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Professor Mary O’Kane AC, Michael Fuller APM
2022 NSW Flood Inquiry

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Dear Ms O’Kane and Mr Fuller

I welcome the opportunity to contribute to the 2022 NSW Flood Inquiry. The recent floods in the Northern Rivers have seriously impacted already highly impacted communities. Coming on the back of the 2017 floods, the 2019 Black Summer bushfires, and two years of the Covid-19 pandemic, the floods this year have devastated our communities. People lost their lives, thousands of people have been traumatised and displaced, and many are suffering and will suffer from long-term mental health impacts, as well as poverty and homelessness. There were 3,396 homes made uninhabitable across the region and another 6,708 were inundated, worsening the existing housing crisis. People are living in cars, caravans, tents, garage floors, friend’s houses, or sleeping rough. The recovery across the electorate is ongoing and will be long term, not just the physical and economic rebuilding but flood-related emotional trauma.

As the Member for Ballina, my office has been kept busy with requests for assistance and information from constituents directly affected by the flooding events, as well as businesses that have suffered damage and losses. Constituents and small business owners have sought advice through my office about flood clean-up, temporary accommodation, and how to access financial support. During the first two weeks of the flood, my office provided rescue and evacuation information to our communities. I met with distressed and fearful people during and after the evacuation phase, and I have been kept up to date each week with the progress of the State government’s recovery plan, including the establishment of a Reconstruction Corporation.

My submission will focus on gaps and mis-steps in terms of rescue and recovery. Please note that in my discussion of combat agency response I am not at all critical of any member of the 14-plus combat agencies that assisted our communities. I want to highlight gaps and problems, so that solutions and preparedness can be identified and worked for. As elected representatives we need to support people in our communities to adapt to future super-charged storms and extreme weather events, including bushfires. We need to see planning reforms that inhibit development in weather and flood vulnerable localities, explore flood mitigation, refine local government responses to extreme weather events, resource councils, plan for housing relief in the Northern Rivers, deliver genuine, long-term mental health supports, improve telecommunications, address the shortage of rescue volunteers, and tackle problems in the transition from incident response to recovery.

1. Causes and contributing factors

Ballina Shire

Ballina Shire is very low lying, with 60% located less than 20 metres above sea level, 20% between 20-100m above sea level, and 20% greater than 100m above sea level (Ballina Shire Local Emergency Management Committee, 2019).

Ballina Shire has four sources of flooding:

1. Richmond River flooding – last major flooding occurred in 2005
2. Creek flooding from Emigrant Creek, Maguires Creek and North Creek
3. Ocean storm surge flooding – king tides that affect parts of Ballina Island and West Ballina; areas with concentrated urban development, and
4. Overland flooding – driven by rainfall runoff, surface storage, pipe capacity and tide oscillations (GHD, 2021).

More than 60% of Ballina Island is a “trapped low point” and conveyance is achieved exclusively by piped drainage through surrounding higher ground (GHD, 2021). The centre of Ballina Island has a “bowl” formation, with the lowest points of the island being at Tamar Street, Grant Street and Moon Street. The February and March 2022 flooding occurred after two consecutive years of La Nina and during a time when the water table has steadily risen and the ground was already sodden. The February event also coincided with high tide conditions which reduced the stormwater network’s capacity due to the tidal backflow. The recent flooding events have shown the exposure of Ballina both to existing flooding and future risks, with more serious consequences inevitable due to climate change.

Byron Shire

Byron Shire has high annual rainfall and a pronounced wet season from December to April. The region is also susceptible to effects of cyclonic activity from Queensland which at times brings torrential rainfall.

Byron Shire has four major flood plains:

1. Belongil Creek Floodplain
2. Brunswick River Floodplain
3. Marshalls Creek Floodplain, and
4. Tallow Creek Floodplain.

All four floodplains were inundated during the February and March 2022 floods. Some of the causes being posited for the February and March flooding events are;

- Blocked drains and lack of maintenance of flood gates
- Choked river systems, in particular the poor health of the Richmond River
- Three intense weather systems leading to record rains and flooding
- Supercharged storm events as a result of global warming, and
- Two consecutive years of La Nina.

2. Climate change and adaptation

The floods in March were the worst our region has experienced in decades. While we were struggling to pick ourselves up from February's catastrophic weather event, which took lives, homes, schools, businesses, farms, hillsides, creek banks, roads, treasures, an entire regional city and our hopes and futures, we faced another extreme weather event, which took even more.

The human face of climate change is painful and exposes the depth of pre-existing inequality caused by State failure: failure to provide secure housing and income support to those in need, and failure to build landscape resilience to best protect us from these events. These failures are aggravated by the unpreparedness and inability of the State to respond to such a colossal climate induced disaster in a reasonable, safe and effective way.

