

Meeting notes

Floodplain Management Advisory Committee

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| Date | 22/03/2019 | Time | 09:35 am |
| Venue | Taree Admin. Committee Room 2 Pulteney Street Taree | Note-taker | Peter Hatton |
| Present | Cr. Peter Epov (Chair) Richard Murphy (OEH) Michael Stubbs (SES) Lloyd (Robert) Gill (Community Rep) Garry Woodward (Community Rep) Jane Cowan (Community Rep) Lesley Woods (Community Rep) Kenneth Billings (Community Rep) Greg Crisp (Community Rep) Scott Nicholson(MCC) Rhett Pattison (MCC) Evan Vale (MCC) Michael Griffith (MCC) Andrew Staniland (MCC) Thomas Doyle (MCC) Peter Hatton (MCC) Daniel Williams (BMT WBM) Chris Thomas (Advisian) | | |
| Apologies | Cr. Karen Hutchinson (Deputy Chair) Tony Day (SES) Maria Frazer (SES) Ben Matters (SES) Jennifer Granger (Community Rep) Janet Troope (Community Rep) Peter Neal (Community Rep) | | |

Meeting items

| Item | Key points/actions |
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| <p>1 Introduction</p> | <p>Committee Chair welcomed all attendees and opened meeting. The chair reminded all members that they are required to sign and return the previously distributed Terms of Reference document. The TOR document will also be redistributed with these meeting Minutes as well.</p> <p>Chair asked for a mover to adopt previous meeting minutes. Ken Billings moved acceptance with the amended inclusion of his meeting comments relating to Harrington flooding. Minute taker to amend previous Minutes and redistribute to members with the following amendment –</p> <ul style="list-style-type: none"> • (Ken Billings) Ken commented that he, with confidence, can advise that Harrington has never experienced a flood event with a flood surface level greater than 1.95m AHD. |
| <p>2 Current Projects</p> | <p>Evan Vale introduced himself and briefed attendees on the status of current projects and the programmed timeframes for each as well as the intent to establish priorities for the next 5 years. Evan in consultation with OEH has set revised timelines for completion of the current main three projects being the Manning River FRMSP (30/11/2019), Karuah River FRMSP (31/10/2019), Gloucester FRMSP (30/11/2019) as well as the Port Stephens Foreshore FRMSP 31/01/2020.</p> <p>The 5 year plan will include applying for funding of a new Flood Study for Bulahdelah. The last study for this area was in 2002 and advancements in flood modelling as well as the inclusion of 2016 AR&R guidelines will deliver a better study outcome for Bulahdelah.</p> <p>Council has advised OEH that it will cease any further work on the current Great Lakes Remote Area Flood Study as the defined scope for this study does not align with Councils current intentions for remote area floodplain management. Councils new approach will deliver a better outcome and provide a “better picture” of suggested flood extents for currently un-modelled areas within the MCC LGA.</p> <p>Tenders for the Racecourse Creek Old Bar Flood Study will be sought shortly.</p> <p>Proposed FMAC meeting schedule – (next meeting) Week of 17th – 21st June, (final meeting for year) week of 2nd – 6th December. Final dates to be confirmed with possible move to holding meetings on a Thursday to better suit attendee's availability.</p> |
| <p>3 Manning River FRMSP Update</p> | <p>Dan Williams (BMT WBM)</p> <ul style="list-style-type: none"> • Study to be completed by end of this year. <p>Dan addressed members with details of Floodplain Risk Management Options as detailed in the attached presentation.</p> <p>Flood modification measures –</p> <p>Levees -</p> <ul style="list-style-type: none"> • Dan discussed the various levee options including explanation of the Flood Damages Assessment process, Cost Benefit Ratio (CBR) and Average Annual Damages (AAD) relative to each |

option.

- Victoria Street Taree levee has highest CBR (1.7).
- Levee installation considerations should not be based upon CBR only but also include impact on the community if a levee was installed.

