

# **BURNETT RIVER FLOODPLAIN ACTION PLAN**

## **COMMUNITY REFERENCE GROUP MEETING**

**TUESDAY 19 NOVEMBER 2013 – 4PM**

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

BUNDABERG

## **AGENDA**

**RSVP Robyn Laing**

**Tuesday 19 November 2013 - 9am**

**[Robyn.laing@bundaberg.qld.gov.au](mailto:Robyn.laing@bundaberg.qld.gov.au)**

- A) Apologies:**
  
- B) Confirmation of Minutes from 31 October 2013**
  
- C) Submission from UDIA**
  
- D) Results from assessing Flood Resilience Proposals under the approved Multi Criteria Analysis (MCA) – to be distributed by email on Friday 15 November 2013**
  
- E) Other Matters:**
  
- F) Next Meeting Date (to adopt Report to Council):**

# **BURNETT RIVER FLOODPLAIN ACTION PLAN**

## **COMMUNITY REFERENCE GROUP MEETING**

**THURSDAY 31 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, John Lee, Jon Carman, Steve Cooper, Andrew Fulton (General Manager Infrastructure & Planning), Rob Calligaris (Council's Design Team Leader), Robyn Laing (Administration Support) and Snr Sergeant Grantley Marcus, (QPS Liaison Officer between Disaster Management and Minister for Local Government, Community Recovery & Resilience, Hon David Crisafulli).

### **APOLOGY:**

An apology was tendered for John Bailey, Dwayne Honor (Council's Design Manager and Project Manager) and Mark Pressler.

### **CONFIRMATION OF MINUTES:**

**CRG MEMBERS STEVE COOPER AND JOHN OLSEN MOVED** that the Minutes of the CRG Meeting held on 8 October 2013 (as tabled at this Meeting) be confirmed and made available on Council's website.

The motion was put **CARRIED**.

### **MULTI CRITERIA ANALYSIS (MCA):**

**CRG MEMBERS, HELEN DAYMAN AND STEVE COOPER MOVED** that the amended criteria and weightings for assessing the flood resilience submissions (as tabled at this meeting) be adopted.

The motion was put **CARRIED**.

### **FLOOD RESILIENCE SUBMISSIONS:**

*Dan Copelin (GHD Flood Consultant) joined the Meeting via teleconference to provide explanation on the tabled flood resilience options summarised from community consultation (copy attached to these Minutes).*

Andrew Fulton attended the Meeting at 4.15pm

The Meeting discussed in detail the additional flood resilience options tabled at the Meeting by CRG Members, Jon Carman, Barry Ehrke and Rob Marshman. Dan Copelin offered support for the idea from Jon Carman (Option 10) to construct levees to reduce the depth and velocity of water in North Bundaberg in the event of major floods; noting that such a large volume of water as experienced in the 2013 flood event, cannot be kept out of North Bundaberg all together without causing adverse effects in other areas with regard to increased velocities and peak flood heights.

CRG Member, Jon Carman referred to the idea of raising the North Perry Railway Line (Option 14) and Dan Copelin advised that a levee could be built along the rail corridor instead of raising the railway line. He discussed the method of using concrete infill panels in the rail corridor and also temporary lift-in panels on roads to provide flood resilience.

CRG Member, Barry Ehrke outlined the reasons for his proposal to open up Skyringville (Option 30) and stated that from his experience, you always start at the mouth and open it up first. In reply, Dan Copelin advised that preliminary modelling had shown that removal of certain restrictions in the river had a greater effect than opening up the mouth. The recent dredging undertaken at Port Bundaberg had been included in the model. Preliminary testing (for a 2013 flood event) of diversion channels and re-opening the Skyringville passage (as described in options 30 and 21) only provided a benefit to the area around the Port of Bundaberg and offered no benefit to the populated areas further upstream. He further stated that widening the river at Millaquin Bend (Option 31) offered a substantial benefit to the city area. Whilst the river mouth is a constraint, there are so many places for the flood waters to release, that widening the mouth does not provide much relief to the flooded areas of the city.

CRG Member, Jon Carman enquired about the extent of benefits to be received from the proposed Rubyanna diversion channel (Option 20) and Dan Copelin advised that early preliminary testing had shown that the benefits depleted upstream of Paddy's Island.

Andrew Fulton asked if Option 31 to improve the restrictions in the river in the Millaquin area increased the backwater flood levels. Dan Copelin advised that preliminary testing in the flood model showed that the widening of the river at Harriet Island (Option 35) and Millaquin bend (Option 31) decreased the quantity of backwater experienced in East Bundaberg and also offered improvements to North Bundaberg and upstream areas. As all the flood water rejoins the river down near the Fairymead levee, no significant increase was modelled for downstream areas. Dan clarified that whilst substantial benefit was modelled from widening the river at the Millaquin bend, greater improvements were modelled when the river was widened from Harriet Island to Millaquin bend.

