Hunter Bird Observers Club
Affiliated with BirdLife Australia

Hunter Bird Observers Club Inc
PO Box 24, New Lambton, NSW 2305
www.hboc.org.au
ABN 62 415 889 446

Warragamba Dam Assessment Team
Planning and Assessment
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

Submission – Warragamba Dam Raising Project – SSI-8441

In making this Submission we declare that we have made no reportable political donations in the previous two years.

There is no material in this submission that may not be published online

We object strongly to the Warragamba Dam Raising Project on two critical and fundamental grounds.

Environmental Destruction:

HBOC strongly opposes the Project due to the unacceptable impact on the environment, including the Blue Mountains World Heritage Area, the richness of biodiversity at risk, and the impact on threatened species.

As one specific example of threatened species, the Regent Honeyeater is listed as Critically Endangered at both the state and federal level, with as few as 350 individuals remaining in the wild. There are only a handful of contemporary breeding sites for Regent Honeyeater and during the assessment of the Project a total of (21) Regent Honeyeaters, including active nests, were recorded within the impact area.

The draft EIS (ref: 1) concludes that the Project poses potential significant impacts to contemporary breeding habitat for Regent Honeyeater that "cannot be avoided or minimised". Birdlife Australia modelling suggests that up to 50% of contemporary Regent Honeyeater foraging and breeding habitat was burnt during the 2019/20 bushfires and protecting remaining unburnt breeding habitat is of the highest conservation priority.

Any breeding habitat is considered habitat critical for survival of the species under the National Recovery Plan for the Regent Honeyeater which 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".* We therefore strongly oppose the proposed destruction of habitat as the destruction or degradation of a contemporary breeding site would have dire consequences for the species as a

whole.

We also strongly oppose the Project's suggested offset strategy for this species. Offsets are rarely an appropriate response for biodiversity loss and especially in relation to critical habitat for the survival of any species, and in this case the breeding habitat for the Critically Endangered Regent Honeyeater.

In general we consider that the process for managing biodiversity offsets has been an abject failure and on a project of this scale and with the broad environmental impacts that would follow, it is implausible that any offset strategy could compensate for the losses. There is no evidence that breeding habitat for Regent Honeyeaters can be successfully offset and it would seem impossible to reconcile this Project and its impact with Minister Kean's recent commitment that there would be no further extinctions in National Parks and with the investment already made in a National Recovery Plan for the species.

This example alone demonstrates the unacceptable nature of the Project even without further discussion of cultural heritage loss, Conventions to which Governments are signatory, and the range of habitats and species impacted.

Project Rationale:

The primary justification for the Project is recorded as … "to provide temporary storage capacity for large inflow events into Lake Burragorang to facilitate downstream flood mitigation and includes infrastructure to enable environmental flows" *ref: NSW Government's Planning Portal Warragamba Dam Raising Proposal*

Initially completed in 1960, a 1987-89 re-evaluation of the potential rainfall and flood risk approved the wall being raised a further 5 metres, and an auxiliary spillway was completed in 2009 to manage extreme flood events.

The EIS records that The Hawkesbury-Nepean Valley has a long history of flooding. According to the Insurance Council of Australia, the region has the highest flood risk exposure in New South Wales, if not Australia. Little wonder that some residents subject to the most recent flooding discovered that they were uninsured (and uninsurable).

There is no suggestion that the Project will eliminate flood risk. It is intended to mitigate rate of flow onto the floodplain in times of "large inflow events". Given the accepted fact that the catchment typically and historically goes through alternate lengthy periods of drought and then high precipitation and inflows; and that these may become more extreme under the impact of global warming, it would seem to be a brave assumption that a larger dam with greater capacity could promise more than minor flood relief.

Even assuming that the additional Dam capacity could be effectively managed, and despite the environmental havoc the Project would deliver, Warragamba Dam outflow is not the principal cause of floodplain inundation although it can make a contribution depending on several factors.

