From:	
Sent:	
То:	
Cc:	
Subject:	SUBMISSION - FNC WATER STRATEGY

Importance: High

SUBMISSION - FNC Water Strategy

Thank you for reading this submission. My name is and I have been a resident of the Far North Coast NSW for 43 years (having moved from Sydney). I live on a rural property, and have a much deeper appreciation of access to water than living in a situation where you just turn on a tap! I appreciate the work DPIE has, and is continuing to do, to develop the Far North Coast Water Strategy and the importance of a reliable water supply for all residents and business owners.

Rous Water's 'Future Water 2060' project:

I believe the current 'Future Water 2060' project promoted by Rous Water is flawed. Of grave concern to me is the contentious Dunoon Dam, which should **not** be an option or part of any water strategy for the North Coast. I am sure that DPIE and the State Government are aware of the strong community objection to the proposed dam, and the flawed consultation process in which Rous has 'participated'. For example, of the nearly 1,300 submissions received, 92% are objecting to the proposed dam. Over 300 of the submissions are identified as personally written and individual, and not pro-forma submissions. Social rejection demonstrates the dam option fails the "triple bottom line" of test (economic/ environmental/social). **Rous Water and DPIE need to urgently review the notion that a dam is an option.**

Other options:

A broad range of other options is available using modern technologies, as reflected in the submissions referred to above and most importantly, evidenced through various studies and reports. I am sure that DPIE are aware of the following:

- · Water Services Association of Australia describe new dams as high risk investments because they depend on rain. With climate change, weather patterns have changed and are continuing to change, leaving us vulnerable in a warming climate. Water Services Assoc recommend a mix of complementary water strategies (WSAA, All Options on the Table, 2020)
- Professor Stuart Khan (UNSW) states 30-50% of water supply needs to come from sources not dependent on rain, eg., Purified Recycled Water and desalination (powered by renewable energy). This would result in a resilient water system, using modern technologies, not an outdated old-fashioned dam! (ABC Nth Coast Radio 22/10/20)
- The NSW Productivity Greenpaper 2020 recommends a range of water efficiencies, including purified recycled water (NSW Treasury, Productivity Commission Green Paper: continuing the productivity conversation, 2020. Accessed athttp://productivity.nsw.gov.au/green-paper/water-energy)

Rous Future Water 2060 fails to mention system resilience as important, and seriously examined only groundwater and Dunoon Dam (Rous County Council, Future Water Project 2060, 20260) a contemporary water management organisation, Rous County Council has failed to show leadership and understanding of contemporary technologies and the range of other options. I believe that all options need to be given serious and urgent attention, including:

- · Water efficiency
- · Roof and stormwater harvesting, which would include tanks on all homes (not just new constructions)
- · Water sources not dependent on rain, such as purified recycled water and desalination

Rous Water's lack of leadership is astounding! Rous Water's lack of understanding, knowledge and incorporation of the range of options referred to in 'All Options on the Table' (WSAA) and also on the Cooperative Research Centre Water Sensitive Cities website — is astounding! Rous Water's insistence on continuing to have a very narrow focus on Dunoon Dam — a focus which is outdated and stunted - is astounding! *This is a deficit that DPIE needs to rectify in the Regional Strategy.*

In addition, Rous Water has overlooked the issue of system-wide water efficiency, which has been promoted through various studies, such as:

- · All Options on the Table (p3)
- · 2020 NSW Productivity Commission Green Paper (NSW Treasury)
- · Professor Stuart White specifically focusing on efficiency measures neglected by Rous Water (https://watemorthemrivers.org/wp-content/uploads/2020/11/Prof-Stuart-White-Brief-Review-Rous-Water-augmentation-20200904-1.pdf)

Destructive impacts of the Dunoon Dam:

The destructive impacts of the proposed Dunoon Dam have been noted in various reports and include:

· Destruction of Aboriginal Heritage through flooding of Indigenous burial sites.