The latest International Panel on Climate Change (IPCC) projections indicate that if carbon emissions continue to rise at their current rate, temperatures are likely to increase by 3 – 4 degrees Celsius above their pre-industrial levels by the end of this century. However, many of the world's leading climate scientists suggest that there is a very strong chance that we could see much higher temperatures, and soon. In his book *Climate Shock*, Harvard economist Martin Weitzman argues that: "Most everything we know tells us climate change is bad. Most everything we don't know tells us it's probably much worse." [Wagner, G Weitzman, M, *Climate Shock: The Economic Consequences of a Hotter Planet*, Princeton University Press, 2016, p xiii]. Environmental journalist Mark Lynas in his book *Six Degrees* outlines what would happen if the world warmed by 1 degree, 2 degrees Celsius and so on. The final chapter describing life in a 6 degree Celsius warmed world begins with a reference to Dante's sixth circle of hell and the end of the human adventure on this planet as we know it.

Extreme temperatures will bring extreme weather events because hot air holds more water than cool air, so a rise in global temperatures will increase the amount of rain dumped in storms. More rainfall means bigger floods. Lightning strikes, wildfires, and droughts will become more frequent. Globally 4 degrees Celsius of warming will increase the damage from flooding by a factor of four and raise flooding risk sixfold [Leigh, A, *What's the Worst that could happen: Existential Risk and Extreme Politics*, The MIT Press, Cambridge Massachusetts, 2021, p 45].

3. Preparation and planning

The Bureau of Meteorology

On 27 and 28 February 2022 the weather system that impacted our communities evolved rapidly and the Bureau of Meteorology (BOM) was constantly updating the weather forecasts. I was informed some weeks after the initial flood events by high ranking combat personnel that staff in the BOM were reluctant to declare the weather event an East Coast Low pressure system because it could have panicked people. If the BOM had declared it an East Coast low on 27 February I strongly believe that more members of the community – in particular people living within Lismore flood zones, would have evacuated.

Given the devastating impact of the flood event, including loss of life as well as the extreme risks that volunteers took to rescue members of their community, it is very hard to understand the conservative approach that the BOM took to the three weather systems.

Recommendation 1:

The NSW Government investigate what appears to be an increasing policy and messaging remit of the Bureau of Meteorology, as opposed to a purely scientific and factual reporting role.

Early warning systems and telecommunications

On 27 and 28 February and throughout the first week of March the State Emergency Services (SES) sent out frequent bulletins and evacuation warnings via text messages to members of the community being impacted by the weather event. However, the text messages to individuals with evacuation warnings, orders and safe to return messages were not sent to every member of the community.

Telecommunications were down across the Northern Rivers, including phone towers, and this seriously hindered the SES in their ability to provide early warning messages and ongoing information to communities. The rapidly evolving weather system, coupled with telecommunication outages, led to people across the region not having time to evacuate, being unable to contact emergency services and unable to call for assistance and rescue from their properties.

Having spoken with many SES members in my electorate after the initial emergency it has emerged that SES on the ground did not have any way of communicating with each other than with walkie talkies. This is a major concern and is highly unsafe for volunteers to be rescuing people without any telecommunications support, and it hindered the capacity to respond. I elaborate on other supports needed for the SES and other volunteer combat agencies later in my submission.

Primary responsibility for protection of life, property and the environment rests with the State in terms of first response. Due to the scale of the floods and weather event, lack of resources and volunteers (factors contributing to the low numbers of volunteers in the SES and RFS locally are explored later in my submission), combat agencies were unable to meet the rescue needs in a timely and safe manner. This left a void into which citizen volunteers, the tinny army, the mud army, friends and family risked their lives to help rescue people whose lives were at risk.

Recommendation 2:

The NSW Government conduct an investigation into the failure of telecommunications during the 2022 flood events in the Northern Rivers and invest in technology that can withstand flood, storm, and fire events. At the very least ALL of our combat agencies must have access to portable telecommunications so that each agency can communicate with their members during rescues.

Delays in State and Federal government rescue and response

There were significant delays at State government level in the deployment of State-wide rescue agencies that resulted in key aviation assets remaining grounded in Sydney. There were also long delays in the deployment of Department of Communities and Justice (DCJ) personnel to the Northern Rivers to operate evacuation centres.

There was a delay at a Federal government level in deploying Australian Defence Force personnel. Deployment numbers were announced in the early weeks but did not appear on the ground until weeks after announcements by the Prime Minister and other Ministers. These delays greatly impacted rescue operations and the operation of evacuation centres and people in our communities suffered as a consequence. Evacuations and deliveries of essential food and medical supplies to people trapped and without any telecommunications were delayed for many days and this had devastating impacts on people throughout the region. People living in hillside communities who were badly injured by landslides were only rescued after many hours and in some cases waited for days to receive treatment and supplies.

