

17 May 2022

The Joint Commissioners  
Professor Mary O'Kane AC and Mr Mick Fuller APM  
NSW Independent Flood Inquiry  
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Dear Commissioners

**RE: SUBMISSION - Community response in the village of (Tweed Shire)**

Our submission is centred around the Terms of Reference detailed below:

**1. Matters**

- (b) the preparation and planning by agencies, government, other entities and the community for floods in NSW, including the accuracy and timing of weather forecasts, current laws, emergency management plans, practices, mitigation strategies, their application and effect;
- (c) iii. equipment and communication systems;
- (d) the transition from incident response to recovery including the roles, structure and procedures of agencies, government, other entities and the community;

**2. Recommendations**

- (b) preparation and planning for future flood threats and risks;
- (d) impact on essential services, including electricity supply, water supply and telecommunications;
- (f) appropriate action to adapt to future action to flood risks to communities and ecosystems;

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Burringbar is located in Northern NSW within the Bundjalung Nation with a population of around 1,200 people. The village centre is 20 kilometres south of Murwillumbah. There are no major rivers running through the village, however rural properties are situated along the Burringbar Creek as well as a number of riverine valleys that are surrounded by the hills and ranges of the nearby Mount Jerusalem and Mooball National Parks. For this reason, the locality is susceptible to flash flooding, landslides and landslips, all of which (during extreme weather events) have the potential to lead to the destruction of dwellings and rural structures and well as damage to local roads and bridges, leaving many residents isolated.

The (BCA) was established in 2016 to facilitate an ethical, accurate and transparent voice from the broader community for the community. For the past five years, the association has worked on the delivery of a community plan, which was accepted by Tweed Shire Council in February 2021 as a preliminary reference document for consideration during planning for future public infrastructure improvements, most notably a Masterplan for the Village Centre. The community plan also highlighted the need to increase the community's capacity to prepare for and respond to natural disasters.

For the period December 2021 to February 2022, the Tweed local government area received higher than usual rainfall. Having experienced flash flooding, property damage and residential displacement in March 2017, the community were somewhat prepared for what was to unfold on 28 February 2022.

There were 100-120 homes that were impacted either by flood water or mudslides. Roads and bridges sustained major damage, in particular in Upper Burringbar.

## COMMUNITY LED RESPONSE

A summary of what occurred in Burringbar is detailed below:

- A coordination hub was set up in the village centre on the footpath, under the shop front awning. Situational information was centralised to develop an overall picture of disaster effects. Members of the public came forward to register their need for help. Details of deserving jobs were logged onto a whiteboard. Any volunteers offering help would be assigned a registered task based on the asset's offered capability and the priority of effort.
- A resource hub was set up in the local public hall, providing cooked meals for displaced residents and volunteers assisting with response coordination and field work. Essential personal hygiene items, food, clothing, bedding, household cleaning consumables and the like that had been donated was also dispensed from this location to residents of 4 villages (Crabbes Creek, Mooball, Burringbar, Stokers Siding).
- When all major communications systems (Telstra/Optus mobile, landline, NBN) were knocked out, a local business owner provided free Starlink satellite WIFI to the coordination centre and all residents who needed to communicate with friends and relatives outside the area.
- Volunteers continued to work to support those in need for the weeks that followed. No external organisation provided any meaningful support until Day 10. The ADF team deployed to Burringbar 10 March were utilised to their full potential because our community response team had established a tasking schedule. They undertook several complex recovery tasks and our community will be forever grateful.
- There was no meaningful contribution from the RFS, SES or any other civil-society organisation such as the Red Cross during the response and in the initial stages of recovery. The local RFS team stationed in Burringbar was deployed to Murwillumbah, so were unable to provide any response support to the residents of Burringbar. The local area SES were understaffed and overwhelmed. We knew that, and we knew that there was no chance of any recovery crews being available to assist anybody in Burringbar.

