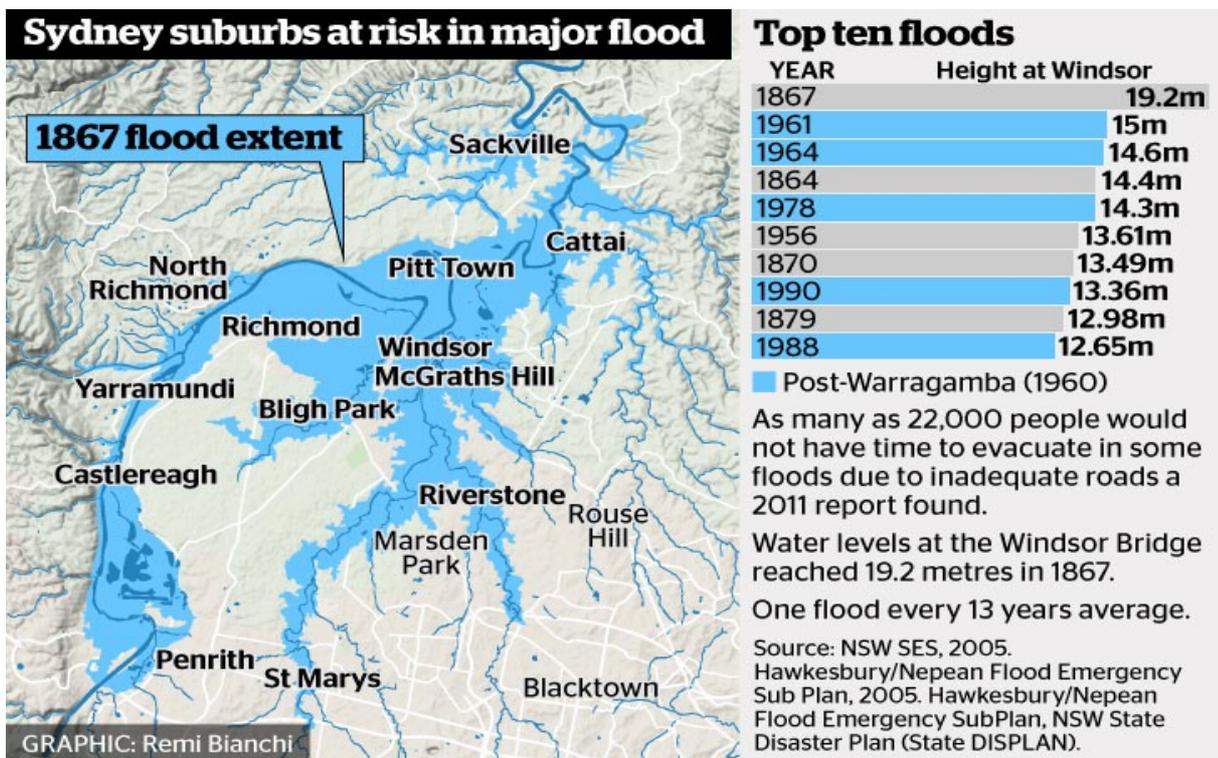


From Joe Grech

I could not speak at the meeting at the Wallacia Hotel due to health reasons and Darrell Bell read my report I wish to add some details I have to clarify some points. There does not seem to be a lot of accurate flood data for Wallacia. I have lived in Wallacia for the past 35 years and have seen a few floods some small and some big, one thing I have noticed is that flood levels are not consistent and can be very hard to model when you actually watch the river flowing during a flood the velocity seems to fluctuate as the flow slows the level rises, you get a surge and the level drops.

The most detailed report on Wallacia flooding was done for Camden Council by Worley and Parsons in 2015 titled “Nepean River Flood Study” It shows a more accurate picture for Wallacia flooding and river flows than the information Penrith Council has which seems to focus on the Hawkesbury/Nepean Flood Emergency Sub Plan. This plan looks at what to do during a flood like evacuation, property damage and communication. Here are some details



The 1867 flood shows a record of 19.2m at Windsor the same flood at Wallacia was officially recorded at 47.5m at Wallacia weir. yet at a property called Grove farm on the west bank of the river at Wallacia a level of 53m was recorded approximately 250m from the weir.

This is from Worley and Parsons 2015 for Camden Council

Table 3.1 provides a list of the major floods and the estimated peak heights during these events at Cowpasture Bridge and Camden Weir (*in Camden*) and at Wallacia (*refer Figure 1.1*).

Table 3.1 RECORDED PEAK FLOOD HEIGHTS

FLOOD EVENT	PEAK FLOOD HEIGHT(mAHD)		
	Cowpasture Bridge	Camden Weir	Wallacia Weir
June 1964	69.75	-	43.93
March 1978	69.12	-	42.24
April 1988	68.45	-	40.81
August 1990	66.30	66.11	39.21

It states these are estimates I think it may be due to the surges in the river flow if you look at March 1978 you see a height at the Wallacia Weir of 42.24m yet the level at Park road was measured on the power pole at 44.5m much higher than the recorded 1964 flood which was a much bigger flood. Some Government departments and private Hydrologists now seem to understand that Wallacia has some unusual problems in regard to flooding being so close to Warragamba Dam and the natural flood water flow restriction at Nepean Gorge.

If the increase in height of Warragamba Dam goes ahead by 14m I believe that it will reduce or stop small floods by converting the dam to a flood mitigation dam, at present it is only a Water Catchment dam, the problem with that, on talking to dam engineers during the construction of the Emergency Spillway, is that when the reserve space is full, a higher volume of water would have to be released over a longer period of time so the problem of flooding at Wallacia would be no more small floods, only big floods, so a 1:30 AEP would become a major flood with higher flood levels than in 1964. If that is the case presented by Raising the Dam Wall by 14m a 1:100 AEP will see flood water over 50m AHD at Jerrys Creek and the golf course would be 90-95% inundated by flood water. I would like to see modelling on the Nepean river including Wallacia and Jerrys Creek with the input of Warragamba Dam overflows.

On another issue Tidal flows in the Hawkesbury River was mentioned at the meeting they do not have any effect at Wallacia during a normal flood The only time it would be an issue is if the Emergency Spillway opens during a major flood it would be like a big wave flowing downriver. You have to remember the Emergency Spillway is fully automatic it has zero human control when the water gets to a certain point its gone in one big flush and if it is high tide in the Hawksbury, where will it go. Everybody ignores this fact it is never mentioned in any report, WHY! I think it is a man made disaster waiting to happen and nobody wants to even think about it.

Joe Grech