

PRESENT

Members:

Matt Rogers (PMHC)
Tim Molloy (PMHC)
Gordon Cameron (PMHC)
Thor Asso (PMHC)

John Hough (Community Rep.)
David Felsch (Community Rep.)
Graeme Sayer (Community Rep.)
Alan MacIntyre (Community Rep.)
Alan Taylor (Community Rep.)

Garry Fajks (SES)
Kevin Sherwood (SES)
Steve Lawrence (SES)

Other Attendees:

Consultants: Chris Thomas – Worley Parsons

The meeting opened at 1.00pm.

01 ACKNOWLEDGEMENT OF COUNTRY

The Acknowledgement of Country was delivered.

02 APOLOGIES

CONSENSUS:

That the apologies received from Kate Browning (Office of Environment and Heritage) and Steve Hart (SES) be accepted.

03 CONFIRMATION OF MINUTES

CONSENSUS:

That the Minutes of the Hastings LGA Floodplain Sub-Committee Meeting held on 29 February 2012 be confirmed.

04 DISCLOSURES OF INTEREST

There were no disclosures of interest presented.

065 CAMDEN HAVEN FLOOD STUDY

Chris Thomas of Worley Parsons provided an overview of the study which provides an update on the previous study.

Allan MacIntyre raised the following issues:

1. 1963 Flood photographs and historic data provided to the Laurieton Library should be reviewed before finalising study.
2. What is Council's duty of disclosure given that predicted 100 year flood levels with provision for climate change will have an impact on a large area of the catchment. Matt Rogers confirmed that Council has a duty of disclosure under the Local Government Act.
3. The study needs to incorporate reference to Council's obligation to consider climate change.
4. The study summary and introduction needs amendment to make reference to Herons Creek.

David Felsch raised the following issues:

1. Noted that figures 3.3 to 3.7 were difficult to read. Chris Thomas confirmed that the figures would be printed with more clarity for exhibition.
2. Will the flood model be available for use by landowners and developers as part of the flood assessment for development proposals? Chris Thomas advised that the models and data are owned by Council and would be available to consultants for a small data extraction fee.
3. Fig 6.14 includes a variation of 600mm between recorded data and the model prediction. Chris Thomas advised that it was likely that a localised blockage was causing the discrepancy. Chris noted that further downstream the differences were much smaller. Calibration of the model to the 1963 Flood was problematic because of the lack of rainfall data. Further investigation would be needed to refine the error, however this work is beyond the scope of this current study.
4. The flood model should allow easy update with new data. Chris Thomas advised that that it is not necessary to continually republish the study because peak flood levels do not change as a result of small site by site updates.
5. The data on river bed topography is very old and should be updated for the study. Chris Thomas advised that it would be costly to update the data and any update would not make any significant change to the study results.
6. Queens Lake should all be regarded as a floodway due to similar depths of the lake. Chris Thomas advised that consideration had been given to different options

for classification of Queens Lake and Watson Taylor's Lake flood paths. In this instance the refinement of floodway definition does not have any significant benefit because development scenarios are based on hazard and it is unlikely that any development would be impacted. Floodway locations for the Lake are an indication of likely flood paths through the lake.

Garry Fajks raised the following issues (as tabled in a written submission):

1. Page 1 of the Introduction fails to mention any tidal or storm surge effect as part of the flooding of the lower catchment. This is a significant oversight at this point & its relevance is not brought into the document until much later. Refer pages 40, 41 & 51.
2. There is some reference to floods prior to the selected timeframe, particularly the 1929 event although references have been few – of note is that the arrival of the flood peak in 1929 in the lower catchment coincided with the low tide, therefore no effects were felt.
3. Throughout the document, reference is made to the lack of available / relevant data necessary for a complete assessment to be made.
4. Data from several pluviometers outside the catchment were used in conjunction with daily readings to try to gain an understanding of the rainfalls occurring during significant events in the catchment. Many of these pluviometers are measuring rainfall outside the area that impacts other than locally. For example: Comboyne Post Office records rainfall that will impact the Hastings & Manning flood plains. The Camden Haven Catchment begins more to the east.
5. The Logan's Crossing Pluviometer was not functioning during the events chosen as representative of local flooding & therefore no true comparison can be made.
6. All the maps produced in figures 3.3 to 3.7 have the background information / detail missing.
7. Page 18 lists data as being only available for a period of 20 years from MHL & 9 years from NSW Office of Water & only covers 35% of the catchment. The lack of data will lead to adverse public criticism & will cause distrust in the document when on public display.
8. Reference is made to the 1963 Storm Event & refers to the general lack of data (page 22) leading to a declaration later in the document that the flood of record being excluded (page 25) from the assessed behaviour of the Camden Haven Floodplain. This is referred to again on page 41.
9. Page 26 refers to the 1980 & 1984 events as being the most suitable for inclusion in the study yet there are constant referrals to the recorded data being manipulated in the models to "make them fit".
10. Table 5.2 lists LAG in minutes – There is no reference as to where the Lag is from. In addition on page 31, it is then decided that the lag times shown are not able to be verified.
11. The document lists lag times on page 57 Table 7.6 in hours after the start of the storm – an extension could be made showing arrival time in the lower catchment or significant settlement.
12. Page 32 states that the RAFTS model as devised could not predict smaller events & again showed that efforts had to be made to "make it fit".
13. References start to be made to the "Laurieton Road Bridge" in maps & tables forming a part of this document. This should be revised before publication to read "Dunbogan Bridge" so as to align with local knowledge.
14. Similar references are made to the "Ocean Drive Road Bridge" locally referred to as "Stingray Creek Bridge" – this should also be revised for public clarity.
15. Page 39 again refers to the lack of data for the local area where in paragraph 2 it

