INQUIRY INTO RESPONSE TO MAJOR FLOODING ACROSS NEW SOUTH WALES IN 2022

Name: Date Received: Ms Janelle Saffin MP, Member for Lismore 21 July 2022

Partially Confidential

Rescue, Recovery, Rebuild, Adapt and Prepare:

responding to a humanitarian disaster caused by the 28 February catastrophic flood followed by the 30 March major flood in the Northern Rivers and some parts of the Tenterfield Shire

Janelle Saffin MP, Member for Lismore

July 2022



Janelle Saffin MP STATE MEMBER FOR LISMORE



Professor Mary O'Kane AC Commissioner NSW Flood Inquiry Mr Michael Fuller APM Commissioner NSW Flood Inquiry

Dear Commissioners

In presenting my submission on the 2022 Northern Rivers floods, mindful that my Electorate of Lismore includes Tenterfield Shire Local Government Area (LGA) -- also flood impacted in parts -- I have done my best to tell the story of the flood of 28 February 2022, followed by the flood of 30 March 2022, so that the state of unpreparedness for rescue and recovery can change. This submission is for public release.

Floods will happen again but preparedness is key. We need to now create a model of adaption to disaster preparedness that addresses risk, structure and cognition that guides preparedness. This requires skills, knowledge and attitude and a total reorientation of how business is done. The structure is hierarchical and it needs to be task oriented. Everyone has a position but it is not clear who has a task, to put it in basic terms. The framework described in the NSW Government's own Legislative Council Flood Inquiry submission says it all. Lots of framework but little else.

The word 'unprecedented' has been bandied about a lot and has become code for it was 'unpredictable'. Therefore, 'we could not have been prepared'. This is erroneous at best and an abrogation of responsibility at worst. NSW Government's public agencies could have been better prepared, and part of that means working alongside the community so that our preparedness coalesces.

The people did prepare to be inundated according to the flood warnings officially received, but by the time the warning came that the flood was much larger than the 2017 flood, it was too late to do much, let alone evacuate. People were trapped in their homes, in ceilings, on rooves and in the streets. Businesses that had lifted well above the flood warnings and earlier large flood levels were gutted. Farmers lost massive amounts of stock, and soil, and suffered landslips as did many landholders and villages, cutting off access.

Tragically, five people lost their lives.

The agencies charged with rescue and recovery were barely prepared for 'what was' let alone 'what if'. The latter is a fundamental disaster preparedness principle. The tragedy that unfolded speaks to this. It was not within their contemplation. That is the NSW State Emergency Service, 000, and Resilience NSW and therefore the NSW Government.

Locals with boats came out in droves to be told by the State Emergency Service not to enter the water, but thank God they ignored this exhortation, an edict without authority, that would have potentially led to more deaths. The State Emergency Service however did at one stage issue a call-out for boats on their social media. After a short time, it was taken down. I was told by the media that they were told not to post such call-outs, and I said, "Do you want to save lives or have people dead? You know what to do and I shall share your posts". As community members as well, they acted to help save our lives. If preparing for 'what if' had been done, the State Emergency Service would have been able to utilise community rescue or our Tinnie Army as they are affectionately known. The NSW Government's response to the Legislative Council Committee's Inquiry into the response to major flooding across New South Wales in 2022 presents nothing more than a framework. If an independent public review was undertaken, including engaging with the Northern Rivers communities, such a review would find the NSW Government and its public agencies to be institutionally deficient. There is a complete disconnect between what the NSW Government outlines its responsibilities are, how NSW Government's public agencies carry out its responsibilities, and what happened here on the ground.

Comprising of NSW Ambulance, Fire & Rescue NSW, Marine Rescue, NSW Police Force, NSW Rural Fire Service, State Emergency Operations Controller, NSW State Emergency Service, NSW Volunteer Rescue Association, the role of the State Rescue Board of New South Wales is to ensure the maintenance of efficient and effective rescue services throughout the State. It carries out its responsibilities through the heads of the agencies that provide the accredited rescue units and through the NSW Police Force, which is responsible for the coordination of rescue within the State.

In the Board's Annual Report 2016-2017 it stated that the NSW State Emergency Service requested assistance from Fire and Rescue NSW to help with the storm recovery where the levee at Lismore was breached. This resulted in an inundation of the central business district, including the local Lismore Fire and Rescue NSW station. A total of six people were confirmed deceased as a result of the severe weather event. Fire and Rescue NSW deployed approximately 730 personnel and the Hytrans high volume transfer tanker to assist and carried out more than 15,000 rapid damage assessments.

Have there been no lessons learnt?

The Secretariat to the Board is Resilience NSW. I have stated that Resilience NSW must be abolished and it must not be recreated in another and be any part of NSW State Emergency Operations.

Recommendation: NSW State Emergency Services must prepare for 'what if', take control of flood warnings, incorporate local knowledge of river heights and speed of rise, incorporate our Tinnie Army. I have stated all this to NSW Premier, The Honourable Dominic Perrottet MP. I said the 'Tinnie Army' could elect to have annual training in flood rescue and get their boat licences for free. The State Emergency Service or rescue agency needs to plan for 'what if' and that includes the Tinnie Army and others. The world has changed and we have spontaneous volunteers aplenty and that needs to be factored in. SES is primarily a volunteer-focused organisation with a primary responsibility to rescue the public and yet does not reflect this organisationally.

Recommendation: Each Volunteer Unit requires a Volunteer Coordinator.

Recommendation: Training must be first and foremost, rescue.

Recommendation: Do rescue exercises that involve the whole of community based on "what-if" disasters.

Recommendation: NSW State Emergency Service or State Rescue Board do a local audit of rescue needs and resources for 'what if' and plan accordingly. That can include the Tinnie Army, Surf Lifesaving (that I am told was not utilised but had offered), know who and what the Australian Defence Force needs to do, and more.

Recommendation: Do not write 100-page manuals but prepare action sheets, task oriented, so all know what to do and when, and have Plan B outlined.

Recommendation: NSW State Emergency Services or State Rescue Board must serve the public, not the minister of the day.

Recommendation: NSW State Emergency Service or State Rescue Board speak openly and truthfully in public and Parliamentary inquiries.

The NSW State Emergency Service must have a fundamental rethink about what their role is, what their resources are, and how to effect rescues. There needs to some overarching rescue body that focuses purely on that and how to incorporate all resources, including community, and that is the role of the State Rescue Board of New South Wales, but not if Resilience NSW is at the helm.

The rescue was virtually a non-response, despite the wonderful efforts of local State Emergency Service volunteers. One told me he was prevented from doing what he knew to be what was needed.

The flood of 28 February 2022 decimated homes, businesses, farms, lands, rivers, and people's state of being, only to be followed by the 30 March 2022 flood that spread people's flood-ravaged belongings piled outside their homes still awaiting collection. The magnitude of the impact is overwhelming, continuous and uncertain. It covers physical, economic, emotional and environmental.

The Northern Rivers requires a comprehensive flood recovery package if there is to be any hope for an estimated 14,500 internally displaced persons living in temporary housing, caravans or tents. Many of them were denied financial assistance after 3,600 homes were deemed uninhabitable as at March 2022. By mid-year it is understood that figure stood at some 4000 homes.

In Lismore alone, nearly 1400 houses sustained major damage, and 37 homes were destroyed. The piles of rubbish have been mostly cleared but rows of empty homes reflect how many families and individuals remain in limbo. (I know that rubbish is a harsh word for peoples' lives)

Thousands of inundated businesses now boarded up across the region with proprietors and landlords pondering their futures. We have 16 anchor businesses with over 200 staff in the region and they must compete for a \$65-million Anchor Fund merely to survive. This Fund could be supplemented, and guidelines enhanced to match priorities and need and that would mean consideration of damage not so much the number of employees.

Three thousand businesses have been impacted, 18,000 jobs impacted with many employees facing uncertainty and insecurity in Lismore. Some notable reopening's have occurred such as Lismore Square and downtown in the Central Business District, however, there is no economic recovery reconstruction plan or even an approach. I am told that an Economic assessment has been done but it is yet to see the light of day. That is wrong, as it should be in the public domain.

To move from these extreme conditions, even now we need to start the discussion on how Lismore will be reimagined and transform a city that has been destroyed by the catastrophic floods into a city that is sustainable. I like many have a great vision for the rebuild but we need the plan and the infrastructure to support it.

We can and we must 'build back better', as I first stated to the Premier while we trudged around muddy streets in the immediate aftermath of the flood. Build back better is his Government's oft-stated pledge to flood survivors of the Northern Rivers. I said that is the frame and we start there.

The Reinventing Cities international competition is organised by C40, which is a network of mayors of nearly 100 worldleading cities collaborating to deliver the urgent action needed to confront the climate crisis. The competition brings together the creativity of designers, architects, and innovators to foster and scale low-carbon solutions that will help move cities toward net-zero emissions goals. Twenty five cities around the world have already committed to enacting regulations and/or planning policy that ensures new buildings operate at net zero carbon by 2030. Solutions from the Reinventing Cities competition will help create new models for sustainable development that these cities and others can look to in the future. Lismore and Murwillumbah might be such cities.

The Southern Cross University is armed with knowledge, experts, networks on how to approach this.

I am aware that local councils and constituents have lodged their own submissions to this Inquiry and I support many of them and the spirit in which they have been made.

I have stated to the Premier that he must accept the recommendations this Inquiry makes sight unseen.

Too many inquiries' reports remain on shelves gathering dust with recommendations untouched. This time that cannot happen. The Premier has stated that the recommendations from this Inquiry will be undertaken by the Northern Rivers Reconstruction Corporation, the authority I called for from day one. That is a positive affirmation that they will be accepted but they need to be implemented as a whole-of-government response and will require the requisite machinery of government to be reoriented and/or created, including reporting to the Parliament. That seems to be beyond the remit of the Corporation but it can help chart the way.

Yours sincerely

Janelle A Saffin MP State Member for Lismore July 2022

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Introduction

It was predictable that the floods in South East Queensland would also impact on the Northern Rivers and some surrounding communities. The NSW Electoral Commission reports that the Legislative Assembly District of the Lismore Electorate population is 64,260 and occupies an area of 13,020 square kilometres and 244 localities as of 21 November 2021. The Electorate of Lismore incorporates the Local Government Areas (LGAs) areas of Lismore City, Murwillumbah City, Tweed Shire, Kyogle and Tenterfield Shire.

Northern Rivers and Northern Tablelands communities had started taking precautions to move their families, friends, animals and possessions to higher ground. People prepared well and did so above the 2017 flood and did act on the SES warnings issued.

The messaging, however, from the Northern Rivers NSW SES, published on social media over the 24-hour period on 27 and 28 February 2022, left the Northern Rivers and Northern Tablelands communities unprepared for what eventuated. There were over 20 separate notifications to communities and some were late. Far too late for communities to respond.

Since the predictable flood, we have received thousands of telephone calls and written requests (and still counting) from the Northern Rivers and Northern Tablelands communities seeking advice, support, referral, and hope. (I apologise publicly if I missed anyone).

Many people are expressing grief, frustration and disbelief that the NSW Government's public agencies responsible and the Federal Government's public agencies responsible did not better protect them and the immediate response was little better.

My Electorate Office was inundated by the predictable flood and is no longer operational. Southern Cross University kindly offered a temporary office as they did to so many and we have now relocated back into another temporary office in Carrington House, 12-14 Carrington Street, in Lismore's CBD.

Executive Summary

From the early foundations of the timber, dairy and fishing industries in the Northern Rivers and Northern Tablelands in the mid-1800s, this area had over time developed a more diversified economy with a stronger farming sector, retail, construction, light manufacturing, tourism, education, health, arts and culture, and information technology start-ups.

The Northern Rivers now has a fractured economy which is an outcome of the absence of NSW Government policy for flood mitigation, flood preparedness and flood-resistant building.

With a diverse population, every citizen in the Northern Rivers and Northern Tablelands has been affected either directly or indirectly by the predictable flood on 28 February 2022 and the subsequent flood.

The Far North Coast region covers approximately 8,620 km² in the nother-eastern part of New South Wales with a population of around 240,000 (in 2020) and includes the catchments of the Richmond River (7,026 km²), the Tweed River (1,080 km²), and the Brunswick River (512 km²). The region encompasses six local government areas – Ballina Shire, Byron Shire, Kyogle Council, Lismore City, Richmond Valley Council and Tweed Shire. I note that the Clarence Valley LGA (Mid North Coast) lies within the Northern Rivers Reconstruction Corporation's ambit. I have called for it to cover the Northern Rivers.

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) advises that while high rainfall has contributed to a robust agricultural sector, the impact of seasonal flooding has significantly impacted assets and communities. The city of Lismore is one of the most flood-affected towns in Australia. Since 1954, over 100 flooding events have been recorded in Lismore.

There is no comprehensive and thorough approach to mitigation in the Northern Rivers and Northern Tablelands.

The flood mitigation measures implemented by the NSW Government's public agencies require forensic review to better protect the flood-prone communities. In fact, the flood mitigation budget for the State was cut. There is also concern that from the 2014 mitigation spending that only 3% had been spent on post-disaster recovery efforts in recent years.

The record flood on 28 February 2022, followed by another one on 30 March 2022 has left the Northern Rivers and Northern Tablelands communities reeling from the sheer scale of devastation, loss and inadequate response from both the NSW Government and Commonwealth Government in terms of rescue and recovery. The whole disaster program response is not requisite for the magnitude of damage and does not reflect humanitarian disaster principles reflected in the *Sendai Framework for Disaster Risk Reduction* adopted by the United Nations.

The 2022 flood peaked at 14.37m AHD, almost exactly 2m higher than the "1-in-100-year" level of 12.38m. The highest floods since 1870 both peaked at 12.11m (1954 and 1974). Unless a hydraulic or climatic aberration is proven for 2022, this peak level requires revision of the defined levels. As a 14.37m flood has occurred during the 150-year record, the new "1-in-100-year" peak is likely to be about 14m. It has been said repeatedly that this flood was unprecedented. I have said there has been code, therefore, not predicted. That is simply not true. Floods of this height and higher have been flagged.

We seem to lurch from one flood to the next, one disaster to the next. With a no lessons learned approach that really does not need an Inquiry but each public agency to do its job and for the NSW Government to commit to change and implement the recommendations being put forward by me for our community and many more from others.

That is part and parcel of preparedness. Preparedness seems to be the missing element here, from the rescue response to the recovery response.

Hydrologic terms are based on stable climatic inputs and unaltered floodplains (no aberrations). Climate change upsets that and requires that the defined floods be date stamped. The so called "1-in-100-year flood" at 14m in 2022 will rise to 15m at some time in the future, due to increasing rainfalls. The Intergovernmental Panel on Climate Change (IPCC) estimates that each degree of warmer air temperature enables an extra 7% capacity of that air to carry moisture. Floods are caused by a percentage of rainfall becoming runoff – some water is held in the catchment. If for example, 70% of rainfall runs off, the extra 7% of rainfall is an extra 10% of runoff.

Failure by NSW Government's public agencies

There has been and remains institutional failure by the NSW Government's public agencies. Endemic and systemic issues that have been and remain prevalent have adversely affected communities in the lead-up to, during and immediately following the flood. NSW Government's public agencies have not displayed a sense of urgency required to do the job nor displayed any preparedness. Preparedness, if at all, is based on what happened last time, not "what if", which is an essential element of preparedness.

Resilience NSW

Resilience NSW has been nothing short of shameful.

Resilience NSW were missing in action and they never made their presence known. They were unprepared to respond and struggled to coordinate evacuation and recovery centres, some of which had no staff when the community arrived seeking help. I've had to work around them and work with a whole range of other agencies.

