

To whom it may concern,

I wish to make a submission concerning Water NSW's proposal to raise the wall of the Warragamba Dam.

I do not support the proposal to raise the wall of the Warragamba Dam as put forward in the newly-released documents, the *Preferred Infrastructure Report* (PIR) and *Submissions Report*. As a member of the Australian public, I have a significant interest in the Greater Blue Mountains Area. Although I live in Brisbane, Queensland, I belong to a family with a long, multi-generational tradition of visiting the Blue Mountains. Throughout my life I have enjoyed the region's many wondrous and beautiful attractions, including around the core (e.g. Katoomba) and on its peripheries (e.g. Kanangra-Boyd National Park). Shaped by years of personal experience from sightseeing, hiking and photographing in this region, I regard myself as emotionally and intellectually invested in the environmental and social welfare of the Greater Blue Mountains. Also, as a scholar of Australian and environmental history, I accept the universal values ascribed to the region by UNESCO's World Heritage Commission, and support the integrity of the national parks' boundaries and their protections. Given my interest, I appreciate the opportunity to provide feedback on a matter of such importance to the area.

Foremost, I do not believe that the proposal by Water NSW to raise the Warragamba Dam wall adequately addresses concerns regarding the *Environmental Impact Statement* (EIS, Sept. 2021). Numerous parties - governmental, expert, and community - have raised multiple issues and questions about the EIS, yet the updated documentation appears to provide little substantive change to management plans. Of particular concern to me, the PIR clearly states that the proposal will lead to upstream damage to biodiversity and Aboriginal heritage sites within a protected area. I believe the plans to mitigate this damage are inadequate. Several matters have especially informed this opinion. I wish to draw attention to what I believe are a number of problematic aspects contained in the PIR and *Submissions Report* documents. These are: justifications of the proposal; offset programs as a means of conservation management; and the carbon footprint of the project.

Justifications

I have several concerns about the assumptions with which Water NSW justifies the raising of the Warragamba Dam wall. The first regards the standard of environmental and cultural protections. The documents repeatedly note that the current dam existed before the surrounding area was granted national park and world heritage protections. This fact is indisputable. However, Water NSW believes that this fact subsequently justifies the undermining of those protections. I oppose this argument that dismisses the area as already tarnished by development, and is therefore available for further diminution of its many environmental and cultural values. That the dam existed prior to environmental protections should afford the area *greater* protection, not less, in order to conserve the status of what still remains. The reports do not consider the possibility that perhaps the Dam should never have been built in an area with such significant heritage values in the first place.

Water NSW makes other similar arguments throughout the documents, which I also oppose. These are the ideas that the proposal is justified because, 1) only a small amount of protected land will be impacted, and 2) that it will only *diminish* environmental and cultural values, rather than destroy them. This assumes that diminishment is an acceptable conservation outcome. I regard these positions as contrary to conservation goals, and I cannot support any project founded upon them.

Secondly, I am concerned about the degree of uncertainty upon which the project is based. The raising of the Dam wall is justified by assumptions about future damage to the area's environmental and cultural heritage. As the documentation states, Water NSW expects some amount of 'diminution' and 'impact' to important upstream protected sites. Despite referring to modelling and on-the-ground surveys to assess the likelihood of damage, the documents are permeated with the language of hopes and assumptions. Just some examples follow, with emphasis added in all instances:

"Additional investigations... *suggest* that the assessed significance of potential impacts on vegetation *may* have been conservative and that vegetation *may* have a greater resilience to temporary inundation than previously concluded." PIR, p.77;

"Some assumed impacts, such as total loss of environmental values... *may* not actually be realised," PIR p.109;

"there is a *possibility* that temporary inundation *may* not have a significant impact," PIR, p.96, repeated on *Submissions Report*, p.379;

"the findings of the assessment presented in the EIS *may* have been conservative... It would not *necessarily* follow that temporary inundation would result in the permanent loss of vegetation," *Submissions Report*, p.398.