- states “no recordings have been made at the mouth of the river during major flood events”.
16. Figure 7.7 to 7.21 show predicted flood levels & velocities during various events – Gary believes the public would like to see a map showing depth over land in various designations in less than .5 metre intervals so as to gain a better understanding of what can be expected in time of flood. The intervals shown do not give a clear impact over the large area that is inundated.
 17. Appendix A is missing.
 18. Appendix B showing the cross section is poorly produced with the use of yellow ink making their usefulness / clarity inappropriate for public display.
 19. Page 32 notes that during 1995 & 1999 a cell of rainfall formed in the limited catchment that is the Camden Haven – this would have explained the closure of the Pacific Highway at Herons Creek where stream flow overtopped the safety fences on the Herons Creek Bridge. While of relatively short duration there was significant effect.
 20. Table 7.4 shows estimation of peak levels at various points in the catchment. In referring Study figures to SES Flood Intelligence cards there are some significant variances & discussions will have to take place at Region HQ to allow revised figures to form a part of upgrading SES intelligence cards.

Logan's Crossing Gauge

ARI	Worley Parsons	Flood Intel
5	6.95	
20	7.65	10.04
50	7.95	10.44
100	8.2	10.74
200	8.45	
PMF	9.15	

Kendall Road Bridge

ARI	Worley Parsons	Flood Intel
5	4.75	
20	5.45	5.6
50	5.85	6.0
100	6.2	6.4
200	6.5	
PMF	7.25	

Laurieton Gauge (shown as Laurieton Road Bridge)

ARI	Worley Parsons	Flood Intel
5	1.3	
20	2.4	2.4
50	2.78	2.7
100	3.03	2.9
200	3.25	
PMF	3.65	4.5

21. The exclusion of the 1963 flood event from the modelling will cause significant uncertainty in the public eye. That coupled with the constant referrals to making the data fit will lead to distrust from the general public. Chris Thomas proposed that the study be amended to reflect Gary's Concerns by including an appendix on

hydrologic model development, up grading of figures and clarifying the situation on the 1963 flood.

22. The report should clarify the relationship between ocean levels and flood levels.

Gordon Cameron advised a revised copy of the Flood Study would be proved to members on CD and that further questions or issues on the Study should be submitted to him by Friday 11 May 2012.

There was discussion on the technical complexity of the study report and concern about the ability of the community to understand the key issues. The preparation of explanatory information to support the exhibition process was canvassed.

CONSENSUS:

That it be recommended to Council:

1. That the draft Camden Haven River & Lakes System Flood Study be placed on public exhibition for six (6) weeks.
2. That an Information Session be held during the exhibition period to assist the community in preparing submissions.
3. That matters raised by Committee members be addressed in the Study Report prior to formal exhibition.
4. That additional explanatory material be prepared and exhibited with the Study Report to assist in community understanding.

076 GENERAL BUSINESS

06.1 David Felsch noted that the residents of Oaks Crescent had spoken at Council in opposition to the recommendation to adopt the Hastings River Floodplain Risk Management Study. David advised that he was under pressure from the residents to ensure that their issues, that were raised in submissions, were given credence given the number of residents that had made submissions and their familiarity with flooding in this locality. David believed that there is a need to respond to the residents and follow up on their concerns.

Matt Rogers advised that the Administrator had written to the residents following the Council meeting.

Alan Taylor noted that technical aspects in submissions had previously been responded to by Council's consultant.

Kevin Sherwood noted that the Committee has considered the issues associated with the Hastings Flood Study and Management Study and made recommendations to the Council and that any issues being raised by residents should be directed to Council staff.

The meeting closed at 3.30pm.