From its total lack of preparedness for recovery centres, no people, ordering Department of Communities and Justice staff out (and they are ones who knew what they were doing), to the person who said "we shall not get too many beds so that people do not get comfortable", to not knowing who to liaise with, such as Salvation Army who are charged from the SOC to handle food, to no security, and so on. The list is endless. The cracker was one senior staff member telling people that their "job was to make the Government look good". Appalling! They are institutionally incapable to do the job.

I have been clear that they should have no role in disasters. This is a common refrain from our communities and indeed many agencies.

NSW State Emergency Service

The NSW State Emergency Service has suffered from being another rudderless institution but is capable of stepping up as the rescue agency that it needs to be. They require cultural change, resources for staff to be on deck in disasters, and support our wonderful volunteers and local people.

The NSW Government commissioned an independent review of the NSW State Emergency Service Operational Response to the Northern Region Floods in 2017. Thirty six recommendations were made. I was assured by the NSW State Emergency Service that all but two were implemented but equally assured by some key staff that they were not.

The NSW Government's public agencies are responsible to protect the Northern Rivers and Northern Tablelands communities. It has a key role to play in human security, as does the Australian Government, and despite its flood budget announcements, displayed a distinct lack of interest or almost punitive behaviour at times in terms of allocating resources. The Federal Member for Richmond, Justine Elliot MP stated that "the disorganisation and lack of communication and coordination is beyond belief let alone the financial side of things," in *The Guardian* on 10 March 2022.

Resilience NSW is responsible for helping communities rebuild and recover after natural disasters such as floods. The organisation is expected to lead disaster and emergency efforts for preparedness and recovery. The Northern Rivers and Northern Tablelands flood, however, meant that communities had to pretty much fend for themselves. There was very limited but muchappreciated assistance from Northern Rivers NSW SES volunteers and I wish to acknowledge that many including Resilience NSW staff suffered loss.

Service NSW

Service NSW and Resilience NSW were uncoordinated. Resilience NSW did not prepare with Service NSW, like war game, how to prepare, plan and then advise on the administration of grants that have been problematic, overly process-driven, and not fit for purpose. It is not clear who advocates on what and many times I have gone straight to the source to do so but it requires leadership and facilitation. I am told it is Resilience NSW but that remains well hidden.

Australian Defence Force

NSW Premier Dominic Perrottet stated that a part of the "review would be why it took so long for ADF troops to hit the ground in the worst-hit areas", as the support was rejected on two separate occasions on 25 February 2022 in the days leading up to the flood on 28 February 2022 by the NSW State Emergency Service, as reported by the Australian Broadcasting Corporation on 14 March 2022.

When they did come, they were terrific, however, lacked tools and equipment and clear standard operating procedures/ROEs. When asked to help move equipment out of the Lismore CBD on the evening of the second flood, one business owner was told, "No, we are reactive, not responsive and it might alarm people." That same night when they were asked to take out their vehicles that can cut through the water, they said they "could not go as they did not know the streets". That is sui generis if they do not come from here, but the local NSW State Emergency Service were ready to go with them and they do know the streets.

Recommendations

Many of the initiatives below have already been suggested by me to the NSW Government, some before the predictable 2022 flood in the Northern Rivers and others immediately after and since the flood.

It is recommended, and without delay, that the NSW Government adopts the following recommendations: I do have many more and a lot go do detail. When the recommendation implementation taskforce is established I trust that they can follow up.

- 1. Adopts all recommendations to be made by the 2022 Flood Inquiry prior to the Flood Inquiry presenting its report to the NSW Government.
- 2. Abolish Resilience NSW and create a NSW Reconstruction Authority based on the international best practice framework by implementing principles reflected in the Sendai Framework for Disaster Risk Reduction adopted by the United Nations. (Risk is key)
- 3. Establish the NSW Reconstruction Authority, similar to Queensland Reconstruction Authority. Establish a package of grants and options ready before, not after the disaster and make the Northern Rivers the *model for adaptation*
- 4. Funding for mitigation and resilience resources for disaster readiness. The 2014 Productivity Commission's review of natural disaster funding found governments' expenditure on resilience measures low and governments' expenditure postdisaster reconstruction high (3 per cent to 97 per cent) Mitigation (in its broad sense) funding must be at the heart of the NSW Government's pledge to 'build back better'. Government's human security obligation demands it. It is also linked to affordableaccessible insurance and now the CSIRO study. Flood mitigation priority project lists compiled by Lismore City, Tweed Shire, Kyogle and Tenterfield Shire councils, including costings, have been provided to the NSW Premier. These projects include reviews of flood warning systems, drainage studies, pump upgrades, levee modification, super-charging voluntary housing raising/purchase schemes.
- 5. Better prepare to protect communities from floods and other disasters, and support them during evacuation and recovery, by implementing the findings of the Royal Commission into Natural Disaster Arrangements called in the wake of the 2019-2020 'Black Summer' bushfire season.

- NSW Government's public agencies and Northern Rivers Reconstruction Corporation to undertake engagement and consultation with all flood-impacted communities on the issues arising from the 2017 and 2022 floods in the Northern Rivers and adjacent areas.
- 7. NSW Government's public agencies and Northern Rivers Reconstruction Corporation plan and implement a framework of mitigation, recovery, and response policies in consultation with stakeholders, including flood-impacted communities to better make the Northern Rivers and Northern Tablelands flood resistant.
- 8. Allocate more resources to enhance the training program for the State Emergency Service volunteers to respond to the demands they have placed on them in responding to storms, floods, and more, but to become a first-class issue agency. As previously stated, it will require a cultural shift at the second tier by creating a NSW State Rescue Agency or rescue oversight Board.
- 9. Consider the establishment of a flood reinsurance scheme for the Northern Rivers. There may be other ways but start here. The future of insurance for the region is a key part of the reconstruction. Mitigation efforts a.re key, including proper funding for voluntary house raising and purchase schemes, land swaps for residential and industrial/commercial properties, land use and planning, and a proper standing reconstruction state authority/agency that prepares for disasters. (See 19 below)
- 10. Overhaul the National Building Code. It contains three core principles -- health and safety, amenity and accessibility and sustainability -- but nothing on resilience which better speaks to flood resistant or flood ready. The Norther Rivers Reconstruction Corporation must issue a focussed guidance note as an immediate priority.
- 11. Clean up the rivers contaminated by flood debris and sewage. It cannot wait and restore our rivers to river health. Establish the environmental recovery package to fund this across the Richmond, Tweed and Clarence River catchments. There is a joint \$64 million for riparian restoration but there is little or no detail. See the Northern Rivers Joint Organisation Watershed Initiative which is a \$150 million strategy over the next decade to enhance river health systems.

- 12. Repair landslips. Landslips have severely disrupted everyday life for many residents, including local farmers who in some cases have had their access to farmland cut. Landslip repair must be factored into recovery and reconstruction as programs roll out to repair roads, bridges and fencing. The Back Home grants now includes this, and if a home is damaged and landslip is present, then the grant is not adequate.
- 13. NSW Government to honour its existing commitment to take back 15,000 kilometres of regional roads and remove the no betterment clause under disaster management grants. Additionally, roads within all Aboriginal communities which are those that have been damaged due to flooding be repaired, and an ongoing maintenance program be established.
- 14. Resource and maintain a new Murwillumbah SES site, so that the team of volunteers can be housed in a fit-for-purpose, safe and healthy headquarters, not the seriously unsafe and physically and environmentally toxic headquarters they are currently housed in. The funding for this upgrade has been announced but a suitable site is under investigation.
- 15. Urgently implement a program of successive budget cycles commitment, voluntary house purchase/raising, land swaps, buybacks, relocations, up-scaled Back Home grants for homeowners/residential landlords, commercial landlords included, road, river, land, landslip support, serious and sustained mitigation, housing.
- 16. Implement financial and coordination assistance recommendations to secure safe and habitable commercial premises for commercial landlords, who are not eligible for grants, to stand up buildings so businesses can reopen. Some own buildings in Self-Managed Superannuation Funds, meaning grant eligibility needs to be blind as to business structure.
- 17. The grant process to be completely overhauled. It is not fit for purpose. Disaster and human behavioural experts to be embedded who can design and plan the application process. The current process is distressing and re-traumatising many flood-affected people and businesses. The recovery is a hotchpotch collection of mainly pre-existing grants not designed for the catastrophic flood.

- 18. Implement a scheme such as JobKeeper (FloodKeeper) to support those who have been unable to work due to the impact of the flood. This would have kept employees with employers working to stand up businesses. This should have been done by the former Federal government at the outset, but they refused. The income support was welcome, but things could have been made to suit the circumstances not the convenience of the disaster relief grants that are not fit for purpose for this event.
- 19. Fund a resilient residential recovery package for flood-affected homeowners with options including retrofitting, house raising and voluntary buy-back of homes at high risk from future floods. The package is a scaled-up version of the Queensland/ Commonwealth \$741-million package. Increase Back Home grant to \$50,000.
- 20. Flood gauges are unreliable and in and poor condition. There is confusion as to the jurisdiction for the installation and maintenance flood gauges whether it be the NSW Government, Australian Government or Local Government, or a mix of them. A responsible public agency must ensure that flood gauges are in the right places, functioning and maintained.
- 21. Overhaul the Bureau of Meteorology/NSW State Emergency Service flood forecasting, warnings, and evacuation orders, and implement an early flood alert system that works as it is currently untimely, contradictory, confusing and too late. There is solid financial modelling that demonstrates the economic benefits of early flood warnings.
- Implement strategies to mitigate long wait times being experienced in contacting the NSW State Emergency Service 132 500 and 000 numbers. Improved coordination with the ability to upscale with speed.
- 23. Fund and maintain a dedicated professional community trauma service based in Lismore to support the community as they come to terms during the coming 18 months (at least) with the future of Lismore and how the whole-ofgovernment approach to the permanent recovery and rebuilding of communities across the Northern Rivers and how it will affect them.

- 24. Advise the Parliament of New South Wales on the progress of the implementation of the 36 recommendations made by the independent review of the NSW State Emergency Service Operational Response to the Northern Region Floods in 2017. NSW State Emergency Service at the highest level assured me face-to-face that all recommendations were implemented but staff at other levels assured me they were not.
- 25. Review of off-farm income criteria and grants: The antiquated off-farm income rule that farmers are ineligible if they make more than 50% of their income off farm does not recognise that it is commonplace for one partner to be working off farm so that they can farm! Additionally, at least half of the \$75,000 Primary Producer Grant should be available up front so farmers can get access to the funds they need to get going. Farmers also need support to get water off their farms, that is with pumps and ease of procedural requirements.
- 26. The NSW Government's package for public schools will help many teachers, support staff, students and families with the cost of replacing resource materials. The guiding principle must be flood equity in the allocation of support for the following non-government and independent schools which suffered significant damage: Trinity Catholic College, Lismore; Saint Carthage's Catholic Primary School, Lismore; Our Lady Help of Christians Catholic Primary, South Lismore; The Living School, Lismore; Saint Joseph's Catholic Primary, South Murwillumbah and Saint Mary's Catholic Primary, Casino.

NSW State Emergency Service

I express deep thanks here and have also done so in the Parliament of NSW, my commendation and admiration for the incredible volunteers of all local units of the State Emergency Service. Made up of outstanding community volunteers, the local NSW State Emergency Service units went above and beyond their duties, given the lack of leadership and resources, during the recent catastrophic floods. Through not just this flood, but all extreme weather events in the Northern Rivers and Northern Tablelands communities, the NSW State Emergency Service volunteers are there, putting their lives at risk to save others in the community. During the morning of the 28 February flood, the NSW State Emergency Service volunteers were out in boats, saving people stuck on the roofs. The NSW State Emergency Service volunteers are there in the rescue phase but also there for recovery. Giving their all to the community despite many being flood-impacted locals themselves. The NSW State Emergency Service units have been stretched to the limit recently but have never wavered in their commitment to our community and to help us in our darkest hour.

Critical information is published by Northern Rivers NSW SES via social media. It would be useful that the Northern Zone Incident Commander's Flood Bulletins for the Northern Rivers were also published unedited via social media.

An overhaul of the NSW State Emergency Service flood plans must be undertaken.

State Emergency Management Plan 2021

NSW Government's public agencies are expected to prepare plans under the *State Emergency Management Plan* and will engage with the community and stakeholders, promote community understanding of the hazards they face, seek their input into the development of plans, especially at the local level, and involve communities and stakeholders where appropriate in exercising these plans.

Timely and accurate warning information for the public is vital during emergencies but did not occur.

It is incomprehensible the NSW State Emergency Service expects that the community needs to be equally prepared as response agencies for the impacts of all hazards, and in particular, the impacts of natural disasters, but here we are.

NSW State Flood Plan 2021

The NSW State Emergency Service was expected to prevent, mitigate and to limit exposure to flood risk for both existing and growing communities by applying a multidisciplinary approach, including flood emergency managers, flood risk managers, and land use planners working together to help communities build long-term resilience to future flood events. It was expected that they work with individuals, communities, businesses, and government agencies to build flood resilience.

The transition from NSW State Emergency Service as the lead agency to Resilience NSW as the lead agency for recovery has failed.

Lismore City Flood Emergency Sub Plan 2018

There was little or no publicity given to this plan to flood-orientated NSW State Emergency Service activities through local media outlets, including articles in local newspapers, about the flood threat and appropriate responses. I am not sure about other localities but did not hear of them.

State Rescue Board of NSW

The State Rescue Board of New South Wales has 12 responsibilities, including developing policies to promote the provision of comprehensive, balanced and coordinated rescue services throughout the State, reviewing planning for single-incident rescues within the State, making recommendations to the Minister on the accreditation of rescue units (both permanent and volunteer) for participation in rescue operations, and on levels of Government support (including financial assistance to volunteer organisations providing rescue services).

The Board is responsible for flood rescue means all rescue activities in a relatively high-water level which overtops the natural or artificial banks of any part of a stream, river, estuary, or dam, and/or local overland flooding associated with drainage before entering a watercourse, and/or coastal inundation resulting from super-elevated sea levels and/or waves overtopping coastline deficiencies. Flood rescue involves the employment of intervention methods requiring specialist skills, techniques and equipment to locate, access, stabilise and extricate persons. In flood rescue, it is responsible for entering the water to reach the person by swimming or using a raft or unpowered craft to reach persons. On these crafts, there is a high likelihood of the operator entering the water.

In far too many cases this did not happen. People were left stranded and even told by NSW State Emergency Services that no one was coming to get them. The below chronology of events and commentary is based upon selected notices published on social media by the Northern Rivers NSW SES.

There were two separate predictable flood events in the Northern Rivers and Northern Tablelands in February and March 2022.

First event of flooding

2 to 5 February 2022

On 2 February 2022, 2.54 pm, Northern Rivers NSW SES advised that the Bureau of Meteorology issued a Flood Watch for parts of the Northern Rivers and Mid North Coast that "flooding possible for parts of New South Wales Northern Rivers and Mid North Coast from Thursday". Again, on 4 February 2022, at 2.54 pm and 8.09 pm, they published "minor flooding likely at Coraki and Bungawalbin this evening". Further, on 5 February 2022 at 12.55 pm, Northern Rivers NSW SES published that "river levels had eased at Coraki and Bungawalbin" and that "no further flooding is expected in the Richmond River, river levels are easing at Coraki and Bungawalbin". The statement was accompanied by an image "Flood Warning Final".

6 to 22 February 2022

Between 6 and 22 February 2022 Northern Rivers NSW SES did not publish any flood advice affecting the Northern Rivers and Northern Tablelands communities.

23 to 26 February 2022

On 23 February 2022 at 11.01 am, Northern Rivers NSW SES published "Flash Flooding - Heavy to intense rainfall occurring in several areas across the Northern Rivers".

Between 23 and 26 February 2022, there were numerous flood warning notices published advising Northern Rivers communities of severe weather warnings, however, there were no Flood Evacuation Orders.

