SUBMISSIONS BY THE COMMUNITY REFERENCE GROUP IN RELATION TO THE OPTIONS OUTLINED IN THE BUNDABERG FLOOD PROTECTION STUDY

On behalf of the Burnett River Floodplain Action Plan Community Reference Group I hereby provide submissions regarding the Options outlined in the Bundaberg Flood Protection Study commissioned by the Queensland Government commencing in 2015. It is noted that the engineering firm Jacobs provided that independent assessment, and have provided assessment of 11 flood mitigation options which included measures identified during their consultation process with the Bundaberg community during Stage two.

The Burnett River Floodplain Action Plan Community Reference Group (CRG) was formed in September 2013 to engage and consult with the community at large, and provide a report to the Bundaberg Regional Council. In particular the role of the Group was to attend the Community Consultation Meetings to gather the information required from the attendees. At the conclusion of the community engagement phase, the CRG had received around 243 submissions from members of the community. These submissions were subject to a number of robust discussions resulting in a number of flood mitigation measures being contained in a comprehensive report delivered to the Bundaberg Regional Council in December 2013.

The CRG members note the study commissioned by the State Goverment investigated both the methodology and community engagement during the 2013 process and was conducted by Jacobs commencing in 2015. The Group was pleased to note that Jacobs independently found no major issue with the methodology and robustness of the Group's engagement, deliberations or outcomes.

Subsequently, Jacobs have produced their report which contains a number of mitigation options they believe will strongly influence the safety and amenity of the community. It is noted that these options are very similar to those proposed by both the CRG, and subsequent Council and GHD submissions. The CRG, however notes there are subtle changes to some options which will, in the opinion of the Group, degrade the effectiveness of the originally submitted option. The CRG members felt therefore, that our concerns should be communicated to the Council, in keeping with our original brief.

The options are discussed hereunder.

OPTION D Bundaberg East Levee. CRG Report Reference 6.3

This option was strongly endorsed in our original 2013 report at Para 6.3 and subsequent investigation and reports by GHD added further weight to the proposal that the East Levee (together with strategically placed flood gates) would provide protection to much of the CBD as well as important commercial and community infrastructure in the East Bundaberg area. It was noted by both the CRG and GHD that this levee should be built to contend with a 1 in 200 flood event, to provide maximum protection as well as economic and social benefit.

The Jacobs report does support the concept of a levee, however the level of protection has been reduced to a 1 in 70 (1.5 AEP) year event. This is done by reduction in height of the levee together with a relocation of some parts of the levee bank. It is not communicated why there is a change in the level of protection; however members believe that cost would be a significant factor in this outcome.

It would be timely to point out the diffences in protection to business and residential properties as a result of this reduction. GHD in their report estimated that a levee constructed to withstand the

higher specification of 1% AEP would result in and estimated 741 properties (many of these commercial) being at a greatly reduced risk of above floor flooding. (p50 GHD report Feb 14) Whilst the report does not specify 1.5% AEP estimates, a 2% AEP estimate reduced that number to 456. It is envisaged that a 1.5% AEP figure would be mid point between these estimates. GHD also estimated the cost benefit ratio of a 1% AED levee would be 0.77, one of the highest cost/benefit ratios of all the proposals.

It has been a long standing agreement with the Insurance Council and the State Government that communities will be protected by insurance at a 1% AEP flood protection. Any reduction in this level will result in the inability of consumers to access insurance. Surely then, this is the level that should be maintained as an absolute minimum in any prospective mitigation options. Floodplain design modelling accepts a 600mm freeboard is recommended by the Floodplain Management Group and should also be recognised as an appropriate level for any mitigation of the nature envisioned in Option D.

The CRG members believe that it is imperative that the level of protection should be increased to the level envisaged by GHD to provide sufficient protection to the CBD and East Bundaberg community. It is noted that either level will not negatively impact any other suburb or location. Moreover, if considered in conjunction with the widening and straightening of the Millaquin Bend, this proposal will result in a reduction in the flood levels in North Bundaberg. Accordingly, the CRG members conditionally support the proposal as contained in Option D but reiterate that the 1-in-200 protection level needs to be retained.

Option H – Improving Emergency Access to Tallon Bridge. CRG Report Reference 6.5

Option H was endorsed by the CRG as included in a suite of measures contained in Para 6.5 to include evacuation routes for North Bundaberg residents, and the community generally. Such a proposal continues to be endorsed as it enables the Tallon Bridge to remain open longer for emergency egress of the public and travel by emergency services. The CRG is in agreement with the assessment against the key criteria.

It is noted with some concern that Option H does nominate a single lane bridge to be erected and to be generally used for pedestrian and non-vehicular movement except in time of emergency. Members were concerned that a single lane (part time) traffic bridge to be used in time of emergency may be confusing to members of the community at a stressful time, and that any traffic incident or congestion issue would render a single lane structure useless for emergency traffic.

It is the view of the CRG members that it would be prudent and beneficial to spend the additional capital to replace with current Hinkler Avenue with a higher level 2 lane carriageway using open bridgework to be used by vehicles at all times. This design is already in place with the original plans for the Tallon Bridge. Such a design removes the earthworks on-ramp which currently exists. Not only did this structure fail in the 2013 flood; it was singularly responsible for causing significant damage to infrastructure, homes and businesses as a result of redirecting high velocity flood waters.

Such a design would also allow access to and departure from this structure to be "left turn only", further improving traffic flow as well as driver and pedestrian safety. As this route will also become a mandatory part of the primary road access to the State Development Area on the northern side of the Port of Bundaberg, its design must allow for future increases in traffic flow.