The Premier stated on a number of occasions that aircraft simply could not get in because it wasn't safe to do so. However, I have been informed by local paramedics with the Westpac Helicopter Rescue that this simply is not true, and that Queensland-based aerial support performed more than 40 rescues on day one of the flood event.

Brave men and women in our communities are the ones who stepped into the void left by the delays in rescue and support from all levels of government. We saw the manager of the Mullumbimby RSL club open his establishment to over 300 men, women, children and animals for nearly two weeks – providing food, shelter, blankets, mattresses and a landline in the absence of qualified personnel who could not get into Mullumbimby. The manager of the Ocean Shores Country Club also operated an evacuation centre for many days before DCJ staff could get in to support. Cherry Street Bowling Club in Ballina also ran an evacuation centre for the first two days of the Ballina flood event without any government assistance.

We saw hundreds of citizens risk their lives to rescue stranded flood and landslide victims – I am hoping that many of those stories of heroism emerge from this Inquiry. We saw members of our own local SES, RFS, Fire and Rescue, Police and other combat agencies rescuing members of the public while their own homes were inundated. But the magnitude of the need simply overwhelmed our under-resourced and under-staffed volunteer combat agencies. There must be changes made to improve the way that the SES and RFS are resourced to undertake rescues in a large-scale natural disaster in the Northern Rivers moving forward.

Recommendation 3:

The NSW Government investigate reasons for the delay in aerial support for rescues from across the State in the first 48 hours of the flood event. If it is the case that local combat agencies are likely to be the sole rescuers in the first 48 hours of a natural disaster, the government must urgently assess the resource shortfalls and reasons for low numbers of SES volunteers at a local level and seek to address those factors as a matter of urgency.

Recommendation 4:

Transition State Emergency services and Rural Fire Services to a retained and salaried personnel model so that there is the capacity to support communities through natural disasters.

Recommendation 5:

Work with the community leaders that emerged in the Ballina Electorate to train and resource them to establish evacuation centres in the event that outside DCJ personnel cannot get into the area.

Local Government early response

In accordance with the NSW Flood Plan Development Manual, local councils have a responsibility to manage flood risk in accordance with the principles of reducing the impact of flooding and flood liability on individual owners and occupiers, and to reduce private and public losses resulting from floods.

Councils draw upon three mechanisms to manage flood risk, mitigation and recovery, but in an era of ever-increasing super-charged storm events, flood events, and bushfires the question emerges as to why there is not State-wide consideration given to adaptation and climate change across all planning instruments.

(i) Property Modification

- Local land use planning instruments, *Local Environment Plans (LEPs)* and *Development Control Plans (DCPs)* across the State are not required to consider the impacts of super charged storms or weather events in the era of climate change. The onus falls on individual councils to get approval to include mitigation and adaptation elements within LEPs. In this flood event properties built in the past 10 years in West Ballina experienced less damage than those built earlier because under the 2012 DCP Ballina council specified higher levels for home foundations. Something as simple as the requirement that all new buildings in flood mapped zones be built from appropriate *water resistance building materials* to reduce flood damage could save people's homes, and also cost to the tax payer.
- *Voluntary House Raising* – funding for this is only available every two years.
- Voluntary purchase of high hazard properties on a case-by-case basis after assessment by *Property Assessment and Demolition*. Byron Shire Council in its North Byron Flood Risk Management Plan (2020) identified 15 properties in which the removal of these properties would restore the natural hydraulic capacity of the flood plain and reduce the number of people living in high flood-risk areas (WMA Water, 2020).

(ii) Response Modification

- *Insurance*
The Federal electorate of Richmond includes the Ballina State electorate and has been deemed the second most flood-prone electorate in NSW (Hutley, N et al., 2022). 20.9% of properties in the Richmond electorate are deemed high for flood risk, and 14.5% of properties are at high risk of periodic riverine flooding (Hutley, N et al., 2022). Flood insurance is cost prohibitive in many areas across the electorate, with quotes of up to \$40,000 per annum for flood insurance. We had a number of constituent enquiries due to the rising cost of their premiums as areas have been reclassified as higher risk.
- *Raising the low points on evacuation routes*
A number of towns were completely cut off during the 2022 flooding events, and many towns are cut off with each flood event, including Huonbrook, Wanganui and Ballina Heights, providing no evacuation routes. The 2021 Ballina Flood Study estimated that the cost of raising evacuation routes in Ballina Shire would be between \$39m and \$172m, depending upon which climate change scenario humans are on in terms of IPCC predictions (GHD, 2021).

(iii) Flood Modification

At this time there are no flood levees or gates in Ballina and they are not considered viable due to considerable constraints both environmentally and from a construction perspective, as well as social impacts. Minimum costs for the levee system are estimated at \$162m and property acquisition \$150m (GHD, 2021).

Recommendation 6:

The NSW Government trial a one-off funding round made available to flood-affected residents whose homes have been assessed by the Property Assessment and Demolition Program and house raising has been recommended.

