



Frequently Asked Questions: Burnett River Floodplain Action Plan

September 2013

1. What is the Burnett River Floodplain Action Plan?

The Burnett River Floodplain Action Plan will confirm the top five floodplain management options and strategies to improve the region's flood resilience and preparedness.

The development of the Action Plan follows the completion of a comprehensive two-year flood modelling and mapping study of the Burnett River floodplain located between Paradise Dam and the river mouth.

2. What information will be used to develop the Burnett River Floodplain Action Plan?

The Action Plan will use the technical and scientific data from the flood study to develop a range of floodplain management options that aim to reduce the potentially devastating impacts of future flooding in the Bundaberg region.

The process will also be informed by consultation with the community and technical representatives to identify and confirm the top five floodplain management options and strategies.

The Action Plan will be informed by:

- Two years' of data from the Flood Study Report
- An independently-facilitated Community Reference Group
- Technical Working Group meetings
- Feedback and ideas through consultation; and
- Discussions with industry and business stakeholders.

3. When will the top five floodplain options and strategies be announced?

December, 2013. The top five floodplain management options will be identified in December and will undergo detailed engineering assessment in the first half of 2014.

Due for completion by mid-2014, the Action Plan will identify a range of other initiatives and strategies to provide a coordinated mix of measures that aim to address existing and potential future flooding risks.

4. Can residents be confident the most suitable options will be determined for the region?

Yes. Using a high level, technical analysis, the Multi-Criteria Assessment (MCA) process will give Council a solid plan to assist in reducing the devastating effects of flooding to the region.

The Multi-Criteria Assessment will provide a robust and transparent tool to refine resilience strategies informed by consultation by assessing them against a set of agreed weighted criteria.

Based on the outcomes of the MCA process, five flood risk management options will be identified for funding purposes by December 2013 and undergo additional detailed assessment.

Due for completion by mid-2014, the Action Plan will identify a range of other initiatives and strategies to provide a coordinated mix of measures that aim to address existing and potential future flooding risks.

5. What is the role of the Community Reference Group (CRG) for the project?

Members of the CRG will play an active role in the development of the Action Plan and gather the collective thoughts and ideas from their respective community networks. This will ensure Council can consider all aspects when deciding on the set of options that will be fed into the MCA process.

The CRG members represent a wide cross-section of the community and include residents directly impacted by the floods, community services representatives, environmental groups and business/industry leaders.

An independent Chairperson, Mr Rowan Bond, has been appointed to conduct and manage meeting proceedings with the objective of ensuring the meetings are run fairly and without bias.

6. What is the role of the project's Technical Working Group (TWG)?

In parallel with the community ideas collection, technical inputs from key stakeholder organisations will be sought at critical points in the process.

The TWG will seek to gain insight into the individual requirements and concerns of State Government agencies such as the SES, Transport and Main Roads, and Emergency Services.

The TWG will identify and discuss potential floodplain management strategies, including options put forward by the CRG and also collectively agree to the floodplain management options assessment criteria and weighting used during the MCA.

7. What is the difference between the Burnett River Flood Study and the Burnett River Floodplain Action Plan?

The flood study provided vital information to underpin the development of the Burnett River Floodplain Action Plan. It provides a solid and detailed account of what may happen during a flood and provides Council with:

- Calibrated flood models
- Flood inundation maps for a range of flood events that indicate the potential flood extents, levels, depths, velocity and flood hazard for the floodplain located between Paradise Dam and the river mouth
- An improved understanding of the behaviour of flooding across the floodplain

- An improved understanding of the impact of infrastructure such as dams and hydraulic structures on river flow rates and flood levels
- An improved understanding of flood warning times.

8. What will this Action Plan achieve?

This work will give Council a solid plan to assist in reducing the devastating effects of flooding to the region.

This whole process has been, and continues to be, about making informed, rational and workable decisions to build flood resilience and preparedness in the community.

9. What sorts of options are being considered for the Action Plan?

- Property Modification Measures which could include re-zoning, house raising
- Response Modification Measures, which may include improving community awareness, improving flood warning systems, and updating local flood and evacuation plans
- Flood Modification Measures, which may include levees, river dredging and vegetation removal.

10. What work has been done since January 2013?

Bundaberg Regional Council and GHD started work studying the region's flooding behaviour in 2011 to gain a comprehensive understanding of the cause, effects, severity and frequency of recent and future Burnett River flood events.

With significant assistance from the community (as was done after the 2010 and 2011 floods) council collated peak flood levels from the river mouth to Paradise Dam. This data was then used to calibrate the flood model to the January flood to ensure the model was able to replicate flood behaviour across the lower Burnett River. Being the largest flood event in recorded history with an inundation footprint of some 275km², it has taken some months to gather the necessary data for inclusion in the flood study. After exhaustive work, the flood study is now complete and provides vital information to underpin the development of the Burnett River Floodplain Action Plan.

Councils landfills received around 90,000 tonnes of flood waste and were able to recycle around 40% of this. Aside from the extensive work council was doing to clean up and remove this waste a significant technical investigation was undertaken to develop a guideline for mitigation of flood induced scour on dwellings built in a flood hazard area. This document is unique to Australia in addressing foundation conditions and velocity information from flood models to improve resilience of residential foundations.

Council has prepared a Temporary Local Planning Instrument (TLPI) to facilitate a short to medium term response to address the management of land use issues immediately following the 2013 Flood event. Council recognises that the 2013 event affected catchments outside the Burnett River and is reviewing the data from these events to formulate an appropriate flood

response for these localities. As approximately 80% of the flood damage occurred within the Burnett River catchment, Council has given priority to this locality for the most immediate flood response. Further information on this can be found on Council's website:

<http://bundaberg.qld.gov.au/development/regulatory-building-planning-flood-response>

The Burnett River Floodplain Action Plan is the next step in the process and will use the technical and scientific data from the flood study to develop a range of floodplain management options that aim to reduce the potentially devastating impacts of future flooding in the Bundaberg region.

11. How much of a say will the community have?

Council is seeking ideas and feedback to better understand what options and strategies they would like Council to consider as part of the project.

The Burnett River Floodplain Action Plan will be informed by consultation with the community and technical representatives to identify and confirm the top five floodplain management options and strategies.

The project will be supported by a dedicated, independently facilitated Community Reference Group which will be in place for the duration of the project.

Ideas and feedback from the community, the Community Reference Group members, and the Technical Working Group representatives will be summarised and fed into the Multi-Criteria Assessment (MCA) process later in the year.

12. If the options that come out of the MCA differ from that of the community will you undertake further consultation?

Everything we do must be rigorously assessed, and stack up in terms of its engineering feasibility, and advantages and disadvantages.

The Multi-Criteria Assessment will provide a robust and transparent tool to refine resilience strategies informed by the consultation by assessing them against a set of agreed weighted criteria. The project's Community Reference Group will help determine how much weight is given to each of these criteria before it is fed into the MCA process.

It will objectively consider options based on the feasibility, effectiveness, social, environmental and economic advantages and disadvantages of each.

13. What information came from the flood study?

The flood study provides a solid and detailed account of what may happen during a flood and provides Council with:

- Calibrated flood models

- Flood inundation maps for a range of flood events that indicate the potential flood extents, levels, depths, velocity and flood hazard for the floodplain located between Paradise Dam and the river mouth
- An improved understanding of the behaviour of flooding across the floodplain
- An improved understanding of the impact of infrastructure such as dams and hydraulic structures on river flow rates and flood levels; and
- An improved understanding of flood warning times.