Not only will this proposal have significant and on-going benefit to the people of the Bundaberg region, it will also facilitate much easier community access across a very busy thoroughfare. For example, this proposal would provide a pedestrian underpass which can be easily incorporated in the design of the structure and so provide for safe movement of school children who are currently crossing this increasingly busy road via a staffed School Crossing.

Although more costly, in terms of initial capital, there would be an immediate and on-going significant social and economic benefit by allowing much improved vehicular movement in this important transport corridor. It is therefore recommended that the Option H include a high level two way carriageway from the roundabout on Bundaberg-Gin Gin Road to the northern approach to Tallon Bridge, and does not include earthworks on/off embankments.

Option J – Floodway House Purchase Scheme – No CRG Report Reference

Option J was raised by the community during the initial 2013 consultation process. The proposal was not considered by the CRG due to a directive from the then Queensland Government that "land buy-backs and swaps were not an option." The CRG acknowledges that there could well have been substantial support for such a scheme immediately following the floods, but that level of support has probably declined substantially due to a number of reasons.

The CRG is of the opinion that, if a purchase scheme were to be implimented, it should have been done immediately after the flood event. Over the four years since the event, many if not all householders have either repaired their homes or sold up and moved from the area. Therefore, it is entirely possible that any purchase scheme would have a poor take up by the present occupiers. The CRG is also concerned that continual depletion of numbers in the community of North Bundaberg will be to the detriment of community amenity and also significant loss of business to the commercial operations in the area.

The CRG is certainly not averse to a purchase scheme/ land swap being implemented, however would make the suggestion such a scheme could perhaps be incrementally applied when a home in the affected area comes up for sale. In this way, a compulsory acquisition could take place over a long period of time, without causing undue further distress to those who wish to remain in the community.

Also if land swaps were to be offered, it would be best that the "new" land be in flood free areas of North Bundaberg in order to continue to support that community.

Option K – Upper floodplain evacuation improvements – CRG report reference 6.4

The CRG indicated strong support for assistance to both the Goodnight Scrub, and Pine Creek/Givelda/Electra areas. This assistance was assessed as upgrade to bridges (Goodnight Scrub) and forming all weather evacuation routes (Pine Creek et al). The CRG notes that these submissions have been progressed in the Options K paper. The CRG notes that the Option K evacuation route for Pine Creek et al, is almost identical to the CRG original option, and therefore endorses Option K in that regard. This is a very realistic and low cost option for a community which has seen isolation periods of up to eight weeks in a less than a six week (in the case of Goodnight Scrub and for about four weeks in the case of Pine Creek) period in recent flood events.

It is noted that the Regional Council also proffered a suggestion regarding an evacuation route west to Mt Perry in their 2014 submissions after our report was submitted. It is also noted that there is some community resistance to the evacuation route to Mt Perry particularly in relation to transport of school children, and travel to their nearest significant community (Gin Gin). The CRG continues to endorse the suggestion of a bridge upgrade to the Perry River Bridge. The CRG acknowledges that this upgrade comes at significant cost, compared to an all-weather evacuation route to Mt Perry; however, the Perry River is responsible for isolation of the upstream communities for weeks after some flood events.. This problem is not really addressed by routing through . Mt Perry.

The CRG acknowledges the upgrades that Council has made to the Perry River crossing environs including erection of automatic flood warning lights, which certainly enhances safety. The CRG members, however, request that the Bridge upgrade be further investigated with at least a flood evaluation being performed on the crossing.

While the proposed evacuation route and flooded road warning lights allows the safety of the community to be significantly improved, it does not address the problem of substantial periods of effective isolation from workplaces and education facilities. In the past (2010-2011), the Perry River bridge was impassable for nearly six weeks. The only access to work and school was via SES flood boat. In 2013, new safety guidelines forbade the use of SES members and equipment for that purpose.

In relation to the Pine Creek situation, whilst Pine Creek itself is serviced by a SES floodboat at times of isolation, nearby Cherry Creek is not serviced therefore the net effect continues to be isolation of the communities between Pine Creek and the Burnett River.

Option F Millaquin Bend widening – CRG report reference 6.8

This Option F was advanced by the CRG in the 2013 report, particularly in relation to its advantages to the community when done in conjunction with the East Bundaberg Levee (in its original submission form). It was noted that there are real reductions in flood heights in the North Bundaberg area, as a result of more efficient water flow through a straightened river. This modelling has not been disputed in any subsequent studies. The CRG submits that this venture is one of the only projects that actually reduces flood levels in North Bundaberg, a primary goal if at all possible.

The CRG members note that Option F was comprehensively investigated in the Jacobs report and was considered viable, despite very significant initial and ongoing costs to maintain. On balance the CRG continues to support the Option on the grounds of its benefit to floodprone suburbs in Bundaberg. The CRG is aware that significant dredging is to be conducted at the Port of Bundaberg in the future to support export of product and industry. Perhaps the dredging of Millaquin Bend can be accomplished at the same or similar time to save costs compared to treating these ventures as separate projects.

Conclusion

The members of the Community Reference Group appreciate the opportunity to provide further input into this body of work as matters progress. We would also like to pass on our appreciation to Bundaberg Regional Council and its staff, for both the progress of the study, and for the actual projects completed to help mitigate the effects of flooding on the community. Whilst there is some progress, the CRG members believe that there is some urgency for all levels of government to come together to advance the mitigation options as a matter of priority. It is now over four years since the 2013 flood, and almost four years since our Group has submitted its report regarding the community consultation and wishes. There is considerable expectation that our (and other) reports will be acted upon in a timely manner.

Forwarded for your consideration in this matter on behalf of the Burnett River Floodplain Action Plan Community Reference Group.

Rowan Bond Chair Burnett River Floodplain Action Plan Community Reference Group