

197 River Road

Leonay

NSW 2750

10 November 2021

Dear Sir

### **Re: Warragamba Dam Wall Raising**

My wife and I reside on the banks of the Nepean River at Leonay, and naturally we are concerned about the possibility of floods on the Nepean River. Our house is 12 metres above the normal river level and during the last 37 years we have witnessed two floods of approximately an 8 metre rise, and many more in the 2-3 metre range.

However I can't support your proposal to raise the dam wall as it fails in two major ways:

1. By your own reasoning it does not guarantee complete safety because of other inflows of water, mainly the Nepean, the Colo and local rainfall, and also the "bathtub" effect of the problem of water departing the flood plains.
2. The proposal is inadequate from the Flood Management point of view especially as the Water Board has control of the Dam and it operates under a charter of storing water for Sydney's needs.

Given the expense of the proposal and its lack of ability to provide security I believe the money could be better spent and we should focus on mitigating the effects of possible floods.

### **Flood Management**

Today's weather forecasts are far superior to even a few years ago and we can operate with greater certainty of the likely future rainfall.

A separate authority needs to control the dam level, and this authority needs to be indemnified against claims arising from flood damage caused by water releases made in accordance with prescribed limits.

I propose the Dam be kept at a maximum level of 96%, and:

- If heavy rain is expected in the next two weeks, attempts should be made to reduce the level to 93% using a release rate (to be determined) that would only cause nuisance flooding,

- If major storms are expected in the next two weeks, attempts should be made to reduce the level to 90% using a release rate (to be determined) that would only cause minor flooding.

### **Flood Mitigation**

The money saved could be used to mitigate the effects of floods, and these three projects should be especially considered :

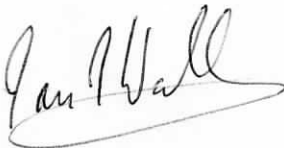
1. Make the broadwalk at Tench Reserve a floating one so it won't go under water with an environmental release of water.
2. Raise the level of the Yarramundi Bridge to be above the level of the adjacent flood plain
3. Raise the level of the Windsor Bridge to be above the level of the adjacent flood plain

### **Flood Relief**

I understand that no simple solution has been found to reduce the "Bathtub" effect but surely one of the boring machines making road and rail tunnels under Sydney could easily drill a few overflow tunnels. The tunnels would only need minimal internal finishing and just a simple removable sluice gate at their starting point. The waste from the tunnel could be used to elevate some of the roads that are subject to local flooding.

I think pursuing these measures would provide a similar level of flood security and a much better cost benefit, especially if environmental and flood mitigation releases generated green electricity.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ian J Walker', with a long horizontal flourish extending to the right.

Ian J Walker