To whom it may concern,

I am opposed to the proposal to raise the Warragamba Dam wall. I don't believe that this is the best course of action for flood mitigation purposes for the Hawkesbury-Nepean Valley, and that it poses an unconscionable risk to the natural and cultural values of the Greater Blue Mountains World Heritage Area.

My personal connection:

Warragamba Dam, western Sydney and the Blue Mountains are at the core of my personal and family history.

I was born in the 1960s in Nepean Hospital. I grew up in western Sydney, and now live in the lower Blue Mountains. My European migrant parents settled in western Sydney around 1950. My father was indentured to the Australian Government through its Displaced Persons' migration scheme, post-WW2, and he worked on the building of the Warragamba Dam, of which he was proud. Just this year, 2021, my father died, aged 99, in the house that they had built. My parents had lived, worked and cared for their five children, and subsequently their grandchildren, in western Sydney over a period of seven decades.

I have a strong connection and respect for western Sydney and the Blue Mountains. My sense of place as a child revolved around the fascinating flora and fauna of the surrounding bush of the Cumberland Plain – the sights, sounds and smells. 'Camping' in the bush around my childhood home, swimming, fishing and picnicking at the Nepean, Hawkesbury and Colo Rivers and swimming in the creeks of the Blue Mountains.

Over the past 25 years, living in Warrimoo, I have been a regular and keen bushwalker, on trails from Glenbrook through to Mount Victoria. During the pandemic, my husband and I have remained closer to home, exploring the trails of the lower mountains to gain a greater understanding of the lie of the land of the area known as the Blue Labyrinth, a magical and magnificent public treasure.

As a child, I loved the vast agricultural land of the Hawkesbury floodplains, part of the food belt of the Sydney Basin, along with that around Badgerys Creek. Traditionally, the floodplains of the Hawkesbury-Nepean River, or Deerubbin, a *16-million-year-old-river*, provided sustenance for the local indigenous populations of the Darug and Gandangara people. Yams were plentiful: 'Darug' itself derives from the Aboriginal word for yam. Upon white settlement, the fertility of the rich, alluvial soil was recognised and before long the original inhabitants were displaced to allow the best agricultural land to be used for crop production to support the new British colony.

In more recent times, this prime agricultural land has been repurposed for housing development, a purpose to which it is far less suited. Not only has this put residents in harm's way in times of flood, but in general, the overdevelopment of western Sydney has also increased the problem. Soils and bushland that formerly absorbed water before flooding would occur have increasingly been paved over, and roads and hard surfaces built that increase run-off and flood risk to communities. Some residents, whose homes have previously seen out floods, are now succumbing to inundation.

None of this is news: successive governments have commissioned over the decades, and continue to commission, reports into flood mitigation in this region. Reports have suggested a range of actions that could be implemented to ameliorate the heavy risk to life and property. These include, but are not limited to, evacuation route upgrades, identification and management of flood risks to property,

public awareness/ community education, flood forecasting and warning, diversion of river flows, construction of levees downstream, voluntary purchase of property, voluntary house-raising, flood insurance, revisions to Council's planning controls to better manage flood risk.

Acquisition of existing housing on the floodplains and prohibiting further development has been suggested in reports to government since at least the 1980s, but it appears that subsequent governments haven't had the appetite to limit development, but rather have looked at ways to increase it.

Raising the dam wall - Flood mitigation or opening up flood-prone land to further development?

It appears to me, that the State Government's preference for raising the Warragamba Dam wall by 17 metres, is more about creating a *perception* of protection of all property downstream, in order to favourably influence the Insurance Council of Australia to support further greenfield housing development on the floodplains. The NSW Government intends for 134,000 more people to be living on western Sydney's floodplains in 30 years.

No matter how high the dam wall is constructed, it will not be able to prevent flooding in the Hawkesbury-Nepean Valley downstream. Almost half of the flooding of the valley comes from waters not controlled by Warragamba Dam.

In 2019, in an article in nine.com.au, *'Raising NSW dam wall 'good for developers"*, it stated that the Hawkesbury-Nepean Valley covered 425 square kilometres of floodplain, and included a property previously owned by Clydesdale Property Development Group.

"Chinese Australian Kenny Zhang was one of three directors when the company bought the land at Marsden Park in August 2014 for \$45 million. The entire property is classified as flood-prone land with parts in the one-in-100-year flood zone. Nearly six months after then-premier Mike Baird announced in mid-2016 that the wall would be raised, Clydesdale sold the property for \$138.8 million – more than three times amount originally paid."

Development has since been given the go-ahead and lots are now on the market.

In the Guardian's 28 March 2021 article 'Developing a floodplain: how raising a dam wall could create a false sense of security in Sydney's west', it states that, "Successive governments have agreed to open up flood-prone land in Sydney, amid pressure from landowners, developers and councils and the challenge of housing Sydney's growing population.