27 February 2022

On 27 February 2022, at 09.18 am Northern Rivers NSW SES issued a Flood Evacuation Order for Tumbulgum, Billinudgel and surrounding areas.

8.45 pm, Northern Rivers NSW SES advised that "Major flooding is expected at Lismore early Monday morning. The Lismore levee is expected to be overtopped around 6.00 am Monday. River rises above 11.50 metres are possible Monday morning, which would be similar to the March 2017 peak (11.59 .26 2metres). Dangerous and rapid river level rises are being observed along the tributaries upstream of Lismore. The Wilsons River at Lismore (AHD) is expected to exceed the major flood level (9.70 m) around 02.00 am Monday. The river level is expected to exceed 10.60 metres 6.00 am Monday and may reach around 11.50 metres Monday morning. Further rises are possible with forecast rainfall".

9.26 pm, Northern Rivers NSW SES issued an Evacuation Order for Richmond River – Kyogle and Wiangaree. "Kyogle lower CBD. Evacuate by 10.00 pm. NSW SES is directing businesses and people within the lower CBD of Kyogle to evacuate the high danger area via Anzac Drive". [Thirty-four minutes to evacuate]

9.44 pm, Northern Rivers NSW SES issued an Evacuation Order for Lismore CBD stating that "The Bureau of Meteorology has advised the NSW State Emergency Service that the Lismore Levee will overtop at 6.00 am Monday (28 February 2022)." "NSW SES is now directing people within these areas to evacuate the high danger area via New Ballina Road, Bruxner Highway and Dalley Street". [People were advised to evacuate by 5.00 am. Most had done so on the Sunday]

9.51 pm, Northern Rivers NSW SES issued an Evacuation Order for South Lismore (Wilsons River) "NSW SES is directing people along the Wilson River within South Lismore to evacuate the high danger area via Union Street and the Bruxner Highway". [Most people had gone to bed based on earlier warnings]

9.56 pm, Northern Rivers NSW SES issued an Evacuation Order for North Lismore "NSW SES is directing people within North Lismore to evacuate the high danger area Union Street and the Bruxner Highway". [Most people had gone to bed based on early warnings]

10.23 pm, Northern Rivers NSW SES issued an Evacuation Order "NSW SES is directing people within South Murwillumbah to evacuate the high danger area via Tweed Valley Way". [It was too late, and I had asked earlier in an SES hook-up (27 February) when South Murwillumbah would receive an evacuation order and was told, words to the effect, 'That they will be okay"].

11.09 pm, among other advice, Northern Rivers NSW SES published "Flood Evacuation Orders will be issued by the NSW SES if and when evacuations are required".

28 February 2022

On 28 February 2022 at 12.39 am, Northern NSW Rivers SES advised that "Heavy rainfall which may lead to flash flooding is developing over northern parts of the Northern Rivers district and is expected to extend further across north-eastern New South Wales overnight into Monday. Six-hourly rainfall totals between 80 and 110 mm are likely, possibly reaching in excess of 150 mm".

1.11 am, Northern Rivers NSW SES advised "Evacuate now - updated information Lismore (Wilsons River). Due to significant additional heavy rainfall, we have seen very rapid river rises. Major flooding is expected at Lismore early Monday morning. The Lismore levee is expected to be overtopped around 5:00 am Monday. River rises around the levels of March 1974 (12.15 metres) are possible Monday morning, which is above the March 2017 peak (11.59 metres)".

1.24 am Northern Rivers NSW SES advised "The situation in Lismore is rapidly changing. To evacuate Lismore, ONLY travel via Keen Street, Leycester Street and New Ballina Road via Lismore Heights to Lismore Heights Bowling Club. As mentioned, the situation is changing and this route may become affected. If flooded, forget it. Do not enter floodwater. If you cannot access this route, seek higher ground immediately. This may include the second storey of your building as well as in or on your roof".

3.08 am, Northern Rivers NSW SES advised "Levee overtopping imminent - seek higher ground (Wilsons River). Major flooding is occurring at Lismore. Overtopping of the Lismore levee is imminent. The river level is expected to exceed the March 1974 peak (12.15 metres) around 9:00 am Monday and may reach around 13.50 metres Monday evening. Dangerous and rapid river level rises are being observed along the tributaries upstream of Lismore. Remain out of the CBD, seek higher ground now".

4.23 am, Northern Rivers NSW SES advised "Evacuation warning - prepare now Woodburn, Swan Bay and surrounds The Bureau of Meteorology has predicting major flooding for the Middle Richmond River area".

4.51 am, Northern Rivers SES advised Billinudgel (Marshalls Creek) to evacuate by 5.00 am. Eight minutes after publishing the advice. "NSW SES is directing people within Billinudgel to evacuate the high danger area via the Pacific Highway". 4.58 am, Northern Rivers NSW SES advised "NSW SES is directing people within Ocean Shores, New Brighton, Brunswick Heads, South Golden Beach to evacuate the high danger area if safe to do so".

5.37 am, Northern Rivers NSW SES advised "The situation in Lismore and surrounds is extremely dangerous and rapidly evolving. NSW SES continues to receive requests from residents to assist with evacuations. Your property may be flooded, you and your family could be isolated (surrounded by floodwater), access to safer areas might be cut and you could lose your power, phone reception, water supply and other low-lying infrastructure such as drainage and sewage may also become blocked. Various roads in are cut off due to floodwater and our emergency service vehicles can't get through safely, we are asking people to stay in place or try to move to higher ground within their homes if it is safe to do so".

5.54 am, Northern Rivers NSW SES issued an Evacuation Order for Casino "The Bureau of Meteorology has major flooding for the middle Richmond River. As a result, residents and visitors to these areas should take action now to prepare for possible flood impacts. NSW SES is advising residents in Casino that they need to prepare to evacuate due to rising flood water.

For emergency help in floods and storms, call the NSW State Emergency Service on 132 500. In life-threatening situations call triple zero (000) immediately". [They were not answering and could not help in any case. In our case in Girards Hill, East Lismore, where I was staying with friends, we were told to put chairs on the table. We did for two minutes only to watch the water rise really rapidly and we bolted out the door].

The Bureau of Meteorology issued a statement for "major flooding for the middle Richmond River".

There is no location or place known locally as "middle Richmond River".

6.23 am, Northern Rivers NSW SES advised that "132 500 line is experiencing some wait times due to the surge of requests for assistance this morning. If you drop out, please try again and if the situation is life-threatening, hang up and dial 000 (Triple Zero)."

The long wait time experienced all night in contacting the State Emergency Service published numbers 132 500 and 000 had a real and severe impact on Northern Rivers communities.

7.27 am, Northern Rivers NSW SES advised "Urgent emergency flood advice. All low-lying areas near creeks and rivers between the QLD border to Clarence Valley that can be impacted by flood waters. For your safety move to higher ground now only if safe to do so.

Do not enter flood waters. Widespread major flooding is occurring. This is a life-threatening situation. Risk to life. This is a rapidly evolving situation".

Between 8.23 am and 9.40 am, Northern Rivers NSW SES issued a flood evacuation warning for Clarence River at Southgate, major flooding on the Tweed River at Murwillumbah, Tumbulgum and Chinderah, low-lying areas near creeks and rivers between the QLD border to Clarence Valley, major flooding occurring at Grafton similar to the 2021 event, moderate flooding occurring at Ulmarra and Maclean, major flooding likely on Monday, major flooding occurring at Billinudgel and Mullumbimby.

10.29 am, Northern Rivers NSW SES advised "Flood Emergency Advice issued for Northern Rivers. Unprecedented flooding in the northern rivers. NSW SES have declared that areas in the northern rivers need to immediately take steps for their safety. You should immediately move to the highest safest place now, such as higher ground or inside a sturdy multi story building as high above water levels as possible. Move away from floodwaters as best you can. Do not enter flood water. This flood event is an extreme risk to life. Move to higher ground".

"It is not possible for emergency services to get to everyone".

10.34 am, Northern Rivers NSW SES advised "The Lismore levee has been overtopped early Monday morning. Record flooding above the March 1974 and February 1954 levels is occurring. Major flooding is occurring at Lismore. The Lismore levee has been overtopped early Monday morning. The river level has exceeded the March 1974 peak (12.15 metres) around 5:00 am Monday and may reach around 14.20 metres Monday afternoon, which is above the record flood level of February 1954 (12.27 m). Dangerous and rapid river level rises have been observed along the tributaries upstream of Lismore".

7.21 pm, Northern Rivers NSW SES issued an Evacuation Order for low-lying parts of Casino - Lennox Street, West Street, Stapleton Avenue and all other lowlying properties adjacent to the river. 8.46 pm, Northern Rivers NSW SES issued an Evacuation Order for low-lying parts of Casino including Lennox Street, West Street, Stapleton Avenue and all other low-lying properties adjacent to the river. An evacuation centre has been set up at Casino High School.

Flood event update

A whole-of-government approach to inform the Northern Rivers and Northern Tablelands communities did not exist leading up to, during and after the predictable flood.

Flood event updates and flood bulletins issued by the NSW State Emergency Service, Northern Rivers NSW State Emergency Service and the NSW Government were at times found to be inconsistent, incomplete, uncoordinated or non-existent.

On 1 March 2022 at 11.48 am and 7.37 pm, the NSW Minister for Emergency Services and Resilience issued a flood event update. Below is an abridged version of the update. The Minister issued the update to Members of Parliament.

Lismore flood peaked at 14.4 metres, as of 0230 on 1/3/22 was at 13.3 metres and receding. Largest flood on record (previous was 12.17 metres).

As of 4pm today, the SES has received a total of 6,296 requests for assistance and 1,283 flood rescues, an increase of 196 flood rescues since 5am today.

The Local Government Areas of Armidale Regional Council, Ballina Shire Council, Bellingen Shire Council, Byron Shire Council, Clarence Valley Council, Coffs Harbour City Council, Glen Innes Severn Council, Hornsby Shire Council, Kempsey Shire Council, Kyogle Council, Lismore City Council, Nambucca Valley Council, Port Macquarie Hastings Council, Richmond Valley Council, Tenterfield Shire, The Hills Shire Council and Tweed Shire Council had been disaster declared following severe weather and flooding in NSW from 22 February onwards.

25 evacuation orders are currently in place, affecting 52,000 people. 5 evacuation warnings are currently in place, affecting 308,000 people. 13 Resilience NSW evacuation centres set up.

The M1 Pacific Motorway between Cudgera Creek and Tweed Heads is closed in both directions. Many other roads across Northern NSW are closed. Check Live Traffic NSW for latest details. Later today a low-pressure system will form offshore and it is likely that this will deepen to form an East Coast Low and move towards the central NSW coast by Wednesday. Widespread heavy to torrential rain, damaging to destructive winds and damaging surf is likely to develop to the south of the low. This includes the Illawarra, South Coast, Sydney and possibly the Central Coast and Hunter Coast. Rain will arrive first through Tuesday, with winds and surf through Wednesday. With all elements perhaps lasting into Thursday. Wet catchments and ground across the east mean that flash flood and riverine flood risk are high. Flash flooding and riverine flooding is forecast to develop along the southern NSW coast later today Tuesday 1 March 2022 or Wednesday. While the East Coast is likely to see widespread rain, thunderstorms and flooding, inland areas could also see severe thunderstorms with localised heavy falls, gusty winds and even some hail possible for the next few days. 194 schools are known to be nonoperational, operating via online learning or only offering minimal supervision.

- 1. SES: At least 550 members are on the ground.
- RFS: 5 x aircraft have also been dispatched to assist with reconnaissance and rescue operations where weather allows. There are 317 personnel and 58 appliances dispatched.
- 3. FR: 3 in-water strike teams (9 people per team) in Casino, Grafton and Lismore.
 - Police: 2 in-water teams in Lismore.
 - Ambulance: 2 in-water teams in Lismore.
 - The Australian Defence Force are deploying aviation assets, high clearance vehicles and 200 personnel to support NSW SES in the Northern Rivers. There are 6 ADF aviation assets, including 3 MRH90 helicopters and three additional aerial assets.

Second event of flooding

When the second flood event occurred, I was asked what needs to happen to mitigate and recover from the flood. I said that there must be strengthened preparedness for response. I have said for many years that preparedness needs to be task oriented and not hierarchical. There must be a balance of a range of needs, general and localised, pragmatic and innovative. Above all, for this to take place, there must be communication with the community in the development of all public policy and the NSW Government, through its public agencies, actively engaging with locals.

23 to 28 March 2022

23 March 2022 at 6.19 pm, Northern Rivers NSW SES advised that "There's a potential for severe storms and rain...we'll keep you up to date on here, via our local Unit pages, and we encourage you to check the BoM for weather updates".

24 March 2022 at 4.19 pm, Northern Rivers NSW SES advised a "Severe Thunderstorm Warning for damaging winds and heavy rainfall for people in parts of Northern Rivers, Mid North Coast, Hunter, Northwest Slopes and Plains and Northern Tablelands Forecast Districts".

25 March 2022 at 5.25 pm, Northern Rivers NSW SES advised that "Minor flooding possible for the Northern Rivers, Mid North Coast and Hunter from Friday".

26 March 2022 at 3.16 pm, Northern Rivers NSW SES issued a "Flood Watch for the Northern Rivers, Mid North Coast and Hunter and increasing flood risk for the Northern Rivers and Mid North Coast".

27 March 2022 at 1.01 pm, Northern Rivers NSW SES issued a Flood Watch "Increasing flood risk for the Northern Rivers and Mid North Coast".

4.29 pm, Northern Rivers NSW SES advised "The Bureau of Meteorology has issued a Flood Watch for Minor to Moderate flooding across parts of the Northern Rivers. This Flood Watch provides early advice of possible flooding. Extremely wet catchments, combined with recent widespread rainfall and localised heavy falls means that predicted further rainfall could lead to flash flooding, renewed riverine flooding and landslips and if there is damaging winds, then potential fallen trees and power lines".

28 March 2022 at 2.15 pm, Northern Rivers NSW SES issued a Flood Watch for minor flooding occurring at Macleay River at Georges Creek "A Flood Watch is current for parts of the Northern Rivers, Mid North Coast, Hunter, Hawkesbury Nepean and North Western New South Wales rivers, including the Macleay River catchment".

2.27 pm, Northern Rivers NSW SES issued a Flood Update "The Bureau of Meteorology has upgraded the flood watch for the Wilsons, Richmond, Orara and Bellinger Rivers with Moderate to Major flooding possible from Tuesday. Catchments are saturated and floods may occur quickly. Every flood is different. Move items to higher ground and consider relocating if your home was damaged in the previous flood. Minor to Moderate flooding is possible for other coastal catchments. NSW SES has deployed additional people, vehicles, boats and helicopters to the Northern Rivers. Residents should prepare now for heavy rainfall and flooding. Act early if you live in a low-lying area.

4.46 pm, Northern Rivers NSW SES issued a Flood Evacuation Warning for South Lismore and the surrounding area. "The Bureau of Meteorology is predicting possible flooding along the Wilson River for the South Lismore and the surrounding area via Union Street and the Bruxner Highway. As a result, residents and visitors to these areas should take action now to prepare for possible flood impacts".

4.46 pm, Northern Rivers NSW SES issued a Flood Evacuation Warning for low-lying parts of North Lismore. "The Bureau of Meteorology is predicting possible flooding along the Wilsons River for the lowlying parts of North Lismore areas. As a result, residents and visitors to these areas should take action now to prepare for possible flood impacts".

9.41 pm, Northern Rivers NSW SES advised that "Multiple flood evacuation orders are now current" and to find the latest information and advice to visit the NSW SES website.

The Australian Defence Force lacked tools and equipment and clear standard operating procedures/ROEs. When asked to help move equipment out of the Lismore CBD on the evening of the second flood, one business owner was told, "No, we are reactive, not responsive and it might alarm people."

