

Submission  
No 287

**INQUIRY INTO PROPOSAL TO RAISE THE  
WARRAGAMBA DAM WALL**

**Name:** Mr Don Le Quesne

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Don Le Quesne

9 September 2019

Select Committee on the Proposal to Raise the Warragamba Dam Wall  
Parliament House  
Macquarie St  
Sydney NSW 2000

### **Legislative Council Inquiry into the Proposal to Raise the Warragamba Dam Wall**

Thank you for the opportunity to submit to the Inquiry.

I am writing as a concerned citizen. I have lived in the Blue Mountains for almost 20 years and have bushwalked extensively in the area for over 50 years.

I am opposed to the proposal to raise the Warragamba Dam wall (the **Proposal**) and wish to make the following points.

#### ***Flood Mitigation in the Hawkesbury-Nepean Valley***

The principal reason given for the Proposal is flood mitigation in the Hawkesbury-Nepean Valley (the **Valley**). This is against the background that some existing residents are already at risk from floods, arising from inappropriate planning decisions in the past, and that the State Government plans to locate another 130,000 people in the Valley by 2030.

It is important to note that whilst the Proposal will reduce flood risk it will *not eliminate* flood risk in the Valley. Warragamba constitutes only a little more than 50% of the catchment area for the Valley. Other rivers like the Nepean, Grose, Colo and South Creek are significant contributors to flooding in the Valley and will continue to result in significant flooding even if the Proposal proceeds.

I am concerned that the Proposal will result in more inappropriate development in the Valley and thereby put more people at risk. It will create a false sense of security - people will move into the Valley believing that they are safe from floods when in fact they will continue to be at significant risk. When a significant flood event occurs with resulting loss of property those people will want to bring class actions against government (state and local) to recover their losses. The recent experience of Brisbane's Wivenhoe Dam is sufficient evidence of the disastrous consequences which can arise from inappropriate reliance on a flood mitigation dam.

I believe there are far better (and more cost efficient) flood mitigation strategies that can be implemented for the Valley, and would like to draw the Committee's attention to the paper "*Managing flood risk in the Hawkesbury-Nepean Valley*" by A. Prof Jamie Pittock of ANU (September 2018).

In evaluating potential flood mitigation strategies, I would also like to make the point that the measurement of costs and benefits can be very subjective. Depending on which costs and benefits you choose to measure, and how you choose to measure them, different strategies can become more or less attractive. I believe the methodology used to date in evaluating the available options has been flawed. For example, in measuring the costs of the various proposals there has been **no** allowance whatever for the “cost” of the environmental damage to the Greater Blue Mountains World Heritage Area (**GBMWhA**) arising from raising the dam wall, nor to the flow on consequences to tourism in the Blue Mountains. Nor has any allowance been made for the cost of losses arising from inappropriate development occurring as a result of the Proposal. Once you include costs such as these in the assessment you cannot conclude that raising the dam wall is the most cost efficient option.

### ***Creating Additional Water Storage Capacity***

I note that item 1(c) of the Committee’s terms of reference includes examining conflicting reports on potentially using the raised dam for additional water storage capacity as well as flood mitigation. In this respect I recall seeing a media interview with the Premier prior to the recent election where she stated that the raised dam would be used for increased water storage.

It may be that the Premier’s comments were a simple error, although it is difficult to understand how she could make an error of such magnitude. I am concerned that her comments may reflect a staged agenda of the Government to firstly obtain approval for raising the dam wall as a flood mitigation measure (with no increase in permanent water storage levels), and then once it is built, to extend its use to a permanent increase in water storage levels.

If the raised dam were to be used for increased water storage I would make the following points. Firstly, it would completely undermine the strategy of flood mitigation. Raising the full supply level of the dam would reduce its capacity to be used for flood mitigation and increase the risk of catastrophic flood in an extreme weather event. Secondly the entire environmental impact assessment process currently being undertaken would be rendered invalid; for example, the environmental impacts of permanent inundation upstream would be likely to be greater. Thirdly, raising the full supply level would extend the exclusion zone around the dam and alienate an additional area of the national park from bushwalkers and other users. For example, if the full supply level were to be increased to 130 metres, the automatic 3 km exclusion zone surrounding Lake Burragorang would mean that bushwalkers could cease to have legal access to popular walking tracks like Mt Solitary and the Kedumba campground, and events like the internationally renowned Ultra Trail marathon may no longer be able to be held. In addition, walks like the Katoomba to Kanangra track could no longer be physically accessed.

### ***Impact on GBMWhA and World Heritage generally***

In the absence of a completed Environmental Impact Statement (**EIS**) it is difficult to make detailed and specific comments on the impacts of the Proposal on the world heritage area. As such my comments are more general in nature and based on the Preliminary Environmental Assessment (**PEA**) released by Water NSW in December 2016 and other public documents.

