

BURNETT RIVER FLOODPLAIN ACTION PLAN

COMMUNITY REFERENCE GROUP MEETING

TUESDAY 8 OCTOBER 2013 – 4PM

COMMITTEE ROOM, BUNDABERG MAIN ADMINISTRATION OFFICE, 190 BOURBONG STREET,

BUNDABERG

MINUTES

ATTENDANCE:

Rowan Bond (Chairperson), Kay Amsler, Helen Dayman, Rob Marshman, John Olsen, Barry Ehrke, Mark Pressler, John Lee, Jon Carman, John Bailey, Steve Cooper, Rob Calligaris (Council's Design Team Leader), Dan Copelin (GHD Flood Consultant), Robyn Laing (Administration Support).

CONFIRMATION OF MINUTES:

CRG Member, Kay Amsler requested that page 1, 2nd last paragraph be amended to show, "Pine Creek / Givelda / Electra residents" and, "the CRG's attention was drawn to the presence of two large, naturally occurring holes in the river bed;".

CRG MEMBERS, JOHN OLSEN AND BARRY ERHKE MOVED that the minutes of the first CRG Meeting held on 23 September 2013 be confirmed subject to inclusion of the above amendments and that the amended minutes be made available on Council's website.

The motion was put CARRIED.

At this stage, CRG Chairman, Rowan Bond advised the Meeting that a resignation had been received from CRG Member, Christine Hardy and that with the agreement of the Meeting; it was proposed to leave the position open in case Ms Hardy requests to re-join the CRG. The Meeting unanimously agreed to leave the position unfilled and retain Christine Hardy in CRG email listings so Ms Hardy receives all information and was able to rejoin the CRG later in the process, if desired.

CRG MEMBERS, JOHN CARMAN AND HELEN DAYMAN MOVED that Christine Hardy's position on the CRG be left open.

THE MOTION WAS PUT AND CARRIED.

REPORT ON COMMUNITY CONSULTATION PROCESS:

CRG Chairman, Rowan Bond stated that he felt there had been a positive outcome to the recently held community information sessions.

Rob Calligaris presented a report from GHD outlining preliminary results from the community consultation process held to identify and assess preferred floodplain risk management options that builds flood resilience and fosters community preparedness. Comprehensive communication, public consultation and stakeholder engagement was undertaken as follows to

educate the community on the flood model and Floodplain Action Plan and seek their input to assist Council identify the top five floodplain resilience options:

- CRG expressions of interest sought and confirmed
- Media interviews on ABC Wide Bay, 4BU and Seven
- BRC website content updates – prominent location
- Dedicated email floods@bundaberg.qld.gov.au
- Stakeholder briefings and presentations
- Advertisements in 3 local papers to promote CRG and Info Sessions
- Email update to over 10,000+ individuals and organisations to encourage participation
- Speaking role at TAFE on 22 August
- Info Session Posters across community touch-points
- Facebook posts and Tweets reaching 4,000+ people
- Factsheets x 3
- YouTube videos and animations

During the above consultation process, the community was invited to submit their ideas to improve flood resilience to dedicated email addresses: *floods@bundaberg.qld.gov.au* or *floodplaincrg@gmail.com*; talk to a CRG member (who were present at community information sessions); and complete a Community Questionnaire. It was noted that 280 or more residents attended 10 community information sessions held at 6 different locations across the region. These sessions outlined the outcomes of the 2013 flood study, gave an overview of the floodplain action plan process, issued invitation to make submissions, provided mapping and information stations and also gave the opportunity for community members to have one on one discussion with Councillors, Council staff and GHD representative (flood consultant).

Steve Cooper advised there were individual businesses with ideas but had been reluctant to submit their submissions as it would look like they were furthering their own business. **The Meeting agreed that CRG Member, Steve Cooper and CRG Chairman, Rowan Bond would consult with the Bundaberg Chamber of Commerce regarding the possibility of Steve Cooper representing them and taking a submission for flood resilience ideas.**

The preliminary report presented at the Meeting showed early analysis of the feedback received from the community indicating that the majority favoured flood response/warning mechanisms/evacuation plans (49%) and response modifications including structural modifications/infrastructure (48%). It was noted that this result would alter when GHD updated their findings with the latest submissions.

It was further noted that the wording of Sharon/South Kolan is to be amended to read, “Pine Creek / Givelda / Electra / South Kolan / Sharon” where it appears in the GHD report.