"The pressure often comes from landowners, and their causes are championed by local MPs and councillors. Despite the ban on developer donations at state level, the largesse from developers is still flowing to the federal campaign accounts of both parties."

It seems, however, that the Insurance Council of Australia has seen the light and has withdrawn its support for the project earlier this year.

In the article, "False Comfort': Buy-backs call sparks government spat with insurers over Warragamba' (SMH 21 October 2021) Insurance Council of Australia (ICA) boss Andrew Hall said the public money spent raising the wall would be better used buying back flood-prone land that never should have been developed in the first place. He told an industry forum that settlement in the Hawkesbury-Nepean Valley was the country's "biggest example" of historically poor planning decisions, with tens of thousands of people living on "one of Australia's most effective floodplains". He described western Sydney as a massive outlet for the stormwater that flowed from the Blue Mountains, adding that raising Warragamba Dam's wall by 14 metres "should never give false comfort because ...no matter how big you build a dam, it can keep raining".

Threat to World Heritage and cultural sites

The Blue Mountains World Heritage area is not just a world class National Park, in 2000 it was inscribed on UNESCO's prestigious World Heritage list in recognition of the Blue Mountains Outstanding Universal value for the whole of mankind. It has been vested with 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. That is not a commitment that only lasts an election cycle: that is a solemn and irrevocable commitment. This is the last place that any government should sacrifice to enable further expansion of floodplain development.

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**, as well as home to healthy populations of dingo, quoll, woodland birds and many other native species.

Australia's obligations under the World Heritage Convention mean it is critical for the Blue Mountains World Heritage site to be managed to protect its ecological integrity and authenticity. Any damage within its boundaries is completely unacceptable and inconsistent with World Heritage management principles.

Gundungurra Traditional Owners have not given Free, Prior and Informed Consent for the Dam proposal to proceed.

- 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.
- Only 27% of the impact area was assessed for Aboriginal Cultural Heritage in the EIS.
- Approval of the EIS would confirm Australia's growing international reputation as environmental vandals. It is notable that the engineering firm, SMEC Engineering, who undertook the environmental and cultural assessments for the project has an established history abusing Indigenous rights, and have recently been barred from the World Bank.

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

Inadequate environmental impact assessment

I understand that the Environmental Impact Statement (EIS) for this proposal downplays and denies the environmental and cultural damage that this project would cause to the Blue Mountains National Park and potentially detrimentally affect the region's World Heritage Area status.

The initial draft was heavily condemned by several of the government's own agencies: National Parks and Wildlife, Heritage NSW, and the Commonwealth Environment Department. The evaluation failed to assess the impact on species and ecological communities following significant recent bushfire events; it did not adequately consider cultural heritage values of the surveyed area, nor sufficiently consult with traditional owners; and it failed to consider the impact on iconic species such as the platypus.

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.

Additionally, I understand that there has not been adequate assessment of the seismic risk of this proposal. There is evidence to suggest that the additional weight of water – even if the wall was only raised by 14 metres – would increase the capacity of the dam from the equivalent of four Sydney Harbours, to six. It is anticipated that the weight of the water and seepage will exert tremendous pressure on the geology below and potentially cause slippage. It is said that the original dam construction, completed in 1960, likely caused the earthquakes at Robertson in 1961 and Picton (the Burragorang Earthquake) in 1973.

After the 2008 Chinese earthquake, Kevin McCue, adjunct professor at Central Queensland University said that "After China, Australia is the next most active intraplate area in the world", and

that a fault line near Lapstone, in the Blue Mountains, is "certainly big enough" to sustain a quake as powerful as the China's" (Sydney Morning Herald, May 14, 2008).

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?

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

Summing up:

What the State Government is proposing is a billion-dollar, tax payer-funded project that will provide very limited flood-mitigation capability in a significant flood event, and which has the potential to irrevocably destroy significant natural and cultural sites. It may act as a band-aid solution to Sydney's housing crisis, and will be a bonanza for property developers, but this will result in a disastrous outcome for homeowners, our cultural heritage, our native forests and our wild rivers. It will go down in history as an act of vandalism with international ramifications, as more than 1,000 sites of immense cultural, national and historical significance in the Burragorang Valley, including indigenous cave art, occupation and burial sites, would drown beneath silty waters, and potentially be destroyed forever.

Raising the dam wall will no doubt also open the door to further ill-advised development in vulnerable areas without providing any guarantee of future protection.

Where is the rational, considered plan for a sustainable future for western Sydney? We need better urban planning, not short-sighted fixes that encourage irresponsible, inappropriate development in flood prone areas.

We need a rational assessment of all flood-mitigation solutions to deal with the problems we have inherited from previous poor planning decisions. We need to decide on an appropriate suite of flood-mitigation actions that do not present unacceptable levels of risk to our Greater Blue Mountains World Heritage Area and our Greater Sydney water supply. And we need to ensure that the EIS process is fit, proper and exhaustive to inform the best possible outcomes.

Thank you.