



ISSUE/DETAILS

There has been renewed interest in the Warragamba Dam wall raising since SMH's Tom Rabe (20th June) reported on Greens defector Justin Field teaming up with One Nation to push through a parliamentary inquiry into the government's plan to raise Warragamba Dam. They're calling for the inquiry to look at plans for any future development of property on the Hawkesbury-Nepean Floodplain. Yesterday (July 4th) The Australian reported the World Heritage Committee, a UN body, has intervened in NSW Government plans to lift the Warragamba Dam wall because of concerns about the possible impact of flooding on the Blue Mountains conservation area. 702's ABC's Harmer & Buck said the World Heritage Committee ruled the NSW Government plan to raise Warragamba Dam's height by 14m has generated concern.

Issues for the Department:

- DPIE issued the environmental assessment requirements for the Environmental Impact Statement for this project.
- The EIS for the Warragamba Dam Raising proposal is scheduled to be exhibited in late 2019/early
- Subject to environmental and planning approvals, a final business case will be prepared for consideration by NSW Government in 2020.
- The Minister has received a request from Water NSW for the project to be declared Critical SSI. The Department is reviewing this request. The Minister would remain the determining authority.
- DPIE is responsible for assessing rezoning proposals brought forward by councils and private proponents (e.g. Penrith Lakes Development Corporation - PLDC) in the Hawkesbury-Nepean Valley.

The renewed concerns around the Warragamba Dam Raising come as NSW Government has developed a new long-term guide - The Development Assessment Guideline: An Adaptive Response to Flood Risk Management for Residential Development in the Penrith City Centre - to manage the flood risk and prepare for flood events on flood-affected areas in the Penrith City Centre. The guideline was released on 28 June 2019. Holding lines with MO on the guideline.

The guideline is part of the Department's work with councils in the Hawkesbury-Nepean Valley, such as Penrith City Council, to ensure safe, flood resilient, sustainable, well-planned growth and development in areas affected by severe to extreme flooding like the Penrith CBD. This work forms part of a larger piece of work by the Department to develop a regional planning strategy for the Hawkesbury-Nepean Valley as proposed in the INSW strategy: Resilient Valley; Resilient Communities.

One of the development areas often quoted as needing the protection of the increased Warragamba Dam Wall proposal is Penrith Lakes. Although the Minister for Planning publicly refused to re-zone the land for the 5,000 dwellings proposed by Penrith Lakes Development Corporation, there are members of the community who believe the land will be re-zoned because of a 1987 agreement between the Government and PLDC.

NSW Government also participated in a mock major flood exercise on 26 June 2019 involving over 500 role players that tested the emergency management arrangements in the event of an actual major flood in the Hawkesbury-Nepean Valley, to ensure agencies are prepared for the real thing. The exercise attracted a lot of media attention.

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EXPECTED COVERAGE/JOURNALISTS

Local community media including <u>Macarthur Advertiser</u> (who reported on the issue in April 2019 on the back of a Water NSW workshop held in Warragamba), Wollondilly Shire Advertiser, Penrith Press, as well as SMH's Peter Hannam, ABC (TV and radio), other environmental journalists. Recent coverage:

- A draft EIS said sides of the wall will be raised 17 metres to allow for future expansion, putting at risk heritage-listed forest in the Blue Mountains and Burragorang Valley (previous documentation from the government stated the wall would only be raised 14 metres)
- A leaked draft report to government suggested up to 1,300 hectares of world heritage-listed bushland could be permanently damaged by floodwaters.

KEY MESSAGES/SUGGESTED LINES

- The Department recognises the Hawkesbury-Nepean Valley has a high level of flood exposure, due to its major river tributaries, unique landscape and large population.
- Most of the area will be affected by extreme and severe flooding and the NSW government has a
 duty of care to protect the existing population in the Hawkesbury-Nepean Valley as well as the
 growth that may occur because of historic zoning and planning decisions.
- The proposal to raise the Warragamba Dam by 14 metres is not about enabling new re-zonings it
 is about mitigating the flood risk to those people. Which is why evacuation capacity is at the heart
 of every rezoning decision we may make in the Hawkesbury-Nepean Valley.
- A good case in point is Penrith Lakes, which is within the Valley.
- We took the decision last year to allow only 30 dwellings on the land, instead of 4900, and to keep a significant part of the land unzoned.
- Based on the information we had available, if this land was re-zoned for urban development, it
 would be putting local lives in danger as people may not be able to evacuate in a flood, including
 from other areas of western Sydney such as Windsor, Richmond and Londonderry.
- The Warragamba Dam Raising project is considered state significant infrastructure under NSW
 legislation and the Department of Planning, Industry and Environment has issued a detailed set of
 assessment requirements including modelling for rainfall events, for land use development, growth
 patterns and evacuation behaviour that will inform the Environmental Impact Statement (EIS).

BACKGROUND

- The NSW Government is committed to keeping our communities safe and recognises appropriate management of different flood risks is vital for community resilience.
- The Department of Planning, Industry and Environment is working closely with other agencies on floodplain management in the Hawkesbury-Nepean Valley, utilising road infrastructure, flood hazard assessment, evacuation and emergency management.
- This work includes developing a land use planning framework in consultation with local councils and state agencies.
- The NSW Government has also developed a new Flood Management guideline and is working
 with Penrith City Council to ensure safe, flood resilient, sustainable, well-planned growth and
 development in the Penrith CBD.
- This is in addition to the Government's <u>Hawkesbury-Nepean Valley Flood Risk Management</u>
 <u>Strategy</u> released in May 2017 which includes flood emergency response and recovery exercises and a coordinated flood risk management plan for local councils, businesses and the community.







