

Environmental Impact Statement (EIS)

Raising Warragamba Dam

ID: SSI-8441

Submission

Video of Flooding and Hydrology of the Hawkesbury Nepean Valley states 70% water coming from the Warragamba River, 37% from the Nepean River, 11% from the Grose River and 7% from the South Creek catchment.

Chapter 15 Flooding and Hydrology

15.4.1 Historic Flooding. States 1867 as the largest flood event. While this is generally correct for the for the lower Hawkesbury – Nepean Valley and possibly the Wollondilly / Cox Rivers.

15.4.2 Upstream Catchment. Mainly talks of the Wollondilly and Cox Rivers and little of the Nepean River and does not mention the highest flood along the Nepean that affected the township of Camden. This major flood event occurred in February 1873 and had an observed flood level at Windsor of 13.1 meters.

This must have been a significant event for the future Water Board as there is a brass plaque showing the flood level at Wallacia Weir at their gauging station (Baines), downstream from Blaxland Crossing Bridge. Detail information is on their records at Warragamba about this site and flood levels of the 1960's is also recorded (to compare with the 1873 event) at that point.

The 1873 high flood line was marked on the Water Board's Catchment Fire Road maps (1970's and 1983 editions) in the Camden and Menangle areas so must have had some relevance.

It also must have had an influence on the early Dam builders because Courdeax Dam, the only one in the Upper Nepean / Metropolitan Catchments, has a fuse plug incorporated immediately south of the concrete spillway. This would be to ensure the integrity of the dam in major flood events, like what has recently been installed at Warragamba Dam (at great cost) for the same reason.

The Upper Cordeaux area has had recorded some of the most significant rainfall events in NSW, for example 26 February 274.5 mm fell in 24 hours (so there must have been very high rainfall elsewhere within the upper catchment) & 564.5 mm in 24 hours on the 14 February 1898 (Camden's 2nd highest flood) 16 May 1943 297mm* information C of A Bureau of Meteorology. Results of Rainfall Observations made in NSW up to 1945.

Although it is acknowledged that the greatest flooding event would come from the Warragamba and if combined with other Rivers such as the Nepean, this PMF would have a devastating effect not only for the Nepean Valley but also those towns and rural communities along the Nepean River upstream of the junction of the Warragamba.

Like Wivenhoe Dam in Queensland (dual purpose built for flood mitigation and water storage), when the dam fills, it will spill, regardless of how big it is built.

Warragamba Dam was purpose built for water supply and like all dams, can act as flood mitigation when low. To consider lowering it for flood mitigation, that has been suggested over many years, could have a detrimental effect on Sydney's water supply if a drought would and likely will, occur.

My point is that major flooding could occur in the Hawkesbury Nepean Valley in a major event from the Nepean as occurred in 1873. Or could there be a flood higher than this?

My question is, why wasn't the effect of a flood coming from the Nepean independently without influence from the Warragamba put forward within this EIS.

The diagrams depict what the storage would be like if the dam were raised by 14 meters but fails to show the level of the inflowing rivers in such an event. When the incoming rivers meet the stored waters, they themselves rise higher for several kilometers upstream of the inflow causing higher and wider flooding through the valleys and thus causing further damage.

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