18 February 2022

Clarification of Warragamba Dam submissions

This report on submissions previously contained an inaccuracy which has been amended.

Five hundred and nineteen (519) emails or hard copy submissions were referred to as ‘feedback’. The Department is treating all issues raised during exhibition as submissions and the summary of submissions contained within the amended Submissions Summary below dated 15 February 2022 has been updated to clarify this.

Warragamba Dam Raising – Submissions Summary

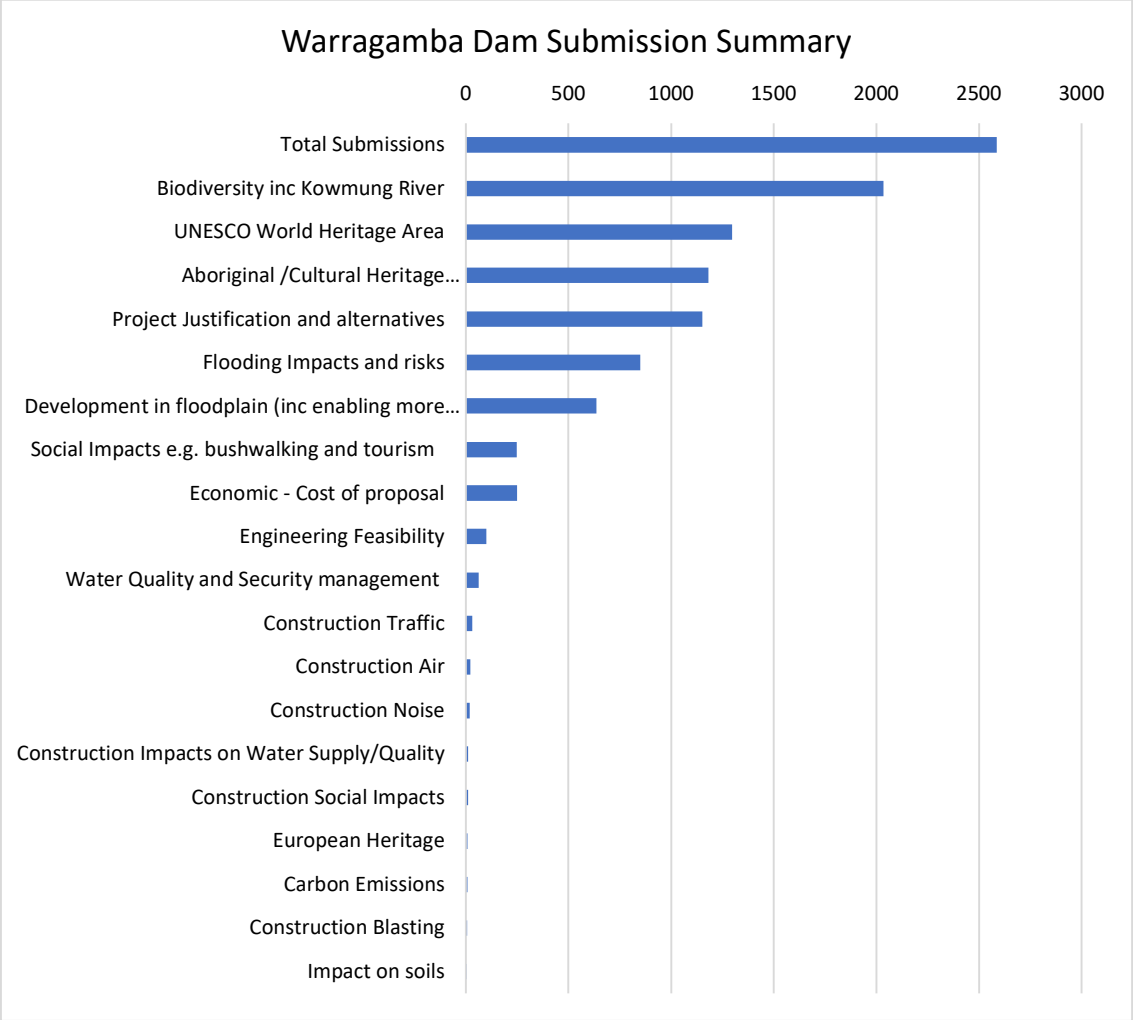
Status

Submissions received: 2,586

	Object	Support	Comment	Total
Public	2,424	58	44	**2,526**
Organisation	47	1	5	**53**
Public Authority	4	1	2	**7**
Total	**2,475**	**60**	**51**	**2586**

