

Andrew Lister

From: Gordon.Cameron@pmhc.nsw.gov.au
Sent: Tuesday, November 18, 2008 10:30 AM
To: Andrew Lister
Subject: Riverpark Sancrox - Climate Change comments

Andrew,

Further to your letter of 25 September 2008, I can provide the following comments.

You have misunderstood my comments on this issue (pg 2, dot point 5). Council has not done any Climate Change (CC) assessment at this stage. This work will be done as a variation to the Hastings Floodplain Management Plan phase. It is prudent for Council, like consultants, to be consistent with the new DECC CC guidelines.

What we have previously done as part of the Hastings Flood Study work is undertaken sensitivity testing for other events and it turns out that the 200 year AEP has a peak flow equivalent to a 17% increase on the adopted peak 100 year recurrence flow at Bains Bridge. This is in-keeping with the order of increase in flow expected from increased rainfall intensities predicted along the east coast of NSW due to climate change, as outlined in table 1 of the DECC Guideline titled, *'Practical Consideration of Climate Change' (October 2007)*. Results from the flood modelling indicate that peak flood levels for the 1:200 AEP are predicted to be typically 400mm above 100 year AEP flood levels in areas immediately downstream of Rawdon Island and typically up to 1000mm above the 100 year AEP in the vicinity of Wauchope.

Hydraulic modelling in the Rawdon Island area also indicates that flood levels are relatively insensitive to increases in sea level associated with CC.

It was suggested that an additional amount of 300mm could be incorporated into councils freeboard defining the planning flood level for all areas upstream of Dennis Bridge to accommodate the potential impact of increased rainfall intensities due to CC, however this needs to be checked and go through the Management Plan process including public consultation before any final decision is made.

It must be understood that all developments of this nature must consider CC and be consistent with the DECC Guidelines. I note a recent industrial development in Herons Creek, with links to your company, has correctly undertaken a CC assessment and as such adopted a 30% increase in rainfall volume given its insensitivity to CC.

Having said this, it is clear that this site is not significantly sensitive to CC and evacuation routes are reasonable. Councils indicative information suggests that a 300mm increase in this area is reasonable and as such I would be comfortable for a 800mm freeboard to be applied to all dwellings in this area. You should be aware that properties are likely to be inundated more frequently &/or to a greater depth in the future. Further, when CC is in effect the evacuation routes will potentially be 300mm deeper than it may be now, however I do not believe this to be a major issue given the sound evacuation routes. Nevertheless, you will need to check this aspect.

In addition, I note you describe a current 100 year AEP as 4.5m AHD. Please note the level varies over the site from about 4.3m at the northern end to around 4.8m AHD at the southern end.

I hope this has clarified this somewhat.

Regards,

2/12/2009

Gordon Cameron
Environmental Engineer
Port Macquarie - Hastings Council

T. 02 6581 8649
F. 02 6581 8123
M. 0408 120 205

PLEASE NOTE: This e-mail and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Access to this electronic message by anyone else is unauthorised. If you have received this message in error you are hereby notified that any disclosure, copying and distribution of the information is strictly prohibited. Please notify the sender by return e-mail and delete the message. Thankyou.
