FACT SHEET 3:

Don’t raise the Dam
The Economics

ON ECONOMIC GROUNDS, the Infrastructure NSW case for raising the height of Warragamba Dam just doesn’t add up.

As a flood mitigation project, Infrastructure NSW’s proposal to raise the height of Warragamba Dam wall by 23 metres would be a waste of millions of dollars. Major floods would still affect most parts of the floodplain (see Fact Sheet 2 - the Impact of Floods). Don’t Raise the Dam’s preferred option provides flood mitigation and management at much less cost (see Fact Sheet 1 - The Better Alternative).

Alternative plan would cost less, work better

Construction of the auxiliary spillway in 2002 has ensured the safety of Warragamba Dam during a Probable Maximum Flood (PMF). Raising the height of the dam — at a cost of $500 million — does not improve dam safety but is an expensive engineering solution that ignores flood management and the mitigation potential of the existing dam.

Costs likely to soar above estimate

The height increase of 23 metres is the largest ever proposed for a concrete faced gravity dam. In all probability major technical difficulties will be encountered, pushing the cost way above estimate.

Only rarely have large dams been constructed for the original estimated cost. Based on construction costs of similar large dams around Australia, the cost of increasing the height of the dam is likely to be nearer $750 million — an extraordinary amount of money for a proposal of dubious additional benefit.

### The real economic cost of raising the height of Warragamba Dam

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Cost estimate Cost (in millions)</th>
<th>Actual Cost (in millions)</th>
<th>Cost over-run (real-terms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henty-Anthony Scheme (Tasmania)</td>
<td>410</td>
<td>574</td>
<td>?</td>
</tr>
<tr>
<td>Pieman (Tasmania)</td>
<td>134 (1971)</td>
<td>730</td>
<td>100%</td>
</tr>
<tr>
<td>Warragamba</td>
<td>500</td>
<td>est. 750+</td>
<td>?</td>
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</tbody>
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Social and environmental costs have been ignored

Don’t Raise the Dam’s analysis of the supposed benefits of the Infrastructure NSW proposal show they have been greatly exaggerated — and costs have been underestimated. In fact, many of the social and environmental costs were not even considered in the original economic studies by the inter-departmental committee that examined the flood mitigation and dam safety options for Warragamba Dam.
Previously Sydney Water had consistently ignored or under-estimated the social and environmental costs of the proposed dam raising, including:

- Inundation and scarring of important wilderness areas in the Greater Blue Mountains World Heritage Area, with unjustifiable restrictions on access to these areas (Fact Sheet 4 - the Environmental Impacts);

- Greater, rather that less, likelihood of an increase in the cost of damage by major floods because of the almost certain spread of urban development on flood-prone land in the Hawkesbury-Nepean valley — such expansion will encourage a false sense of security created by Warragamba Dam’s wrongly perceived flood mitigation potential (see Fact Sheets 2 and 4);

- Increased health risks for residents of the Hawkesbury-Nepean valley due to deteriorating quality of water and air resulting from increased urban expansion;

- Loss of fisheries, including valuable oyster farming, as wetland and estuarine areas are affected adversely by changed river flows.

Prolonged community disruption

Sydney Water has admitted that low level bridges and roads will be impassible for much longer periods during floods than in the past, due to flood mitigation by the proposed dam. Some could be closed for up to 10 days, causing serious inconvenience to the community and a cost of many millions of dollars to industry.

Oyster farms - a valuable industry at risk

Sydney Water has admitted that mitigation of very large floods will have serious consequences for oyster farming industry in the Hawkesbury estuary. Extended fresh water flood flows will kill oysters, bringing ruin to this multi-million dollar industry. Hawkesbury oyster farms are of major importance because they provide growing stock for the rest of the industry.

There is a better alternative that will cost much less

Don’t Raise the Dam advocates an alternative to Infrastructure NSW’s grandiose plan that would cost far less and still provide reasonable flood mitigation. The dam could remain as it is now and be used to mitigate floods.

It would be far more effective to move low lying buildings to higher ground than to implement Infrastructure NSW’s proposal (see Fact Sheet 1 - The Better Alternative). In the meantime, further development on low lying land should be strictly prohibited.

The best protection from major floods is to refrain from developing the low lying areas likely to be affected.

Say NO to the proposed waste of hundreds of millions of dollars on a poorly conceived plan that will reduce your quality of life and damage the environment.

For more Information, phone Don’t Raise the Dam on (02) 9261 2400 or write to the Colong Foundation, Level 2, 322 Pitt St, Sydney, NSW, 2000