Member comments –

Greg C – “Are the economic benefits of possible new development considered in CBR ?” Dan response “No”

Road Raising –

- Dan’s tabled suggested costings associated with road raising of roads identified in his report including areas of the Pacific Highway (State Road) and local and regional roads (Council owned). Refer attached presentation for details.
- Economic benefits associated with road raising were also included in Dan’s report. Dan commented that the economic benefits were a guide only. Non-monetary benefits are very hard to quantify and are outside his area of expertise.
- Road raising does not necessarily increase flood prevention as it is mainly a means to increase accessibility in times of flood. Road raising should not further impact flooding.

Member comments –

Ken B – “ Shipping container movement is largely by rail not road”

“The RTA considered affects to flood surface levels adjacent to Ella Simon Bridge and an increase of 50mm in flood surface height was determined applicable as a result of its construction “

Greg C – “ Are economic affects of local road flooding assessed in the same way as highway economic considerations?” Dan response “Very hard and complicated to quantify. Would require external economic analysis as he is not able to provide this detail as it is outside his area of expertise”.

“Are road hotspots identified and is Manning Point Road flood risk and community safety included?” Dan response “Yes. Report identifies hotspots and community serviceability and climate change has been considered in report”.

Entrance Management –

- Dan presented report images depicting the peak flood impacts on the floodplain for a 1% AEP event with a closed berm condition at Farquhar Inlet.
- A review of Councils current Farquhar Entrance Management Opening Plan will be carried out in conjunction with the FRMSP.
- Current berm conditions at Farquhar would inhibit natural inlet opening in all but a major event and possible mechanical opening may need to be considered.
- Farquhar Inlet is a far more volatile inlet than Harrington Entrance.

Member comments –

Greg C - "The current Farquhar Inlet Opening Management Plan should be reviewed and consideration be given to a lower notch base level be considered. A lot of sand dissipates out to sea when the entrance is open"
Dan response "Farquhar entrance is a very volatile entrance".

Greg sought clarification from Dan on upstream flood effects of a 1% AEP event with Farquhar closed – Dan referred to report images and discussed surface level increases of greater than 1.5m in the immediate Farquhar inlet area, 1.0m – 1.5m increase in the Old Bar village/ eastern coastal Oxley and Mitchells Island areas (refer report for full detail). Dan also advised that SLR (Sea Level Rise) is currently increasing by around 2 – 3 mm per year.

General discussion on the effects of Farquhar closed as well as the history of the mechanical opening of the inlet. Lots of comments from members in regards to sand movement in this area. Concerns centred on past dredging of Farquhar Inlet and the understanding that this may have contributed to the large amount of sand currently accumulated within the entrance.

Ken B – "Sand at Harrington disappears in a large event and alleviates flood levels and extents".

"Harrington dredging in the past has helped maintain large boat access but since dredging has ceased the large hole in the entrance is filling up and large boat access is not possible. The large amount of sand in Farquhar has had detrimental affects on the Harrington Entrance".

Other Property Modification and Response Modification management options were discussed including –

- House raising , VPA house purchase by Council/ State Govt (rarely happens). Generally poor take-up by homeowners and a very costly option.

Gary W - sought comment regarding House buyback particularly in the Wingham Peninsular area. Dan and Richard M commented that buyback and house raising were very expensive options that are only ever offered on rare occasions where funding supports such an option. Flood emergency response is considered a suitable alternative for supporting residents in the Wingham Peninsular area in times of flood. The local SES have good warning systems in place and management triggers to provide warnings and advice to residents. Gary W also suggested that a new resident's floodplain information kit be developed. Also whilst residents have access to information on flooding via the Section 149 certificate, renters do not have an equivalent. Flood levels on street signs, street lighting poles etc around town would provide a reminder/indicator of areas at flood risk.