Recommendation 7:

The State government should require that extreme weather mitigation and climate adaptation designs are part of all development applications across all planning instruments.

Recommendation 8:

The State government should resource and require all councils in NSW to conduct flood mapping every five years, so that insurers can make informed decisions about risk in flood-prone communities and pass on more competitive insurance premiums.

Recommendation 9:

The State government should resource local councils to raise low points of evacuation routes, and prioritise those Local Government Areas that are highly flood-prone in NSW.

4. Early impacts

Warnings and evacuation orders

Significant issues arose as a consequence of the loss of telecommunications on 27 and 28 February 2022, and in the following weeks and months for some areas. Residents across the Ballina electorate relied on a range of information sources and media where available including SES warning texts, phone calls, SMSs from friends, Facebook and radio. Residents of Mullumbimby received limited warnings due to the telecommunication outage, and the residents of Upper Main Arm, Upper Wilson's Creek, Wanganui and Huonbrook were unable to receive ABC North Coast radio bulletins and relied on Byron Bay community radio station BayFM.

Unfortunately, many people reported not getting an evacuation order text from the SES. There was an SES bulletin rather than a text message giving an evacuation warning for all residents of the Northern Rivers on 1 March to move to the highest, safest place immediately, such as higher ground or inside a sturdy multistorey building as high above water levels as possible. This evacuation warning affected 308,000 people, and many did not access the SES bulletin, so many people did not know that they were advised to evacuate. There were 30 evacuation orders affecting 59,000 people in the Northern Rivers on 2 March 2022, but many were not accessed by residents.

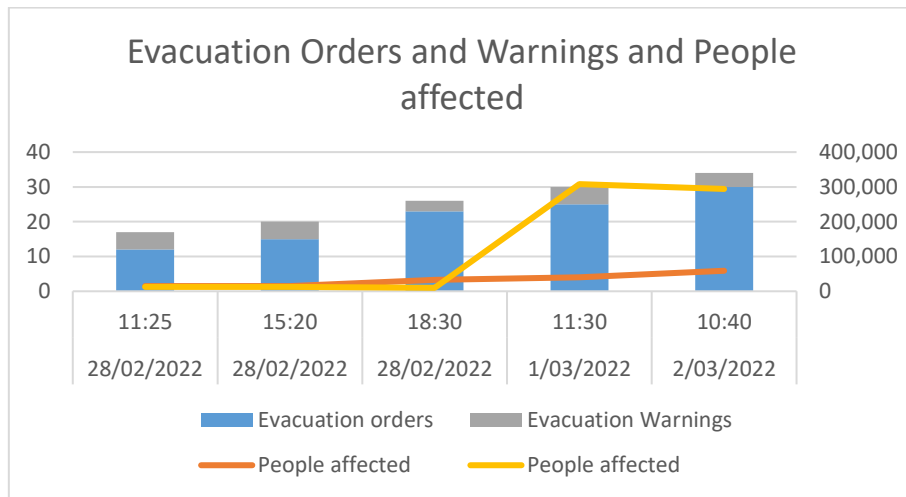


Figure 1: Compiled from SES bulletins 28/2 - 2/3/2022

Residents of Mullumbimby were given just 10 minutes notice to evacuate. The order was sent at 5:50am on Monday 28 February to evacuate by 6am, with residents waking to water already within their property. Fifty-five patients at Ballina Hospital were evacuated due to imminent flooding to the Catholic high school Xavier College in Skennars Head, where a makeshift hospital was stood up on 1 March as a precautionary measure as 50mm of water was predicted to cover the whole of Ballina Island.

School Closures

147 schools across the Northern Rivers were non-operational on 1 March 2022, increasing to 194 the next day. Most schools did not reopen until 8 or 9 March. Schools were then closed again on 30 March with the second flood event, and did not reopen for a further three school days.

Caravan Parks

Due to the speed that the flood waters rose, it was not possible to evacuate dwellings from caravan parks, with many park residents experiencing severe damage to their property. We saw highly vulnerable people from residential land lease communities displaced and in evacuation centres without their usual social support networks. I note that incredible individuals and organisations went over and above during in the early and later phases of the evacuation to support displaced and highly vulnerable caravan park residents — some of the lowest socio-economic people in the Ballina electorate.

Evacuation Centres

As noted earlier in my submission there was confusion about where people needed to evacuate to in all parts of affected areas in the Ballina electorate, and there was a significant delay in the government providing appropriately trained staff to run the evacuation centres. People in Ocean Shores, South Golden Beach and New Brighton evacuated to Ocean Shores Country Club and were supported for over a week before DCJ staff took over. People in Mullumbimby evacuated to the Mullumbimby RSL Club because they could not get any further out of town and it was many days before any DCJ support arrived. Residents affected on Ballina Island evacuated to the Cherry Street Bowls Club for 48 hours before the evacuation centre at the Ballina Indoor Sports Centre was stood up.