Note: Of the above 2586 submissions, 519 were emails and/or hard copy letters that did not provide relevant details regarding political donations and/or privacy declaration.

Key Issue	Frequency	Proportion (%)
Biodiversity	2034	78.65%
UNESCO World Heritage Area	1296	50.12%
Aboriginal Cultural Heritage	1182	45.71%
Project Justification and alternatives	1152	44.55%
Flooding Impacts and risks	849	32.83%
Development in floodplain (including the project enabling more development)	635	24.56%
Social Impacts e.g. bushwalking and tourism	247	9.55%
Economic - Cost of proposal	249	9.63%
Engineering Feasibility	99	3.83%
Water Quality and Security management	63	2.44%
Construction Traffic	30	1.16%
Construction Air	22	0.85%
Construction Noise	18	0.70%
Construction Impacts on Water Supply and Quality	12	0.46%
Construction Social Impacts	11	0.43%
European Heritage	9	0.35%
Carbon Emissions	9	0.35%
Construction Blasting	6	0.23%
Impact on soils	3	0.12%
Total	**2,586**	


Warragamba Dam Submission Summary
0
500
1000
1500
2000
2500
3000
Total Submissions
Biodiversity inc Kowmung River
UNESCO World Heritage Area
Aboriginal /Cultural Heritage...
Project Justification and alternatives
Flooding Impacts and risks
Development in floodplain (inc enabling more...
Social Impacts e.g. bushwalking and tourism
Economic - Cost of proposal
Engineering Feasibility
Water Quality and Security management
Construction Traffic
Construction Air
Construction Noise
Construction Impacts on Water Supply/Quality
Construction Social Impacts
European Heritage
Carbon Emissions
Construction Blasting
Impact on soils

The key issues raised in public submissions received are summarised below.

Biodiversity

Impacts of the upstream inundation on the Grassy Box Woodland, which includes known breeding habitat of the Regent Honeyeater and individuals recorded during targeted surveys. Concerns that the loss of this habitat is inconsistent with the objectives of the National Recovery Plan for the species under the EPBC Act. Submissions also object to the proposed offset strategy for impacts on the Regent Honeyeater.

Impacts of the project on the GBMWHA and risks of the project on the UNESCO listing

Impacts on other key species including Koala, Emu (Sydney's last population), Platypus, Rakali, Squirrel Glider, Brush-tailed Rock Wallaby, Box Gum Grassy Woodland, Camden White Gum, Kowmung Hakea

Concerns raised that the upstream impact assessment underestimated the impacts based on an inundation level of 7.5 m (between RL 119.5 mAHD and RL 126.97 mAHD) vs 14 m above the current FSL inundation area. Submissions questioned the justification of this impact area.

Inadequate environmental impact assessment, survey effort,

Many submissions raised concerns that surveys were undertaken prior to the 2019/20 bushfires, with no surveys post bushfires. Section 8.3.11.4 notes the assessment is consistent with the DPIE March 2020 guidelines for assessments of recently burnt sites.

Suitability of applying the biodiversity offsets policy to the impacts associated with the project.

Impacts of inundation on the Kowmung River, which is declared a Wild River under the *National Parks and Wildlife Act 1974*. In addition, the impacts on the Nattai River, Coxes River, Wollondilly River and the Tonalli River.

Aboriginal Heritage

Loss of cultural sites and cultural values

Inadequate consultation and requests that consent from Gundungarra people is obtained

Inadequate surveys with only approximately 27% of the impact area assessed

Social

The importance of the natural areas, National Park and/or GBMWHA to bushwalking groups and tourism economy

Cultural heritage (Aboriginal and modern)

Social impacts during construction associated with construction workers

Project Alternatives and justification

Effectiveness of the proposal in mitigating downstream flooding impacts on the floodplain, including the contribution from the Warragamba catchment to downstream flooding

No modelling of the stated economic and flooding benefits of the project

Confirmation that the range of options for flood management and mitigation were considered in accordance with the recommendations of the State Infrastructure Strategy

Issues around the cost of the project and justification against the benefits

Review cost estimate

Lack of consideration of alternative options, particularly alternatives to development in the floodplain and use of project allocated funds to purchase existing flood affected properties – alternative measures suggested include planning, development controls, voluntary and compulsory buy back, improved forecasting, community awareness, improved governance of flood risk management, road flood risk planning

The utilisation of alternative and existing infrastructure such as the desalination plant is not considered.

Engineering feasibility

Risks of dam failure and dam safety concerns

Need for a review by Dams Safety NSW

Engineering feasibility of the proposal

Downstream flooding impacts

Effectiveness of the proposal in mitigating downstream flooding

Effects of the project on downstream flooding regimes and impacts on residents in the floodplain

Concerns that the project will facilitate further development in the floodplain and increase risks on a larger population

Construction Impacts

Impacts of construction traffic on local roads and safety of road users

Construction noise, blasting and air quality impacts

Impacts on water quality during construction and risks to water supply security

Confirm proposed operating hours of the concrete batch plant

Duration of construction activities underestimated

Other Issues

European heritage

Greenhouse gas emissions

Criticism of EIS authors and specialist consultants - independence of the EIS

Issues raised about the adequacy of assessments and surveys, underestimation of impacts

Objections from public authorities and experts

Reference to the issues raised in the Parliamentary Select Committee on the Proposal to Raise the Warragamba Dam Wall

Sample Submissions

Bird Life Australia

I most strongly oppose the proposal to raise Warragamba Dam due to the projects unacceptable potential impacts on the environment including to the Blue Mountains World Heritage Area and many threatened species.

In particular , 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. We cannot afford to lose not one more single bird!

Modelling by BirdLife Australia suggested that up to 50% of contemporary Regent Honeyeater foraging and breeding habitat was burnt in the 2019/20 bushfires. Protecting remaining unburnt breeding habitat is of the highest conservation priority.

There are only a handful of contemporary breeding sites for Regent Honeyeater and during the assessment of the project a total of twenty one (21) Regent Honeyeaters, including active nests, were recorded within the impact area.

Most notably, 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.

I fail to see how there can be a logical reason and debate otherwise.

The National Recovery Plan for Regent Honeyeater states It is essential that the highest level of protection is provided to these areas and that enhancement and protection measures target these productive sites.

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.

It is unacceptable and inconsistent with the National Recovery Plan for any avoidable loss or degradation of breeding habitat to occur.

I also very strongly oppose the Projects offset strategy for the Regent Honeyeater.

Offsets are rarely an appropriate response to proposed biodiversity loss and especially for critical habitat for the survival of a species, in this case breeding habitat for the Critically Endangered Regent Honeyeater.

There has been no evidence at all 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 justification for raising the Warragamba Dam wall is that it required to reduce the risk of future flooding to residents and businesses across Western Sydney. This is simply not the case. The project rationale is deeply flawed, with nearly half the floodwaters that have historically impacted the floodplain coming from rivers outside the Warragamba catchment. Raising the dam wall will encourage further ill-advised development in vulnerable areas without providing any guarantee of future protection. What we need is better urban planning, not short-sighted fixes that will only encourage development in flood prone areas.

As well as this, The World Heritage listed Blue Mountains National Parks have been given the highest possible international status and protection in recognition of the areas extraordinary biodiversity and ecological integrity. The Commonwealth and NSW Governments made a commitment to future generations to protect the Greater Blue Mountains World Heritage Area forever. This is the last place that any government should sacrifice to enable further expansion of floodplain development.

Raising the Warragamba Dam wall will inflict terrible damage on the environmental and cultural values of the catchment. It will decimate 5,700 hectares of National Parks, 1,300 hectares of World Heritage Area, more than 60 kilometres of wilderness rivers and thousands of Aboriginal sites and places of cultural significance. The area that will be destroyed contains some of the best remaining grassy woodland ecosystem in NSW, complete with healthy populations of dingo, quoll, woodland birds and many other native species. The rising water will drive threatened species into extinction, including NSWs rarest bird, the Regent Honeyeater.

Australia is a signatory to the World Heritage Convention and required to do everything in its powers to protect the ecological integrity of the Greater Blue Mountains World Heritage Area. This proposal falls far short of that obligation, and if the EIS is approved it will confirm our growing international reputation as environmental vandals.

No consent has been obtained from the Gundungurra Traditional Owners for the work that will significantly impact their cultural heritage. The Commonwealth Department of Environment and the International Council on Monuments and Sites have both pointed out very serious failings in the assessment of the impact on the cultural heritage of the Gundungurra traditional owners.

The purpose of raising the dam wall is to hold water at a level up to 17 metres higher than the present dam. Even if the water is only held at these elevated levels for a few months, the unavoidable reality is that the habitats, flora, fauna, cultural sites and soils within the inundation zone will be devastated. Despite the EIS having been in preparation for more than 5 years, the environmental and cultural surveys on which it relies are woefully inadequate. The EIS relies upon biodiversity and cultural surveys conducted before the unprecedented wildfires of 2019/20, which burnt 81% of the Greater Blue Mountains. Those fires changed the face of the Blue Mountains and drove many species to the brink of local extinction. It is not sufficient to do a desktop analysis of the impacts of the fires on the project area, a new survey is needed.

The proposal relies upon the payment of biodiversity offsets to mitigate the irreparable environmental damage to the biodiversity of this unique and internationally significant area. Calculations based on the NSW Governments own biodiversity laws and offsets trading scheme suggests that the total cost of biodiversity offsets will be around $2 billion.

NSW is still reeling from the 2019/20 mega-fires, record levels of land clearing and a species extinction crisis. If there is any time and any place where the protection of nature must be prioritised, surely it is in now in World Heritage listed National Parks? Has the NSW Government

learnt nothing from the desecration of Juunkan Gorge about the importance of protecting Aboriginal cultural heritage?

Aboriginal cultural heritage, National Parks, World Heritage and threatened species need protection, not destruction.

Give a Dam (https://www.giveadam.org.au/) – Colong Foundation

Systemic Failures of the EIS

- The engineering firm (SMEC Engineering) who undertook the environmental and cultural assessments for the project have an established history abusing Indigenous rights, recently being barred from the world bank.
- Severe fires during the summer of 2019/20 devastated 81% of Blue Mountains Heritage Area. No post-bushfire field surveys have been undertaken.
- Only 27% of the impact area was assessed for Aboriginal Cultural Heritage.
- Threatened species surveys are substantially less than guideline requirements. Where field surveys were not adequately completed, expert reports were not obtained.
- No modelling of the stated flood and economic benefits of the dam wall raising are outlined in the EIS.
- The integrity of the environmental assessment is fundamentally flawed, and cannot be accepted as a basis for further decision-making by the Minister for Planning.

Blue Mountains World Heritage Area

- The Blue Mountains World Heritage area is not just a world class National Park, in 2000 it was inscribed on UNESCO's World Heritage list in recognition of its Outstanding Universal Value for the whole of mankind. Raising the Warragamba dam wall and consequent damage to natural and cultural values would be a clear breach of these undertakings and Australia's obligations under the World Heritage Convention.
- An estimated 65 kilometres of wilderness rivers, and 5,700 hectares of National Parks, 1,300 hectares of which is within the Greater Blue Mountains World Heritage Area, would be inundated by the Dam project. This includes:

- The Kowmung River - declared a 'Wild River', protected for its pristine condition under the National Parks and Wildlife Act 1974;
- Unique eucalyptus species diversity recognised as having Outstanding Universal Value under the area's World Heritage listing such as the Camden White Gum;
- A number of Threatened Ecological Communities, notably Grassy Box Woodland;
- Habitat for endangered and critically endangered species including the Critically Endangered Regent Honeyeater and Sydney's last Emu population.

Gundungurra Traditional Owners

- Over 1541 identified cultural heritage sites would be inundated by the Dam proposal.
- The Aboriginal Cultural Heritage Assessment Report has been severely and repeatedly criticised by both the Australian Department of Environment and the International Council on Monuments and Sites (ICOMOS) for not appropriately assessing cultural heritage in meaningful consultation with Gundungurra community members.

Alternatives to Raising the Dam Wall

- There are many alternative options to raising the Warragamba Dam wall that would protect existing floodplain communities. A combined approach of multiple options has been recommended as the most cost-effective means of flood risk mitigation.
- Alternative options were not comprehensively assessed in the EIS. Any assessment of alternatives does not take into account the economic benefits that would offset the initial cost of implementation.

- On average, 45% of floodwaters are derived from areas outside of the upstream Warragamba Dam catchment. This means that no matter how high the dam wall is constructed, it will not be able to prevent flooding in the Hawkesbury-Nepean Valley downstream.

National Parks Association of NSW

https://npansw.org.au/2021/10/11/have-your-say-proposal-to-raise-the-warragamba-dam-wall/

A flawed project

- WaterNSW, an agency of the NSW Government, has released an Environmental Impact Statement (EIS) proposing to raise the wall of the Warragamba Dam. Their justification for the project is that raising the dam wall is required to reduce the risk of future flooding to residents and businesses across Western Sydney. This is simply not the case.
- The project rationale is deeply flawed, with nearly half the floodwaters that have historically impacted the floodplain coming from rivers outside the Warragamba catchment.
- Raising the dam wall will encourage further ill-advised development in vulnerable areas without providing any guarantee of future protection.
- What we need is better urban planning, not short-sighted fixes that will only encourage development in flood prone areas.

Intolerable environmental impacts

- The World Heritage listed Blue Mountains National Parks have been given the highest possible international status and protection in recognition of the area's extraordinary biodiversity and ecological integrity.
- The Commonwealth and NSW Governments made a commitment to future generations to protect the Greater Blue Mountains World Heritage Area forever. This is the last place that any government should sacrifice to enable further expansion of floodplain development.
- Raising the Warragamba Dam wall will inflict terrible damage on the environmental and cultural values of the catchment. It will decimate 5,700 hectares of National Parks, 1,300 hectares of World Heritage Area, more than 60 kilometres of wilderness rivers and thousands of Aboriginal sites and places of cultural significance. The area that will be destroyed contains some of the best remaining grassy woodland ecosystem in NSW, complete with healthy populations of dingo, quoll, woodland birds and many other native species.
- The rising water will drive threatened species into extinction, including NSW's rarest bird, the Regent Honeyeater.
- Australia is a signatory to the World Heritage Convention and required to do everything in its powers to protect the ecological integrity of the Greater Blue Mountains World Heritage Area. This proposal falls far short of that obligation, and if the EIS is approved it will confirm our growing international reputation as environmental vandals.
- No consent has been obtained from the Gundungurra Traditional Owners for the work that will significantly impact their cultural heritage.

Totally inadequate environmental impact assessment

- The purpose of raising the dam wall is to hold water at a level up to 17 metres higher than the present dam. Even if the water is only held at these elevated levels for a few months, the unavoidable reality is that the habitats, flora, fauna, cultural sites and soils within the inundation zone will be devastated.