The salient point here is that between 45 and 60% of the water entering the system and contributing to flood peaks originates from water sources and inflow entering the floodplain downstream of the Dam. On the western side that includes the Grose, Colo and Macdonald Rivers and many additional creeks and feeder streams. On the eastern side the floodplain catchment includes the Nepean River and Cattai Creek catchments and many other feeder creeks and streams. Most of these watercourses on the eastern side of the floodplain have increasing residential and industrial development in their catchments and as the surface areas of concrete, asphalt and roofing expand, so the flash flooding

through storm water races quickly to the floodplain after heavy rain, as sealing of the landscape through development reduces the opportunity for soil absorption.
The continued growth and development on the eastern catchment of the floodplain can be expected to make this situation worse should climate change deliver the extremes in precipitation forecast.

Another key factor is the recognised "bathtub effect" of the basic geology and geography of the Hawkesbury-Nepean Valley and floodplain. The "tub" may have many sources to fill it but there is only one "plughole" to let the water out. Most rivers widen as they reach the sea but the Hawkesbury-Nepean narrows. After it crosses the floodplain and the influence of all the rivers and feeder streams and catchments below the Dam, it enters a narrow gorge in the sandstone downstream of Sackville before it can reach the estuary and Broken Bay.

So the more Western Sydney is allowed to grow and be sealed and paved, the more water there is available to rapidly fill the "bathtub" at an even faster rate and hence the greater the immediate flood risk on the floodplain. Raising the Dam wall may in fact do more harm than good if inflows are poorly managed. If there is any level of sea level rise due to climate change, then peak tides in the estuary will back up and the "plug hole" may be even slower to drain!

Flooding is only a problem, of course, if people settle in the path of the flood and can't get out of harm's way fast enough. In 2014 the NSW Government established the Hawkesbury-Nepean Valley Flood Management Taskforce to develop a whole-of-government approach to flood risk management and preparedness in the Valley. The Taskforce developed key elements of a Flood Strategy and in 2016 the Government adopted the recommendations of the Taskforce for nine outcomes. Only one of the outcomes was to be the raising of the Dam wall while recognising that "Raising Warragamba Dam would reduce the flood risk but will not completely eliminate all flooding impacts".

Given the uncertainties of climate change, our current understanding of potential impacts and the passage of time since this Project was first proposed, it would seem prudent to now consider alternatives for the expenditure including depopulating the floodplain, improving its safety for the remaining inhabitants and restoring its amenity especially for agriculture. The land is fertile because it floods! Climate change is happening now and Sydney needs to prepare for it. Inappropriate development on the floodplain should also stop; especially residential development.

And as one elder asserts "live on a floodplain, own a boat"

Conclusion

The Project should not proceed for the unacceptable environmental destruction alone that it entails. Since raising the Dam wall provides no guarantee of resolving flood damage the Project also warrants immediate cancellation with alternative safety measures to be undertaken.
We consider that the Project as described is misconceived, the rationale deeply flawed, and the enormous cost both tangible and intangible minimises or ignores salient facts. The Project should not proceed.

Submission prepared by G. Stevens on behalf of Hunter Bird Observers Club Inc. 19th October, 2021

References

1) *SMEC (September 2021) Environmental Impact Statement - Warragamba Dam Raising. Prepared for WaterNSW.*

About the Hunter Bird Observers Club

Hunter Bird Observers Club Inc. (HBOC) was established in 1976 and currently has a membership of 400 members. Although the Club is based in Newcastle NSW membership includes members from other areas in NSW and from interstate.

Aims of HBOC

- *to encourage and further the study and conservation of Australian birds and their habitat; and*
- *to encourage bird observing as a leisure-time activity.*

Activities include monthly regular outings, evening meetings, camps and field studies. HBOC promotes systematic field studies which include regular surveys by volunteers from the membership.

All data gathered from field studies are entered into the national bird record database administered by BirdLife Australia; Birdata https://birdata.birdlife.org.au/. Data are used to underpin conservation issues and HBOC promotes systematic surveys and data collection.

HBOC has a long history of working in collaboration with local councils, national parks and other state agencies, industry and schools.

For more information go to www.hboc.org.au