## COMMUNITY MEETING AND DEBRIEF

On Monday 21 March 2022, residents were given the opportunity to tell their stories and to make suggestions about what we needed to do as a community to be better prepared. There were over 80 people in attendance. The following lists the key points from the community debrief:

1. **Bridge vulnerability.** Our historic bridges are prone to abutment wash out by swift water. During re-construction, Council needs to consult with the residents in these areas about past bridge rebuild problems to avoid making the same structural errors.
2. **Local Area Maps.** The community action team needs laminated A2 size maps of Burringbar and surrounds in these formats: • Topographic • Road and Plot • Aerial/Satellite Image
3. **Communications.** A valley wide CB network is needed, with all residents encouraged to resource themselves with a handset, so that a channel can be dedicated for emergency communications when all other communications systems are unavailable. The action team would operate on a different channel and would need to have at least 12 handsets for distribution once an emergency is declared. Due to the topography, repeaters would need to be positioned and tested at key locations prior to storm season. A future local Burringbar CB network would be accessible to any visiting response teams with CB sets.
4. **Air Band Comms.** Advice sought from helicopter aircrew confirmed that the community action team needs Air Band Radio capability in order to effectively communicate with Air Ambulance or ADF air assets. This is a relatively inexpensive item and can be used as a guide

for navigation instruments on board the aircraft. It is recommended that two (2) radios be procured as part of essential community response equipment. These two radios will otherwise monitor the local CTAF Frequency and/or 121.5 MHz.

5. **Helicopter Landing Sites.** There is currently no centralised list of suitable HLS within the valley, apart from the Burringbar Sports Club. It is recommended that a reconnaissance of all suitable HLS within the valley be captured in Lat/Long Decimal Degrees, so that the response team at least has: • readily available access to formed roads by 4WD • 20x25m in size • Clear of overhead wires, unstable soil and fuel sources
6. **Electricity Vulnerability.** A reliable alternative power source; with at least 5 days of operational capability; is needed for key response infrastructure such as response coordination and tasking. This is a gap in community capability. We recommended the Burringbar and District Sports Club, as the EVAC centre seek to procure either a diesel-powered generator or investigate battery storage solutions for the existing solar system.
7. **Fuel Vulnerabilities.** The local fuel suppliers in Mooball and Crabbes Creek are low-set properties that are vulnerable to fuel contamination. Recommended that the community investigate solutions for emergency fuel supplies as part of our preparedness.
8. **Plant Equipment Locations.** Private plant equipment may be called upon again during future response events, subject to owner's consent. Recommended that a centralised database be created including contact information and the location of all equipment.
9. **Personal preparedness.** Ideally every resident has a pair of work boots with safety cap, gum boots, clear and/or shaded eye protection, long sleeved work shirt and trousers, a broad brimmed hat, a pair of work gloves, a limited stash of cash for when the EFPOS machines fail due to power and internet outages. Recommended that BCA assist with communicating this information to new residents and sending out reminders prior to storm season to "be prepared".

## CONSIDERATIONS IN REFERENCE TO THE TERMS OF REFERENCE

### 1. Matters (b), (c) iii, (d)

There was a failure by government agencies to properly prepare communities for what was to unfold, and there was a failure by government agencies to actively respond in the first instance. We believe the impacts of decreased volunteer numbers due to COVID mandates and the centralisation of volunteer services such as the SES are factors contributing to this lack of preparedness.

We suggest the following be considered:

- Acknowledge that SES volunteer numbers were inadequate to manage a natural disaster of this scale. Consider adapting to seasonal employment, rather than relying on volunteers. Employed SES personnel would then prepare community responders in the lead up to storm season through joint "on site" training.
- Properly resource isolated communities with alternative communication systems such as radio communications, with temporary (mobile) repeater stations deployed prior to storm season. Pre-planned and regular communications test and joint on-site training activities, led by the SES to ensure local community volunteer action teams are prepared when emergencies are declared.
- Provide local community volunteer action teams with a set of laminated A2 size local area maps including Topographic • Road and Plot • Aerial/Satellite Image.

- Review the EWS (early warning system) flood alert protocols. Tweed Shire residents can voluntarily sign up to receive SMS and email updates for EWS flood alerts. These alerts were forth-coming, however they were not in step with the rapidly changing conditions. Residents had little or no time to evacuate when the alerts were updated from Minor to Moderate ; only to find actual impacts (in some instances) progressing to Major- all too late.
- Review the function of local Rural Fire Service units and their role in local response and recovery efforts. There is a Rural Fire Service unit stationed in Burringbar, however it was deployed elsewhere.

## **2. Recommendations (b), (d), (f)**

In 2020, the Burringbar and District Sports Club was designated by the NSW Department of Communities and Justice as the emergency evacuation facility for Burringbar and surrounds. To date, there has been no meaningful engagement, funding, support or advice given by DCJ or any other government agency representatives on how to properly or adequately resource this community facility in Burringbar. The Sports Club committee has been working hard to obtain grant funding to achieve their aims in supporting the community, however because of the competitive nature of grant funding rounds, and long processing delays – progress has not met with demand – to the extent that during March 2022, this facility could not be activated because there was no alternative power source available during a four-day power outage.