CRG Member, Mark Pressler attended the Meeting at 4.20pm

Andrew Fulton (General Manager Infrastructure & Planning) and Dwayne Honor (Manager Design Services and Project Manager), Ben Regan (GHD Flood Consultant) joined the meeting via telephone conference facility at 4.45pm to discuss the Multi Criteria Analysis spreadsheet which had been emailed to the CRG for their perusal. Andrew Fulton stated that the weightings for the criteria were to be determined by the CRG. The CRG were requested to give consideration to the likely funding available when determining rankings for some of the options.

CRG Member, Helen Dayman referred to the recently released Review of Dam Safety Management Actions for Paradise Dam (Flood Event of January-March 2013). The Meeting agreed to forward a copy of this report to Council for Andrew Fulton to read.

This concluded the teleconference with Messrs Fulton, Honor and Regan and the Meeting returned to the order of business, continuing with GHD's presentation on the preliminary findings of the community consultation process.

CRG member, John Olsen tabled a list of questions (attached to minutes) for flood consultant GHD to answer and thus authenticate the outcome. CRG Members, Barry Ehrke and Rob Marshman also had questions regarding the flood model; some of which were answered at the Meeting and others were referred to GHD consultant, Dane Copelin to answer outside of this Meeting via email: *floodplaincrg@gmail.com*.

John Olsen stated that the Burnett River had been modified beyond the level of responsible management and that he was concerned that information on the natural level of the Burnett River was not included. There was discussion regarding the lack of tidal flow in the river and stagnant sections upstream. CRG Member, Jon Carman stated that there is a much lower tidal prism since installation of the Ben Anderson Barrage. He referred to compacted sediment in the vicinity of the Burnett River Bridge and Millaquin and stated that the problem was fine siltation rather than sand and that the Burnett River was slowly moving south. He further stated that Harriet Island was growing in size and that it hardly existed prior to 1942 flood. There was discussion regarding removal of Ben Anderson Barrage to improve tidal flow and reduce sedimentation and John Lee stated that he had observed more sedimentation now than in previous years. CRG Member, Mark Pressler pointed out that the Ben Anderson Barrage had been installed to provide irrigated water to farms in the Woongarra system and stated that the recent drop at Ben Anderson Barrage to 2.2m (to carry out repair work) had put approximately 35 irrigators out of action. Without this barrage, there will be no farms on the south side. CRG Member, Rob Marshman referred to LiDAR imagery taken at the peak of the 2013 flood and stated that the floodplain area at Fairymead was the natural diversion for high flood levels and that the levee construction was dictating the water levels in the city.

Dan Copelin (GHD Flood Consultant) drew the Meeting's attention to the large size of the Burnett River system and stated the 2013 flood of the Burnett River was something like 4-5 times the volume of the 2011 Brisbane flood.

Multi Criteria Analysis (MCA) Weightings:

GHD Consultant, Dan Copelin advised the Meeting that this tool was a method of assessment often used to evaluate different criteria and that it gave the CRG an opportunity to give meaning to what criteria they felt was more important.

There was some discussion and amendment to the criteria proposed by GHD. The attached draft criteria and weighting was resolved at the Meeting; noting that the MCA (as amended at the Meeting) would be forwarded by email to the CRG for further review. CRG members were asked to advise the Chair no later than 10 October 2013 of their agreement or propose additional amendment.

The CRG requested that all flood submissions be collated in one database and emailed to CRG members for review for the purpose of eliminating unrealistic submissions. It was noted that this amended list was also required by 10 October 2013.

Next Meeting Date:

It was resolved to hold the next CRG Meeting in the Bundaberg Office on Thursday 31 October 2013 at 4pm.

This concluded the business of the Meeting at 8.05pm.

Overall Categories - Calculation of Weightings

| | ADOPTED WEIGHT |
|---------------|----------------|
| Economic | 25% |
| Social | 40% |
| Environmental | 35% |

Economic Criteria

| | |
|---|--|
| A | Overall cost-benefit |
| B | Cost of implementation |
| C | Cost of maintainance / upkeep |
| D | Inundation of agriculture land |
| E | Impact on local business / commercial land |
| F | Impact on residential properties |
| G | Impact on municipal infrastructure / utilities |
| H | Impact on fisheries |
| I | Impact on tourism |

