

**Submission
No 15**

**INQUIRY INTO WATER NSW AMENDMENT
(WARRAGAMBA DAM) BILL 2018**

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State Development Committee

Inquiry into the Water NSW Amendment (Warragamba Dam) Bill 2018

Submission

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This submission relates to the proposal by the Government of the State of New South Wales (Australia) to raise the wall of Warragamba Dam and the Water NSW Amendment (Warragamba Dam) Bill 2018 which seeks to void operation of the National Parks and Wildlife Act in relation to temporary inundation of National Park land. The proposed Warragamba Dam project would be to inundate a substantial area (up to 4700m²) within the Greater Blue Mountains World Heritage Area including about 65 km of rivers and streams.

This project would result in inundation within the World Heritage Area of temperate eucalypt forest and rainforest, habitat for a range of threatened flora and fauna, including at least two eucalypt species and significant cultural heritage sites. The period of inundation would extend for periods of long enough to impact on plant species and other organisms existing within the temporary inundation area. It is also likely that inundation would facilitate weed invasion.

The proposal threatens the integrity of the World Heritage Area and the values for which it was listed.

At least two threatened eucalypts would be affected by the proposal. The Camden White Gum (*Eucalyptus benthamii*) population in the Kedumba Valley is under threat with about 40% of the total known population at risk due to the proposal. A disjunct population of Slaty Red Gum (*E. glaucina*) along the Wollondilly floodplain is also at risk. In addition, the Wollondilly occurrence of Coastal Grey Box (*E. moluccana*) would be threatened with extinction.

The structural diversity of eucalypts across the World Heritage Area is one factor which contributed to its listing. The proposal is likely to have a disproportionate impact on tall, moist forests and grassy woodlands, as these habitat types are found in areas subject to inundation.

The total number of threatened species, including plants and animals, which may be affected is at least 26 and may be much higher.

My friend and colleague, Michael Doherty, until recently a CSIRO ecologist, discovered a new species of *Hakea*, now known as *Hakea dohertyi*, whilst on a bushwalk in the 1980s. This species was known to occur in the Sombre Dome, Mount Doris and Rudders Rift area of Kanangra Bod National Park. In 1989 I found a new population of this species close to the shore of Lake Burragorang on the Tonalli River Arm. The population at this location, within the inundation area, was about 40 plants, or about 10% of the total known population. *Hakea* is genus within the Proteaceae family. Plants within this family have proteoid roots, a structure which enables them to absorb the nutrient phosphorus from the soil. These plants are susceptible to soil water changes and to root pathogens, which can lead to rapid death of affected plants. Periods of inundation could threaten the existence of this population of a quite rare species.

Habitat diversity was one criterion on which The Greater Blue Mountains World Heritage Area was listed. The NSW Government proposal would affect a range of unique, and poorly surveyed habitats including the vegetation types, Dry Rainforests, Douglas Scarp Woodland, Box-Gum Woodland, Coxs Granite Woodland and old growth forests of the Wollondilly Valley; the restricted and rare plants which occur in these habitats; and threatened fauna which depend on these habitats including the Regent Honeyeater, Brown Treecreeper, Speckled Warbler, Hooded Robin and Diamond Firetail, as well as the last wild population of Emu in Greater Sydney.

Of particular concern is the Regent Honeyeater, which is currently listed as Critically Endangered (NSW, National & IUCN). The Burragorang Valley floor adjoining the current full storage level (FSL) has been described as the most fertile regional habitat and a key foraging and breeding site for this species. The Regent Honeyeater is a specialist nomad and the regional meta-population relies predominantly on the woodlands of the Capertee, Burragorang flats and Cumberland Plain.

IUCN has published (2013) the World Heritage Advice Note: Environmental Assessment. This document establishes principles for environmental impact assessment relating to World Heritage sites and provides guidance as to appropriate processes for such assessment.

In particular, the document stresses the need to identify, evaluate, avoid and mitigate potential impacts of development and to assess alternatives to damaging developments, including the 'no project' option.

These are important principles in environmental assessment. This Bill effectively puts the NSW Government in conflict with these management principles.

Responsibility for management of World Heritage area listed under the World Heritage Convention falls to the 'state party'. In the case of the Greater Blue Mountains World Heritage Area, this is the Australian Government, which, in turn devolves management to the State of New South Wales. Management governance for the World Heritage area includes the Greater Blue Mountains World Heritage Area Strategic Plan and detailed management prescriptions are provided for through management plans for the reserves which constitute the World Heritage Area. It is difficult to see how a Bill which turns off management plans to allow a development is consistent with the governance structure which the Australian and NSW Governments have committed to implement to meet their respective obligations to protect the World Heritage Area.

In the Preliminary EIS, detailing its approach to the environmental assessment of the Warragamba Dam project, the NSW Government takes a minimalist to its consideration of World Heritage values and the significant values for each National Park likely to be affected by the proposal. In doing so, it has failed to take heed of the IUCN World Heritage Advice Note: Environmental Assessment and the Government's own Plans of Management for Blue Mountains and Kanangra Boyd National Parks and the Nattai Reserves including Nattai National Park and Yerranderie State Conservation Area.

It is important that any proposal by the NSW Government use a robust best practice environmental impact appraisal in relation to assessment of impact on World Heritage values and the conservation values for each affected conservation reserve. The assessment needs to provide for a comprehensive assessment of the biodiversity within the impact zone and a thorough understanding of the nature of inundation and the likely effects of inundation.

Allowing this Bill to proceed now is premature. The environmental impacts need to properly and adequately assessed through a rigorous process. The issues of protection of the World Heritage Area and the role of the Australian and NSW Governments in meeting their commitments to protect this area need to be foremost in each Governments' appraisal of the Warragamba Dam project.