Burringbar residents are situated in residential streets and rural properties with creeks and streams flowing through the numerous valleys, in the shadow of steep mountain ranges. The vast areas of National Parks that form a perimeter around the valley are valuable environmental resources that provide forest habitat for native fauna. Preservation of the waterway systems in the valley are important for both the rural producers and lifestyle residents, however consideration must be given to how the impacts of farming and other land uses are managed towards a sustainable future.

We suggest the following be considered:

- Review and improve government agency outreach to assist isolated and small communities to resource themselves as first responders during declared emergencies.
- Review and improve regional land use planning strategies, including long term waterway and creek bank restoration projects to ensure a realistic balance is met, in respect of local development, flood mitigation, erosion control and native flora and fauna preservation.
- Review of contingencies for provision of essential services in isolated communities, specifically in Burringbar – telecommunications and electricity. Outages of more than four days should never occur again. This could be achieved if Burringbar had an alternative electricity supply unit, such as a diesel generator. As previously stated, as a minimum Burringbar needs to have an effective radio network when all national telecommunication provider networks fail. A radio network will need a power supply. Burringbar needs to have a back-up generator installed at the Sports Club.

## **CONCLUSION**

There was a failure by the responsible government agencies to adequately advise and assist isolated communities, to the point where if the community had not responded, people would have died in the Burringbar locality. This failure is in both the response and the recovery phases of this natural disaster. Burringbar is a small village that is often forgotten about, to the point where each time a tranche of government funding was announced for the recovery effort - Burringbar was omitted. [Terms of Reference points 1. (b); 1. (d); 2. (b)]

We know our vulnerabilities as a small community and now call on the government to better prepare us, because we will be the first responders again and again.

National communications and electricity providers had no contingencies when services failed. As a community that has the potential for residents to become isolated, we need communications contingencies, and with this comes the need to have alternative sources of electricity. [Terms of Reference points 1. (c) iii ; 2.(d)]

Our village is surrounded by the mountain ranges of two National Parks. The waterways that flow through the valley are a natural resource that provides habitat for native fauna. We are concerned by erosion and storm damage and look to government to develop long term strategies to address the impacts of natural disasters that are caused by Climate Change. [Terms of Reference point 2.(f)]

The residents of Burringbar have the capability to mobilise a response team, however there is a shortfall in the resources and equipment necessary to effectively carry this out.

We look forward to receiving further direction from Resilience NSW and the National Recovery and Resilience Agency, to deliver on their responsibilities of preparedness and response; to either provide us with the funding or the resources for our community to be better prepared next time.

Yours faithfully

## **ATTACHEMENTS:**

1. Photos of impacts, flooded creeks and landslips
2. Local news article "A night of terror and destruction in Burringbar", 17 March 2022.



## Attachment 1: Photos of flood impacts - Burringbar, Northern NSW

Tweed Valley Way at Hunter Street, many homes here were inundated with fast flowing water



Flood waters flowing through the backyards of homes in Burringbar and Mooball Villages





**Greenvale Court Causeway with homes located either side of the fast-flowing water. This is a tributary of the Burringbar Creek catchment that flows via Mooball Village, joining the Mooball Creek through Warwick Park, flowing out to sea at Pottsville.**



**Landslips and tree falls blocking roadways on Cudgera Creek Road and Tweed Valley Way**





## The bridges of Upper Burringbar



## Community flood assistance hub, set up under shop awnings in Burringbar Village





**Major landslide in Upper Burringbar that buried vehicles, farm sheds, houses. Vehicle was recovered through manual labour of community volunteers and ADF personnel.**





# A night of terror and destruction at Burringbar

By Jo Kennett

SHAUN APPLEBY and his son Ethan are lucky to be alive after spending a night outside in the rain, as landslides buried more than two decades of work at his Upper Burringbar property on Monday, February 28.

"We'd had a metre of rain in two days and by 3pm the causeway was gone; I'd never seen the water so high here in 24 years," he told *The Weekly*.

"Then as we walked up the hill to check the water tank, what was a gentle creek just roared and all of a sudden all these trees and soil and rocks came raining down and pulling trees down as it went and I said to my son, 'I hope my tank doesn't come down' and ten seconds later it came bouncing down.