The 2011 Cultural Heritage Impact Assessment states "Aboriginal stakeholders are of the opinion that the sites should remain undisturbed and that no level of disturbance is considered acceptable to them". Please note: In 2013, Rous Water commissioned another Cultural Heritage Impact Assessment (CHIA 2013) to supersede the 2011 CHIA). It seems that very few Wijabul Wia-bal stakeholders have seen the 2011 or the 2013 CHIAs, or have been aware of their existence. Rous are now asking the Wijabal Wia-bal to repeat the CHIA process yet again, apparently until they get the result they want!

Destruction of Big Scrub Rainforest and its threatened species.

There are 62 ha of Lowland Rainforest Endangered Ecological Community (EEC) on the site. Only 1% of the Big Scrub Rainforest remains. This rainforest is of global significance. The Channon Gorge contains warm-temperate rainforest on sandstone, a rare occurrence. The dam wall construction would destroy 92% of it.

$\cdot \ Destruction \ of \ threatened \ flor a \ species.$

Nine threatened flora species would be severely impacted by Dunoon Dam (2013 Terrestrial EcologyImpact Assessment Report). The destruction of these plants and an increase in the threats against them is a very serious matter with international scientific consequences.

Destruction of fauna, including extinction of local koalas.

17 fauna species have been identified that are listed as threatened under the TSC Act NSW (the koala, one fruit bat, six microbats, eight birds and one frog). Extinction pressure on koalas were under extinction pressure even before 70% of koalas in North Coast firegrounds were killed in the 2019 Summer fires https://www.wwf.org.au/news/news/2020/new-wwf-report-koalas-suffer-decline-across-fire-grounds. The 2011 Terrestrial Ecology Impact Assessment (TEIA), identified 72 ha of Tallowwood and Flooded Gum koala habitations:// waternorthernrivers.org/wp-content/uploads/2020/11/ Dunoon_Dam_Terrestrial_Ecology_Impact_Assessment.pdf3). The ABC 7.30 Report has just visited and filmed the threat to koalas from the proposed Dunoon Dam.

Destruction of platypus.

Assessments have shown that construction of the proposed dam wall will hasten the decline of platypus species, due to sediment load smothering (The 2012 Aquatic Ecology Assessment p.61). https://waternorthermrivers.org/wp-content/uploads/2020/11/Aquatic_Ecology _Assessment_Final_Report-1.pdf, and threats to the breeding platypus in the area. The platypus is already facing extinction because of habitat destruction, dams and weirs (Bino et al, A stitch in time Synergistic impacts to platypus metapopulation extinction risk , Biological Conservation, Feb 2020

· Destruction of native fish

A Dunoon dam would extinguish nearly all of the endangered Eastern Freshwater Cod's Rocky Creek habitat due to cold water pollution downstream (NSW Fisheries, Eastern (Freshwater Cod (Maccullochella ikei) Recovery Plan , 2004). The existing NSW DPI Eastern Freshwater Cod Recovery Plan aims to restore this species to the Rocky Creek and Richmond River systems. It depends on quality habitat and natural flows (https://www.dpi.nsw.gov.au/fishing/fish-species/endangered-species/eastern-freshwater-cod). Another 16 native fish species are also threatened by a significant and permanent loss of this 17.5 kms of habitat, including Oxleyan Pygmy Perch and Purple Spotted Gudgeon (2011 Rous Aquatic Survey).

Conclusion:

DPIE have the opportunity to show leadership, innovation and strategic thinking by developing a FNC Water Strategy that involves a range of options, NOT including a dam! Please consider carefully the decisions made at this point, because at present, they don't seem to be fit for 21st Century thinking or action or moving ahead in a sustainable way.

Rous Water and DPIE need to urgently review the notion that a dam is an option.



I acknowledge the Traditional Owners and Custodians of the lands on which I live and work and pay my respect to Elders past, present and future