In Wardell, local Rural Fire Service volunteers and community members supported the entire town for over a week and provided mattresses and food and supplies without any government assistance. A group of incredible young people stepped up at the Wardell Memorial Hall and provided food and supplies to flood victims from day one and are still going 12 weeks after the flood event. In Mullumbimby and Ocean Shores local Resilience organisations did the heavy lifting in terms of providing rescues as well as ongoing support in terms of food and supplies to affected residents. Resilience Byron and the Mullumbimby Neighbourhood Centre played a huge role, as did countless citizens acting from pure altruism and care for their neighbours. However, the lack of warning time, the timing of warnings, and lack of consistent texts and messages to convey evacuation orders greatly impacted our communities and directly put lives at risk.

We note the establishment of local Resilience programs as an important step in preparing and supporting community, but it is governments that must lead and provide the legislative authority with guidance and resources to make it possible. There is a vital role for local government to take in preparedness-planning but it needs financial commitment and direction from the State and Federal governments.

The information to inform residents of key issues such as what to do and where to go in case of an event must be readily available. The identification of evacuation centres and guidance on safety and vital personal information that will be needed if homes or property is lost and or damaged should be prioritised. Many people are still trying to navigate the support networks without essential documentation to meet government requirements for access to funding and support.

Recommendation 10:

Given the lack of radio coverage from ABC North Coast for many residents in the Ballina electorate, the NSW Government should fund BayFM to operate as an additional official broadcaster during natural disasters.

Recommendation 11:

The NSW Government should resource and empower local councils to create community committees that engage with local residents on all things flood-related, including purchasing and storing sand bags and equipment, and to be responsible for communicating procedures and governance structures to be enacted the moment a flood event occurs.

5. Resourcing, co-ordination and deployment

State Emergency Services (SES)

As SES requests for assistance increased so did the number of flood rescues across the region. The figure below does not account for the “tinnie army” who undertook a number of rescues.

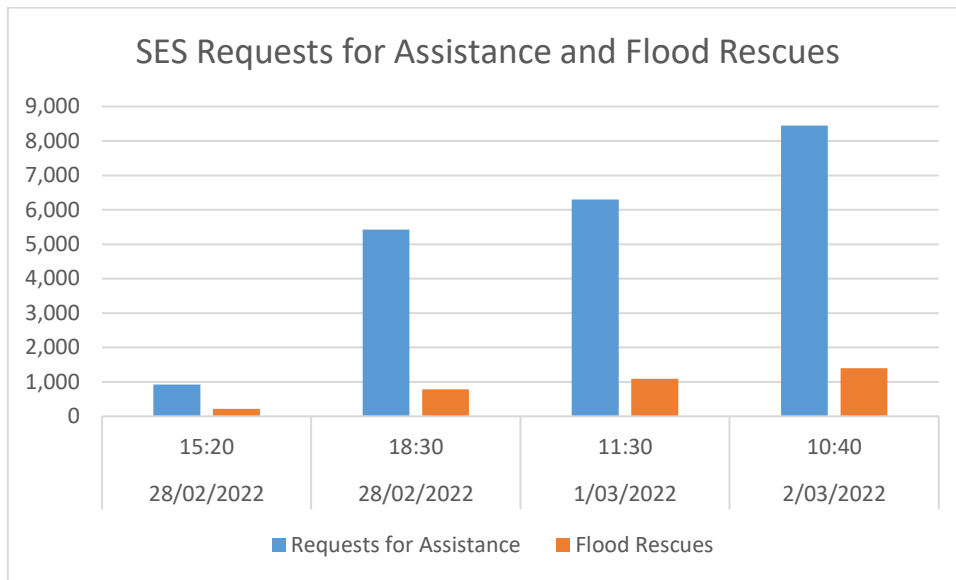


Figure 2: SES requests for assistance

On 1 and 2 March 2022, there were 550 SES and 312 rural fire service (RFS) personnel on the ground, including 58 RFS appliances, and four aerial assets.

Both the SES Ballina Operations Centre located at Angels Beach Drive, Ballina, and Ballina Shire Council Emergency Operations Centre located at the Waste Management Centre flooded during these events, which calls into question the location of the SES headquarters. This resulted in the coordination of the flood response in Ballina occurring in a makeshift structure.

The NSW Greens are pushing for a doubling of emergency services funding to \$5 billion over the next decade, with increasing personnel and equipment. We would like to see investment restrictions on the Emergency Response Fund so that \$600m is spent per year until 2026-27, and \$300m per year from 2027-28 on climate resilient projects to protect communities.

