

Warragamba Dam Raising Project

Greater Blue Mountains World Heritage Area

Fact Sheet



World Heritage Area

In the year 2000, around a million hectares of the Blue Mountains were World Heritage listed in recognition of their significant natural values.

The Greater Blue Mountains World Heritage Area (World Heritage Area) is one of the largest tracts of protected bushland in Australia. The area has a unique landscape that extends for more than 250km from the edge of the Hunter Valley, to the Southern Highlands near Mittagong.

At some locations around the lake the boundary of the World Heritage Area matches the full supply level (FSL) of Lake Burragarang - the waterbody formed behind Warragamba Dam wall. Currently when Warragamba Dam fills and spills, areas above the FSL of Lake Burragarang are temporarily inundated.

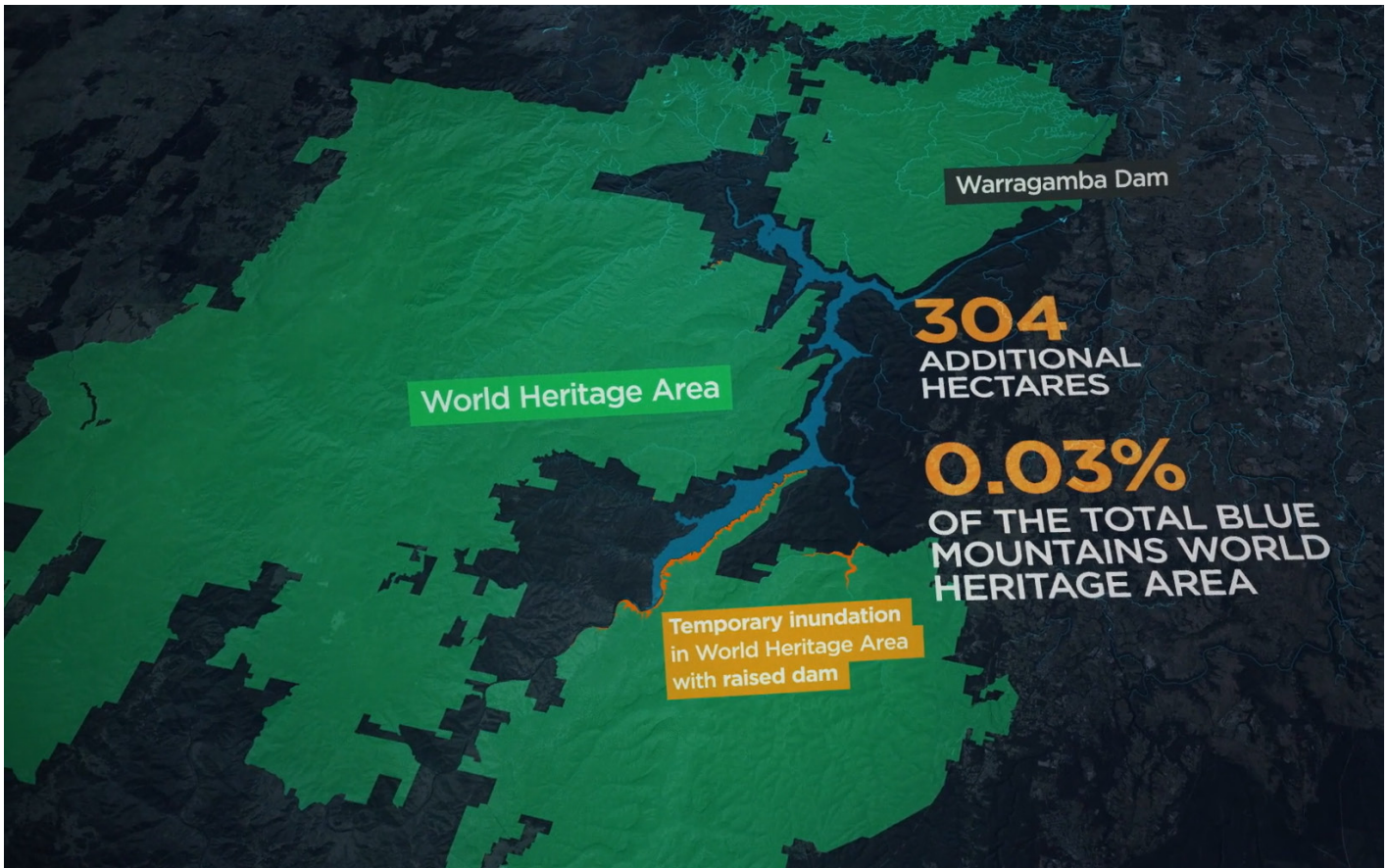
Project upstream impact area

The proposed Warragamba Dam Raising Project (the Project) involves raising the height and increasing the thickness of the dam with new concrete creating a 'flood mitigation zone' to temporarily hold back inflows. This would reduce frequency and extent of major floods in the Hawkesbury-Nepean Valley downstream.

With the Project, temporary upstream inundation will increase in extent and duration during the operation of the flood mitigation zone.

There are 304 hectares of World Heritage Area within the Project upstream impact area that based on modeling would experience increased temporary inundation during operation of the flood mitigation zone. This represents about 0.03% (or three hundredths of 1%) of the total World Heritage Area and is illustrated by the orange area in the graphic below.





World Heritage Area

Temporary inundation impacts

The impacts of temporary inundation depend on many factors such as the:

- timing and magnitude of rainfall
- catchment conditions when the rain falls, including recent stress events such as drought or bushfires
- existing storage level in Warragamba Dam
- duration, depth and extent of inundation for an individual flood event
- type and condition of Aboriginal cultural heritage items and places in the area
- flood tolerance of species

Species such as the Camden White Gum have resilience to temporary inundation. This was demonstrated in a controlled CSIRO study undertaken to inform the EIS to assess their tolerance to temporary inundation for up to six weeks (pictured below). Similarly, Aboriginal archaeological sites

have differing vulnerability to inundation. The fieldwork undertaken to inform the Aboriginal cultural heritage assessment identified over 183 Aboriginal archaeological sites that are subject to either existing temporary inundation (119) or were below the FSL (64) which were visible due to the low lake level at the time of survey.

However, in evaluating potential impacts to World Heritage values, the assessment has taken a precautionary approach, assuming the complete loss of values in the 304 hectares within the Project upstream impact area.

Suitable land offsets are being explored in collaboration with the Australian Government Department of Agriculture Water and the Environment and the NSW National Parks and Wildlife Service (managers of the World Heritage Area), so that, on balance, the Project will not cause a loss or degradation to the Area's Outstanding Universal Values.



World Heritage Committee

In 2019, the UNESCO World Heritage Committee noted with concern that the proposed Warragamba Dam Raising is expected to increase the frequency and extent of temporary inundation upstream of the dam.

The Committee asked that the proposed dam raising be rigorously assessed and that the EIS fully assesses all potential impacts on the World Heritage Area's Outstanding Universal Value and its other values, including Aboriginal cultural heritage.

The International Union for the Conservation of Nature has a set of World Heritage Assessment Principles, all of which have been fully addressed by the World Heritage assessment for the EIS.

The Australian Government is the 'State Party' responsible for World Heritage matters and works collaboratively with the state and territory governments to fulfil its obligations.

The Project team continues to assist the Department of Agriculture Water and the Environment in relation to World Heritage, including regarding access to the EIS documentation and supporting resources.

For further information, refer to the EIS Protected and Sensitive Lands Chapter 20 and World Heritage Assessment Report Appendix J.

Ask a Question

Visit the project portal and virtual engagement room: www.waternsw.com.au/wdr

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Toll-free Service

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