To: Warragamba.DamEIS@dpie.nsw.gov.au

Submission – Warragamba Dam Raising Project – SSI-8441 - Zoë Sofoulis – Lawson 2783



FOR PUBLICATION:
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I am writing this submission both as a Blue Mountains resident and as someone who has studied urban water management (especially the social and cultural dimensions) for almost two decades.

I strongly OBJECT TO the proposal to raise the wall of Warragamba Dam for the following reasons:

### 1. Solution is anachronistic

Raising the dam wall is a 19<sup>th</sup> Century "Big Water" solution (Sofoulis, 2005) to a 21<sup>st</sup> Century problem (or more accurately, constellation of problems). Its proposal for heroic engineering works to further alter natural water flows for economic reasons (namely, to protect homes, businesses, developers and insurers of properties on floodplains) runs counter to the reparative spirit emerging in this age of ecosystems collapse and climate catastrophe. Increasingly, big dams built last century are being dismantled in order to help restore downstream riverine and estuarine life and biodiversity. I am not suggesting that here, but the caution is that getting even bigger is not necessarily the best solution

There have been numerous public criticisms, including from the Coolong Foundation, of how this proposal threatens ecosystems and endangered species in the areas to be flooded permanently or occasionally. We ought to be well past the time when economic considerations trump all others (Sofoulis 2013). Instead of destroying more natural heritage we need to repair and restore it.

# 2. Alternatives not duly considered

The proposal is clearly for a single bullet solution for a complex of problems, the most obvious being how to use Warragamba Dam for both water storage and flood mitigation in

a time of increasingly unpredictable and extreme weather events. A 21<sup>st</sup> century approach to complex problems ought to offer a basket of solutions to explore and implement (Fam & Sofoulis 2017).

Water NSW notes "While a range of other infrastructure and non-infrastructure outcomes are included in the strategy and must be part of the solution for managing ongoing risk, no other mitigation measures can achieve the same risk reduction as the Warragamba Dam Raising Proposal." (https://www.waternsw.com.au/projects/greater-sydney/warragamba-dam-raising)

The public is asked to comment on the raising of the dam wall: the single Big Water solution is already presupposed in the question. The alternatives to this strategy, such as property resumption on floodplains (as Prof. Jamie Pittock has suggested), more flood mitigation structures and practices in other waterways, building of escape roads from flood-prone areas, different ways of managing Warragamba for water storage vs flood mitigation, etc etc., have not been similarly scoped, researched or presented in sufficient detail to the public to allow anything like a debate and weighing up of alternatives. It's as though the options were: raise the dam or flood the Hawkesbury/Nepean.

Water NSW takes a typical Big Water approach and emphasises the single biggest solution — which, not coincidentally, is something it could potentially implement as a department, given the budget—and pays insufficient attention to the technical, social and economic feasibility of actually implementing "a **range** of other infrastructure and non-infrastructure outcomes." This narrow focus is perhaps unsurprising, as most of these other solutions are beyond Water NSW's jurisdiction and would require interdepartmental coordination to effect.

Without being able to assess the cumulative effects of implementing a broad range of solutions to flooding and floodplain management through seasonal and extreme weather events, Water NSW's statement that "no other mitigation measures can achieve the same risk reduction as the Warragamba Dam Raising Proposal" has to be taken as an assertion of belief, not fact, at this stage.

# 3. Planning Approach is Technocratic not democratic

Although the public has had some chance to participate through submissions and attending community consultation meetings, this not genuine participatory planning but rather demonstrates a conventional technocratic "DAD" approach: Decide, Announce, Defend. Letting the public comment on an announced proposal does not disguise the fact that the whole issue of raising the dam has been presented as a *fait accompli*, with the problem having already been defined and the strategy proposed by technocrats and dam experts who already have a big water, big tech solution in mind.

I have read public comments from ecosystems scientists, traditional indigenous owners, and natural and cultural heritage experts and environmental advocates, variously criticising the tokenistic, partial and incomplete study of sites of cultural significance in the affected area, insufficient consultation with traditional owners, the inadequate scientific studies of endangered and vulnerable species and ecosystems affected by the habitat disruption and

destruction the raised dam wall would bring. These critiques all indicate a flawed and inadequate planning process is behind the proposal to raise the wall.

#### Conclusion

- The proposal to raise the Warragamba Dam wall needs to be shelved for the time being while more thorough evidence of effects of raising the wall is gathered.
- There are things we in NSW could learn from post-technocratic participatory planning approaches to flooding and waterways, such as those adopted in some UK localities, examples of which are discussed by Liz Sharp (2017).
- Instead of asking the public to comment on whether the wall should be raised we
  need a more robust participatory planning process that starts with a more open
  question about how to respond to, mitigate and prepare for future flooding in the
  Hawkesbury/Nepean, a process that gives more scope and respect to knowledges
  and interests beyond those of dam-builders, and owners of properties in floodplains.
- A range of departments and levels of government as well as citizen groups, including social scientists, must be invited and enabled to become involved in planning for floodways management – not just Water NSW and STEM experts (Fam & Sofoulis, 2017).
- More credence must given to social, cultural and environmental values in order to better articulate the goals of flood mitigation and response, and to ensure planning decisions are for the common good, not just vested economic interests.

Written by: Zoë Sofoulis, November 2021

#### References

Fam, D., & Sofoulis, Z. (2017). A 'knowledge ecologies' analysis of co-designing water and sanitation services in Alaska. *Science And Engineering Ethics*, *23*(4), 1059-1083. <a href="https://doi.org/10.1007/s11948-016-9830-x">https://doi.org/10.1007/s11948-016-9830-x</a>

Sharp, Liz. 2017. Reconnecting People and Water: Public Engagement and Sustainable Urban Water Management, Routledge.

Sofoulis, Zoë. 2005. Big Water, Everyday Water: A Sociotechnical Perspective, *Continuum: Journal of Media and Culture*, 19.4: 445-463.

Sofoulis, Zoë. 2013. 'Below the Double Bottom Line: The challenge of socially sustainable urban water strategies' Australian Journal of Water Resources 17.2: 211-221. (Now Australasian Journal of Water Resources.)