In reply to questions raised by CRG Member, Rob Marshman with reference to Option 31, Dan Copelin advised that preliminary modelling had shown that dredging works at Millaquin bend had potential to reduce flood levels in East Bundaberg in the order of 600mm. Further, the east Bundaberg levy (option 2) would prevent backwater in East Bundaberg without affecting the flood heights elsewhere. As some properties in East Bundaberg flood regularly, widening the river at Millaquin would assist in all events not just major events; which was a matter to be noted for consideration.

With reference to Option 19, Dan Copelin advised the Meeting that structures to prevent flood waters breaking the bank at Perry Street caused increased peak flood heights and velocities in other areas of North Bundaberg. If the levee was continued to Mariners Way the peak flood

heights on the southern side of the river increase in the order of 1 – 1.5 metres. Dan Copelin confirmed Rob Marshman's comments that efforts to prevent flooding of North Bundaberg resulted in adverse affects somewhere else. It was noted that more benefit could be received mitigating against flooding that happened every 20-30 years, than the one major event that happened once every 100 years or more.

Option 10 would provide additional time for evacuation in a major flood event and whilst flooding would still be experienced, this proposed levee would provide immunity for medium flooding; which is experienced more frequently than the 2013 event.

Helen Dayman drew the Meeting's attention to option 38 to upgrade regional Bridges and enquired about the modelling undertaken to date. She stated that whilst the community would like Booyal Crossing upgraded, given the width and velocity of flood water, she did not think it would be realistic to construct a bridge. However, raising the crossing a couple metres above regular flood height and heights experienced during Paradise Dam releases, would offer great benefit to the community. It was noted that Pine Creek, Cherry Creek and Log Creek should be included. Dan Copelin advised that he could make a preliminary recommendation on what heights the bridges/crossings should be subject to additional hydraulic work and agreed that there would be substantial benefit received from modest upgrading of bridges/crossings in these regional areas. At this stage, the Meeting discussed the possibility of upgrading a road through the State Forest and private property via Promiseland Road to be used in times of evacuation in lieu of upgrading bridges/crossings over Pine Creek and Cherry Creek.

John Olsen spoke regarding this proposal to remove Ben Anderson Barrage (Option 28) and tabled additional information (attached to these Minutes). In reply to John Olsen's comments, Dan Copelin clarified his comments of 'major implications for water supply' by stating that he did not mean it was impossible but would incur high costs to secure and deliver an alternative water supply. Dan Copelin also pointed out that securing a supply of water in drought years would need to be considered. John Olsen reiterated previous comments that modelling should be undertaken from a pristine state of the river to fully understand the elevated state of the river since construction of Ben Anderson Barrage. At this stage, Dan Copelin referred the Meeting to his email circulated prior to this Meeting, answering the concerns raised by John Olsen (copy attached). To address the first issue, h

The Meeting discussed the benefit of combining flood resilience options. Dan Copelin confirmed that the reduced flood heights from Option 31 - Millaquin bend would greatly reduce the height and engineering required for the East levee in Option 2. It was noted that the homes and properties benefiting from the North levee proposed in Option 2 only came into effect for a 2013 flood event and that these properties did not flood below this level of flooding.

Dan Copelin agreed with comments by CRG Members that widening the full reach or just Millaquin bend and raising evacuation roads seemed to make the most sense at this early stage of the investigations.

The CRG Members were asked to comment on the Wallaville levee (option 12). Dan Copelin stated that it might be better to address evacuation routes rather than leave a small community isolated in a flood event.

Helen Dayman asked if Paradise Dam had been modelled in the event of a failure. Snr Sergeant Grantley Marcus stated that he was expecting a report from Sunwater on this matter and that he would put forward a submission to provide the CRG with some sort of appreciation of those

questions. Dan Copelin stated that modelling had been undertaken for the Probable Maximum Flood which would be greater than a dam break. He further stated that upgrading Paradise Dam to a flood mitigation dam would require a tripling of the dam's volume to reduce the current 100-year flood to the equivalent of the current 50-year flood.

CRG Chair, Rowan Bond referred the Meeting's attention to Option 38 – regional bridge upgrades. It was agreed to include Cherry Creek and Log Creek (at the end of School Lane / Pine Creek Road) as these roads are cut off with frequent minor flooding. It was noted that there are a number of creek crossings that require upgrading to maintain access during minor to medium flood flooding and the Meeting suggested that these crossings be identified for submission to Council to commence a program of upgrades. Upgrading of alternative access routes in lieu of bridge/ crossing upgrades was discussed at length.

CRG Chair, Rowan Bond thanked Dan Copelin for his time and concluded the teleconference.

