

Submission re Warragamba Dam Raising

This project should not proceed for so many reasons, among them:

1. Warragamba contribution to flooding

According to Infrastructure NSW's Hawkesbury Nepean Valley Flood Risk Management Strategy the Nepean, Grose, Colo, Macdonald rivers plus South Creek, Eastern Creek and many creeks down to Wisemans Ferry can contribute between 27% and 58% of floodwaters (1961, 1975, 1986 and 1990 floods), averaging 42%. So, how many billions will it take to fix just 58% of the flood problem, while doing nothing for the other 42%? The cost/benefit ratio does not stack up.

Should the wall be raised under the present proposal, there will always be substantial flooding from these other sources.

2. Lowering Warragamba FSL

According to Sydney Water, Warragamba is NOT for flood mitigation; if this is to change, and given the Water Minister has called for suggestions to deal with Sydney's ongoing water supply then serious consideration must be given to lowering Warragamba's FSL in conjunction with other water supply options, such as recycling and desal plant operation/extension. Research by University of Technology Sydney (Turner et al, 2016) has shown this to be a more cost effective approach.

The EIS, in focusing on only one solution, examined FSL lowering in isolation.

Further, if flood mitigation is proposed then pre-release of Warragamba, in conjunction with detailed weather monitoring, has not been examined.

3. Floodplain damage

Project purports to reduce the number of evacuees from 55k to 14k and homes flooded from 7600 to 2500 plus damage from \$3b to \$1.5b for 2011 Brisbane flood equivalent. If 2500 homes are responsible for \$1.5b damage then 7600 homes would be responsible for \$3b, not \$1.5b as quoted, detrimentally affecting the cost/benefit ratio.

If development on the floodplain continues, any reductions in this area will be negated. If a further 134,000 people are allowed (Infrastructure NSW, 2017), this represents a possible further \$3b damage, using the above costing, totalling \$6b damage.

The 2011 Brisbane floods quoted so often in the EIS publicity had, as a major contributing factor, local and state governments sanctioning of development in high-risk flood prone areas.

4. Decrease floodplain development

There are 5000 houses presently below the 1 in 100 year flood level and a further 7000 below the 1 in 500 year flood level (Infrastructure NSW, 2017). Many of these can be flooded by the rivers not regulated by Warragamba. They should never have been built there.

In order to minimise the risk to existing landholders, the floodplain should be gradually cleared by acquiring affected houses in a staged process - 6200 houses for \$3.3b in Hawkesbury Nepean Valley Flood Risk Management Strategy, along with preventing further development below the 1 in 100

chance per year flood level. 1 in 500 is a more realistic threshold, bringing NSW in line with most of the western world. This is already looking to be cheaper than the ultimate cost of raising the dam wall.

Additionally, improve evacuation routes from the floodplain. Benefit of improved traffic flow was not considered.

As the Brisbane floods of 2011 have shown, placing housing in the floodplain is a lose/lose situation; leave the floodplain to its best use - agriculture, which benefits from occasional flooding - win/win. Look at the Nile river in Egypt where it's been done like this for many millenia.

5. Environmental Offset

The EIS environmental offset only covers half the impacted area (why only half?), based on a 1 in 20 year flood whereas the previous EIS used a 1 in 100 year flood. So the EIS calculates environmental offsets on the basis of a 7.5m rise in level, not the 14m proposed. Had the environmental offsets been based on the flooding of 4700ha and 65 km of wilderness watercourses (Colong Foundation for Wilderness, 2018) the environmental offset cost will be prohibitive.

Based on NSW Government's biodiversity laws, the true total cost of biodiversity offsets for the project will be over \$2b, further weakening the cost/benefit ratio.

6. Insurance Council of Australia don't support proposal

The Insurance Council of Australia is unable to support the proposal as it stands. The EIS fails to take this into account. It also fails to account for the massive increase in cost to insure the project without their imprimatur.

7. World Heritage area destruction

The EIS claims that only 0.03% of the World Heritage area will be affected and can be 'offset'. If UNESCO don't agree with that assessment and revoke World Heritage status, the damage would be incalculable. Is it guaranteed that UNESCO will not take that stand?

The 0.03% is a figure plucked from the air, based on a quoted upstream impacted area of 1400ha, not the 4700ha found by the Colong Foundation. Using that figure gives an impacted area representing 0.47% of the World Heritage area.

Recently, Planning Minister Rob Stokes downgraded the state planning significance of the project, acknowledging its deleterious effect on World Heritage status.

At the same time John Barilaro (then deputy Premier) suggested other options should be considered.

In October 2021 a cross-party Parliamentary Committee *(Legislative Council Select Committee on the Proposal to Raise Warragamba Dam Wall Interim Report) found the wall raising should not proceed "if the proposal cannot maintain or improve the current and future integrity of the Greater Blue Mountains world heritage area".

8. Environment Minister dismisses Project

In November 2019, Matt Kean (then Environment Minister) proclaimed that the economics of raising the dam wall would make it unviable. What has happened in the meantime to suddenly make it viable?

9. Selective editing

The same Parliamentary Committee inquiry into the wall raising heard in November 2021 that Rachel Musgrave, a former primary assessor for biodiversity surveys and analysis for the EIS, had resigned her position after WaterNSW consultants asked her to interpret impacts of the wall raising as "indirect" and not "direct". This would have led to a lower cost and was unacceptable to Ms Mulgrave. Also, WaterNSW wanted her assessment of the threat to dozens of flora and fauna species from upstream flooding to be changed from 'would likely' to 'may'. Hardly independent advice!

10. Indigenous impact on Gundungurra people

Indigenous impact - modelling was based on only 27% of impacted area. What could be lost in the other 73% when the full 14m rise is accounted for? Understandably then, the Gundungurra people have not given any consent to the project. Would the Minister give the go-ahead to a project where only 27% of the engineering work was done, or 27% of the finance arranged? Laughable to even consider such concepts, yet apparently acceptable when it comes to the impact on the Gundungurra.

11 Environmental impact

The draft EIS concludes that the project poses potential significant impacts to contemporary breeding habitat for the Regent Honeyeater that “cannot be avoided or minimised.”

The Regent Honeyeater is listed as Critically Endangered at both a state and federal level, with as few as 350 individuals remaining in the wild.

The destruction and degradation of breeding habitat for Regent Honeyeaters is incongruous with the time and money that the Federal and NSW Governments have invested into the recovery program, including the Regent Honeyeater Captive Breeding and Release program.

There is no evidence that breeding habitat for Regent Honeyeaters can be successfully offset and any offsets would be unlikely to provide direct benefits for both the local affected population and the species.

The impact of flooding some of the last remaining wild rivers in the state, and in a World Heritage Area at that, can not be overstated. Aside from destroying spectacular wilderness valleys, the areas flooded will then be denuded, allowing infestation by weeds.

* The Legislative Council Select Committee on the Proposal to Raise Warragamba Dam Wall Interim Report, October 2021 has been quite scathing of so many aspects of the project

Additionally I must say the timeframe for submissions of 8 weeks (originally 6!) beggars belief; Sydney Water's bureaucrats have had four years to familiarise themselves with its contents but affected parties have only 8 weeks to critique the thousands of pages of the EIS.