Peter E – "Education is a very good tool for providing support"

Ken B - "More digital flood warning systems needed" (Council has a flood gauge situated just upstream of the Peninsular). Ken also raised the predicament that flood affected property owners are confronted with.

(Peter H) advised that Council provides their flood mapping to the Insurance Council of Australia (ICA) who then on-provide this data to individual insurance companies upon request. It is suggested that in some cases insurance companies massage the data to suit their needs which leads to a disparity between the data held by Council and the insurance company. It is also evident that insurance companies are using events larger than 1% AEP events (including PMF) in some cases when assessing property flood risk.

Gary W – questioned whether Council should be assisting with or provide insurance cover for flood affected properties. Comments from Council members stated that insurance was not a service provided by Council and Peter E advised he will contact the ICA and seek advice and clarification on how insurance premiums are assessed.

Comments from the floor supported ongoing provision to the ICA of Councils most current and accurate mapping.

Gary W – questioned how and why Council has permitting development approval in the high risk Wingham Peninsular area. Comments from Council were that appropriate and current approval processes were always used for development assessment and under the Local Government Act “Acts in good faith” when considering all applications.

- Changes to planning/building and development controls by Council to lessen risk to home owners and the community. A new mapping series will be included in outcomes from this study. The new mapping will delineate Flood Planning Constraint Categorisation (FPCC 1-6) and Flood Function (Conveyance, Storage, Fringe) and this will assist Councils in managing flood constrained lands.
- Community response measures including provision to the community of timely flood warnings, improved information and education and awareness of the community by the SES and Council for vulnerable areas and communities. An opportunity for the SES and Council to work together to provide these warnings and advice to the community. This option can provide great community benefits at negligible cost.

Member comments –

Lesley W – “What are local protection Measures?” Dan response “Floodgates, floor raising”. Lesley W suggested that the existing mitigation mound at Manning Point could be extended/augmented to make it more effective.

FPCC Mapping –

Dan displayed an example of the new FPCC (Flood Planning Constraint Categorisation) mapping. This mapping will be available to Council to support development and building control management as well as an additional tool to support Emergency Management. (It is noted that Councils WaterRide flood management software also has tools to support and develop this mapping).

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| | <p>General Member comments –</p> <p>Rhett P “What is the difference between a PMF and Extreme flood event?” Dan response “A PMF (Probable Maximum Flood) and Extreme are generally much the same modelled event and is derived using around 2.5 to 3.5 times the flow of a modelled 1% AEP”.</p> <p>Greg C “Believes there is no evidence of a PMF ever occurring in this area”</p> <p>“An existing second seawall at Harrington entrance still exists (although mainly under sand) and provides no significant flood reduction benefit”</p> <p>Andrew S – “In relation to previous comments on Harrington entrance flood studies in regards to sand movement within the entrance recent studies prove and support the fact that floods in the Manning result in substantial sand movement in the Harrington entrance and the Farquhar inlet to a lesser degree.</p> <p>Garry W – tabled photos he had taken of the Wingham Peninsular area in the 1978 flood</p> <p>Refer attached presentation for full details.</p> <p>The Chair thanked Dan for his thorough presentation and sought a seconder from the floor to support consensus that the committee was pleased with progress and content of the FRMSP to this point. Greg C – seconder.</p> |
| <p>4 Karuah River FRMSP Update</p> | <p>Chris Thomas (Advisian)</p> <p>Apologised to members if his presentation content was familiar as this previous presentation as this was purely an update.</p> <p>Stages 1 to 7 (of 9) of Karuah FRMSP reports are complete.</p> <p>Chris discussed the study background and referenced the significant impact on Stroud from the April 2015 storm event which coincided with the major event impacting the Dungog area.</p> <ul style="list-style-type: none"> • Study outcomes utilise the 2016 ARR (Australian Rainfall and Runoff) guidelines and include “restriction” influences. • 2015 event focus on Mill Creek. • The area catchment terrain consists of steep valley, with gravel evident of Allworth. The riverine system is not alluvial and most development is situated on high grounds not near the river system. • 1% AEP held mainly in the channel resulting in not too much effect on residential properties (very few affected properties). • The 2015 event provided little warning to residents. • The event posed a large threat to residents of the Stroud Community Lodge which houses and provides care for elderly residents. • The Northcoast rail was impacted by this and the Dungog event. • Community consultation was carried out during the study process and 23 people responded. • No viable options for Flood Modification were apparent. |

