Catastrophic flooding downstream in worst floods,** particularly for the first 3 kilometres below. (Environmental Flows Assessment 2011)(6)
- **Potential for a big dam to drive unneeded population growth,** as the government attempts to gain value from an otherwise unnecessary, and stranded, asset.

Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value." NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020 < https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the-plan >, Direction 2: Enhance

biodiversity coastal and aquatic habitats and water catchments. (4)

I SUPPORT these alternatives:

To take action on a suite of smart water options and proven alternatives.

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. This is 21st century thinking.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has *not* costed this in creating their future water plan)

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.*(7) (8)*

Professor Stuart White from UTS has provided a detailed and costed proposal "The Rous Sustainable Water Program" which shows exactly how and why system-wide optimisation of water use is possible and economical. In comparison, the proposed dam is simply financially, environmentally and socially irresponsible.*(9)* (Stuart White, 2020 www.bit.ly/Prof-Stuart-White-Rous-slides)

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*(9)*

Example: The city of Windhoek in Namibia in Southern Africa has been using purified recycled water for 30 years using advanced technology. https://www.wingoc.com.na/our-history*(10)*

Water harvesting (urban runoff; rain tanks):

Water tanks on all new (and existing) developments.*(11) 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.*(12)* 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.*(13)* https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown

With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an oversized and unnecessary dam.

References and Notes

1. Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
2. Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011
3. SMEC Australia, Terrestrial Ecology Impact Assessment, 2011
4. NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020 < https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the-plan > , Direction 2: Enhance biodiversity coastal and aquatic habitats and water catchments.
5. 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".
6. Environmental Flows Assessment Proposed Dunoon Dam, 30 Aug 2012, Eco Logical Australia.
7. The Rous Regional Water Efficiency Program 1997, *Final report of the Rous Regional Demand Management Strategy : preferred options*, Rous County Council, Lismore.
8. Watson R., Turner A and Fane S 2018, *Water Efficiency and Demand Management Opportunities for Hunter Water*, Institute for Sustainable Futures, Sydney.
9. Stuart White, 2020 www.bit.ly/Prof-Stuart-White-Rous-slides)
10. Kahn,Stuart and Branch, Amos 2019, *Potable water reuse: What can Australia learn from global experience?,* Water Research Australia Limited, Adelaide.
11. Windhoek Goreangab Operating Company (Pty) Ltd 2020,*Our history | Wingoc,* Veolia Environment, Windhoek, viewed 3 August 2020, <https://www.wingoc.com.na/>
12. $220 million dollars - the estimated cost of the new dam - could provide more than 73,000 rainwater tanks (22,700L) at $3,000 each including installation. That is 1.66GL storage with no evaporation and much increased community resilience for future climate risks. This more than covers the 0.9GL extra water needed by the 12,720 new people predicted to come to our area based on 194L/person/day average water use (Rous).
13. Australian Government Department of Industry 2013, Science, Energy and Resources, *Rainwater | Your home*, Canberra, viewed 3 August 2020, <https://www.yourhome.gov.au/water/rainwater>
14. Department of Agriculture, Water and the Environment 2018, *What are the ecological impacts of groundwater drawdown? | Department of Agriculture, Water and the Environment,* Canberra, viewed 6 August 2020, <https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown>