I am writing this submission due to my strong and total opposition to the proposed raising of the Warragamba Dam. I write as a biologist, as a family member concerned about the future, and as an Australian who does not want future generations to lose their natural heritage, and I consider that it is of particular concern that an Australian World Heritage Area is involved.

The draft EIS itself concludes that the proposed dam raising would have significant and negative environmental impacts on the Blue Mountains World Heritage Area. Consequently any raising of the dam would also have significant and deleterious effects on all the threatened species that live within the relevant World Heritage Area habitat.

Indeed it is particularly concerning that the proposed project will significantly impact upon known contemporary breeding habitat for the Regent Honeyeater, already classified as a critically endangered species. Such deleterious impacts, to quote the EIS, "cannot be avoided or minimized".

Nor is the Regent Honeyeater the only bird species that will be placed in danger by the proposed raising of the dam. Australian National University researcher R. Crates has also observed the vulnerable listed Painted Honeyeater in the Burragorang Valley – a valley that will be flooded by the proposed dam-raising. Indeed important Platypus habitat, consisting of 65 km of wilderness rivers, will also be destroyed by the proposed project.

Yet it is the Regent Honeyeater that is of particular concern. Already listed as *critically endangered* by both state and federal governments, the wild population may be as low as 350 individuals. Moreover the 2019/2020 fires have already destroyed up to 50% of the contemporary foraging and breeding areas needed for their survival.¹ Therefore any remaining habitat areas that provide these birds with the requirements necessary for their survival have now become of crucial significance in the fight to prevent their extinction in the wild, with breeding habitat being of especial importance if wild numbers are to be increased rather than reduced to zero. Indeed, when the proposed project was assessed for the EIS, a total of twenty-one Regent Honeyeaters were observed within the impact area, along with active nests. Whilst these numbers may initially appear so low that they need not be worried about, the plight of the Regent Honeyeater is so dismal that in fact these numbers are of vital significance if the species is to survive. Preventing any destruction or degradation of still-existent and un-burnt breeding habitat for such an endangered species must be of extreme conservation priority.

This is recognized by official government policy. The National Recovery Plan for the Regent Honeyeater clearly states; *"It is essential that the highest level of protection is provided to these {breeding} areas and that enhancement and protection measures*

¹ BirdLife Australia modeling

target these productive sites".² Large amounts of taxpayer time and money have already been put into the recovery program³ and taxpayers have every right to expect the recovery plan – both the underlying policy and its program of implementation - to be respected.

Moreover the offset strategy incorporated into the proposed dam project for the Regent Honeyeater is more likely to be a public relations stunt than an effective method of protecting the Regent Honeyeater. Historically offsets have had limited usefulness in conservation efforts and they do not usually form a successful mechanism for preventing biodiversity loss. It is especially concerning that offsets should even be put forward as a response to the loss of critical habitat for the survival of a species. No empirical evidence has been presented that offsets can mitigate the proposed loss of breeding habitat for the endangered Regent Honeyeater and no direct benefits for either the local affected population or the species overall can be readily discerned.

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

Indeed the Field cross-party parliamentary committee report on the raising of the dam, released in October 2021, concluded alternatives should be strongly investigated and that the raising should not go ahead "if the proposal cannot maintain or improve the current or future integrity of the Greater Blue Mountains World Heritage Area." Moreover the report added cultural heritage issues to concerns about the impacts on threatened species and the degradation of a World Heritage area. The original dam destroyed sites important to the Gundungurra people and, if the dam wall is raised, even more of the last remnants of their cultural inheritance will be lost forever.

Opposition to the raising of the dam by the wider non-indigenous community is also strong, especially given the fact that the raising of the dam wall is unlikely to solve the problem of flooding⁴. Indeed even the commercial, non-conservation minded Australian

² Any breeding habitat is considered *habitat critical for survival* of the species under the National Recovery Plan for Regent Honeyeater

³ Including the captive breeding program whose ultimate success depends on there being suitable existent 'wild' habitat for the birds produced by the program to be released into.

⁴ "It is very important to remember that it is not possible for Warragamba Dam, whatever its size, to stop the most extreme floods- {see} <u>Leaked charts published in the Sydney Morning Herald</u>.""Building up the dam wall is seriously flawed and the government is exaggerating the mitigation benefits," said Dr Chas Keys, a flood researcher on Western Sydney floodplains and former deputy director of the State Emergency Service. Professor Stuart Khan, from the University of NSW Global Water Institute, agreed with Dr Keys' concern about the amount of water flowing into the catchment below the Warragamba Dam. Further, he said it appeared that the amount of water expected to flow into the system above the dam — estimated to be about 1500 gigalitres — would eventually overwhelm the dam's capacity even if it had been raised.

Insurance Industry no longer supports the raising of the dam as "a critical part of flood management and mitigation in the Hawkesbury-Nepean Valley." Consequently, in this submission, I hold that the non-conservation factors behind the widespread community opposition, and the economic issues involved, should also act against the proposed project proceeding.

Some of the strong community opposition to the project comes from the knowledge that the proposed project will facilitate development on the Western Sydney floodplains. Indeed many seem to consider the project is simply a developer-driven proposal that will make it easier to build on flood-prone land in western Sydney, against the wishes of local communities, and there are serious safety issues to be considered before any such development occurs. Importantly, the raising of the dam will not prevent any flooding from ever occurring. The raised dam "would delay the flood peak as the dam took time to fill but scientific analysis suggests it would not necessarily lead to lower maximum flood height."⁵ This is especially the case since climate change predictions indicate heavier but less frequent rains shall occur – the once-in a 100 years flood is likely to be much more frequent and the dam even less likely to stop floods when heavy rainfall occurs. One might even consider that no self preserving authority would allow any dam raising given the known changes expected.

In fact some flood experts state outright that the government should halt plans to build more housing on the floodplain below the Warragamba Dam, and that population growth should be housed through other solutions than building on flood plains known to have such serious flooding problems. The 2021 floods, with their associated loss of life and building destruction, show the validity of these criticisms. Floodplains are simply an extended part of river systems and must flood upon occasion. Houses built on flood plains will experience such flooding. The scientific opinion on the raising of the dam seems to indicate it will not prevent flooding as much as alter factors like the speed at which flooding occurs, and other methods to prevent any loss of life (if not of building and infrastructure) would be more efficient.

And it is unfortunate that both the NSW Water Board and the NSW government have been investigated by the ICAC concerning the possibility of mismanagement and corruption within their ranks. Such negative publicity means that the public is not always convinced these institutions operate according to the broad wishes and wellbeing of the wider community but rather that special interest and lobby groups hold undue sway upon management and the decision making process. Such perceptions have probably strengthened community opposition to the dam raising made on economic grounds and the government needs to make certain that the proposed project is given full and publically available transparency, especially since revised estimates of the cost of raising

⁵ Adam Morton March 2021, Guardian Environment. (see also footnote 4)

the dam have recently risen to \$1.6 billion. Like others I consider this is a lot of money to pay to implement a project that water experts consider will not erase the problem. Certainly community opposition on economic grounds should be listened to – ultimately it is taxpayer money being spent and the principle of 'fit for purpose' should apply.

IN SUMMARY

I submit that the dam should not be raised on the following grounds:

1. Loss of biodiversity and the denial of official government policy with respect to such losses.

2. Indigenous cultural heritage shall be destroyed.

3. Implementation of the project is unlikely to remove flooding problems in the floodplain areas to the desired extent.

4. Project costs have risen greatly and taxpayer opposition should be listened to, as it is their money that will pay for an apparently unwanted project. Furthermore governance should serve the people, not lobby groups, if democracy is to survive.