Australian Defence Force (ADF)

There were delays in deploying the ADF. We were promised 200 personnel by 2 March, however on 3 March I was still calling for these troops. These troops only arrived on 4 March. Co-ordination efforts were further impacted by road closures, including up to 240kms of the Pacific Motorway that was closed from 1 March due to flooding, with the final stretch of the M1 only reopening on 6 March. This led to fuel and food shortages across the region.

Numerous communities across the Northern Rivers remained isolated until 7 March 2022. On 7 March, the ADF were deploying aviation assets, high clearance vehicles and approximately 280 personnel on the ground; by the next day there were 630 personnel. We needed those resources much earlier than day eight.

Recommendation 12:

The Inquiry should examine why there was a significant delay in the Federal government deploying ADF support, and explore how that delay can be lessened in the future.

Recommendation 13:

Ballina Shire Council in consultation with Ballina SES assess the capability of the proposed new Ballina SES headquarters to sustain large-scale flooding events in the future.

6. Equipment and communications systems

Telecommunications loss was devastating and many of our combat agencies did not have what they needed, including readily available satellite phones. This is an indictment on the current resourcing of many of those agencies, but in particular the SES and RFS, who rely on volunteers.

Telecommunications including landlines, mobile phones and internet went down across the region from 3-10 March 2022. This left a number of communities isolated and unable to call triple zero (000). These communities included Mullumbimby, Jiggi, Uki, Koonorigan, Ocean Shores, Stokers Siding, The Channon, Main Arm, Kyogle, Modanville, Homeleigh, Pillar Valley, Eden Creek, Ulmarra, Tucabia, Woolli, Duranbah, Kingscliff, Whian Whian and Doubtful Creek unable to call triple zero (000). It is unacceptable for people not to be able to call 000 at any time, let alone when they have just experienced trauma and possible injury.

The reliance on technology assumes that everyone is tech savvy. It must be recognised that not everyone, especially aged and financially disadvantaged members of the community, may not have 'smart phone' access and the reliance on these forms of communication are not equitable and must be addressed.

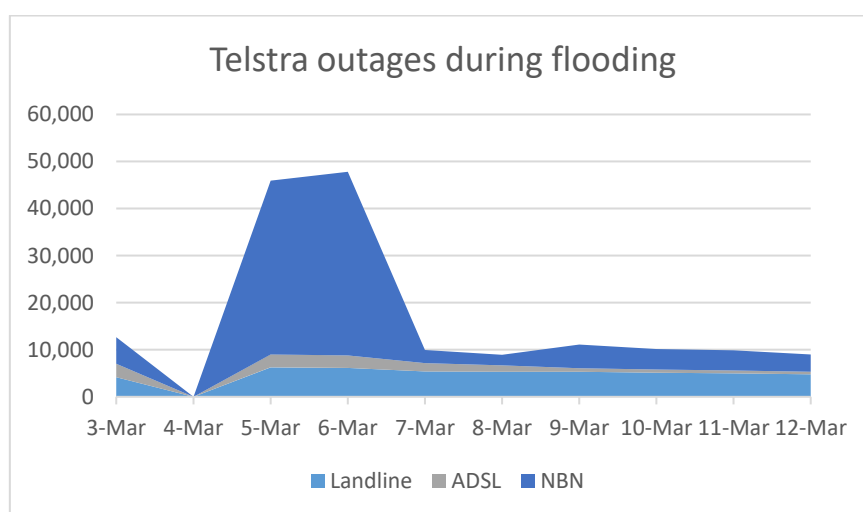


Figure 3: Telstra outages during flooding

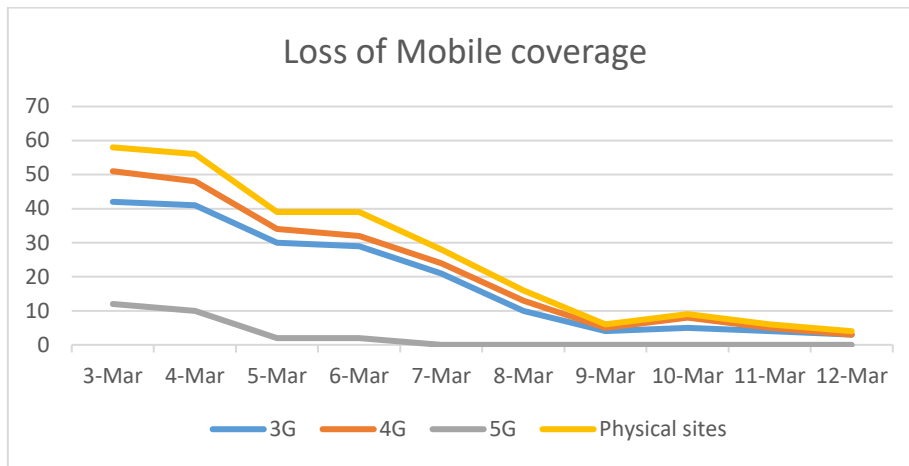


Figure 4: Loss of mobile coverage

Recommendation 14

That satellite technology be installed in rural and remote communities to ensure that communication access is viable in extreme events to allow access to information and emergency services.