That same night when they were asked to take out their vehicles that can cut through the water, they said they "could not go as they did not know the streets".

When the NSW Premier appointed NSW Police Deputy Commissioner Mal Lanyon as Northern NSW Recovery Coordinator, this was a very welcomed announcement. I knew that Deputy Commissioner Lanyon's professionalism, stakeholder and community engagement would deliver a swift response to drive the long-term recovery where other NSW Government's public agencies were failing. It would be extremely helpful if Deputy Commissioner Lanyon was able to remain as the Northern NSW Recovery Coordinator at the very least until the end of 2022.

29 March 2022

There were about nine separate pieces of advice issued by Northern Rivers NSW SES.

Within less than a 13-hour period, Northern Rivers NSW SES issued a Flood Evacuation Order, a return safely notice, an Evacuation Warning and one more Flood Evacuation Order for Lismore CBD, Lismore Basin, low-lying areas of East Lismore, Girards Hill.

12.22 pm, Northern Rivers NSW SES issued "Flood Evacuation Order for North and areas of South Lismore, Lismore CBD, Lismore Basin and low-lying areas of East Lismore and Girards Hill. Residents must evacuate by 4 pm today EDT. NSW SES is directing people within these areas to evacuate the high danger area via New Ballina Road, Bruxner Highway and Dalley Street".

1.25 pm, Northern Rivers NSW SES issued a Moderate to Major Flood bulletin. "Richmond River at Wiangaree, Kyogle, Casino, Bungawalbin & Woodburn. Heavy rainfall from Monday night across the Richmond and Wilsons River catchments has caused significant river level rises.

A major flood warning is current for Lismore".

Floodwaters along the Richmond River combined with inflows from the Wilsons River are expected to cause moderate and possibly major flooding along parts of the Richmond River depending on the amount of rain that falls over the remainder of Tuesday and Wednesday".

1.30 pm, Northern Rivers NSW SES issued a Moderate to Major Flood bulletin. "Wilsons River at Lismore. "Heavy rainfall across the catchment of the Wilsons River overnight Monday into Tuesday has caused rapid river level rises in the tributaries upstream of Lismore. Further rainfall is forecast for the remainder of Tuesday and Wednesday. If the rainfall continues to intensify during Tuesday, major flooding may occur Tuesday afternoon with levels reaching near the Lismore Levee Height (10.60 m) Tuesday evening. Levels are expected to remain below those experienced in late February 2022. A Severe Weather Warning has been issued for the Northern Rivers and parts of the Mid North Coast and Northern Tablelands Forecast District".

4.30 pm, Northern Rivers NSW SES advised that it was "Safe to return for Lismore CBD, Lismore Basin and low-lying areas of East Lismore and Girards Hill. It is now safe to return to Lismore CBD (which was under Evacuation Order earlier today). Fortunately, the forecast has been revised & river levels are likely to peak below the major flood level this evening. This is below the height of the Lismore levee which means it is safe to return. We wanted to allow the community in the CBD to return as soon as it was safe to do, so the clean-up can continue.

Evacuation Orders for North and areas of South Lismore remain in place".

This caused major community uproar. I always post the SES notices as they are without comment, but I did say this one concerned me. I watch the rate of the rivers rising and it gives me a real sense of what is happening, and where and when. The gauges, however, need to be working and that is a perennial problem that falls into the twilight zone. (See attached my recent advocacy on this matter)

I was concerned enough to ring the Northern Rivers Recovery Coordinator and say that this removal of the Lismore CBD Evacuation Order was brain-dead stuff. Confusing as how can you have Evacuation Orders for North Lismore and South Lismore but all saunter around the Lismore CBD? I told him things needed to change, but it took quite a few hours to get the Lismore CBD Evacuation Order back on. I had lots of interaction that evening and overnight.

6.25 pm, Northern Rivers NSW SES advised that river levels are likely to peak below the major flood level at Lismore Tuesday. "Heavy rainfall across the catchment of the Wilsons River overnight Monday into Tuesday has caused significant river level rises along the Wilsons River and its tributaries. Rain has eased since Tuesday morning. River levels in the tributaries have peaked. Moderate flooding is occurring at Lismore where river levels are likely to peak below the major flood level (9.70 metres) Tuesday evening. A Severe Weather Warning is current for the Northern Rivers and parts of the Mid North Coast and Northern Tablelands Forecast District. Further rain is possible which may cause additional river level rises".

30 March 2022

There were about 11 separate pieces of advice issued by Northern Rivers NSW SES.

1.27 am, Northern Rivers NSW SES issued an Evacuation Warning for Lismore CBD, Lismore Basin, Low-lying areas of East Lismore, Girards Hill. "A dynamic weather system is generating significant heavy rainfall in the Northern Rivers. Renewed river level rises are occurring along the Wilsons River at Lismore where river levels may reach major level in the early hours of Wednesday 30 March 2022. The river level may reach the major flood level of 10.5m Wednesday afternoon".

3.25 am, Northern Rivers NSW SES issued an Evacuation Order for Lismore CBD, Lismore Basin, Low-lying areas of East Lismore, Girards Hill – evacuate now. The Evacuation Order remained in place until 4 April 2022. 11.48 am, Northern Rivers NSW SES advised "Important information, sirens not working. Don't rely on sirens to alert you of Levee Bank overflow and flooding. Due to recent flooding the sirens are broken".

3 April 2022

3.00 pm, Northern Rivers NSW SES advised that it was to return for low-lying parts of Iluka.

4 April 2022

10.00 am Northern Rivers NSW SES advised that it was safe to return for North Lismore and South Lismore, Lismore CBD, Lismore Basin, low-lying areas of East Lismore, Girards Hill, North Lismore, and South Lismore.

2.45 pm, NSW SES advised that it was safe for return for Coraki and New Italy.

5.45 pm, NSW SES advised that it was safe to return for Clarence River, Maclean, Yamba, Iluka, Lawrence and surrounding areas.

5 April 2022

2.30 pm, NSW SES advised that it was safe to return for Riverside Caravan Park, Coraki.

5.00 pm, NSW SES advised that it was safe to return for Woodburn and Swan Bay.

5.00 pm, NSW SES advised that it was safe to return for Broadwater, Wardell and Cabbage Tree Island.

Public Safety Network

The NSW Telco Authority's Telecommunications Emergency Management Unit telecommunications operations centre is expected to support critical communications during bushfires or floods so that communities can rely on mobile phone coverage to stay up to date during emergencies and protecting equipment such as mobile phone towers and Public Safety Network for rising floodwaters and is vital to keeping communities safe and connected during these events.

There was no communication with Coraki State Emergency Service. They had to 'phone someone to advise me that they had coordinated 16 rescues. There is a need for satellite phones to be used.

There needs to be a better understanding of how the Public Safety Network critical communications infrastructure is going to better protect the flood-prone communities and establish a stronger relationship with Telstra.

Northern Rivers and Northern Tablelands community strength

It is only due to the strength of the Northern Rivers and Northern Tablelands communities that we avoided a rising death toll, even more internally displaced citizens and destruction of property.

In the absence of the NSW Government's public agencies providing timely and accurate advice in the leadup, during, and immediately after the predictable flood, Northern Rivers and Northern Tablelands citizens took it upon themselves and fashioned a community-led response.

During the first few days of the predictable flood, people with private boats rescued members of the community who were stranded and/or potentially facing dire circumstances as the predictable flood levels had reached the roof cavities where people were desperately endeavouring to escape from the rising waters.

In the lead-up and during the initial 48-hour period of the predictable flood arriving on 28 February 2022, communication from the NSW Government's public agencies was limited, uncoordinated, and in some cases, unhelpful.

There was a lack of evidence-based advice on the heightened level of the predictable flood. A warning to evacuate was issued between midnight and 0300 hours, leaving citizens stranded and unprepared. Laudate Dominium, sadly many were not there due to the last flood.

The Lismore Citizens Flood Review Group has advised that the evacuation centre was not functionally able to effectively support large numbers of evacuees, and all of centres suffered from a lack of integration with the regional response.

The Southern Cross University evacuation centre was poorly staffed and resourced with the Department of Communities and Justice supervisor required to stand down due to personal flood issues. No back-up supervisor was nominated to take over. As a result, many evacuees were left to relocate to the Goonellabah Swimming and Aquatic Centre evacuation centre set up by Lismore City Council staff.

The Department of Communities and Justice staff did not arrive for several days.

Many non-government organisations have been supporting the Northern Rivers communities during and following the flood that has caused devastation to people's lives.

Issues raised by the Northern Rivers and Northern Tablelands communities

Northern Rivers and Northern Tablelands communities have raised directly with me issues that they experienced in the lead-up to and during the flood, and during our recovery.

I express appreciation to The Koori Mail, Currie Country Social Change, Jali Aboriginal Land Council, Dr Ken Gudmundsen, Lismore Citizens Flood Review Group, North Lismore Flood Coordinator, NSW Farmers' Association, Ms. Annie Kia, Mr Mark Dowling, Mr Simon Clough, Lismore City Council, Tweed Shire Council and concerned members of the Northern Rivers and Northern Tablelands communities and many who do not wish to be named for contributing towards providing submissions and comments to this report and for raising issues.

Flood gauges

A main issue during the Northern Rivers and Northern Tablelands flooding events of February and March 2022 was the unreliability and poor condition of gauges. I made representations on this issue to the Minister for Emergency Services and Resilience and Minister for Flood Recovery.

I draw to the attention of the 2022 Flood Inquiry the submission made by Ms Annie Kia.

A package of correspondence and information shared with me and corresponding advocacy is included in this report Appendix C.

Depth of water at a river height measuring gauges located along the Northern Rivers are inoperable exposing communities to rising level of water and without warning. There are several failed gauges along the Northern Rivers, including but not limited to, Richmond-Tweed area, Lismore, Browns Creek Pump Station at Lismore is not working as the flood gate at the end of the conduit did not close when the Wilsons River rose above the predetermined level. Other gauges that must be reviewed as a part of the audit, include Nashua River rainfall gauge failed, Bellingen gauge failed, Neileys Lagoon in the Bungawalbin catchment failed resulting in the Bungawalbin community not having access to information that would necessitate an evacuation.

There is confusion as to the jurisdiction for the installation and maintenance of flood gauges whether it be the NSW Government, Australian Government or Local Government, or a mix of them.

I am advised by Lismore City Council that they made application to the NSW Government for \$110,000 in funding to upgrade the flood gauges, including closedcircuit television to monitor river levels for the Local Government Area. The NSW Government, however, rejected the application for funding.

As reported by ABC North Coast on 14 May 2022, the Northern Rivers legal framework is at breaking point. To summarise, Tracey Randall is a legal practitioner in Lismore. Tracey, like countless other business owners, has been affected by the catastrophic flood. One of the key differences is that the physical documents were so badly damaged by the flood that the ink has been washed away. Many documents are ruined and this has flow-on effects for the practice, clients and courts. The flood has affected other legal practices as well, including the Northern Rivers Community Legal Centre, which supports some of the most vulnerable people.

Other issues raised by the Northern Rivers and Northern Tablelands communities include the following.

- The NSW State Emergency Service, Bureau of Meteorology or the Australian Insurance Council does not include landslips and rain downpours as a part of the definition for floods or flooding.
- Inappropriate location of the Northern Rivers NSW SES in a flood-prone area and the failure to provide emergency power systems for that organisation.
- No adequate monitoring of the rainfall and creek heights in high-priority areas.
- Dismissive attitude by those usually with no local knowledge and experience by NSW State Emergency Service (staff, not volunteers) and prohibiting actions that would support the rescue operations continually such as the Tinnie Army.
- Failure to implement any of the recommendations in the Citizen's Review of the 2017 flood, let alone the Owens Review's subsequent recommendations.

- Government intervention is necessary for housing to be insured as it is presently cost prohibitive for homeowners.
- Essential that the Northern Rivers Reconstruction Corporation has direct contact with Northern Rivers and Northern Tablelands communities most affected by the flood, including businesses, primary producers and farmers to collaborate with them about the future of the Northern Rivers and Northern Tablelands.
- Flood mitigation strategies to be implemented.
- Grants are needed to be at least \$200k to get businesses back to Lismore, including for employers who employ less than 20 people.
- Larger conditional grants for repairing buildings.
- State/Federal funding to repair all local regional and rural roads and bridges; flood-affected roads adjacent to and within Aboriginal communities; and to fix landslips that have made people's properties inaccessible and dangerous.
- An independent review into claims that the Pacific Highway upgrade may have worsened the impact of flooding on the town of Woodburn as flood waters could not escape towards Evans Head as they had in the past.
- It has been historically shown that as soon as the latest flood fades from memory, minimal action is taken ... if any.
- First Nations People's capacity to collate information and respond comprehensively relies upon intercommunity and broader consultation with the Bundjalung Nation.
- Early warning system for the community failed.
- Bureau of Meteorology warnings were far too late, therefore, Northern Rivers NSW SES bulletins were too late.
- Northern Rivers NSW SES staff (not volunteers) says they are not able to listen to and include very experienced local knowledge in community communication and management decisions.

- Management of public broadcast of Information and communication to the Northern Rovers communities failed due to syndication and reduced on-air time of ABC and commercial radio stations in rural and regional areas.
- Lack of local knowledge of fly-in fly-out emergency management staff.
- Cross-border issues with no ability for emergency agencies to communicate effectively.
- Greater cooperation and coordination, and joint activity between all emergency agencies across all relevant areas.
- Australian Defence Force on-the-ground support should have been activated as soon as the flood occurred to ensure the timeliest emergency response.
- Establish renewable energy micro-cells to mitigate the impact of the loss of production and connectivity because of natural disasters.
- A single point of contact for businesses recovering from flood to report any allegations of unconscionable practices by contractors undertaking emergency repairs following floods and other natural disasters.
- A review of the cost of insurance premiums be undertaken with a particular focus on the Emergency Services Levy component.
- Harvestable Rights limit in coastal draining catchments is increased to 40% productive use inappropriate catchments.
- Review whole-of-government input for Natural Disaster Declarations.
- Review NSW Rural Assistance Authority grant assessment process.
- Support smaller or establishing primary producers based on a percentage of off-farm income against net primary production income.
- Identify alternate processes to confirm expenditure for natural disaster rectification work.
- Terania rain gauge ceased transmitting sometime after 3 February 2022.

- Several people nearly lost their lives in the Keerrong Valley during the flood.
- Rain gauge at The Channon is still inoperable.
- Rain gauge at The Channon has overhanging shrubs.
- Joint management of gauges by various entities creates an impenetrable, inaccessible barrier to citizens who want to make a submission to the Flood Inquiry.
- Strong potential to improve collective management of catchment information with increased community involvement.

2022 Flood Inquiry

In March 2022, the NSW Government commissioned an independent expert inquiry into the preparation for, causes of, response to and recovery from the 2022 catastrophic flood event across the state of NSW.

On Tuesday 3 May 2022, the 2022 Flood Inquiry held a public forum at Southern Cross University, Lismore. Community members from the Northern Rivers raised issues regarding recovery, rebuilding or relocating everything above the flood level, mental health, implementing Northern Rivers Adaption Plan, creating an overarching plan for rebuilding, establishing a cross-sector leadership forum, building long term resilience, supply chain and labour shortage, evidence-based decision making, the deaths caused by floods, hundreds of people saved by the Tinnie Army, some 4000 homes have been declared as uninhabitable, few homeowners have flood insurance, First Nations communities were majorly impacted, Koori Mail established a recovery hub to look after their mob but also looked after others within the community, majority of people in Lismore have been traumatised.

