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

Name:Name suppressedDate Received:3 October 2018

## Partially Confidential

## <u>Warragamba Catchment Area and the Blue Mountains World Heritage National Parks – impact of</u> <u>raising the dam wall on biodiversity</u>.

I am a zoologist with over 30 years of field experience working with the NSW National Parks and Wildlife Service and Office of Environment and Heritage. My role as a Natural Heritage Officer with NPWS/OEH between 1983 and 2016 was largely to undertake fauna surveys to assess the conservation value of lands that could be added to the national parks estate or protected through other land management instruments, or assess the fauna values of national parks and other reserves.

I have been visiting the Warragamba Catchment Area to undertake fauna surveys as a professional officer and volunteer since 1997 until the present. I am deeply concerned about the proposal to raise the dam wall and flood a significant area of the catchment which supports biodiversity values of national significance. In fauna surveys I undertook for NPWS in the catchment in 1997 we discovered large numbers of the Critically Endangered Regent Honeyeater. Fifty individuals were observed in the "Joorilands" region of the Yerranderie State Conservation Area. Subsequent biannual surveys for the Birdlife Australia National Regent Honeyeater and Swift Parrot Surveys have located the Regent Honeyeater and also the Endangered Swift Parrot in the immediate vicinity of the "Joorilands" homestead as well as a number of other threatened woodland birds which include the Hooded Robin, Brown Treecreeper, Speckled Warbler, Diamond Firetail and Turquoise Parrot. Other threatened woodland species which will be threatened through inundation of this woodland habitat include the Black-chinned Honeyeater, Barking Owl, Masked Owl, Eastern Free-tail Bat and Squirrel Glider.

The lands proposed for flooding includes significant areas of Temperate Grassy Woodland Ecosystems which are some of the most endangered ecosystems in south-eastern Australia, the majority of which fall within the heavily cleared and cropped Wheat-Sheep Belt of south-eastern Australia where as little as five percent of the original native vegetation remains. The Temperate Grassy Woodland Ecosystems of the Warragamba Catchment Area found along the Wollondilly River Valley and southern shores of Lake Burragorang which have survived the initial inundation caused through the creation of Warragamba Dam in the late 1950's are some of the most intact Grassy Woodland Ecosystems remaining in all of south-eastern Australia. These grassy woodlands support a predominantly native species understory which has not been subject to domestic stock grazing since the 1950's and has not undergone pasture improvement. It may be one of the only remaining temperate grassy woodland ecosystems to retain native predators, such as the Dingo, Spotted-tailed Quoll and Wedge-tail Eagle, in a natural equilibrium with their prey populations of native grazers, kangaroos, wallabies and wombats. The presence of a healthy Dingo population within this grassy woodland ecosystem, buffered by the extensive forested areas of the Blue Mountains World Heritage National Parks, may also be the reason why a population of the Endangered Brush-tailed Wallaby survives on the low bluffs of the Wollondilly River within this woodland environment. This species has disappeared from most of its former range in NSW. It is a species impacted by fox predation. Dingoes are considered by many scientists to act to suppress fox populations therefore their presence benefits many medium sized marsupials like the Brush-tailed Rock Wallaby.

Not only would inundation threaten these significant woodland environments but also significant forest environments along the shore of Lake Burragorang, the Nattai River and Kowmung River

valleys. Threatened species whose habitat would be impacted by inundation include the Glossy Black-Cockatoo, Gang Gang Cockatoo, Sooty Owl, Powerful Owl, Yellow-bellied Glider, Large-eared Pied Bat, Large-footed Myotis and Large-eared Pied Bat.

The uniqueness and condition of the woodland ecosystems of the Warragamba Catchment Area warrant them being given special status as a Scientific Reference Area which should be protected through their inclusion as an Area Of Outstanding Biodiversity Value under the Biodiversity Conservation Act 2016.

The suite of ecosystems that are contained within the Warragamba Catchment Area and the Blue Mountains World Heritage National Parks rival the biodiversity of Kakadu or the Kimberly regions of northern Australia. The protection of these ecosystems in their entirety is crucial to maintaining the biological integrity of the Blue Mountains World Heritage National Parks.

Restricted access into the catchment for the public and limited fauna surveys by staff and scientists undoubtedly mean that a full appreciation of the value of the catchment lands to flora and fauna is yet to be fully discovered or appreciated.

I ask that the government halt this proposal to raise the dam wall and destroy ecosystems of national conservation significance and seek other avenues to achieve flood protection for existing residents downstream.

Yours sincerely,