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| | <p>Study recommendations –</p> <ul style="list-style-type: none"> • Increased communication, Flood awareness, increased community preparedness and promotion and preparation of a Community Flood Plan. <p>In regards to flood warning there was a lot of discussion on options and means to assist with early warning systems for the village area. Michael S (SES) discussed how he and the SES had assisted northern areas with installation of early warning systems, procedures and alert triggers that may provide a suitable solution to assist with the areas flood events. Evan advised that funding for two automated rainfall gauge sites was considered in the current round of OEH grants and would now be sort in the next round for the Stroud area site as a priority.</p> <p>Refer attached presentation for full details.</p> <p>The Chair thanked Chris for his thorough presentation.</p> <p>Note: Further discussion between Council staff and the Chair is to be held in regards to suggested recommendation to Council for installation of an early warning system for the area.</p> |
| <p>5 Gloucester FRMSP</p> | <p>Dan Williams (BMT WBM)</p> <p>Dan gave a brief address to members on this studies progress.</p> <p>Draft report to be provided in June 2019.</p> <ul style="list-style-type: none"> • Floodplain Risk Management options to be assessed. • The Gloucester CBD area is most affected by a large flood event. • Risk to life in low lying areas. • Although there are a good number of flood and rainfall gauges in this area it is suggested that a review of locations and possible inclusion of new gauges be carried out. • Refer attached presentation for full details. |
| <p>6 General Business</p> | <p>Greg C –</p> <ul style="list-style-type: none"> • Farquhar Entrance Opening Management Plan needs reviewing as part of Manning Study and suggests a likely outcome should include consideration of a revised notch base level. Consultation with the Estuary Committee should occur. • Farquhar Inlet open/closed scenarios are an important part of the flood management plan. <p>Lloyd G –</p> <ul style="list-style-type: none"> • Concerned with apparent downgrade of previous Harrington studies. • Reminded members that in the '78 flood both entrances were open. And this event included huge rainfall totals (+900 mls) in the Barrington catchment area that fed into the Manning. This flood event cleared in 4 days. • 1991 flood both entrances were open. This event took 4 days to reach peak and a further 4 days to drain. |

- There is a large amount of mud silt in the river system up to and including the Coopernook area.
- Harrington Entrance management is a priority and a large flood would be needed to open the Entrance successfully. A second wall is needed. Rhett P responded that Crown has a current study available online and open for comment that concludes that a second wall is not viable. Members were urged to provide comment on the study if desired. Rhett also noted that Lloyds view was contrary to the consultant flood studies which used acceptably current though not the latest entrance data.
- Marine sands are naturally pumped into the Harrington Entrance and only large floods 'clean out' the entrance.
- The Manning is the only river in NSW with two entrances but only one wall at Harrington.
- There is a history of a much deeper waterway in Harrington Lagoon (60ft).
- Expand focus of Manning FRMSP to include more detail of impact on Harrington Entrance.
- Flood management in-action poses risk to life.
- Levee bank options should consider the effect of overtopping.

Following the conclusion of General Business discussion the Chair requested that a brief from the Coastal Management Program be delivered at the next FMAC meeting.

With no further General Business the Chair thanked members for their attendance and input and closed the meeting at 13:12.

Next meeting

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| Date | 20 th or 21 st June 2019 (TBC) | Time | 9:30 am |
| Venue | Taree Admin. Committee Room 2 Pulteney Street Taree | Note-taker | |

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