

Submission
No 236

**INQUIRY INTO PROPOSAL TO RAISE THE
WARRAGAMBA DAM WALL**

Name: Mr Peter Prineas
Date Received: 10 September 2019

Partially
Confidential

Peter Prineas

Sunday 8 September 2019

Justin Field MLC
Chair, Select Committee on the Proposal to Raise the Warragamba Dam Wall
Legislative Council
NSW Parliament House
Macquarie Street
SYDNEY NSW 2000.

Dear Mr. Field,

Re: Inquiry into Proposal to Raise the Warragamba Dam Wall

1.0 I wish to make a submission to the Legislative Council's Inquiry. This is a personal submission. My background includes 35 years in employed and voluntary roles with environment non-government organisations in NSW, experience with NSW government bodies including the National Parks and Wildlife Advisory Council, the EPA Board, and the former Licence Regulator for Sydney and Hunter Water, and familiarity with the Blue Mountains based on numerous bushwalking visits beginning in the 1960s.

2.0 The NSW government proposes to raise the wall of the Warragamba dam by 14 metres. In furtherance of this objective it has enacted the *Water NSW Amendment (Warragamba Dam) Act 2018*. This Act provides for the setting aside the leasing, licensing, easement and right of way requirements in Section 153B of the *National Parks and Wildlife Act 1974*, and removing relevant national park lands from the control of the *Blue Mountains National Park Plan of Management*. The Act is essentially a mechanism for the administrative removal of legal obstacles to the inundation of lands within two national parks.

3.0 No environmental assessment has as yet been completed on the impacts of the proposed dam development. It is believed that if the dam wall is raised as proposed, the largest flood events would inundate up to 4,700 hectares of national parks and 65 kilometres of wilderness streams above the current full storage level of the dam. In 2000, the Blue Mountains area was listed on the World Heritage Register due to its exceptional representation of major eucalypt groups, exceptional diversity of habitats of the Australian fauna within a single place, and outstanding ecological integrity. Over time, inundations caused by a raised wall at Warragamba Dam are likely to cause permanent damage to the integrity of this *Greater Blue Mountains World Heritage Area*. At least 25 threatened species are known, or are likely to occur, within areas that would be inundated. The nationally threatened Camden White Gum (*Eucalyptus benthamii*) and the critically endangered Regent honeyeater (*Anthochaera phrygia*) are two species whose existence may be threatened by raising the dam wall.

4.0 I believe that in proposing to raise the wall of the Warragamba Dam, the NSW government has failed to properly consider the effects on wilderness recreation values in the southern Blue

Mountains, and I ask the Select Committee to examine these effects and take them fully into account in making its recommendations. The areas that will be affected by the raising of the dam wall are in the Southern part of the Blue Mountains National Park and the Kanangra-Boyd National Park. These areas occupy a place that is both geographically and historically at the heart of wilderness conservation in New South Wales and, indeed, in Australia. For more information on this subject I refer your Committee to my book 'Wild Places: Wilderness in Eastern New South Wales' produced with photographer Henry Gold in 1983 (the second edition published in 1997 is readily available), and in particular the chapter entitled 'Kanangra'. Some understanding of the cultural significance of this landscape can be gained by examining the very detailed sketch maps 'Kowmung' and 'Gangerang' produced by Myles J. Dunphy in the 1930s. These maps testify to the great love of this landscape that inspired Dunphy to make them, and of the later generations of young people who, with *Dunphy maps* in hand, have ventured into the wilderness on foot. The classic *Kanangra to Katoomba return walk*, would be ruined by the raising of the dam wall, as the course of the lower Kowmung is one of the highlights of the route either on the outward or return journey. The Kowmung River which would be severely affected if the dam wall were to be raised, is the premier wild river in New South Wales. To allow the lower Kowmung to be intermittently inundated and turned into an eroded and muddy channel, and to do so needlessly as is the case here, would be an enormous act of vandalism.

5.0 Many indigenous cultural heritage sites of the Gundungurra people of the southern Blue Mountains, are also located within areas that would be inundated if the dam wall is raised. Cave art, rare eucalypt scar trees, dreaming waterholes and marker sites are amongst the cultural heritage that would be inundated by a raised dam wall. The Committee must take account of these consequences.

6.0 As mentioned, if the raising of the dam wall proceeds it could threaten the status of the *Greater Blue Mountains' World Heritage Area*. A UNESCO advisory body warned in October 2018 that the Blue Mountains World Heritage Area could be listed as a site "in danger" if the dam wall is raised. World Heritage Centre Asia-Pacific chief Feng Jing has further stated that the conservation issues raised were being followed closely, and Joan Domicelj, who prepared the official nomination that saw the Greater Blue Mountains area added to the world heritage list in 2000, has stated that the plan to raise the dam wall is a "genuine concern". ['UNESCO Worried about Warragamba Dam Wall' SBS News 14 February, 2019]. State government actions, especially actions as thoughtless as those under examination here, should not put Australia in the position of endangering an international heritage property and reneging on international obligations.