A local experience

Because of what happened in 2017, when we did not have not have a warning and didn't have good communication, and we all didn't expect that the same would have happened in February 2022. I arrived home after being in town checking on my small business. I saw that the creek had been flooded. We were after all on "flood watch" but not "flood warning". I had heard that Lismore was underwater and it was on my mind that on some level we all needed to be prepared. Two days before the flood I was walking in town where I had established my shop and went visiting some of the other businesses to gain a sense of what, if anything, we should be doing to protect ourselves. We were not forewarned of what was going to happen around the corner.

In February 2022, on that fateful night, I arrived home and organised a removalist to lift my furniture and belongings in the shop as I am unable to physically lift myself. The removalist cancelled; however, people helped me move things about.

On Sunday when I arrived home and secured the bins and sorted my chickens out, the SES knocked on my door at about 6.00 pm and told me that the water would be expected to be between 10 to 10.4 metres in height. My ground was just over the levee height. I told SES that I did not want to be stuck in the house because the 2017 flood was frightening.

At about 11.00 pm, a flood evacuation order was issued. The water was frightening and so too was the amount of rain. I have poor physical visibility and I rang SES straight away. I had just received the evacuation order and I had a place to go to. My friend would come and pick me up and my dog. The SES told me to stay where I was and they would pick me up. They didn't come. It was extremely difficult and traumatising.

I 'phoned the SES again and was told there was no need to call as they were coming to get me.

I called SES every 30 minutes as I was becoming increasingly stressed. I told SES that they must come now and this must not be left until tomorrow. I told them that I could walk out now but SES told me not to. Still, they didn't come.

At about 2.00 am, SES said that they wouldn't come. I told the SES that they have put my life in danger and that a friend could have picked me up. The SES told me to get up as high as I can. They also told me that if I could walk out that I should. Water started to enter the ground floor of my home at about 3.00 am. I was abandoned.

Based on my 2017 experience, I tried to rest and stopped looking at the Bureau of Meteorology website.

At about 5.00 am, my brother who lives in Sydney contacted me and told me "That it looks bad where you are", I then saw that the water was coming to the top step of the house. Because of my visible impairment, I could not do anything. My friend who had 'phoned me from the Blue Mountains could hear the water sloshing through the house. I knew that the power would soon be cut off.

My chickens were on the back deck and one of them had drowned. My dog "Sadie" who is a 12 kg 30-year-old animal companion panicked.

I started to wonder what else could I do. I have high ceilings, but I could be stuck between the roof and the ceiling.

I grabbed a lamp and the dog and stood on the bench that I only just managed to drag onto the verandah.

I waited and sent messages, watching the water rise to the level of the rails on the verandah. I realised that I would have to stand on the verandah rail to get to the roof, but the dog would not be able to get to the roof. I crawled onto the roof with the lamp. The dog remained on the bench. We waited until someone would come. No one came.

I was on the roof for a long time and I could not move. I could only sit tight. I resigned myself to being there for a very long time. No one had adequate time.

I thought that I was being surrounded by people who had drowned. Hundreds of people – drowning. 100s.

I became aware of a noise around the back of my house. The back lane was like a river. Then I noticed that there were people that I thought were being rescued but they were coming to be placed on the roof of my house. I had a roof over my back deck. Kids, adults, and dogs coming to my roof. I saw a guy in a red canoe pulling people out of the water, putting them in the canoe and moving them onto high positions on the rail tracks and then moving them to my roof.

Red canoe man went to the front of my house to rescue Sadie but couldn't find her. Sadie was eventually found alive and traumatised, which is another story.

Red canoe man eventually took me from the roof. A neighbour's fluffy white dog, Ollie found its way to me. We were taken up north of the railway and there were a whole lot of tinnies. Thank you, Red Canoe Man and Tinnie Army. A tinnie took us further north under power lines toward Tullera. There we got into cars and up to Tullera Hall and then onwards to Modanville School, an evacuation centre. People from the community then came to the school and took those people rescued back to their homes and cared for them ... thank you. I was one of those fortunate people.

The next day I received a 'phone call from my daughter telling me that Sadie had been saved.

Naomi Worrall, of Lismore.

Preparedness

Support, reassurance and vision are fundamental to some semblance of getting operational. Many businesses, farms, homes and way of life, was ripped from us on the 28 February 2022. Despite reassuring words on visits from Government leaders, some whose sincerity I do not doubt, little happens by way of reconstruction response commensurate to the humanitarian disaster we live with each day. Resilience NSW, which is institutionally incapable of planning and executing recovery, must be abolished and replaced by a NSW Reconstruction Authority.

I have bought to the attention of the NSW Government and Parliament of New South Wales the immediate concerns facing the Northern Rivers and Northern Tablelands communities, principally the recovery from the 2017 flood and preparation and prediction for future floods.

The floods were predicted and could have been better responded to with preparedness and mitigation.

Training for State Emergency Service volunteers

On 21 December 2021, I wrote to the Minister for Emergency Services and Resilience requesting the Minister to consider allocating more resources to enhance the training program for the State Emergency Service volunteers to respond to the demands they have placed on them in responding to storms, floods, fires and more.

In the Minister's reply on 18 February 2022, the Minister advised that "NSW SES (advised) that the Lismore Unit has the resources they require to maintain the training program...and the NSW Government will continue to work with them to ensure a fit-for-purpose and effective program is in place for current and future needs."

This was not the case.

Need for a new home for Murwillumbah State Emergency Service and Rural Fire Service

On 21 December 2021, I wrote to the Minister for Emergency Services and Resilience requesting the Minister to help with resources for a new Murwillumbah SES site, (a matter I had raised verbally) so that the team of volunteers can be housed in a fit for purpose, safe and healthy headquarters, not the physically toxic one they were in. The Minister eventually acknowledged my letter in early May 2022, thanking me for bringing the matter to her attention. A suitable flood-free site is still being investigated, but the funding has been announced in the pre budget period.

Lismore City, Tweed Shire, Kyogle councils' current flood mitigation priority projects for funding

On 9 December 2021, I wrote to the then Minister for Police and Emergency Services, and Minister for Lands and Water requesting funding to bring into effect the priority list of many 'shovel ready' projects provided by Lismore City, Tweed Shire, and Kyogle councils, which, as a targeted package, would give our local business and residential communities greater preparedness, protection and confidence when faced with natural disasters.

The letter has not been acknowledged.

Lismore Electorate flood protection and mitigation

On 22 October 2020, I stated in the Parliament of New South Wales and recorded in Hansard the following:

I continue to talk about floods and the Lismore electorate -- more importantly, the things that we need to do to help with flood protection and mitigation. I begin by thanking the Emergency Services Minister. I asked him for a briefing, particularly on the "Independent Review of the NSW State Emergency Service Operational Response: Northern Rivers Floods March 2017", authored by former NSW Deputy Police Commissioner Dave Owens. The review made 36 recommendations and I asked for advice on where they were up to. Today the Minister's adviser, the Commissioner and the Deputy Commissioner briefed me on that. I have been watching the issue closely. I am pleased to say that, of the 36 recommendations, some 34 have been implemented. Two have not been implemented yet but are afoot; one of them has to do with finding a suitable place for SES headquarters in Murwillumbah, in my Electorate of Lismore. It is good to know that all of that is happening.

I also asked them for any observations they have on the "Lismore Citizens' Review of March 2017 Flood." A group of well-known and well-respected citizens came together and did its own review and has been engaging directly with the Government on that. There are a few things afoot. The 2017 flood was so catastrophic. The velocity of the water that hit both Lismore and Murwillumbah was unprecedented. Locally I know that councils would like to do more, but they need an increase in the resources available for the voluntary house/land purchase buyback scheme. I am told that only about \$2 million is available at the State level to contribute to this program, which is done on a 50-50 split. Some councils say that is okay, but those with a very low-rate base say that they just cannot contribute their portion in the same way. Certainly, it needs some more resources, and that is one of the things that I have been following up on. The answer was: "The department will consider whether there is a need to examine ways to improve the scheme to better meet council needs, including consideration of the currently available funding pool."

I will continue to advocate for that, because we do need more than that \$2 million. That buyback scheme is really useful. There are other things that we need to do. In some places we have levees -- we have one in Lismore, and there are various ways levees are constructed if they are suitable and communities want them -- but we would also like some natural flood mitigation measures. We would particularly like them in the Northern Rivers through the Northern Rivers Watershed Initiative, which I have spoken about in this place before. It is something that covers Lismore, Kyogle, Richmond Valley Council, Rous County Council, Tweed Shire Council -- three councils in my Electorate of Lismore -- as well as Ballina Shire Council and Byron Shire Council.

It brings together a holistic approach to the management of water within our catchments. It will use best practice approaches to catchment management modelling and natural flood mitigation. It targets improvements in stream bank condition and river health that contribute to reduced flood risk within the catchments. That initiative is costed at about \$150 million, and I know it would require at least \$3 million to scope out that properly. That is another advocacy that I am pursuing to make sure that we get as much flood protection and mitigation as we can. There is also more to be done with the Natural Disaster Relief and Response Arrangements [NDRRA]. There are guidelines, and they are good guidelines, but sometimes they are not fully implemented. We need to implement them so that councils are not out of pocket up front and can do the work and get the money immediately.

Lismore Electorate floods

On 21 October 2021, I stated in the Parliament of New South Wales and recorded in Hansard the following:

I talk about floods and the need to take more concerted action. To date, it has not been strong enough and we need more flood protection in the Lismore Electorate. Lismore city, where I live, is known as the city that floods. Since we started taking records, which, from memory, were from 1870, there have been over 30 major floods.

The impacts from 2017 floods that resulted from Cyclone Debbie hit Lismore and Murwillumbah particularly hard, with catastrophic impacts. Tragically, seven lives were lost. Devastatingly, the CBDs and businesses in them and surrounding industrial areas were smashed in a way that we had not seen before. I have lived in South Lismore and North Lismore, and I now live on the banks of the Wilsons River. I have been through many floods. The floods that we saw in 2017 were very different and they have been written about as very different. It was like a tornado coming through the CBDs where the devastation landed.

I am guite familiar with floods. I can watch the rate of rising and know what is going to happen -- that is, the timing of spill overs et cetera -- as indeed do many locals, mainly farmers, who know much better than I do. We relied on those farmers for years and then they were shut out as it all had to be "professionalised". Only after warnings had been through the intersection of the Bureau of Meteorology with the State Emergency Service were they approved and then trickled down to us. They had gone through what I call the central prism, with no local knowledge, and then we got our warnings. Our radio used to run all the locals and we would think, "Okay. I have just listened to Fred, or so-and-so. We know what is going on." We would believe them and take action accordingly because we knew they knew what they were talking about. That is another story.

I became involved in the campaign in Lismore to raise the levee. This caused me to look way beyond Lismore to see the impacts in other places. I am talking about quite a few decades ago. I pause here to pay tribute to the late Florian Volpato, businessman, philanthropist and Lismore resident. Florian got active in flood protection around 1980. Because he was Italian and Lismore is Australian, he brought two Italian engineers to Lismore and paid for them to prepare a proposal to channel floodwaters away from the Lismore CBD. After many years and much debate, a levee wall was constructed in Lismore in 2005. I was actively involved in that, working with the then Federal Member for Richmond Neville Newell to get it prioritised. Dr Ros Irwin was mayor when it was decided, and I thank her.

The need to do more for flood protection never waned, but the political will did, as the current channelling operations in Lismore funded by the State Government -- and I acknowledge that -- at \$8.2 million demonstrate. I am told, though, that that proposal had a development application [DA] approved some four years back from 2019 and sat dormant for all those years. But guess what? It came alive during the 2019 State election campaign. It was promised by me, and The Nationals candidate supported it as well. He then created a petition to have local people sign it. I questioned the need for that, given that it was already a project, it was already developed and it already had a DA approved.

Anyway, it is now underway and we all support it. It will have a small impact, but any impact is worthwhile for those who were badly impacted. However, what we need is a more holistic approach to flood protection, which has many facets to it --structures, buybacks and natural mitigation work such as that set out in the locally agreed Northern Rivers Watershed Initiative, endorsed as a priority project by the Northern Rivers Joint Organisation of Councils and the Rous County Council. Many other actions are required and they were writ large by the absence of a planned approach after the 2017 catastrophic floods. This is to be continued. [Completed since I spoke and it has minimal impact]

Flood strategy

On 12 November 2020, I said in the Parliament of New South Wales asked the Parliament and recorded in Hansard to:

- Note that the Government needs to reveal its comprehensive strategy for protecting Lismore and Murwillumbah's Central Business Districts and residential areas from a repeat of the devastating 2017 floods.
- 2. Note this should include funding boosts for the Voluntary House Raising Scheme and Voluntary Purchase Scheme.

Beyond the status quo

On 11 May 2022, I informed the Parliament of New South Wales and recorded in Hansard the following:

The people of my Lismore Electorate and all Northern Rivers and Northern Tablelands residents have suffered quite a shock from the flood that smashed us on 28 February. It was unprecedented in terms of height and the damage it inflicted, but it was not unpredicted or unpredictable. It was about 14.4 metres, and we have had credible warnings of floods that could be even higher -- even up to 16 metres. Saying it was unprecedented is code for "We could not have predicted it; therefore, we could not prepare for it", and that is factually wrong. We can prepare for any disaster because we do not prepare for what happened in the past; we prepare for "What if". The 1954 flood that caused terrible loss of life and devastation was 12.27 metres. In 1974 the flood was 12.15 metres, and then we had another big flood in 2017. One month after the 28 February flood, we had another one that was 11.4 metres. That is quite a high flood in our area, and people were saying, "Oh, that's not big. We had the 14.4-metre one". But coming on top of the 28 February flood, it was quite a shock.

I will say a little about mental health. The Government's mental health responses so far have been wellintentioned and there has been additional money, but I consider them to be ill thought out. I said the night before they were announced that they should not be described as the best thing since sliced bread—just a simple announcement, no grandstanding—and I have to say that was done. But the process involved giving more money to particular providers without a framework around it. The framework is that a collective community trauma has happened that requires a particular response. Again, that is known.

I see those things play out and think we just have to do it a little differently. Of course, those providers needed a bit of extra money, but we needed something else. Lismore psychologist Karen Potter was quoted in *The Guardian* on 29 March as saying that her community had been in a "post-traumatic state" for the past month and the recent flood warning had "amplified everything" -- and it did. But the mental health responses so far are very individualistic, and we do not have to individualise mental health. We have to approach it as a community -look at what the communities endured and how we respond to that. Of course, people need individual help, but I wanted to make those points.

About the flood itself, on 28 February SES volunteers were stretched beyond their capacity but not beyond their will to do their job. Our local SES volunteers are us; they are our people. We love them and they do the best they can. A person put out a call through the local SES for boats to rescue residents, and I said they needed an award. That call-out was then rescinded by the SES because it said it was too dangerous, and I said the way we deal with that situation needs a rethink. But thank God for our wonderful community, knowing how hairy and dangerous it was, turned out in droves. They were true heroes, and I have been very privileged to meet or talk with many of them. They will be named at another time when they step up to get their bravery awards -- and some of us are working through that at the moment. The Mayor of Lismore, other mayors and I are looking at what we can do and how we can nominate them.

The last thing on their minds during the rescues in the wee hours and days of this flood, as they saved people, animals, goods and everything, was being heroes. They were just being good neighbours and good citizens and enacting civic duty. After I got out of the flooding house I was in and up to the high ground, I watched the flotilla of boats -- our Tinnie Army -- ferry up and down the highway, which had turned into a raging river. I know that happened right across the electorate, with rescues in Murwillumbah and up the Tweed River. It was the same everywhere. Villages were swamped, there were no communications and there were landslips. There was no power and no rescue. Farmers watched animals being washed away. I am out of time, but I will continue this story over the next year.

