



Cyclone Yasi - communities building disaster resilience

Summary

Cyclone Yasi, a category 5 cyclone, crossed the Queensland coast near Cairns in February 2011. It caused widespread damage between Cooktown and Townsville, destroying homes, businesses, infrastructure and crops. Around \$6.8 billion was allocated for reconstruction following cyclone Yasi and other flood events in the summer of 2010-11. Reconstruction was rapid and efficient, with numerous examples of community and local government leadership in disaster resilience. Examples in this snapshot include Japoonvale, Mackay and Cairns.

Keywords

Cyclone Yasi, resilience, community disaster preparedness

Background

Cyclone Yasi, the first category 5 cyclone to hit the coast of Queensland since 1918, crossed the coast at Mission Beach near Cairns on 2 February 2011. It was accompanied by wind gusts of up to 290 km/h, and a storm surge of around seven metres that pushed 300 metres inland. The cyclone caused widespread damage between Cooktown and Townsville and destroyed homes, businesses, infrastructure and crops. It damaged more than 9,000 kilometres of road and affected more than 4,500 kilometres of the Queensland Rail network. It also temporarily closed a number of coal mines for the second time following flooding in 2008. Despite the intensity of the wind gusts and storm surge, no deaths were directly caused by this cyclone.

Around \$6.8 billion was allocated for reconstruction following cyclone Yasi and the flooding events over the summer of 2010-11. Much of that went to rebuilding infrastructure, and the response was impressive; by September 2011, 96% of affected roads and 92% of affected railways were recovered, and all 411 damaged schools were in full operation.

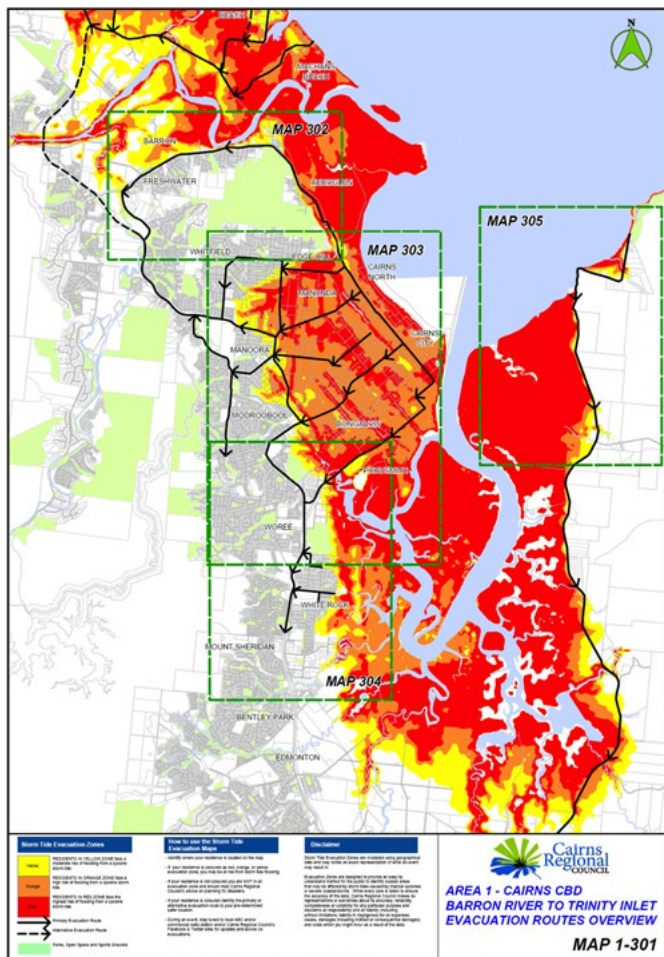


Figure 1: Example of evacuation map included in Cairns' Storm Tide Evacuation Guide. Source: © Cairns Regional Council, Queensland Government 2016. (Available online at: http://www.cairns.qld.gov.au/_data/assets/pdf_file/0017/33470/StormTideEvacGuide2014.pdf).

In the face of a large disaster, Queensland communities showed a great deal of resilience. Disaster resilience is the capacity to prevent, mitigate, prepare for, respond to, and recover from the impacts of disasters. It is about the capabilities of individuals, families, communities, businesses and governments. Integral to disaster resilience is the role of local governments, which can readily partner with communities, the not-for-profit sector, industry, the private sector and other tiers of government in recovery action.

Examples of community and local government action to build resilience

Japoonvale community plan

Members of the small community of Japoonvale, between Innisfail and Tully, applied lessons to recovering from cyclone Yasi that they learned from cyclone Larry just a few years earlier in 2006. Frequently isolated by flooding, the local community aimed to be self-reliant and, following cyclone Larry, developed a simple disaster management plan. This plan included:

- communication failures minimised through establishment of alternate communication networks that utilise UHF radio and local transport businesses
- first aid personnel registered, and appropriate helicopter landing sites identified
- a flyer on the plan distributed to each household.

The plan meant that residents knew what to do during cyclone Yasi. Resident Dina Campagnolo said, "We were ready: all we had to do was bunker down, sit it out and get to work the next day." (Qld Reconstruction Authority).

Mackay Regional Council community awareness campaign

Prior to the 2010-11 wet season, the Mackay Regional Council took action to raise awareness about what communities should do to prepare for disaster and emergency events. This included:

- disseminating an emergency action guide
- using electronic billboards to broadcast safety messages
- publishing a 'Surviving Emergencies 2010-11' notification in local newspapers
- holding public displays at local shopping centres.

Cairns Regional Council Evacuation Strategy

The Cairns Regional Council was pro-active in engaging the community in 2009-10 to prepare an evacuation strategy, which included:

- designated evacuation zones and routes, and road capacity
- defined timeframes to initiate evacuations
- key recommendations for mitigation works
- online mapping with detail to property level of all areas in the Cairns area (see Figure 1 for an example).

Further, a Storm Tide Evacuation Guide was distributed to all residential properties throughout the Cairns area. It included coloured labels (red, orange or yellow) that were delivered to residents in a predicted impact zone, highlighting risk levels. All key information was made available through a dedicated website, www.cairns.qld.gov.au/disaster (accessed 25 May 2017), with guides translated into Arabic, Chinese, Hmong, Italian, Japanese and Tagalog (Filipino).

Further reading

Cyclone Yasi, Queensland 2011 – Australian Emergency Management Knowledge Hub: <https://knowledge.aidr.org.au/resources/cyclone-cyclone-yasi-queensland/> (accessed 8 February 2018).

From recovery to renewal – case study reports April 2013: <http://www.regionalaustralia.org.au/wp-content/uploads/2013/06/RAI-Natural-Disasters-Report-Case-Studies.pdf> (accessed 25 May 2017).

Impact of the 2010-11 disasters – Queensland Treasury: <https://www.treasury.qld.gov.au/publications-resources/state-budget/2011-12/budget-papers/documents/bp2-3-2011-12.doc> (accessed 25 May 2017).

Rebuilding a stronger, more resilient Queensland - Queensland Reconstruction Authority: <http://qldreconstruction.org.au/u/lib/cms2/rebuilding-resilient-qld-full.pdf> (accessed 25 May 2017).

Storm tide evacuation maps – Cairns Regional Council: <http://www.cairns.qld.gov.au/natural-disasters/tools/evacuation> (accessed 25 May 2017).

This Snapshot was prepared by the NCCARF CoastAdapt Development Team. Please cite as: NCCARF, 2016: Cyclone Yasi – communities building disaster resilience. Snapshot for CoastAdapt, National Climate Change Adaptation Research Facility, Gold Coast.



Australian Government
Department of the Environment and Energy