Recommendation 15

That some form of analogue warning be established in the likelihood of electronic telecommunication failure.

7. Water supply Byron Shire

Water supply became an issue in Mullumbimby due to damage to Laverty's Gap Weir, Byron treatment plant, and Rous County Council from 1 March. This led to Byron Shire Council requesting people to delay cleaning their properties. It was not until 4 March that the water network was repaired and residents could clean their properties in Byron Shire. Having to wait six days to hose out your property is unacceptable and support needs to be given to Byron Shire Council to improve the resilience of town water supply.

8. Housing crisis North Coast

The North Coast was already experiencing a housing availability and affordability crisis prior to the recent disaster. As a result of the flood event, there is now a housing emergency of extreme proportion. Recovery efforts are hampered by the existing housing stress across the region. With almost zero rental availability, very high costs of rent, and substantial increases in land and property values in the last 12 months, our flood refugees have found themselves with very little options for emergency and medium-term housing. The loss of 3,000 whole homes damaged or uninhabitable due to flood damage sees us in a deepening housing crisis.

The factors that have led to the extreme housing crisis in the Northern Rivers are multifaceted but in Byron Shire one of the influences on the housing crisis is the negligence of government in allowing the use of residential housing for the purpose of Short Term Rental Accommodation (STRA), while at the same time putting pressure on councils to approve new housing. There is a major conflict with these two approaches.

As more housing is approved the use of housing for STRA is increasing. This is resulting in both a shortage of housing availability and increases in property prices. It is estimated that there are between 3,000 and 6,000 whole homes on short-term holiday platforms in the Northern Rivers at any one time.

These factors have had a major influence on the accessibility of housing in Byron Shire for essential workers, and those who are available and willing to fulfil voluntary positions with organisations such as SES and RFS — as well as council staff, nurses, teachers, care providers and other essential workers.

According to Housing NSW website figures in 2019, the social housing stock in the Northern Rivers indicates a major negligence in delivery. Byron Shire has only 19 social housing dwellings, Ballina 593, Lismore 501 and Tweed 916.

Additional impact comes from the pressure to deliver more housing stock without a focus on risk management. In some circumstances, developers are allowed to address risks by presenting theoretical studies showing that the impacts can be mitigated to gain approval. The unprecedented impact on housing in the shire has created an urgent need for many to have alternate safe housing. Access to housing is essential to avoid the further trauma and mental health impacts that results from a loss of 'normal' life. For residents to be able to maintain employment, education and social activities, it's vital that they are able to access safe and long-term housing.

Recommendation 16

The NSW Government trial a program of delivering designated housing for essential workers and volunteers under a State-based social housing program.

Recommendation 17

The NSW Government commit to delivering more social housing in Byron Shire.

Recommendation 18

The NSW Government immediately progress the planning proposal to limit STRA to 90 days in Byron Shire to provide much-needed permanent rental housing stock.

9. Land Use Planning

Risks associated with the location of housing and infrastructure must be reviewed. As was recommended from the NSW State Bush Fire Inquiry, there needs to be a review of the State government's planning requirements for housing and development with a strong focus on risk assessment. This is a role for councils but can only be done under the direction of the State.

A review of State planning legislation and policies is vital to ensure that 'disaster' risk management is a key issue. The latest flood disaster in the Northern Rivers identifies the need to limit development on areas that are now known to be at risk. To undertake the assessment and planning work required to learn from this experience, the State must provide financial and technical assistance to councils to immediately prepare the planning documents that will guide future development risk-avoidance.

There needs to be commitment to an assessment standard that considers the worst case scenario planning that goes beyond the recent event and takes on board specific climate change planning. We now know that the atmospheric moisture capacity increases by 7% with each degree of warming. The extra rainfall will mean increased flooding. The outcomes of the assessment and planning must then be financially supported to allow for timely implementation of risk avoidance strategies and infrastructure.

A major concern for Byron Shire in this recent event has been the risk to rural areas from unprecedented land slips and the loss of property and damage to the road and communication networks. The development of a Landslip Management Plan should be undertaken immediately with funding support from State and Federal governments. This approach to risk management must apply the Precautionary Principle and must dismiss theoretical planning that proposes to mitigate risks. Instead, new development should not be approved in areas where foreseeable risk is likely.

There should be clear direction to avoid development on floodplains and a return to the prohibition on the introduction of fill in floodplains that clearly exacerbates the risk. Byron Shire Council already has Floodplain Management Plans for much of the shire but the implementation of these plans requires funding from the State and the Federal governments. A key issue that shouldn't be overlooked is the increased pressure to develop in flood-prone areas. Development generally reduces the permeable surfaces available to absorb the rainfall. The second round of flooding in Byron Bay at the end of March was more extreme than historical records and could indicate that the increased development has contributed to the lack of absorption in the catchment as the town is increasingly covered by hard surfaces. Greater efforts are required to limit the area of hard surfaces within new developments. A review of existing areas for redesign to provide natural vegetated areas must be investigated.

