From: [redacted]
Sent: [redacted]
To: DPIE W Regional Water Strategies Mailbox
Cc: office@pavey.minister.nsw.gov.au
Subject: SUBMISSION - Far North Coast Water Strategy

To: Dept Planning, Industry & Environment (DPIE)
Dear Sirs/Mesdames
Re: Future Water Project 2060 – Dunoon Dam proposal

I have resided in the Far North Coast region for around thirty years. I currently live in Nimbin, but I have also lived in and around Mullumbimby, Dorroughby, Rosebank and Terania Creek. I am familiar with the area which will be inundated by the proposed Dunoon Dam and the wildlife that lives there.
I am a wildlife rescuer and carer and I am very concerned about species extinctions and the loss of our precious wildlife which I am experiencing on a first hand basis. The Northern Rivers remains a high biodiversity hot-spot, but this position is increasingly precarious and we must commit to ensuring it remains so or our own wildlife will be lost forever.
As you are aware, the Nimbin community faced increasing water restrictions during the latter half of 2019, culminating in level 4 water restrictions by January 2020. During this period large numbers of residents became dependent upon water carried in from the Rous Water system and the precariousness of our community's water security became evident.
Numerous issues became clear such as an over-reliance upon pumping directly from creeks and springs to service domestic needs.
Many residents did not have their homes plumbed into tanks, or indeed any significant storage tanks on site, instead relying on regular pumping to small header tanks from creeks and springs. This made water deliveries impossible for many. Additionally, the nature of many of our local roads meant that access by water trucks was impossible for many residents anyway.
It is clear from this experience that we really had not planned ahead for water shortages and there are many steps that we as a community can take to improve our own water security as is the case across the region.

In late 2020 I note that people have continued to pump the creeks dry, and it seems the lessons are not yet learned by the community. I know of at least 2 examples of people irrigating paddocks right in the middle of the heat of the day in order to provide pasture for 5 or 6 head of cattle.
I therefore DO NOT support the proposed Channon-Dunoon Dam for the following reasons:
1. New dams should be an absolute last resort. The negative impacts on the local environment and residents in the wider catchment area cannot be justified unless all the 'low-hanging fruit' such as education and demand reduction (and even the medium-hanging fruit) has been picked. It is clear to me that this is not the case.
2. The destruction of important Bundjalung country and cultural heritage, including burial sites will be involved. *(Cultural Heritage Impact Assessment, 2011*). I don't know what to say other than I cannot believe we could even be contemplating doing this in light of the highly publicised RioTinto fiasco (e.g. https://www.sbs.com.au/nitv/nitv-news/article/2020/06/15/rio-tinto-not-sorry-cave-blast-investigation-opens-newly-destroyed-sacred-site, https://www.mining-technology.com/features/anthropologists-rio-tinto-aboriginal-site/) and the rise of the *Black Lives Matter* movement.
3. Investment into the changing of community attitudes to water security in the Northern Rivers is needed. I was born and raised in South Australia where frugality with water was a way of life. As climate change continues to impact our regional water security, so must the mindset of our population alter in order to adapt to the new reality.
4. The priorities must be demand reduction, waste reduction and technology shifts. So much water is wasted. We need to clean up our collective acts before we look to destroy more of our environment and Indigenous peoples' cultural heritage. Water conservation should be incentivised. Simply providing additional water to meet a business as usual approach will not create such incentives. Although the large additional cost upon consumers should the dam proceed would create a level of financial incentive to be frugal, this model would also create access inequities and create hardship for people who are already struggling to make ends meet.
By focussing purely on system efficiency, Sydney added an additional 950,000 people without a rise in consumption. (Metropolitan Water Plan 2006, NSW Governmenthttps://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0)
5. There are significant opportunities to increase on-site water harvesting and storage. In a similar way as people have increased their capacity to generate electricity via rooftop PV solar arrays, we need to exploit a distributed water model rather than an old-school centralised model. Increased smart water systems e.g. where leaks are more readily detected and individuals can more easily monitor their own water usage.
6. There are also opportunities to invest in water re-use and recycling. Whilst it is clear that attitudes towards potable recycled water require substantial change before there would be widespread acceptance of this, there is scope to use recycled water for a large range of domestic and commercial uses, notwithstanding that people may not be prepared to drink it just yet.
7. The small population increase predicted for the four Rous-supplied councils, of 12,720 between 2020-2060, does not justify such a devastatingly destructive approach to our water security. The corresponding increased water needs can be met by other means, which are also less costly to implement than the construction of a new dam. (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").
8. Rocky Creek dam has not yet reached its full potential.
Previous assessments of regional water supply availability have failed to consider how the condition of the catchment can affect water yields. If the average rainfall across the 2,800 ha catchment of the Rocky Creek Dam is 2,400 mm then this represents a total water volume of some 67,200 ML per annum. If the guesstimate of Cornish (1997) is correct, with the catchment in its current condition, some 1,100 mm, or 30,800 ML, of the rainfall may currently pass into the dam in an average year. This assumes the combination of evaporation and transpiration by plants currently utilise an average of 36,400 ML per annum.
Cornish (1997) suggests that for the Rocky Creek Dam catchment the maximum yield decline resultant from the conversion of old growth forest to regrowth is 300 mm or 8,400 ML per annum, though this could be as high as 600 mm (Vertessy 1999) or 16,800 ML per annum. Cornish (1997) suggests the current yield depression due to logging is 200 mm or 5,600 ML per annum. From this it can be assumed that if logging is stopped in the catchment the likely increase in water yields will eventually total somewhere between 5,600 ML and 16,800 ML per annum. (Pugh, D: *'Rocky Creek Dam Catchment Management - An Issue of Regional, National And International Significance',* March 2000).
Mr Pugh's extensive research into the Rocky Creek Dam indicates that regeneration and rainforest recovery in the entire catchment is the key to the existing dam reaching its maximum yield and that this process has around eighty more years to evolve since the cessation of logging.
9. Overall, our community as a whole must find ways to live within our means including within the local environmental capacity. We cannot continue to plan for infinite growth on a finite planet. We cannot continue to try and engineer the planet to meet our short term needs at the cost of biodiversity and the long term survival of all life on earth including ourselves. The Northern Rivers is in a good position to model sustainable forward planning and provide leadership in the water security field, which does not involve the further destruction of our local environment and cultural heritage.
I am aware that the plan is to 'offset' the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is problematic because the type of vegetation offered as recompense will not be equivalent to the biodiversity that will be lost due to the specialist nature of this rare area of sandstone rainforest.
The Dunnon Dam proposal does not meet Councils' obligations 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*).
It follows that Rous Water is required to ***avoid*** this destruction because there are economically viable and more effective solutions.
Yours sincerely

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