It is very clear that the Proposal will result in environmental/ecological damage to the GBMWA and adjoining national park. There seems to be broad consensus that it will result in the periodic flooding of around 4,700 hectares of national park (at least 1000 hectares in the GBMWA) and some 65 kms of wild rivers and wilderness streams (including the lower reaches of the iconic Kowmung River) and that this will threaten the habitat of some 48 threatened species (including breeding habitat of the critically endangered Regent Honey Eater, one of Australia's rarest birds). The PEA also lists a number of other likely ecological detriments, including disturbance of spawning habitat of threatened Macquarie perch and platypus and various flora and fauna. These facts of themselves should be sufficient to conclude that the proposal is unsound and should not proceed.

World heritage status is not easy to achieve – a site must be very special to achieve this status, being of outstanding universal value and meeting very strict criteria. In my opinion the GBMWA is indeed very special, a priceless treasure made even more remarkable by the fact that it is so close to Australia's biggest city. We have an obligation to preserve the GBMWA for all the world and it should be a source of national embarrassment that the World Heritage Committee of UNESCO has recently stated that it is very concerned that the proposal will likely adversely impact on the outstanding universal values of the GBMWA.

There have been various public comments by proponents of the Proposal (including Water NSW and various Ministers) that its ecological impacts will not be significant, and that inundation will be for a "few days only" or "up to 2 weeks". These comments are at best misleading and I would like to briefly address them.

The period of upstream inundation will largely be a product of two factors: the size of the flood event and the rate at which water is released from the dam. The PEA estimates that in a probable maximum flood (**PMF**) the period of upstream inundation would likely be between 2 and 5 weeks (*PEA para 3.6.2*). This estimate appears to be based on what the PEA describes as a "moderate" to "high" downstream water release rate of between 100GL/day and 230 GL/day. However at these rates of release the PEA indicates that there would be quite extensive downstream flooding, principally around Windsor, Richmond, Cattai, Wilberforce and McGraths Hill (*PEA figure 3-6*).

Such flooding is reduced if the downstream water release is reduced to "low" or 40GL/day (*PEA figure 3-6*). The PEA does not state what the estimated period of upstream inundation would be at this "low" rate of water release, but I calculate it to be close to 12 weeks.

Ultimately the rate of water release will depend on operational guidelines which I understand have yet to be developed. However, faced with a situation of extensive downstream flooding (potentially made worse by other catchments such as the Grose and Nepean Rivers) it would be easy to imagine that the rate of water release may be reduced to the lower end of the scale thereby extending the period of upstream inundation.

Temporary upstream inundation does not equate to temporary environmental damage. Even inundation for "only a few days" will result in the depositing of silt, the proliferation of weeds and the slumping of riparian banks. Inundation for longer periods (even a few weeks) will inevitably result in the death of vegetation including large trees. Among the trees that will be destroyed will be one of the last known stands of the vulnerable Camden White Gum (*E. benthamii*). The result will be

loss of habitat for wildlife and an ugly scar on the landscape. And you only need one inundation event to create this outcome.

The impact of scarring on the national park should not be underestimated. It is very ugly – a recent photo of the dam would clearly show the ugly scar between the current and full supply levels (or if the Committee wants to see firsthand, I suggest a visit to McMahon’s Point lookout overlooking the dam). Such scarring will be particularly evident in the Kedumba Valley where the land is relatively flat around the Kedumba River, meaning that a broader area will be inundated. I estimate that a PMF event will result in scarring to an area almost twice the land area of Mt Solitary, and extending as far north as the Kedumba campground. This scarred area will be clearly visible from popular tourist lookouts between Wentworth Falls and Katoomba, including Sublime Point, Elysian Rock and Echo Point. In short, tourists will look out on a massive scarred area to the left of Mt Solitary, where virtually the only living vegetation will be weeds. The potential impact on Blue Mountains tourism could be severe, especially given that the views from places like Echo Point are critical to the Blue Mountains “brand”.

### ***Impact on Aboriginal Cultural Heritage***

I am very concerned that the proposal will result in irreversible damage to Aboriginal cultural heritage and destroy the remaining link that the traditional owners have to country. The proposal will destroy significant cultural heritage sites of the Gundungurra people including rock art, scar trees and culturally significant water holes. The Gundungurra people lost many such sites when the dam was filled in the late 1950s, it is simply appalling that we should be contemplating the destruction of those that remain, especially when as a society we now claim to have greater empathy and cultural awareness.

My earlier comments in relation to “temporary” inundation are particularly relevant to Aboriginal cultural sites, for example very short term inundation or even “splashing” will irrevocably destroy precious art work.

I am also concerned over reports that Infrastructure NSW has not adequately surveyed the area, and that Indigenous groups have not been given sufficient time to review and comment on the very lengthy draft cultural assessment.

### ***Consultation on EIS***

Finally, I would request that the Committee seek to ensure that, when the EIS is finally released, there is an adequate period for review and comment (unlike the situation with the recent draft cultural assessment). The EIS is likely to be a lengthy document and it is essential that the community have an adequate opportunity to fully review and digest its contents, and the opportunity to provide measured responses.

I note that the World Heritage Committee has requested the Federal Government to submit the EIS to it for review before any decision is made. This is a further reason for the period for responses to be extended to enable submissions to also be made to the World Heritage Committee.

Thank you for considering this submission.

Yours sincerely,

*Don Le Quesne*