THIRD PARTIES

- Local community
- Give A Dam action group
- Aboriginal land care groups
- Environmental groups
- Wollondilly, Camden, Penrith, Blue Mountains and Hawkesbury local councils
- Local MPs including Minister for Western Sydney Stuart Ayres
- Justin Field, who has teamed up with One Nation to push through a Parliamentary inquiry into the NSW Government's plan to raise Warragamba Dam
- One Nation
- World Heritage Committee

Q&A

Why raise Warragamba Dam for flood mitigation?

Warragamba Dam is on the Warragamba River - one of the major tributaries to the Hawkesbury-Nepean River. Flows from the large Warragamba Catchment are involved in all major regional floods that pose the greatest risk to life and property.

Warragamba is Sydney's largest water storage dam and provides around 80% of current storage. The dam is not built or operated to manage or mitigate floods.

In developing the Hawkesbury-Nepean Valley Flood Strategy, a range of options were investigated to use or modify Warragamba Dam to provide flood mitigation. It was found that raising the dam wall by around 14 metres is the infrastructure option with the highest benefit - significantly reducing the risk to life downstream and reducing flood damages by around 75% on average while balancing the impacts on the upstream environment. It would significantly reduce the risk to life and property, including the worst floods on record, and increase the certainty of time for people to evacuate.

How would a raised Warragamba Dam mitigate floods?

The raised Warragamba Dam wall would mitigate floods by creating 'airspace' in a dedicated flood mitigation zone around 14 metres above the current full water supply level. This flood mitigation zone behind the wall would capture and temporarily hold back floodwaters coming from the large Warragamba Catchment allowing more time for evacuation of downstream settlements. After the flood peak, the floodwaters would be released in a controlled way - managing flood levels downstream and alleviating potentially devastating impacts on downstream communities.

The flood mitigation zone would only be used during floods. The current water supply level would not change.

Would raising Warragamba Dam eliminate flood risk in the Hawkesbury-Nepean Valley?

No. The dam raising would significantly reduce the flood risk, including the worst floods on record, but not eliminate it completely. It is not feasible to build a dam high enough to capture the most extreme, rare floods possible in the valley. This is true for most river valleys.

Flooding can also be generated by the other tributaries to the Hawkesbury-Nepean River. However, floodwaters from the large Warragamba Catchment are the major contributor to the most damaging and dangerous floods in the valley. The contributions from the Nepean River and other tributaries downstream of Warragamba Dam contribute to flooding but at much lower levels.





What's happening with the environmental assessment for the proposal?

WaterNSW, as the owner and operator of Warragamba Dam, is preparing a comprehensive environmental impact statement (EIS) and detailed concept designs for the proposal.

The project is considered state significant infrastructure under NSW legislation. The then NSW Secretary of the Department of Planning and Environment has issued a detailed set of assessment requirements. Modelling, surveys, technical studies and analysis are under way to inform the EIS, including Aboriginal Cultural Heritage Assessment in consultation with traditional owners, and detailed flora and fauna surveys and assessments. Community and stakeholder consultation are an important part of this process.

The proposal is also considered a 'controlled action' by the Australian Government under the Environment Protection and Biodiversity Conservation Act 1999 and will be assessed in relation to matters of World Heritage, National Heritage and threatened species and communities.

What is the timeline for the proposal?

The EIS for the Warragamba Dam Raising proposal is scheduled to be exhibited in 2019. Subject to environmental and planning approvals, a final business case will be prepared for consideration by the NSW Government in 2020. If approved, it is estimated construction would take approximately four years.

POLICY BACKGROUND (NOT FOR DISTRIBUTION)

1. WATER NSW APPLICATION TO RAISE THE WALL

- An application is expected to be lodged by Water NSW for raising the Warragamba Dam wall by 14 metres for flood mitigation, including raising the auxiliary spillway and modifying the dam wall.

 The project is likely to be placed on public exhibition in late Q4 2019/early 2020, possibly September/October. (NOT PUBLIC KNOWLEDGE
- The project proposes consequential changes to the existing flooding regime both upstream and down downstream, in terms of frequency and flood extent.

Issues include:

Impacts on Aboriginal places, wilderness and threatened species, including the Camden White Gum (located on the shores of Lake Burragorang), Regent Honeyeater, which has habitat adjacent to the lake, and the Macquarie Perch, which has habitat in the lake.

Impacts on world heritage values of the site. Concurrent Commonwealth Bilateral process.

- The application is already State Significant Infrastructure (SSI) through the State and Regional State Environmental Planning Policy (SEPP) and the Minister for Planning and Public Spaces is the consent authority.
- The Minister has received a request for the project to be declared Critical SSI. The Minister would remain the determining authority.

2. LAND USE PLANNING FRAMEWORK

- Whilst the Land Use Planning Framework has the ability and will look at flood evacuation risks (both with and without a dam wall raising) in a place-based context, it is too early to talk about potential recommendations of the Framework.
- The District Plan has included a precautionary approach to rezoning decisions in the Hawkesbury-Nepean Valley until the Land Use Planning Framework is complete, to ensure re-zonings only occur when there is sufficient evacuation capacity for the development. In addition to Penrith Lakes, a number of smaller re-zonings at Windsor and Emu Plains have been refused.

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OTHER AGENCIES

Water NSW, OEH, INSW, Transport for NSW (RMS), SES and Office of Emergency Management

RELEVANT CONTACTS

Minister's Media: Minister's Policy: Department Policy:

APPROVALS

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