Calculation of Weightings

| | A | B | C | D | E | F | G | H | I | | SCORE | CALCULATED WEIGHT |
|---|---|---|---|---|---|---|---|---|---|--|-------|-------------------|
| A | | | | | | | | | | | 3 | 8% |
| B | A | | | | | | | | | | 1 | 3% |
| C | A | C | | | | | | | | | 2 | 6% |
| D | D | D | D | | | | | | | | 6 | 17% |
| E | E | E | E | E | | | | | | | 7 | 19% |
| F | F | F | F | F | F | | | | | | 8 | 22% |
| G | G | G | G | D | E | F | | | | | 5 | 14% |
| H | H | H | H | D | E | F | G | | | | 4 | 11% |
| I | A | B | C | D | E | F | G | H | | | 0 | 0% |

Social Criteria

| | |
|---|--|
| A | Communication / notification during a flood event |
| B | Flood warning time |
| C | Frequency & duration of flooding or isolation / effects of isolation |
| D | Impact on direct exposure to flood hazard / safety |
| E | Visual amenity |
| F | Cultural heritage |
| G | Impact on community infrastructure |
| H | Impact on evacuation routes |
| I | Impact on recovery / accommodating displaced victims of a flood |

Weighting Calculation

| | A | B | C | D | E | F | G | H | I | | SCORE | CALCULATED WEIGHT |
|---|---|---|---|---|---|---|---|---|---|--|-------|-------------------|
| A | | | | | | | | | | | 7 | 19% |
| B | A | | | | | | | | | | 6 | 17% |
| C | C | C | | | | | | | | | 6 | 17% |
| D | A | B | D | | | | | | | | 5 | 14% |
| E | A | B | C | D | | | | | | | 0 | 0% |
| F | A | B | C | D | F | | | | | | 1 | 3% |
| G | A | B | C | D | G | G | | | | | 2 | 6% |
| H | A | B | C | D | H | H | H | | | | 4 | 11% |
| I | A | B | I | I | I | I | I | H | | | 5 | 14% |

Calculation of Weightings

| | A | B | C | D | E | | SCORE | CALCULATED WEIGHT |
|---|---|---|---|---|---|--|-------|-------------------|
| A | | | | | | | 2 | 20% |
| B | A | | | | | | 3 | 30% |
| C | A | B | | | | | 0 | 0% |
| D | D | B | D | | | | 3 | 30% |
| E | E | B | E | D | | | 2 | 20% |

Environmental Criteria

| | |
|---|--|
| A | Impact on terrestrial environment (flora / fauna) |
| B | Impact on aquatic / riparian environment (flora / fauna) |
| C | Difficulty of environmental approvals |
| D | Impact on river stability / sedimentation |
| E | Erosion / scour to floodplain |

Modelling questions

FROM JOHN OLSEN...

I personally have questions to ask before being convinced that the scope of the modelling is sufficiently rigorous to cover all bases.

- . Does the modelling date from a period where natural conditions occurred, and before impoundments changed the river?
- . If the modelling does not do that, then the results could well be skewed in relation to rainfall volume v river height reached during flood events past and present.

Why?

- . Because the river heights of a natural system are the base line factor. They have become elevated due to the influences of the human activity. We need to know, (as best we can), to what extent human activity has elevated river heights during floods, and to what extent the duration of flooding has changed.

Other modelling concerns and questions.

- . Has the modelling accounted for cm capacity of river narrowing caused by the installation of training walls? How much water capacity has been displaced by training walls?
- . The model needs to consider the changed tidal influences at play since the training walls were put in place across the mouth of Skyringville Passage. Skyringville pass was the natural northern entrance of the river. The training walls have changed the exhaust direction of the river.
- . It seems implausible that were the northern entrance re-opened, that the silt level deposits in the Port Bundaberg sea leads area would not be significantly reduced.
- . This is because the sedimentary drift of silt etc is carried in the direction the water is flowing.
- . Therefore, whilst a simplistic example, it follows that were the north wall breached to permit say, 30% of the tidal flow to escape in its natural water course, then approx. 30% less silt should build up in the Port sea leads. At the very least, dredging should be reduced by a comparative margin, and shipping access could be achieved at an earlier date, and at a lesser cost.

. Some learned locals are saying that Moore park beach is eroding away because the water carrying the sand which used to be carried by tide from the river through Skyringville Passage no longer replenishes the beach front because the tidal flow has been modified. The sand now finds it's way east into the sea leads and settles there, instead of being transported northward to replenish the Moore Park beaches.

. Does the modelling take into account the creeks and streams which were filled in and subjected to development over time?

These streams were nature's drainage system, the system which helped drainage occur at the earliest possible period after rainfall.

. In terms of flood relief, the CRG could identify specific problem areas. Some of these will be mentioned in public submissions, whilst others may not.

It would be helpful to identify solutions as well. Again I stress that necessary items such as early warning systems are a must. However they in no way relate to flood level relief.