"There were 12 landslides that day, each one bigger than the last.

"The first one hit my shed and the front porch of my house and when we went out to clear out the shed another one came.

"I didn't hear it coming and my son yelled out a warning and we barely made it out."

As dusk neared, they decided they had to evacuate the house as it wasn't safe to stay.



"We were cut off by the creeks; they were raging torrents and none of them were navigable," Shaun said.

"Each landslide got worse and worse and the final one literally destroyed the neighbour's entire house and crashed through the glass doors of two sides of my house filling part of the house with mud and rocks.

"The sound was indescribable, it was like a derailed freight train, a cacophony of thousands of tons of boulders, mature trees and mud crashing down the hill."

Shaun and his 27-year-old son spent the night outside in the rain on slightly higher ground that they hoped might provide some protection from landslides.

"Even being outside, we fully expected a landslide would come down the hill taking the house and then us also with it," he said.

"It was a long night; we were watching for stars and every time there was a shower we were sure there would be another inundation.

"There was no birdsong and it felt as if time stood still.

"Once morning finally arrived, I was so grateful that my son and I were both alive; that's the most stunning outcome, we are both alive.

"It could so easily have been different."

They walked up and found the shed buried, the house badly impacted, his HiLux ute crushed under the shed and the neighbour's house completely obliterated, fortunately no one was inside.

Ethan went to the evacuation centre in Ocean Shores which they described as "fantastic".

"I was in shock and was devastated by the sheer magnitude of the landslide, which was approximately 300-metres long and up to 60-metres wide," Shaun said.

"The main, central intersection of the property where my house is, is now blocked with an additional five-metre-high pile of mud, huge trees and rocks.

"I'll need to do massive earthworks in order to get access to the house, then get tonnes of mud out of the house.

"The landslides had ripped the power and phone lines out and the water system disappeared down the raging creek.

"I also lost my shed, Mazda sports car, tractor, chainsaw, brush cutter and a lifetime's worth of tools.

"It feels like grief and you can get really discouraged by the sheer enormity of it."

Shaun has been planting rainforest trees on his ten-acre block for 20 years.

"With the help of the community we collected 140 species of trees and planted them and they were doing great," he said.

"We were just starting to get seeds out of them and now I reckon about 60 per cent of them are gone.

"We are just going to have to start replanting again.

"I'm a big fan of the rainforest blue figs [quandong] now; they are about 18 or 20 years old and not a single one of them is gone and every other type of tree has been knocked over by the landslides."

Shaun said he is a pensioner and wants to stay on his property and rebuild and replant "as it's my way of reducing the impacts of climate change which is the cause of all of



LEGENDS: The ADF and volunteers brought a moment of joy when they rescued Shaun's HiLux

this devastation".

"The Burringbar community has been absolutely splendid; I was never very social here, but I feel like I used to have a big house in a little community and now I feel like I have a little house in a big community," he said.

"The Tweed Council road guys were so efficient getting the road rebuilt.

"The Burringbar Community Response Team (CRT) headed up by Gary and Adam has done an absolutely brilliant job integrating resources in a very efficient and useful manner, I feel very supported by them.

"Two volunteers, Zac and Vinnie and their friends came up in the first couple of days and did the initial heavy lifting, they were amazing.

"The Australian Defence Force has been absolutely brilliant; I'm so grateful for all their efforts.

"People came from far and wide to help including two volunteers, Jake and Nick, who turned up and told Shaun, 'We're going to get your car out' and arrived two days later with equipment and a four-wheel-drive.

"The Army was here and fourteen of us all worked together for six

hours and extracted the ute from its precarious position," Shaun said.

"The moment we were ready to pull it out they said, 'Why don't you try to start it' and not only did it start, it drove.

"It needs significant repairs, but I love my four-wheel drive ute as it's vital to getting my property back and I couldn't be more grateful to all of these guys.

"That was the first time I had a smile on my face since this all started."

Shaun described the women who cooked hot meals for lunch and dinner as "amazing."

"So many people have just pitched in to help; I really appreciate everyone and hope that those friendships endure in the aftermath," he said.

"My circumstances are still gravely uncertain, but I would certainly want to live in this community more than any place on earth and I'm really grateful for the help."

**Help Shaun to rebuild his life in the community he loves: [gofundme.com/help-shaun-rebuild-after-burringbar-landslide](https://www.gofundme.com/help-shaun-rebuild-after-burringbar-landslide).**