Bundaberg flood protection study
Developing a 10-year action plan for flood mitigation in Bundaberg.

Option E – Fairymead levee removal
Option E involves removal of existing levees at Fairymead on the floodplain downstream of Bundaberg.

Stage 2 of the Bundaberg flood protection study involves assessing 11 flood mitigation options, including those identified through consultation with the Bundaberg community in late 2015.

The following provides an overview of the assessment of Option E.

**Viability**
A key step in the options assessment involves identifying issues that may mean construction or implementation of the option is not viable. These relate to matters such as:
- The likelihood of obtaining environmental approvals, due to unacceptable environmental impacts
- Significant or unaffordable costs of construction or ongoing maintenance
- Potential for unacceptable impacts on other areas.

An option is considered to be unviable where the assessment identifies one or more of these matters are ‘unlikely to be achieved’.

The assessment of Option E found that this option is likely to have significant impacts on areas outside of the benefited area.

| Likelihood of obtaining environmental approval |  
| Affordability |  
| Tolerable impacts outside benefited area |  

- Likely to achieve
- May achieve with modification
- Unlikely to achieve

**Costs and benefits**
Initial cost estimates indicate that capital costs for removing the Fairymead levees would be about $3.4 million.

The estimated reduction in flood damages (i.e. the tangible benefits) would be in the order of $0.1 million.

**Summary of assessment against key criteria**
- The option increases flow over the floodplain to the north and west, increasing flood levels in this area.
- Several buildings would experience an increase in flood level of 300 mm in a 1% AEP[^1] event.
- Due to the distance between the Fairymead levee and the Bundaberg urban area, the removal of this levee would reduce flood levels by a very small amount in Bundaberg.
- Reduced flood levels would be experienced upstream of the levees and on the eastern floodplain. In a 1% AEP event the benefit is limited to a distance of about 3 km upstream of the levee.
- The costs for this option would be about 30 times the estimated monetary benefits.

[^1]: 1% AEP flood is the name given to a flood event which has a 1 in 100 or 1% chance of occurring in any year. It would be similar to the January 2013 flood.
Option overview

The existing levees at Fairymead were originally constructed to protect the old Fairymead sugar mill. The levees are estimated as being around 2 m to 3 m in height, with levee crest level at around 5 m to 6 m AHD.

Following the Burnett River, the levees are located approximately 7.2 km downstream of Bundaberg CBD. Option E involves removal of about 2.5 km of the existing Fairymead levees.

Find out more about this option

Community consultation on the flood mitigation options and the findings of the options assessment will take place from 24 October to 20 November 2016. To find out more about the flood mitigation options and to provide your feedback:

Visit the website
www.qld.gov.au/bundabergfloodstudy

Interactive mapping is available on the website so that you can see how the flood mitigation options would change flooding in your area.

Contact the project team

Email: bundabergfloodprotection@jacobs.com

Telephone: 1800 994 015 (during business hours)

Next steps

The Bundaberg flood protection study is due to be completed later this year. Engagement on the 10-year action plan will occur in 2017. It is important to note that the flood mitigation options have not yet been considered by the State government and are not government policy. No commitment will be made on any of the options until the State government has consulted with the community and stakeholders on the 10-year action plan.

The Queensland Government will continue to engage with the Bundaberg community as the action plan develops.