

Shoalhaven Bushwalkers Inc. Submission on the proposed Warragamba Dam Wall Raising Environmental Impact Statement (EIS)

This submission is made on behalf of Shoalhaven Bushwalkers Inc. The Shoalhaven Bushwalkers is a club of some 250 members which undertakes both local bushwalks and walks further afield – the Blue Mountains National Park (BMNP) has long been a much loved walking destination for the club so we have a particular interest in its ongoing environmental health.

We are strongly opposed to the proposal to raise the Warragamba Dam wall for downstream flood mitigation.

A flawed project rationale

The rationale of the proposal to raise the Warragamba Dam wall by up to 17 metres is a conceptually deeply flawed flood mitigation strategy for protecting downstream residents and businesses. Raising the dam wall will reduce the downstream flood threat for the lesser, more frequent flood events but will achieve little mitigation in the bigger flood events according to the NSW Government's own investigations. The consequential push for increased floodplain development will serve to increase the overall risk, taking into account the risk of such infrequent larger floods. This is the so-called 'Levee Paradox' as occurred in Brisbane below the Wivenhoe Dam.

The March 2021 Nepean/Hawkesbury flood evidenced another flaw in the proposal's rationale. In contrast to the NSW Government's position that the Warragamba catchment represents 80% and 70% of the total catchment at Penrith and Windsor respectively, it transpired that over 40% of the Windsor floodwaters were from other catchments – the Nepean and Grose Rivers and Eastern and South Creek among them. Additional development (with increased runoff) will only serve to increase these flooding effects of other catchments in the future. The Chair of the *Legislative Council Select Committee into the Proposal to Raise the Warragamba Dam Wall* states in the foreword to its October 2021 Interim report: 'At its peak, the volume of water that flowed over the Warragamba Dam during that event was enough to fill the airspace that would be created by a 14 metre dam wall raising in just two days. This demonstrates that major upstream impacts would be inevitable should the project proceed, even from events assessed as a 1 in 10 to 1 in 20 chance per year event.'

Sound flood mitigation alternatives are available and should be thoroughly explored. These include:

- Lowering the Warragamba Dam full storage level. A 12-metre lowering would free 795 billion litres of airspace for flood control;
- Instead of earmarking ever more floodplain land for residential and business development, promoting flood-resilient land uses such as farming, recreation and conservation;
- Improving flood forecasting and evacuation infrastructure;
- Relocating the most flood-prone residents through a coordinated program of voluntary land/home acquisition.

In combination, such strategies would go towards stopping the problem of community flood vulnerability from continuing to worsen.

Impact on First Nations cultural artefacts and heritage

A Fact Sheet produced by WaterNSW entitled *Aboriginal Cultural Heritage Assessment* provides a damning indictment of the proposed project. Adverse impacts would include:

- harm to the cultural landscape through the temporary inundation of a predicted 174 archaeological sites (including 43 known sites) and further partial inundation of 11 cultural places already partially inundated.
- Cumulative harm to the intangible values of the cultural landscape through the extension of previously unmitigated impact.

The Fact Sheet goes on to state: 'If the project proceeds there is no capacity for directly applied management measures for the avoidance or minimisation of harm' and concludes with 'The project is understood by the RAPs [Registered Aboriginal Parties] as a continuance of the dispossession and loss of cultural heritage initiated by the original development of Warragamba Dam in the 1950s.'

We submit that a precondition of WaterNSW proceeding with this project should be that Registered Aboriginal Parties must give free, prior and informed consent. Patently, this has not occurred to date.

We concur with a recommendation by the Legislative Council Select Committee in its October 2021 Interim Report that Water NSW conduct a further Aboriginal Cultural Heritage Assessment, including additional field surveys, to address the concerns raised by stakeholders and agencies, particularly in relation to the adequacy of field surveys, and post-fire assessment, as well as demonstrating the agreement of RAPs in the significance assessment of sites, and the need for a broader cultural impact assessment of the project.

Profound environmental impacts

The 1 million-hectare Greater Blue Mountains World Heritage Area (GBMWH) was listed in 2010. Some of its boundary coincides with the full supply level of the dammed Lake Burrangorang. It is estimated that 1300 hectares of the World Heritage Area would be subject to inundation under the project proposal. This area contains some of the best grassy woodland ecosystem in NSW with its associated native birds and mammals.

A 2020 review by the International Union for Conservation of Nature of the 'Conservation Outlook' for the GBMWH downgraded the site from 'good with some concerns' to 'significant concern'. The assessment identified threats and potential threats and included the raising of Warragamba Dam for flood mitigation as a 'high threat' due to the likely impact on biodiversity, aesthetic, wilderness, geodiversity and Indigenous cultural values.

The GBMWH Strategic Plan's Objective 1 is to 'maintain, and wherever possible, improve the current and future integrity of the GBMWH'. We concur with the sentiments of the Select Committee in finding it impossible to reconcile this most important objective with any proposal which would inundate part of the GBMWH and support its recommendation that: the NSW Government:

- not proceed with the Warragamba Dam wall raising project if the proposal cannot maintain or improve the current and future integrity of the Greater Blue Mountains World Heritage Area, and
- pursue alternative floodplain management strategies instead.

We share the concern expressed by both Commonwealth and State Department stakeholder agencies and by the Select Committee that the EIS fails to properly assess the impact of the devastating 2019/20 bushfires by redoing biodiversity field surveys post-fire. The NPWS assessed that the bushfires burnt 81% of the Blue Mountains area under its management, including 100,000 hectares that suffered severe burning. Many species will likely have been driven to the verge of local extinction. Species protection must be prioritised given the outstanding universal values for which the BBMWHA was listed.

Biodiversity offsets

We are concerned at the huge expenditure that will be incurred in providing biodiversity offsets – a sum of around 2 billion dollars has been suggested. We are concerned that the EIS does not calculate the biodiversity offset liability for the proposed project. We share the Select Committee's concerns about the secrecy of the Government around questions regarding the biodiversity assessment process and proposed offsets.

It is clear that the project will have significant, perhaps devastating impacts on upstream biodiversity including on critically endangered species and on the pristine and iconic wild river – the Kowmung. Echoing the sentiments of the Chair of the Select Committee, we find it inconceivable that detriment to critically endangered species, World Heritage listed areas and wild rivers can be suitably offset by a credit trading system.

Conclusion

We believe that significant expenditure for better flood-proofing the Hawkesbury floodplain is required whether or not the Warragamba Dam wall is raised. New or upgraded roads for flood evacuation are required and some housing should be relocated. The money saved by aborting the dam wall raising project and instead lowering the dam's current full supply level could go towards these requirements. The state government needs to continue to pursue new strategies designed to lower per-capita water usage, for example contributing to the cost of water tank installation (which should be mandatory for new housing developments) and recycling sewerage for drinking water.

Thank you for the opportunity to make this submission.

John Souter

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