Recommendation 19

The NSW Government conduct a review of State-based planning requirements to ensure that risk management and avoidance is a high-order issue that is not able to be dismissed by theoretical mitigation.

Recommendation 20

That funding be allocated to each of the flood impacted councils in the Northern Rivers to assess the impacts of the recent flood events and prepare new planning instruments based on risk avoidance for development.

10. The health of the Richmond River

Decades of neglect, broken promises, erosion and pollution have resulted in the Richmond River becoming one of the most degraded river systems on the east coast of Australia. Decades of logging, unsustainable farming practices and agricultural and urban runoff have destroyed native riparian vegetation, polluted waterways and degraded riverbanks.

Extreme flood events, such as those experienced in the Northern Rivers in April 2017 and February 2022 further exacerbate the river system's degradation. The historic broad-scale land clearing and floodplain drainage have exposed acid sulfate soils, leading to black water surges with disastrous impacts on the river system.

Excessive sediment load smothers the river bed habitats for native marine animals and plants and reduces water quality. This has led to a 70% loss of Richmond River's fish habitat. Wild sub-tidal oysters are all but gone, destroying the thriving fishing and oyster industry, and the green seagrass beds are vanishing. When a river system like the Richmond River is no longer capable of supporting marine life, something is terribly wrong. The University of New England, in its recent 2014 EcoHealth Report for the Richmond River, graded the waterway's overall health at D-, or poor. While the overall grade was D- for the catchment, grades ranged from an F in the Wilsons River (the lowest rating possible) and upper Richmond estuary up to a C in the headwater streams of the catchment. 12 of the 17 river systems recorded a score of D or less.

The 2012 Coastal Zone Management Plan for the Richmond River Estuary (CZMP) found there is currently no holistic management of the river and a lack of co-ordination between management entities. The plan also found there has been inconsistent monitoring and evaluation of the health of the catchment.

We need to see management of the river co-ordinated from one focal point by a leader who has the power to bring stakeholders together and that has the funding support to make the changes required. The Greens have argued for the appointment of a Richmond River Commissioner. This would be a full time, independent Statutory Office, the role of which is to co-ordinate a whole-of-catchment response to the recovery of the river. The Commissioner would also chair a new Richmond River Advisory Council, made up of representatives from local and State governments, including Rous Water, Landcare, Aboriginal representatives, scientific experts, landholders, fishers and local business and community members.

The Commissioner and Council would be tasked with;

- Determining and delivering River Recovery incentive funding
- Reviewing and reporting on river health, including:
 - o Setting clear targets for recovery and regeneration
 - o Monitoring progress
 - o Delivering three-yearly comprehensive reports, and
 - o Delivering community and business education programs.

Recommendation 21

The NSW Government appoint a Richmond River Commissioner to oversee the improved health of the river

11. Cabbage Tree Island community

On 28 February 2022, the Aboriginal community of Cabbage Tree Island was given just three hours to evacuate, with many only leaving with the clothes on their backs. Residents were evacuated to evacuation centres across the Ballina Shire, with a large proportion of community going to Lennox Head Cultural Centre evacuation centre. After nearly two weeks families were allowed back on the Island to inspect what was left of their community. At that time the electricity network to Cabbage Tree Island was inaccessible, with power to be restored by 18 March. On 18 March personnel from the Australian Defence Force and Rural Fire Service began the clean-up of the local medical centre and Cabbage Tree Island primary school.

Currently all but one residential homes have been identified as requiring demolition, resulting in the entire community of more than 180 people needing medium-term accommodation. Members of the community have expressed how challenging it is to find medium-term housing due to households being multigenerational, with up to 12 people living under one roof. The community is currently housed across the region and there are concerns that Elders may pass away before the community is rebuilt. The community feels like there has been limited consultation about what the rebuild will look like. Jali Local Aboriginal Land Council CEO Chris Binge has been working tirelessly with all levels of government to secure medium-term accommodation for families, and land in Wardell has been secured and the process of establishing temporary house pods is under way.

Recommendation 22

The NSW Government conduct culturally appropriate community consultation with all members of the Cabbage Tree Island community and ensure that community members are leading the recovery and rebuild of their community.

Recommendation 23

A full-time Aboriginal identified Special Envoy be appointed by the Minister for Aboriginal Affairs to support and advocate for the Cabbage Tree Island community, and to co-ordinate the government's response with key stakeholders.

I look forward to seeing the outcome of this inquiry.

A handwritten signature in blue ink, appearing to read 'Tamara Smith', with a stylized flourish at the end.

Tamara Smith MP
Member for Ballina