**The Meeting resolved to adopt the summarised list of flood resilience options prepared by GHD for assessment with the agreed multi criteria and designated weightings subject to the following amendments:**

**Option 12 – Open up the Wallaville Ring Levee to protect those properties flooded in the 2013 event.**

**Option 20 – Rubyanna Diversion Channel would significantly reduce safe anchorage for boats.**

**Option 21 – Amend to include an option to take a channel from the apex in the bend of the river at Fairymead across to Skyringville.**

**Option 26 – Include the option of removing a 5 metre high ridge separating Fairymead from Skyringville to encourage flood waters to flow to Skyringville.**

**Option 25 – Clarify area of dredging at Fairymead Bend in the vicinity of Rubyanna Creek and the old Fairymead Molasses Wharf.**

**Option 27 – Amend to include responsible removal of mangroves from the town reach.**

**Option 29 – Seek clarification if Perry Island is Paddy's Island and whether this option is for the removal of sedimentation only.**

**Option 36 – Amend to include removal of part of Harriett Island – being the southern bank above Tallon Bridge to straighten the flow path.**

**Option 38 – Amend to include Pine Creek, Cherry Creek and Log Creek (in the vicinity of Pine Creek Road / School lane) and/or an alternative evacuation route for Wallaville Bridge.**

## **OTHER MATTERS:**

Paradise Dam:

Snr Sergeant Grantley Marcus offered to arrange for a Sunwater representative to present emergency plans for Paradise Dam to CRG. It was noted that notification of releases from dams was now compulsory and that Paradise Dam was to be upgraded with sensors to give warning of impending failure.

Removal of debris from banks of Burnett River:

John Olsen referred to the build up of debris in the Burnett River and reported the following sites for attention:

1. Rubyanna Creek (near Millaquin pond)
2. Kirbys Wall Boat Ramp – just past the wash out
3. Finemore Caravan Park, Quay Street

**NEXT MEETING DATE:**

**It was agreed to make a tentative date of Tuesday 19 November 2013 to commence at 4pm in the Bundaberg Office for the next CRG Meeting. Meeting Date to be confirmed by the CRG Chair.**

This concluded the business of the Meeting at 8.15 pm.

# Urban Development Institute of Australia (Bundaberg Branch)

E: [bundaberg@udiaqld.com.au](mailto:bundaberg@udiaqld.com.au)

W: [www.udiaqld.com.au](http://www.udiaqld.com.au)

President: Bill Moorhead 0415 798 084

Secretary: David Job 4151 5650

PO Box 1115, Bundaberg 4670



## Submission by UDIA Qld (Bundaberg Branch) to Burnett River Floodplain Action Plan

### About UDIA

UDIA Queensland is the peak body representing all segments of the development industry. The industry is diversified and includes many forms of residential, commercial and retail developments. It is a non-profit institute which has represented development in Queensland for more than 20 years. Its State office is located in Brisbane and numerous regional branches operate with a membership in excess of 1000 nationally. Further information can be found at [www.udiaqld.com.au](http://www.udiaqld.com.au)

The institute:

- Interacts with government to achieve positive outcomes for the industry;
- Keeps members up to date and well informed in industry issues;
- Encourages excellence in development through Branch, State and national Awards;
- Promotes a Code of Ethics; and
- Collaborates with other industry bodies to deliver optimum results to members.

The urban development industry is a key economic activity in Queensland which represents significant capital investment and employment creation.

## Representations

UDIA Qld (Bundaberg Branch) (hereinafter referred to as UDIA) comprises local stakeholders of the development industry who are vitally interested in the outcomes for the Bundaberg region post the 2013 flood event. Several members of the local branch were directly impacted by the event.

UDIA submits that mitigation to address the impacts of future flood events is imperative to underpin future economic development of the region, including by maintaining and enhancing property values and providing community confidence. Mitigation also presents the opportunity to better utilise ideally located land on the city fringe for urban development purposes.

1. UDIA supports the process of determining a suitable range of options derived from the community consultation process for further analysis.
2. The branch endorses the engagement of GHD as a worldwide authority in the field of flood modelling and mitigation design for the provision of the independent study.
3. UDIA submits that all options should be subject to rigorous assessment for cost/benefit and should not be judged on perceived community popularity. It is imperative the science and not emotion determine how we move forward.
4. Options to be included for further assessment should define the level of mitigation to be derived (ie. revised flood peak) and the benefiting area. Broad estimates of the establishment and ongoing costs of mitigation works and an economic analysis of the benefits should accompany options chosen.
5. High cost total mitigation options (upstream diversion channels to provide total flood proofing) should not be discounted on the perception that they are not able to be funded in the short term, recognising that funding would be required over a long term period. Economic analysis of benefits may present a case for long term funding.



We look forward to the recommendations of the committee to Council and trust that the principles outlined in this submission will be considered in your deliberations.

Yours faithfully

A handwritten signature in black ink, consisting of a large, stylized loop on the left and a long, horizontal line extending to the right, ending in a small flourish.

Geoff Campbell Vice President for

Bill Moorhead

**President UDIA Qld Bundaberg Branch**

30 October 2013