On 10 May 2022, in the Parliament of New South Wales, I gave notice and recorded in Hansard that I will move that this House:

- 1. Notes that communities in the Lismore Electorate have been devastated by catastrophic floods and landslips in February and March 2022.
- Notes that the current onerous application process for assistance grants is distressing and retraumatising many flood-affected people and businesses.
- 3. Calls on the NSW Government to:
 - a. Institute the efficient, timely, flexible, peoplecentred and compassionate administration of grants.
 - b. Fund government officials to be on the ground walking the streets assisting people and businesses in need.

Flood mitigation priorities from Local Government Areas, Lismore Electorate

On 9 May 2022, I wrote again to the Premier, Deputy Premier and Minister for Regional NSW, Minister for Emergency Services and Resilience who is also the Minister for Flood Recovery, and Minister for Lands and Water to update the NSW Government on a range of flood mitigation priority projects previously identified by Lismore City, Tweed Shire, Kyogle and Tenterfield Shire councils which require urgent and targeted funding and must be done without further delay. The letter has not been acknowledged.

Northern Rivers Reconstruction Corporation

I initiated and drove the establishment of the Northern Rivers Reconstruction Corporation.

On 29 March 2022, in the Parliament of New South Wales and recorded in Hansard, I spoke on the urgent and critical need to establish a reconstruction corporation that would:

- Provide the focus we need on the myriad questions asked by community members that enable them to make critical decisions.
- Reassure us that our efforts are being backed in by the Government for the long haul.
- Be inclusive and ensure that community members, indigenous communities, and business representatives would have a voice.

On 19 April 2022, the NSW Government announced the establishment of the Northern Rivers Reconstruction Corporation. Formally coming into effect on 1 July 2022, the Corporation will coordinate planning, rebuilding, and construction work of essential services, infrastructure, and housing across multiple government agencies to help people in the Northern Rivers and Northern Tablelands communities rebuild their homes and lives as quickly as possible.

Lismore Electorate flood mitigation

On 23 February 2022, I informed the Parliament of New South Wales and recorded in Hansard the following:

Today my Electorate of Lismore is watching and waiting with bated breath to see whether we will have another flood. Lismore, the city in which I live, is known for great things and floods. It floods in all areas across the electorate. We need urgent flood protection measures and resources, including fixing the drainage system. These are not new needs or new matters, but they have not been properly attended to over many, many years. Although our State Emergency Service does fantastic work, it is under-resourced and made up mostly of volunteers. It needs paid line officers to fully support those volunteers.

The SES in Murwillumbah does not have a decent shed to call its headquarters because it shares premises with the Rural Fire Service. I have sought funding urgently because its headquarters is not fit for purpose. It is toxic. It is mouldy in the extreme, has collapsed floors and more. Lismore and Murwillumbah suffered catastrophic damage during the floods that resulted from Cyclone Debbie in 2017. It did not receive funding to match the catastrophe that took place. The State did not seek Category D assistance from the Feds, which would have meant extra public funding. The roads have not fared well since. They were already in a parlous state, which we know from the NRMA report of 2016-17, among other things. Under the natural disaster assistance rules, roads and other infrastructure cannot be built to a better standard. I understand some of the thinking around that, but it is nonsense because we want to continually improve our roads and build them to a better standard. We should be doing that and, of course, making sure that it is forensically acquitted.

I have been in conversation with at least three of the local councils in my electorate -- Tenterfield, Kyogle and Lismore -- and know what their flood protection needs are as well as the engineering solutions. Some of those councils want nature-based solutions. Tweed Shire Council covers Murwillumbah, Tweed Valley and some of Tweed, which is in the member for Tweed's electorate. It has nine projects, and \$2,950,000 would kick-start some of them. Then it will need \$27 million later for the homes. Its needs are quite extensive across that area. For Kyogle there are seven projects, which would be \$13 million. Two of them are voluntary house purchase schemes and two of them are voluntary house-raising schemes. There is the Bruxner Highway, Woodenbong Road and Capeen Street floodway. In Lismore, 18 projects, 15 of which have been costed at \$5,222,000, would do a lot to give some of the protection needed. I also wish to talk about the overflow of drains with a hint of rain, and furiously overflowing drains. Today my office has been deluged with calls about drains and it is getting worse. Cam Latimer, President of the Lismore Thistles Soccer Club, has had a four-year battle trying to get the club's drainage fixed because it causes damage and loss of income and stops matches. The club is part of the Far North Coast zone. I have taken up the matter with the council. Let us hope that we get some action.

Another group of residents contacted me over the same issue – drains -- and they were in desperation. For years they had been asking for the drains to be fixed at Sherwood Drive and Ballina Road but had received little attention. The focal point of contact is Mrs Delma Rigby. I have visited the site and I have seen the rain run torrents of water and create flash flooding that ripped through the gardens and houses in that area, causing damage to homes and gardens. I said to the council, "Let's sit down, work out who's responsible, and then we can have a plan." That is what I have been seeking -- to make sure that we all work together -- but the residents are frustrated and I do not blame them. Hopefully, now that we have taken it up with the new Council, we will be able to work with it. In the previous council I took it up with some councillors, Councillor Cook and Councillor Lloyd, who put in a maintenance request, but we still need a lot more done there.

Request for funding to support those who have been unable to work due to the impact of the flood

On 17 March 2022, I wrote to the Premier, Minister for Emergency Services and Resilience, and Commonwealth Treasurer and raised the need for a scheme such as JobKeeper/FloodKeeper to be implemented as soon as possible to support those who have been unable to work due to the impact of the flood.

In April 2022, the Office of the Commonwealth Assistant Treasurer responded and indirectly rejected the need for a scheme such as JobKeeper/FloodKeeper by inferring that by providing other means of support to the Northern Rivers and Northern Tablelands communities that they would recover and rebuild from the flood.

In May 2022, I communicated with the Prime Minister and raised the need for a scheme such as JobKeeper/FloodKeeper to be implemented as soon as possible

Businesses Flood Recovery Assistance

On 29 March 2022, in the Parliament of New South Wales and recorded in Hansard, I informed the Acting Premier that a \$50,000 grant to help small businesses get back on their feet is of course welcome. But the way it is designed, where businesses need to spend money first -not the first \$15,000, but the additional \$35,000 -- is making it difficult. It just is not working because they do not have the cash flow or the spare cash on hand. As the Acting Premier knows, the Lismore CBD has been smashed and there are very few businesses operating. This needs to change urgently. Will the Acting Premier consider removing this rule and redouble efforts to get as much grant money as possible out to businesses that have been devastated by floods?

Flood Recovery Assistance

On 29 March 2022, in the Parliament of New South

Wales and recorded in Hansard I thanked the Acting Premier for his response to my first question. Thousands of families have lost their homes in floods or have had their homes made uninhabitable at this stage. It will take quite a bit to rebuild or get people back into them. The Acting Premier has acknowledged that mine was one of many such homes. Will the Government immediately consider upping the Back Home grant to \$50,000 as the Queensland Government has done with shared funding between Queensland and the Federal Government. Given where we live, we watch what happens in Queensland, as he would be well aware. It just does not quite cut it.

Flood Recovery Coordination

On 29 March 2022, in the Parliament of New South Wales and recorded in Hansard, I informed the Acting Premier that so far, the people responsible for the emergency flood response include the Premier, the Acting Premier, the Emergency Services and Flood Recovery Minister and a whole raft of other people and agencies. I cannot name them all, that we need just one person on the ground who is in charge. As the Acting Premier knows, these are things I have said publicly, for which I have advocated and on which I have lobbied all Ministers. Have called for a Reconstruction Commission and a Commissioner. Call it whatever we want but we just need one person who is in charge and can cut through all the agencies and all the issues that local members are experiencing. Will the Acting Premier consider that?

Northern Rivers Floods

On 29 March 2022, in the Parliament of New South

Wales and recorded in Hansard, I asked the Acting Premier to report on what the emergency response plans are for the Northern Rivers as Lismore, along with large parts of the Northern Rivers, is flooded for the second time in a month. Murwillumbah is already flooded, and they are currently evacuating or have evacuated, people in the Lismore CBD. Floodwaters are expected to reach 10.6 metres by this evening, and the levee limit is 10.6 metres.

Mental health

I am very concerned about the mental health of the Northern Rivers and Northern Tablelands communities.

Northern Rivers and Northern Tablelands communities have suffered.

Many are traumatised by grief, mourning, loss of their homes, income, property both physical and intrinsic, animal companions and more. There remains a sense of dislocation both physically and emotionally, and disconnection from each other and within the broader community. The flood caused severe disruption to critical primary care services.

There was no support for people with physical and/or mental health priorities for both adults and children.

The trauma that the flood has caused to people's lives, the impact on their lives, their sense of self and belonging is going to take years to recover from, and in some cases, if at all.

The present is difficult and at times seemingly unbearable, and the future is unforeseeable.

It is now that the Northern Rivers and Northern Tablelands communities need to be presented options in terms of the way forward and strategies to live life daily and support them now and into the future.

A dedicated professional trauma service is required to be based in Lismore to support the community as they come to terms with the future of Lismore, and how the whole-of-government approach to the permanent recovery and rebuilding of communities across the Northern Rivers and Northern Tablelands will affect them.

New South Wales and Australian Government Grants

Some 80 separate grant programs from the NSW and Australian Government were announced across a wide spectrum for the flood-affected Northern Rivers and Northern Tablelands communities (Appendix B).

In principle, grants are welcomed. Access to the grants, however, remains difficult. There have been countless 'phone calls and written requests relating to the problematic and overly process-driven application process.

The grants rolled out by the NSW Government's public agencies to flood-affected communities and businesses have been slow and staggered. Several grants were announced by the NSW Government but the grant process and/or guidelines were not implemented nor online at the time of the announcement. In some cases, people could register their interest in a particular grant, however, they were never contacted by Service NSW. There were similarities among some grants. People were concerned that if they made an application for one type of grant, they would be precluded from making an application for the other similar grant. Several grant guidelines lacked clarity and created ambiguity for people.

There have been numerous occasions when people made applications for a grant by phone that their personal profile information and specific circumstances were not recorded, retained or available across the numerous and various grant programs.

People are being contacted multiple times and repeatedly asked for information that they had already provided, causing continued traumatisation for them.

Grants were not prepared prior to flood and nor were they tested. It is not difficult from a public policy perspective and it didn't happen. It appears that neither the NSW or Australian governments nor their public agencies pilot test public policy prior to implementation. The current policy regarding application, applicability and fraud requires review and further development.

When fraud and scams are reported to the NSW Police, they can undertake an investigation. NSW Police were not involved at the start and there has been delay in processing applications for grants because the relevant NSW public agencies did not alert the NSW Police earlier to establish the necessary systems and policies.

Flood recovery rental support statistics and fraud

Commenced on 14 March 2022, there are numerous reports that unscrupulous individuals are fraudulently accessing grants by stealing the identities of bona fide applicants. The NSW Government advised as of 31 May 2022 that there are 758 applications that are under fraud review as of 16 May 2022. It advised that 10,937 applications were received for rental support payments. From the number of applications received 85 applications have been approved and 1,652 paid. 7,399 applications have been rejected.

From 10,937 applications for rental support payments, 1,801 applications are undergoing assessment with 147 in assessment. There are 780 applications waiting for information from individuals.

Flood recovery grant for small business and medium business (the latter was too slow with coming alive and now remains fraught)

Commenced on 9 March 2022, there are numerous reports that unscrupulous individuals are fraudulently accessing grants by stealing the identities of bona fide applicants.

The NSW Government advised that there are 713 applications that are under fraud review as of 31 May 2022. It has also advised that 16,102 applications for flood recovery grants for small businesses were received. From the number of applications received 471 applications have been approved and 2,673 paid. 8,156 applications have been rejected.

Of 17.519 applications for flood recovery grants for small businesses, 3.398 applications are undergoing assessment with 242 in assessment. There are 2,442 applications waiting for information from individuals. 9,628 applications had been rejected.

Rural Assistance Authority special disaster grant

Since 4 March 2022, the NSW Government advised as of 31 May 2022 that 2,777 applications were received for the Rural Assistance Authority special disaster grant. Of the number of applications received, 1,159 applications were completed i.e. approved or rejected. 887 payments have been made.

Grant eligibility and applicability

I have written elsewhere that the application for grants is problematic and overly process-driven. There is no "onestop shop" where Northern Rivers and Northern Tablelands communities, including businesses, can visit to find out whether they are eligible for a specific grant/s and make application for them.

Grants have been made available by the NSW Government, Australian Government, non-government organisations and the corporate sector. As a result of this hybrid and convoluted grants eligibility and application process there have been, and continues to be, an average of over 100 'phone calls every few days to the Lismore Electorate Office. In numerous cases, my staff have become case managers because Service NSW and the National Recovery Resilience Agency are not located in the same physical location.

The grant eligibility and applicability are not commensurate with what is needed or expected.

For instance, business grants should be paid upfront as a business loan and upon acquittal written off as a grant.

Commercial landlords

There needs to financial support packages to better help Northern Rivers and Northern Tablelands commercial landholders rebuild from the 2022 flood. Landlords affected by the floods who are under-insured or uninsured find themselves unable to access sufficient funding or support and are being hindered from being able to rebuild and reopen their premises after the flood.

Commercial landlords appear to not be eligible for any grants or funding.

In late March 2022, I attended a meeting organised Business NSW to identify the specific needs of commercial landlords in the region, from which a raft of urgent recommendations went to the Director of Regional NSW and the NSW Government.

There is still an imperative that the NSW Government instills business and landholder confidence and provide financial and coordination assistance to secure safe and habitable commercial premises by implementing the following initiatives:

- Retaining anchor businesses, both national and local.
- Communicating the vision and timeframes for any changes that impact investment, for example, relocations, buy backs and planning or regulatory requirements.
- Getting serious about an insurance scheme that protects businesses and landlords in future events.
- Establishing a team that will lead the longer-term recovery and reimagining of the city (Lismore) to ensure an integrated approach with the CSIRO report and other proposals/reports.
- Unlocking current funding support for landlord access to assist with upcoming rates for landlords with no rental income.
- Creating new funding support packages to enable faster repairs to building infrastructure.
- Establishing a coordinated approach to works/trades/materials that can be shared and funded to reduce the overall financial impact of the weather event.

Grants for farmers

There are a number of grants and services that are available from the NSW Government and Australian governments and non-government organisations. See Appendix A.

The application process for rural assistance for farmers provided by NSW Rural Assistance Authority requires review.

It is impractical and unrealistic for primary providers to be advised when making application for the replacement of fencing on their properties that it might take up to three months for the grant to be approved, if at all.

The NSW Government needs to do more to get flood relief to local farmers.

We are in a rural area and our local primary producers are critical to the local economy, but they are not getting the flood relief they need, and some are not able to access any support for their farm business at all. There are two issues that must be addressed to help get farmers back on their feet.

- 1. Off-farm income rule does not recognise the nature of farming in the Northern Rivers and Northern Tablelands that farmers are ineligible if they make more than 50 percent of their income off farm.
- 2. At least half of the \$75,000 Primary Producer Grant should be available up front, so that farmers can get access to the funds they need to get going. Currently, at \$15,000.

I successfully advocated for more up-front funding for small business and the same needs to happen with the primary producer grants. A small success so far. Timing is critical in rural industries and farmers tell me the delays are causing stress and taking a toll on mental health.

I have asked the NSW Minister for Agriculture to discuss with his Federal counterpart whether there is scope to review both of these existing guidelines which make it harder for our primary producers to access muchneeded financial assistance.

Flood mitigation

I requested expert advice on possible flood mitigation strategies. While some advice is presented below, there is more to come and be had. There is an NRRA-CSIRO study underway, but it remains opaque in its scope of works, and it has not met the terms of reference. The new Minister has assured that we have the scope of work for the Terms of Reference. When it was announced by the former Federal Government it was said that the "debate is over". Complete nonsense of course the debate is not over. I have welcomed the CSIRO study as I did when the then NSW Minister responsible for water, sensibly announced she was getting them to review the Far North Coast Rivers Water Strategy which is now a public report. I requested independent advice of flood mitigations strategies. The options I got so far but there are many more options that have been put to me.