- Despite the EIS having been in preparation for more than 5 years, the environmental and cultural surveys on which it relies are woefully inadequate. The EIS relies upon biodiversity and cultural surveys conducted before the unprecedented wildfires of 2019/20, which burnt 81% of the Greater Blue Mountains. Those fires changed the face of the Blue Mountains and drove many species to the brink of local extinction. It is not sufficient to do a 'desktop' analysis of the impacts of the fires on the project area, a new survey is needed.
- The Commonwealth Department of Environment and the International Council on Monuments and Sites have both pointed out very serious failings in the assessment of the impact on the cultural heritage of the Gundungurra traditional owners.
- The proposal relies upon the payment of biodiversity offsets to mitigate the irreparable environmental damage to the biodiversity of this unique and internationally significant area.
- Calculations based on the NSW Government's own biodiversity laws and offsets trading scheme suggests that the total cost of biodiversity offsets will be around $2 billion.
- Shockingly, rather than disclose the true cost to NSW citizens and taxpayers, the EIS does not calculate the biodiversity offset liability for the project.

The wrong time and the wrong place

- NSW is still reeling from the 2019/20 mega-fires, record levels of land clearing and a species extinction crisis. If there is any time and any place where the protection of nature must be prioritised, surely it is in now in World Heritage listed National Parks?
- Has the NSW Government learnt nothing from the desecration of Juunkan Gorge about the importance of protecting Aboriginal cultural heritage?
- Aboriginal cultural heritage, National Parks, World Heritage and threatened species need protection, not destruction.

GP letter

To whom it may concern,

I am writing to express my unequivocal opposition to the proposed raising of the Warragamba Dam wall (project number SSI-8441). I have never made any political donations, including in the last two years.

I am a general practitioner living and working in the lower Blue Mountains. I have previously lived and worked in the western suburbs of Sydney and, as such, have an affinity to both areas. Easy access to the national parks was a key factor in my decision to move to the Blue Mountains and I always have a sense of pride taking visiting friends and family to the beautiful sites that the Blue Mountains have to offer.

I am very concerned by the negative environmental, social, and cultural impacts that raising the Warragamba Dam wall would have. It is my understanding that the proposal would result in the intermittent inundation of 5,700 hectares of National Parks and 1,300 hectares of World Heritage Area, including habitat for koala and emu populations, as well as the critically endangered regent honeyeater. To my knowledge, no field surveys for threatened species have been undertaken since the devastating Black Summer Bushfires of 2019/2020, which saw massive loss of wildlife across the state; some modelling indicates that koalas will be extinct in the wild in NSW by 2050. In this context, the preservation of National Parks and World Heritage Areas is now more important than ever. I have no doubt that if the proposal is followed through with, it will be reflected upon by future generations with the level of incredulity with which we currently reflect upon the deliberate introduction of cane toads to Australia.

It is also my understanding that the proposal would result in the inundation of 1,500 Indigenous cultural heritage sites. Particularly following the very justified backlash which Rio Tinto faced following the blasting of Indigenous sites and artefacts, I believe it would be in very poor taste for the NSW Government to knowingly follow through with the proposal.

I am aware that the Warragamba River is one of five rivers that feed the Hawkesbury-Nepean and as such, it is contentious whether the proposed raising of the Warragamba Dam wall would in fact adequately mitigate flood risks. It is my understanding that there are alternative flood mitigation strategies available that would avoid the negative environmental and cultural impacts outlined above. I implore the NSW Government to follow expert advice and the voices of their constituents, rather than (as cynics may believe) the desires of property developers seeking financial gain.

There are suggestions that the NSW Government intends to increase the population of the Hawkesbury-Nepean area by 134,000 people over the next 30 years, a plan to be facilitated by the proposed raising of the Warragamba Dam wall. Having previously worked as a doctor in both the inner west and outer west of Sydney, I am well aware of the health and social inequities faced by residents in western Sydney and I fear that the planned growth in this area will further exacerbate these inequities. I strongly believe that resources should be directed toward public infrastructure, rather than facilitating an untenable population boom in an already under-resourced area.

I hope to raise a family in the future and I hope that they will be able to enjoy the privileges which

I have enjoyed, including access to unique natural wonders such as those found within the Blue Mountains. I trust that the concerns which I have outlined above, and the concerns of many likeminded constituents, will be appropriately considered.