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Dear Sir/Madam

Submission – Warragamba Dam Raising Project – SSI-8441

There are some projects that should not proceed, and the raising of Warragamba Dam wall is one of these. This submission responds to the exhibition of the environmental impact statement (EIS) for the project and explains reasons why the proposal should be refused.

This submission is based on a detailed review of the documentation on exhibition, and a professional understanding of key matters underpinning the assessment, including flood risk, biodiversity, urban planning and economic feasibility assessment.

As a former tourism representative on the Greater Blue Mountains World Heritage Advisory Committee, I recognise that it is essential to have regard to Australia's world heritage convention obligations, and to maintain the integrity of the world heritage area.

Raising Warragamba Dam wall will cause significant damage to the world heritage area and its values, and bring comparatively little flood risk benefit for flood mitigation and management. The economic and environmental cost of the proposal is significant and far exceeds any social benefits. In fact, the proposal increases the risk of catastrophic flood damage to Western Sydney in extreme or unforeseen events.

The most important issues in the assessment of he proposa are not primarily project related, but rather about issues of water security, land use in Western Sydney, assessment of economic options, the integrity of protected natural areas and national security.

Specific comments in relation proposal on exhibition are as follows:

1. **World heritage values** – the world heritage values of the Greater Blue Mountains World Heritage Area will be degraded by the proposal, and significantly affect a key core part of this area. It appears contrary to international legal obligations.
2. **Impacts on matters of national environmental significance** - The EIS highlights that there are likely to be significant impacts on matters of national environmental significance, comprising 4 threatened ecological communities, 59 threatened species, and a world heritage listed area. At a time when Australia's biodiversity is in continuing and catastrophic decline, it is unacceptable to contribute to further planned losses.
3. **Consequential security risk** – Raising Warragamba dam wall would most likely lead to consequential actions including (1) increasing water supply capacity to provide higher water security, (2) further reliance on limited water supply sources, and (3)

higher risk of future catastrophic damage as a result of accidental or deliberate breach and collapse of the dam wall (eg due to eartquake, terrorism, or war).

4. **Disconnected land use planning and flood management** – the problem that the proposal to raise the Warragamba Dam wall responds to is inadequate land use planning for flood risk and management. This should be addressed before high cost, high risk and high impact developments such as that proposed for Warragamba Dam are contemplated.
5. **Flood risk** – While some periodic minor flooding in Western Sydney can potentially be mitigated by the proposal, it will continue and encourage the practice of allowing increased development on flood prone land. This is contrary to sound practice and is against the public interest. In major flood events, increased flood storage in Warragamba Dam will have little impact and not prevent severe flooding, and unlikely to impact on social dislocation and economic loss. More effective land use planning is a much better solution. In fact, raising the Warragamba Dam Wall is likely to increase risks in extreme or unforeseen events and is unacceptable and unnecessary.
6. **Social inequity** – the project is primarily beneficial to property developers and private interests involved in developing flood liable land. It is not of widespread community benefit, and impacts adversely on sections of the community who value the protection of valued community assets such as national parks, Aboriginal heritage, and protection of biodiversity from extinction. With increasing unpredictability in determining flood risks into the future with climate change, it is likely that communities living on flood prone land will suffer risks from extreme events or engineering failures which are not anticipated in the planning of the dam wall raising project, and which the proposed infrastructure cannot prevent.
7. **Economic costs and benefits** – the investment in raising the dam wall would be much more effectively spent on other projects with lower risk and higher return. In addition, the economic impact of degradation of world heritage values, and the impacts on tourism and international perception are of significance, and cannot be underestimated. The economic investment involved is significant, relative benefits are low and underlying assumptions are not stated. For example, Table 4.8 does not consider combinations of potential options that may be have more beneficial economic returns, and the opportunity cost of an alternative investment should form part of the investment. Above all, economic evaluation of the proposal is not transparent and does not provide an adequate basis for making a decision.
8. **Aboriginal heritage** – the importance of protecting Aboriginal heritage values in the area are extremely high. These sites and areas are of world heritage significance and should be protected, even though the world heritage listing currently does not recognise these.
9. **Inadequate consideration of alternative options** – planning processes for project have failed to consider all reasonable options, especially alternative land use planning measures and land development locations. The proposal is not necessary because better and more robust alternatives for flood mitigation exist, primarily through measures applied on the impact site and immediate locality. Of the limited options considered in the EIS, the preferred and lowest risk option would be to lower the full supply level by 5 metres.
10. **Biodiversity** - Important threatened species habitat, such as that for the critically endangered Regent Honeyeater will be severely impacted by the proposal. Key inadequacies in the EIS relating biodiversity are as follows:

    - 'Temporary inundation' of native vegetation represents a significant impact on natural ecosystems and processes.
    - Minimal attention has been given in the EIS to aquatic ecology when this is essential for a proposal that affects the flow and behaviour of rivers and associated ecosystems.
    - Cumulative, continuing and cascading biodiversity losses at the national scale have not been considered adequately. There is a need to consider lags in the decline of threatened species populations that are yet to occur.
    - The assessment considers only threatened biodiversity entities not the full spectrum of biodiversity including key ecological drivers such as insects and fungi. Impacts on common species and ecological communities, and unlisted

species that are rare or potentially under future threat have not been assessed and are also potentially significant. These impacts should be documented and should be offset.

11. **Biodiversity offsets** – Biodiversity offsets identified in the EIS do not account for the full biodiversity impact of the project, and do not lead to a net biodiversity benefit. The provision of these offsets is also subject to high risk for the following reasons:
    - Biodiversity offsets have not been secured in advance of the project. This should occur before project approval.
    - It is likely that equivalent areas of vegetation to offset the identified credit requirement are not available. The credit assessment methodology is based on assumptions about protection of species that may not be realised in practice.
    - Biodiversity offsets do not take into account future climate change, and the adaptation requirements of threatened species.
    - Impacts on habitat connectivity for species at broad landscape scales does not form part of part of the biodiversity. The compromised integrity of national park conservation is not fully considered in biodiversity offset calculations.
    - The proposal will result in net loss of biodiversity, and this is not acceptable.
12. **Cumulative impacts** – The EIS assessment is extremely limited and considers a small number of known NSW Government projects only. The footprint of the proposal and its consequences are much larger than calculated.
13. **Carbon emissions** – It appears that no assessment has been undertaken of the carbon emissions of this project. The cumulative impacts section of the EIS makes no mention of the extent or consequences of carbon emissions from raising the dam wall. This is unacceptable, and avoids any assessment of a significant and key environmental impact of the project. While ambiguous commitments are given to consider measures to minimise carbon emissions, the total expected carbon emissions are not identified.

    With NSW and global targets for net zero carbon emissions, it would be appropriate for zero carbon emission to be an fundamental principle underpinning the design, construction and operation of the proposal. Carbon emissions from direct and indirect land use consequences also need to be considered.

I request that these matters be taken into account in assessing and determining the proposal.

Thanks for your consideration of this submission.

Yours sincerely

Martin Fallding