Option 1: Revert to pre-2022 flood. Business as usual.

Issue: No economic investment, stagnant population growth.

Consequence: Government becomes the insurer, uncertainty: no incentive for the private sector to invest, property values, mental health, stagnation.

Cost: The ongoing expense to all levels of government. The ongoing increase in insurance and operation costs for the private sector.

Option 2: Revert to pre-2022 flood. Flood mitigation engineering.

Issue: Engineering solutions are viable, insurance, and economic uncertainty.

Consequence: Lack of integrated planning, no economic growth, stagnant population growth.

Cost: Over time loses focus, inconsistent funding, and support from the government and community.

Option 3: Planned new Lismore, and staged relocation.

Issue: Leadership, commitment to ongoing funding, master plan, and pathway.

Consequence: Will drive economic activity; create certainty, insurable assets, and community vision.

Cost: The one-off commitment of funds would create economic drivers for the whole region.

Levees

The Wilsons River and its major tributary Leycester Creek, which joins right in the city centre, have a relatively small cross-sectional area between their narrow banks, and their riverbed cross-sections are even smaller. The floodplain, during major floods, however, is many kilometres wide, its cross-section conveying a huge volume of water at these high velocities. Even large aeroplanes, shipping containers, full water tanks, and very heavy steel objects can be washed away down the river at these times, as witnessed recently.

The existing small levee partially protects the CBD area under moderate floods. Using levees to protect all three areas of central Lismore, South, and North Lismore under large flood situations, like February 2022, is almost impossible. Any future levee would have to cater for flood levels over 15-16 m AHD otherwise potential overtopping could create catastrophic damage and a further false sense of security. In many places, there is not the physical space to construct the very high levees required to protect against these major floods. Water from the large local catchments behind the levees must be pumped into the river, with power outages creating potential problems. The length of required levees is many kilometres along all banks of the Wilsons River and Leycester Creek.

The huge volumes of water and higher predicted flood levels mean that there is an insufficient cross-sectional area within levee walls, which pushes water levels higher, making the required levee height even greater. Also, as we have recently seen, if a levee is overtopped, the velocities and sudden huge volumes can create further unnecessary damage, e.g. tightly embedded paving bricks in the footpath of the CBD were ripped out and washed away. Levees can also exacerbate flooding in other areas, upstream or downstream of Lismore.

Dredging and flood channels

Dredging the riverbed will have negligible benefit due to the small cross-sectional area of the bed about the wide floodplain. For the same reason, building flood channels provides limited benefits, even if suitable locations can be found for such channels. The flow capacity of such channels is considered to be insufficient, at these peak flood events to make a meaningful difference to flood levels.

Dams

The catchment north of Lismore is drained by many streams starting in the Nightcap Range bordering the Tweed Valley, with all converging on Lismore. The major streams are the Wilsons River and Leycester Creek which are in turn fed by many other large creeks, including Jiggi, Goolmangar, Terania, Rocky, Numulgi, Boomerang, Coopers, Stony, Byron, and Pearces Creeks. The concept of a flood mitigation dam (like Wivenhoe in Brisbane) to reduce flood levels significantly depends on locating suitable dam sites. Based on previous investigations these are rare, and such combined purpose dams would require spillway gates if these were feasible. There are so many large streams feeding floodwater to Lismore that any single dam would have minimal impact on flood levels in Lismore.

Reforestation of catchment

Even if it were possible, the impact on the peak flood levels in Lismore is minor.

Conclusion

The lack of preparedness followed by the lack of coordination had devastating consequences. This state of affairs must never be repeated. Some people have said that we need to stop the flooding. I understand the sentiment and agree. We mitigate where we can. All of the evidence to date indicates that we cannot totally mitigate or engineer our way out of this.

I have stood in absolute solidarity with my community. I know that when we help each other our community strength and spirit is there for all to see. We need State and Federal governments to help with the monumental task which lies ahead of us. If we adopt an inclusive approach which draws everyone in, together we can do this.

We must prepare based on known and potential risks, and adapt accordingly. Risk has been something missing in our emergency management and disaster preparedness.

We will move from these extreme conditions. We now need to start the discussion on how all of the Northern Rivers will be reimagined, where we need to.

We can transform the Northern Rivers that has been devasted by the catastrophic floods and make Lismore, other cities and villages sustainable.

We can do better

We must do better.

We must build back better!

Member for Lismore media releases relating to Northern Rivers floods between June 2019 and June 2022

Media releases that I have issued advocating for our local communities relating to floods & other disasters.

- Saffin seeks review of \$75,000 Primary Producer Grant guidelines (July 2022)
- Saffin calls on NSW Government to act on housing crisis (July 2022)
- Lismore Square reopening a milestone for city's rebuild: Saffin (July 2022)
- Commercial, residential landlords need help to build back better (July 2022)
- Saffin seeks expansion of Washing Machine Replacement Program (June 2022)
- 'Build back better' demands a strategy, funding & empathy (June 2022)
- Saffin renews call for State rescue package for Norco's factory (June 2022)
- NSW Budget lags behind QLD's billions for flood recovery (June 2022)
- Dine and Discover vouchers extension to aid our flood recovery (June 2022)
- Flood-impacted ratepayers set to have rates waived in 2022-2023 (June 2022)
- Saffin welcomes broader access to back home grants
- Investing in future proofing our water and sewerage; showgrounds (June 2022)
- Rural Financial Counselling Service extended for 3 years (May 2022)
- Funding will help artists get started again (May 2022)
- Public school teachers urged to apply for flood funding now (May 2022)
- Government must do more to help farmers access flood grants (May 2022)
- Saffin seeks \$7.5 million for Lismore townhouse developments (May 2022)
- \$55-million Fund a welcome boost for sports: Saffin (May 2022)

- 2022 Community Building Partnership Program now open (May 2022)
- Initial flood disaster assistance available (March 2022)
- Prime Minister's Queensland housing package needed in Northern Rivers (April 2022)
- Artists should apply now for recovery grants for creatives (March 2022)
- Saffin asks locals to make submission to Flood Inquiry (April 2022)
- Welcome boost to legal service for flood recovery (April 2022)
- Apply for early childhood education & care flood grants (May 2022)
- Northern Rivers needs a flood reinsurance scheme now (May 2022)
- Boots on the ground a welcome service for our community (May 2022)
- Local communities must be front and centre of Reconstruction (May 2022)
- Saffin updates Premier on region's flood mitigation priorities (May 2022)
- \$55-million fund a welcome boost for sports: Saffin (May 2022)
- Temporary housing sites across the northern rivers to support flood-affected locals (April 2022)
- Saffin asks locals to make a submission to Flood Inquiry (April 2022)
- Why we need a reconstruction commission (April 2022)
- Governments must respond to enormity of national disaster (April 2022)
- Still no details on Premier's housing taskforce (March 2022)
- All rebuild options (March 2022)
- Saffin says Lismore needs urgent support for temporary and longer term housing (March 2022)

- Saffin wants flood mitigation package for Northern Rivers (9 December 2021)
- Saffin's input helps drive regional city focus for Lismore (13 September 2021)
- Saffin urges local communities to apply for \$250-million Bushfire Local Economic Recovery (BLER) Fund – now opening up (July 2021)
- Saffin, Moriarty host Mental Health Forum in Lismore (July 2021)
- Saffin puts flood protection firmly on the agenda (July 2021)
- Tapping into \$10M COVID Recovery funding not easy (December 2021)
- NSW Labor will keep Murwillumbah's schools open (December 2021)
- Saffin welcomes disaster assistance for our Electorate (July 2021)
- Saffin seeks \$25-million roads package for Lismore City Council (31 January 2021)
- Government fails Murwillumbah East on rebuild from 2017 flood (July 2020)
- Barilaro and Mitchell must consult with local school communities on \$100-million Murwillumbah Education Campus: Saffin (October 2020)
- Saffin puts flood protection firmly on the agenda (November 2020)
- Keep fighting for the people in challenging times (March 2020)
- Volunteer groups and organisations can apply for a new grant to help them prepare for natural disasters like floods and bushfires (June 2019)

Flood relief and support programs for the Northern Rivers

Purpose	Web link	Jurisdiction
Emergency financial support for people affected by floods finding personalised financial support by using the Disaster Assistance Finder to find support available to you.	Disaster Assistance Finder (nsw.gov.au)	State
Northern Rivers Community Legal Centre will receive a funding boost to deliver critical legal services to people recovering from the flood crisis.	Legal services funding for flood victims NSW Government	State
Rental support packages and temporary housing if you need short-term accommodation support,	Emergency financial support for people affected by floods NSW Government	State
Back Home grants	Get notified about the flood recovery Back Home grant Service NSW	State
Disaster Recovery Payment if your home has been severely damaged or destroyed, or you've been seriously injured.	How to claim the NSW Floods, February 2022 - Australian Government Disaster Recovery Payment - NSW Floods, February 2022 - Australian Government Disaster Recovery Payment - Services Australia	Federal
Emergency accommodation is available to people who have had their homes affected by the February and March 2022 loods.	Access this accommodation by visiting a recovery centre or by calling 13 77 88	State
emporary accommodation: NSW Department of Planning and Environment have further information on the policy and egislation in NSW for people who have been impacted by natural disaster.	Temporary accommodation - (nsw.gov.au)	State
Disaster Recovery Allowance short-term income assistance (up to 13 weeks) if you've lost income as a direct result of he floods.	How to claim the NSW Floods, February 2022 - Disaster Recovery Allowance - NSW Floods, February 2022 - Disaster Recovery Allowance - Services Australia	Federal
Disaster Relief Grant if your home or essential household items have been destroyed or damaged by a natural disaster.	Disaster Relief Grant for individuals NSW Government	State
Property assessment and demolition program offers free structural assessments, demolition and waste removal for properties damaged by floods.	Register for the flood recovery Property Assessment and Demolition (PAD) program Service NSW	State
Bereavement grant to support senior next-of-kin of those who died as a direct result of the floods, and who have mmediate needs such as funeral and other related expenses.	NSW and QLD floods grants 2022 Australian Red Cross	NGO
Help with basic needs such as food, clothing or personal items for people whose primary place of residence was affected by the floods and who are experiencing financial hardship as a result.	NSW and QLD floods grants 2022 Australian Red Cross	NGO
Additional Child Care subsidy for extra help with the cost of approved child care.	The Temporary Financial Hardship additional child care subsidy - Additional Child Care Subsidy - Services Australia	Federal
Replacement ID, licences and personal documents you will need to provide identification when applying for financial assistance. If these have been lost or damaged in the floods, you can apply for new documentation.	Identification, licences and personal documents Service NSW	State
Early access to superannuation in limited circumstances in which you may be able to access your superannuation early such as early access on compassionate grounds.	Early access on compassionate grounds Australian Taxation Office (ato.gov.au)	Federal
Help from banks and businesses have announced options to defer loan repayments launch for up to 3 months for customers affected by floods in NSW. Additionally, some banks are offering small business customers in NSW from flood-impacted postcodes cash grants of up to \$3000 launch or grants of up to \$10,000 launch to help with expenses and repairs.	Banks offer flood victims a financial lifeline - Australian Banking Association (ausbanking.org.au) Westpac Group announces \$2 million fund to support flood impacted small businesses Westpac	Corporate

	CommBank Flood Relief	
Help from other businesses: telephone and internet service providers are offering relief for customers affected by floods. You can apply by filling out a form with Telstra launch, Optus launch, or contact your provider to find out more.	Request disaster assistance for mobile (telstra.com.au) Customers impacted by floods in QLD & NSW (optus.com.au)	Corporate
Insurance Council of Australia: some insurers are fast-tracking claims for people in financial hardship.	What to do when you return to your property after flood - Insurance Council of Australia	Corporate
Grants for flood-affected businesses in disaster-declared Local Government Areas are eligible for financial support. You can get face-to-face advice at recovery centres for information about accessing this support.	Flood recovery centres NSW Government	State
Small business grants is available to help with the costs of clean up and reinstating operations. You must be a small business or not-for-profit in a defined disaster area to be eligible. The grant has a maximum payment of \$50,000.	Apply for the February and March 2022 storm and flood disaster recovery small business grant Service NSW	State
Help from banks and businesses have announced options to defer loan repayments launch for up to 3 months for customers affected by floods in NSW. Additionally, some banks are offering small business customers in NSW from flood- mpacted postcodes cash grants of up to \$3000 launch or grants of up to \$10,000 launch to help with expenses and repairs.	Banks offer flood victims a financial lifeline - Australian Banking Association (ausbanking.org.au) Westpac Group announces \$2 million fund to support flood impacted small businesses Westpac CommBank Flood Relief	Corporate
Help from other businesses: telephone and internet service providers are offering relief for customers affected by loods. You can apply by filling out a form with Telstra launch, Optus launch, or contact your provider to find out more.	Request disaster assistance for mobile (telstra.com.au) Customers impacted by floods in QLD & NSW (optus.com.au)	Corporate
Insurance Council of Australia: some insurers are fast-tracking claims for people in financial hardship.	What to do when you return to your property after flood - Insurance Council of Australia	Corporate
Grants for flood-affected businesses in disaster-declared Local Government Areas are eligible for financial support. You can get face-to-face advice at recovery centres for information about accessing this support.	Flood recovery centres NSW Government	State
Small business grants is available to help with the costs of clean up and reinstating operations. You must be a small business or not-for-profit in a defined disaster area to be eligible. The grant has a maximum payment of \$50,000.	Apply for the February and March 2022 storm and flood disaster recovery small business grant Service NSW	State
Help from banks and businesses have announced options to defer loan repayments launch for up to 3 months for customers affected by floods in NSW. Additionally, some banks are offering small business customers in NSW from flood- impacted postcodes cash grants of up to \$3000 launch or grants of up to \$10,000 launch to help with expenses and repairs.	Banks offer flood victims a financial lifeline - Australian Banking Association (ausbanking.org.au) Westpac Group announces \$2 million fund to support flood impacted small businesses Westpac CommBank Flood Relief	Corporate
Help from other businesses: telephone and internet service providers are offering relief for customers affected by floods. You can apply by filling out a form with Telstra launch, Optus launch, or contact your provider to find out more.	Request disaster assistance for mobile (telstra.com.au) Customers impacted by floods in QLD & NSW (optus.com.au)	Corporate
Insurance Council of Australia: some insurers are fast-tracking claims for people in financial hardship.	What to do when you return to your property after flood - Insurance Council of Australia	Corporate
Grants for flood-affected businesses in disaster-declared Local Government Areas are eligible for financial support. You can get face-to-face advice at recovery centres for information about accessing this support.	Flood recovery centres NSW Government	State
Small business grants is available to help with the costs of clean up and reinstating operations. You must be a small business or not-for-profit in a defined disaster area to be eligible. The grant has a maximum payment of \$50,000.	Apply for the February and March 2022 storm and flood disaster recovery small business grant Service NSW	State
Property demolition grants for business will be available to insured and uninsured owners of property to get free structural assessments, demolition and waste removal.	Register for the flood recovery Property Assessment and Demolition (PAD) program Service NSW	State
Clean-up and recovery grants for businesses are now available to businesses in disaster-declared LGAs. These grants support with removal of debris and cleaning up flood-impacted businesses.	Floods financial grants: your questions answered NSW Government	State
Support for industry, primary producers and councils. There is a primary industry support package to assist a range of ndustries, organisations and producers impacted by floods.	Floods financial grants: your questions answered NSW Government	State
Disaster relief loans for small businesses, not-for-profits and sporting clubs may be eligible for concessions	Special Disaster Grants – NSW Severe Weather & Flooding February 2022 onwards	State
mmediate tax relief for flood-affected communities in flood-affected areas will be provided with any additional time they need to meet any upcoming business activity statement obligations.	ATO here to help NSW and QLD communities affected by March floods Australian Taxation Office	Federal
Northern Rivers business support like food processing, tourism and manufacturers in the Northern Rivers will receive a range of different support based on their business size.	New support package for northern NSW NSW Government	State