It *may* be that damage to important environmental and cultural sites caused by the Project is not substantial, as Water NSW claims. Or, equally, damage *may* yet prove substantial. The proposal has not fully ruled out worst-case scenarios of significant damage or total loss of species, habitat, or cultural sites. The PIR and *Submissions Report* underplay this possibility of irreparable damage. Given the unique and irreplaceable heritage values of the impacted area, I cannot support a project based upon such levels of uncertainty.

My final comment pertaining to justifications for the Project relates to alternatives to raising the Warragamba Dam wall. Both the EIS and new documents provide a comprehensive analysis of numerous options that have been considered for reducing flood impacts and risks in the Hawkesbury-Nepean valley. The Project is regarded as justified since it is the most efficient and effective option compared to these many alternatives as listed in Chapter 4 of the EIS. Notably absent from this list, however, is the option of removing the Dam wall altogether, and letting the Warragamba River return to its original course before the building of the Dam. (Since the issue at hand is solely that of flood mitigation, the question of retaining the Dam for drinking water, or the heritage status of the Dam itself is thus irrelevant to this particular argument). Have any viability studies been made into whether removing the Dam wall could mitigate the severity and risks of flooding events? Have river rewilding projects elsewhere been examined for their successes or failures? Has expert opinion been garnered on this possibility? Given the lack of information provided on this option, it is not certain that raising the Dam wall is indeed a superior means of flood mitigation.

Biodiversity and cultural heritage offsetting

The reports further argue that any actual damage caused by the Project, regardless of likelihood, will nevertheless be offset. I note that the biodiversity offset plan assumes a total loss of biodiversity in the impacted area. However, I also oppose the raising of the Warragamba Dam wall because of

doubts about the fundamental utility of offset programs. As the documentation clearly states, offset programs are a legitimate mechanism of conservation, and are accepted by the NSW Government. Yet, this does not allay my concerns about biodiversity and culture loss that will result from the Project - a concern that is shared by other community members and other bodies, as is evident from the *Submissions Report*. The updated PIR addresses concerns with the EIS on this matter simply by referring back to the EIS. Despite discussion on why offsetting is desirable, and details on how offsets in this instance justify any upstream damage, the reports fail to address the lingering issue of the adequacy of this system in realising conservation goals. Citing their legal legitimacy cannot alleviate the troubling dollar value that any offset program gives to heritage. In being reduced to currency and credits, an invaluable and irreplaceable species, artefact or site becomes equivalent to the purchase of new land or making a monetary donation to a relevant organisation. Any purchase made under an offset scheme cannot contain the same unique species, landforms, or cultural sites - and protecting a similar thing cannot be a substitute for protecting the original. Hence, I oppose the use of offsets as a conservation strategy, and, as such, cannot support this Project's proposal.

Carbon footprint

Finally, I have additional concerns about the carbon footprint of the Project. Water NSW claims that operational carbon emissions will be low, and that *possible* future technological advances *may* further reduce emissions (*Submissions Report*, p.87). Again, this claim seems to overly rely on vague hopes instead of robust plans and data. Regarding construction, the documentation states that a five per cent reduction of emissions from a baseline is a desirable goal, but provides little detail about, or modelling of anticipated greenhouse gas emissions. Preliminary strategies of emission reduction listed include utilising lower carbon transportation, minimising concrete use, and the purchase of Green Power (EIS, Chapter 23). There appears to be no further detail provided in the newer PIR. The absence of carbon emission offsets as a strategy is notable, given the preference Water NSW has given to other forms of offsets for this project. Since the construction industry has a sizeable carbon footprint, due to the use of concrete and fossil fuels, any infrastructure project will undoubtedly release a significant amount of new greenhouse gases. This in turn contributes to the worsening of the effects of climate change. Thus, I believe that greater transparency about expected emissions is desirable in all stages of project design and planning in order to make fully informed decisions about overall environmental impact.

Yours sincerely,