7.0 Raising the wall of Warragamba Dam will not stop flooding as the dam controls only a fraction of the Hawkesbury-Nepean catchment area. There will continue to be a substantial risk of flooding from tributary rivers below Warragamba Dam and from the eastern side of the catchment. Professor Jamie Pittock of ANU, who has expertise in flood management, has stated that, "no matter how high you build that dam wall, floods will still happen in the Hawkesbury-Nepean Valley" [*Daily Telegraph* 7 Aug. 2019]. The NSW government's own recently available data [leaked charts reported by *Canberra Times* 5 August 2019 and by other media] show that raising the dam wall by 14 metres would provide a "small benefit", according to Professor Pittock, who is further reported to state that in his view this new information, "really undercuts the argument for raising the dam wall." These issues should receive the Select Committee's close attention.

8.0 The NSW government has said that the dam wall must be raised to protect 130,000 people who live and work on the Hawkesbury-Nepean Valley, an area over 425 square kilometres in extent. If there are in fact so many people at risk, this is to the discredit of the government and its predecessors, as it has been well known for a very long time that the valley floods disastrously: there are records of severe floods in the 1790s, and in 1867 a flood reached a height of 17.5 metres at Windsor. There are currently limits on developing lands in the Hawkesbury-Nepean Valley at

risk from one-in-100-year floods. Raising the wall of Warragamba Dam will be used as an argument for reducing the area affected by this zoning, with the result that large areas may be opened up for higher density development, putting many more people at risk. Infrastructure NSW's flood management strategy for the area openly supports this scenario, as it accepts that the valley is, "rapidly growing" and the population could double over the next 30 years. These matters need to be examined by the Committee.

9.0 Media reports state that a property on the Hawkesbury-Nepean floodplain at Marsden Park was purchased by Clydesdale Property Development Group in August 2014 for \$45 million and that Mr [redacted] was one of three Clydesdale directors at that time. The land was then (and is still) classified as flood-prone, with some sections in the one-in-100-year flood zone. The then premier, Mike Baird, announced in mid 2016 that the dam wall would be raised, potentially making the Clydesdale Group's landholding less prone to flooding, and some six months later, Clydesdale sold this landholding at Marsden Park for \$138.8 million. The sale price was over three times greater than the purchase price paid by the company only 30 months before. Mr [redacted] is also managing director of Waratah Group, an entity which, media reports indicate (based on Australian Electoral Commission records), donated \$300,000 to the NSW division of the Liberal Party in 2016 and \$250,000 in 2017 [AAP report by Dominic Sanda in the *Blue Mountains Gazette* 6 February 2019 and in many other newspapers]. The Clydesdale Group's dealings with floodplain land, and the Waratah Group's donations to the Liberal party, should be the subject of investigation.

10.0 It was reported earlier this year that the Warragamba Dam abutments may be raised in excess of 14 metres, to 17 metres, opening up the possibility that the dam wall could be raised even higher at some time in the future. The additional height was reported to be a response to the threat of increased frequency of flooding due to climate change ['Government's Secret Plan to raise Warragamba Dam wall by 17m', Peter Hannam, *Sydney Morning Herald* 15 March 2019]. The increased height would greatly magnify the impacts on upstream areas in the Blue Mountains. It is also possible that the proposed raising of the dam wall, or a further raising in the future, might be used to increase the dam's water storage capacity, not just for flood mitigation. In that event the increased inundation would become more or less permanent. The Select Committee should inquire into these issues.

11.0 As a flood mitigation measure, raising the wall of Warragamba is ineffective for the reasons already stated. Raising the dam wall to increase water supply, whether to meet the possibility of reduced rainfall due to climate change, or to keep pace with the rapid growth of Sydney, is also a highly questionable strategy. If climate change does significantly reduce rainfall then more storage capacity behind Warragamba Dam will be of little use. Instead we should look to drawing on Sydney's annual stormwater* and wastewater flows which, combined, have a volume equal to about double Sydney's present annual water consumption and are a resource that is little used at present. Developing these sources of supply, in conjunction with supply from the dormant desalination plant, and water efficiency measures, has the potential to improve flood mitigation in the Hawkesbury-Nepean Valley by allowing the maximum water level behind Warragamba Dam to be lowered permanently, and at the same time assure Sydney's future water security. [* Eastern Sydney's long term average rainfall is over 40% more than the Warragamba catchment area's]

12.0 I believe the proposal to raise the wall of Warragamba Dam has nothing to recommend it and should not proceed. The *Water NSW Amendment (Warragamba Dam) Act 2018* should be repealed. A range of alternative measures should be adopted to minimise any damage and loss due to flooding in the Hawkesbury-Nepean Valley. These include:

12.1 improving management of the existing storage of Warragamba Dam for flood mitigation, in conjunction with the development of alternative water supply options including stormwater

harvesting, wastewater re-use, desalination and improved water efficiency, as suggested in paragraph 11.0;

12.2 bringing floodplain development controls up to the level of world's best practice;

12.3 relocating residents at high risk from floods.

12.4 improving flood evacuation routes; and

12.5 developing enhanced flood-forecasting capacity;

Yours sincerely,

Peter Prineas OAM