	Floods financial grants: your questions answered NSW Government	
Small Business Northern Grant of \$10,000 grants for small businesses and not-for-profit organisations that are ineligible for other grants.	Storm and flood customer care service Service NSW	State
Legal support: free legal help through Disaster Response Legal Service NSW	Disaster Response Legal Service NSW	Sate
Rural Landholder grants up to \$25,000 are available for eligible landholders and oyster farmers impacted by storms and floods from 22 February 2022 and who are not eligible for existing support.	Rural Landholders Grant - 22 February 2022 onwards (nsw.gov.au)	State
Farm investment loan: Primary producers who mainly sell, or plan to sell, products in supply chains that are interstate or outside Australia may be eligible for loans of up to \$2 million	Farm Investment Loan - Regional Investment Corporation (ric.gov.au)	Federal
SafeWork quad bike and side-by-side vehicle rebate: if you own or operate a farm or a business that uses quad bikes or a side-by-side vehicle (SSV), you may be eligible for a rebate up to \$2,000	Quad bike and SSV rebates SafeWork NSW	State
NAB business grant : if you're an existing NAB business and agribusiness customer impacted by floods and storms, you may be eligible for a grant of up to \$1,000 to restart or reopen, cover the cost of damaged property, equipment or fencing, and for loss of stock or livestock. Other assistance, such as concessional credit card and loan applications, may also be available.	NAB extends \$1,000 grants to customers impacted by northern NSW floods - NAB News	Corporate
Westpac disaster relief: If you're an existing Westpac small business customer impacted by floods and storms, you may be eligible for a grant of up to \$3,000 to help with urgent expenses or repairs.	Westpac Group announces \$2 million fund to support flood impacted small businesses Westpac	Corporate
Storm and flood industry recovery program supports NSW primary industries as they recover from the February and March 2021 storms and floods.	Storm and Flood Industry Recovery Program NSW Government	State
Transport subsidies for farmers: a natural disaster transport subsidy is available to primary producers who are affected by a declared natural disaster event.	Natural Disaster Transport Subsidy (nsw.gov.au)	State
Recovery connect: brings together services and supports from charities, organisations and government directly to you. This assistance helps people prepare for and recover from disasters and major natural events.	Recovery Connect Home (serviceconnect.gov.au)	Federal
Flood support including financial support for families, individuals, primary producers and small businesses in the immediate aftermath of a flood; health support for individuals and families including mental health and telehealth services; future resilience against floods for families, individuals, primary producers and small businesses; a Recovery Support Officer who can assist you with things like filling out forms and finding what support is available in your area.	Recovery Connect Flood (serviceconnect.gov.au)	Federal
Flood Relief for women impacted by floods, includes clothing packages for women impacted by floods, locations serving meals, offering meal packs and/or vouchers, laundry services, access to clothing, and other essential items and services as a result of a disaster.	Style Delivered Request – Dress for Success Career Hub (dfscareerhub.org.au)	NGO
Flood recovery support for landholders affected by floods to rebuild and recover. Specialist advice and online resources are available for a range of areas including post-flood horse & livestock care, pasture management, cropping information and soil health. Additional information for flood-affected landholders can be found on the website including links to information about grants for flood & storm assistance, emergency flood planning, current storm & flood advice and surface & groundwater management, services to help fix fences, rain water tanks, sheds and other structures on residential land and small business real estate, rebuild and reconstruction work, and revegetation	Floods - Website - Local Land Services (nsw.gov.au)	State
Animal welfare support including rescue, evacuation, emergency care of livestock and livestock welfare for primary producers affected by floods, animal shelters for displaced or rehomed animals and livestock during a disaster	Floods - Website - Local Land Services (nsw.gov.au)	State
Farm household allowance is a payment and grants for farming families in financial hardship, regardless of the cause of hardship	Recovery Connect Farm Household Allowance (serviceconnect.gov.au)	Federal
Farm Management deposits scheme is designed to enable primary producers to deal with uneven income flows by making deposits during prosperous years and receiving repayments during less prosperous years, includes payments and grants	Recovery Connect Farm Management deposits (serviceconnect.gov.au)	Federal
Low-interest loans: farmers can apply for farm investment loans and drought loans up to \$2 million to prepare for, manage through or recover from drought, including financing needs such as purchasing feed and fodder, through the Regional Investment Corporation.	Recovery Connect Low-interest loans (serviceconnect.gov.au)	Federal
Recovery Support Officers ensure farmers, businesses, families and individuals in affected areas are aware of Australian Government support and services, how to access them, and receive the correct information and advice to suit their individual needs, including payments and grants available as a result of a disaster, and financial counselling services.	Recovery Connect Recovery Support Officers (serviceconnect.gov.au)	Federal
Regional Weather and Climate Guides provide localised facts about the likelihood, severity and duration of key weather variables in regions across the country.	Recovery Connect Regional Weather and Climate Guides (serviceconnect.gov.au)	Federal

Rural Financial Counselling Service - Northern Region - Casino NSW is a free, independent, professional planning and support service for farmers, fishers, forest growers and harvesters and related small business owners who are suffering financial hardship. The RFCS can also but farmers and graziers in touch with trusted advocates that can provide appropriate personal counselling	Recovery Connect Rural Financial Counselling Service - Northern Region - Casino NSW (serviceconnect.gov.au)	Federal
Emergency Relief – Lismore includes locations serving meals, offering meal packs and/or vouchers, laundry services, access to clothing, and other essential items and services as a result of a disaster	Lismore Regional Mission Uniting Church – Uniting Church in the Lismore region (wordpress.com)	NGO
Emergency Relief – Goonellanah is available for individuals and families experiencing disadvantage. Aid includes food parcels, food vouchers, travel vouchers, petrol vouchers, clothing, blankets, fumiture and financial assistance for paying household bills.	Recovery Connect Emergency Relief - Goonellabah NSW (serviceconnect.gov.au)	NGO
Lismore Community Pantry distributes material aid in the form of food parcels to families and singles on low incomes.	Welcome to Community Gateway - Community Gateway (nrcg.org.au)	NGO
Aussie Farmers: Family and Emotional support for farming families across Australia, includes crisis, grief and trauma counselling, family and domestic violence counselling, and other support for individuals and families.	Aussie Helpers Feed A Farmer - Aussie Helpers	NGO
Blanket Patrol distributes material aid in the form of toiletries, blankets, sleeping bags, clothing and assorted essentials for people in need ncluding the homeless people and disadvantaged families & individuals in New South Wales. Material aid is also distributed in times of need to people impacted by natural disasters including bushfires, floods, drought, storms and earthquakes. Includes locations serving meals, offering meal packs and/or vouchers, laundry services, access to clothing, and other essential items and services as a result of a disaster.	blanketpatrol@gmail.com Phone 0460 410 355	NGO
BlazeAid works with families and individuals in rural Australia after natural disasters. Working alongside the rural families, our volunteers help to rebuild fences and other structures that have been damaged or destroyed, includes animal shelters for displaced or rehomed animals and ivestock during a disaster.	BlazeAidimn volunteers rebuild fences after fires, floods, drought and cyclones. BlazeAid helping communities rebuild after Natural Disasters.	NGO
Disaster Inquiry Centre an inquiry service for people concerned about the whereabouts, safety and well-being of family or friends during disasters such as bushfires, floods and storms. The twenty-four-hour free call number is activated during times of disaster and emergency, ncludes crisis, grief and trauma counselling, family and domestic violence counselling, and other support for individuals and families.	Act for humanity Australian Red Cross	NGO
Drought Angels provide direct and timely financial assistance, essential resources and meaningful relief for Primary Producers, their families and communities across Australia impacted by drought and natural disasters, includes services and supports for businesses and farms, such as grants, rebates, counselling, government support, and workplace relations advice.	Supporting Aussie Farmers & Their Communities - Drought Angels	NGO
Emergency Relief Assessment: clothing, food parcels, food vouchers, vouchers or financial aid. The caller's situation is assessed by qualified staff via the centralised telephone centre. When the telephone assessment is completed, the caller is referred to one of the Salvos Connect Community Centres. The pre-approved material aid can be collected as well as, if applicable, attending appointments and connecting with Salvation Army events in the local area.	Recovery Connect Emergency Relief Assessment - NSW (serviceconnect.gov.au)	NGO
Family Assistance Hotline: A central assistance hotline for individuals and families experiencing financial hardship. The call centre staff forward the request for assistance to a volunteer member who will then make a home visit and provide the relevant assistance. Emergency relief may be given in the form of food parcels, food vouchers, and assistance with utility bills, clothing and fumiture. Information and referral are also available. The assistance given is based on the assessment conducted by the volunteer member at the time of the home visit.	Recovery Connect Family Assistance Hotline - NSW (serviceconnect.gov.au)	NGO
Financial and material support: a wide range of financial assistance and material aid support services for disadvantaged individuals and families. Aid includes food parcels, clothing, fumiture, fuel vouchers, assistance with the paying of household bills and no-interest loans. Support is provided through a network of local Vinnies volunteer members across New South Wales.	Recovery Connect Financial & Material Support - NSW (serviceconnect.gov.au)	NGO
NSW Farmers' Natural Disaster Relief Fund provides financial assistance, goods or services to help primary producers adversely affected by flooding so they can continue to operate their farms.	Recovery Connect NSW Farmers' Natural Disaster Relief Fund (serviceconnect.gov.au)	NGO
Outback Links provide practical support when it's needed most. This could include anything from care taking to property maintenance, gardening to painting or perhaps general farm support is what's needed most.	Recovery Connect Outback links - NSW (serviceconnect.gov.au)	NGO
Psychological First Aid helps to care for and support the wellbeing of people affected during and after natural disasters such as bushfires, cyclones, floods, drought and storms by providing psychological first aid at evacuation, relief & recovery centres, through telephone & physical outreach and at events. Psychological first aid is a psychosocial support activity that helps people affected by an emergency, disaster or raumatic event. It includes basic principles of psychosocial support to promote natural recovery. This involves helping people feel safe, connected to others, calm & hopeful, and ensuring access to physical, emotional & social support.	Recovery Connect Psychological First Aid (serviceconnect.gov.au)	NGO
Rural Adversity Mental Health Program is committed to supporting the mental health and wellbeing of farmers, their families and drought- affected (and flood) communities.	Recovery Connect Rural Adversity Mental Health Program - NSW (serviceconnect.gov.au)	NGO
Rural Aid provides a number of support programs for rural Australia. The charity provides financial assistance, water and counselling to farmers in times of drought, flood or fire. Other initiatives support its vision that farming and rural communities are safeguarded to ensure their	Recovery Connect Rural Aid (serviceconnect.gov.au)	NGO

sustainability both during and after these natural disasters. These programs provide a range of support services from provision of animal feed, ash handouts, holidays and mental health assistance, education assistance and technology.		
Rural and Remote Emergency Medical and Primary Health Care Services: The Royal Flying Doctor Service is one of the largest and nost comprehensive aeromedical organisations in the world, providing extensive primary health care and 24-hour emergency service to people over an area of 7.69 million square kilometres.	Recovery Connect Rural and Remote Emergency Medical and Primary Health Care Services - NSW (serviceconnect.gov.au)	NGO
Hospital Services acute medical and surgical public hospital services offer inpatient and outpatient treatment including cardiology & cardiac ehabilitation, neurology, oncology, obstetrics, maternity & neonatal, paediatrics, pathology and radiology services and an Aged Care Services n Emergency Team (ASET). After-hours emergency casualty services are available.	Recovery Connect Hospital Services - Lismore NSW (serviceconnect.gov.au)	State
Flood Recovery Support provides support for landholders affected by floods to rebuild and recover. Specialist advice and online resources are available for a range of areas including post-flood horse & livestock care, pasture management, cropping information and soil health.	Recovery Connect Flood Recovery Support - Lismore NSW (serviceconnect.gov.au)	State
Nobile Service Centre provides financial assistance and information about disaster recovery payments for those impacted. Staff help people access disaster recovery assistance and payments as well as access Centrelink, Medicare and Child Support services.	Recovery Connect Mobile Service Centre - Lismore - NSW (serviceconnect.gov.au)	State
Financial First Aid Line provides information and support for individuals, families and groups of consumers who are experiencing debt problems. Advice on debt management, negotiating with creditors and budgeting is provided. Information on bankruptcy, credit laws and povernment assistance is also available. Counsellors may liaise and consult with creditors when required.	Recovery Connect Financial First Aid Line (serviceconnect.gov.au)	NGO
Strengthening Rural Communities aims to give the thousands of small rural, regional and remote communities across Australia an apportunity to access funding to support broad community needs.	Recovery Connect Strengthening Rural Communities (serviceconnect.gov.au)	State
Farm Business Resilience Program to help farmers, farm managers and their employees prepare for and manage risk, adapt to a changing dimate and improve their business' economic, environmental and social resilience. This is a chance to get your farm headed in the right direction and creating the future that you want. Farmers will receive an expert coach who works with them and helps with their farming business, people and anything else that pops up.	Recovery Connect Farm Business Coaching - NSW (serviceconnect.gov.au)	State
bod Business Support : Lismore City Council's Economic Development team are here to support business throughout the ood recovery process. The team is a conduit to help business owners and operators find what they need in order to ecover and rebuild. Knowing this flood has affected everyone differently, we are here to support you though anything usiness related from accessing grant funding, filling out forms, get the right referral advice, working through insurance, eferrals to wellbeing support and general council matters. For business support or referral advice, please contact the eam at business@lismore.nsw.gov.au or call 02 6625 0500.	Flood 2022 Information – Lismore City Council (nsw.gov.au)	Local
tesilient Lismore is a collaborative community-run disaster response network, has set up a website for local businesses o request help from volunteers.	Flood Help Northern Rivers (floodhelpnr.com.au)	NGO
lood Alert SMS registration: to receive official flood SMS alerts please enter your mobile phone number below. All other formation is optional. There is no cost to receive SMS flood alerts. Your provider may charge you to access some SMS ervices. Council will still provide its usual road closure information at www.livetraffic.com.	Flood Alert SMS Registration – Lismore City Council (nsw.gov.au)	Local
Hood-impacted arts and cultural organisations, individual artists and collaborative groups in NSW can now apply o access funding to support the immediate recovery of arts and cultural activities in their communities	www.create.nsw.gov.au	State
Support available for flood-impacted students and teachers: Financial support is now available for school communities mpacted by the major flooding events in the Northern Rivers with access to up to \$1000 for teachers and \$500 for students o replace education materials. Non-teaching school staff are also eligible for grants of up to \$500 The financial support for staff will be available until 30 June 2022, while families will be able to access their funds through the remainder of the 2022 and 2023 school years.	www.nsw.gov.au/floods/financial-support	State

As of 30 May 2022

Representations made to the Minister for Emergency Services and Resilience, and Minister for Flood Recovery Relating to flood gauges

From: Harry Gregg

Sent: Wednesday, 30 March 2022 4:45 PM Subject: FW: My email to my contact in Manly Hydrology Lab

Hi Kit,

Please see the below email expressing concern about rain gauges. Could you direct who would be the best person to send this through to so they can consider this? Many thanks, Harry Gregg JP Electorate Officer Office of the State Member for Lismore

55 Carrington Street PO BOX 52 Lismore NSW 2480 P. E. W. www.janellesaffin.com.au

Janelle Saffin MP
MEMBER FOR LISMOREImage: Construction of the second s

COVID 19 statement:

My Electorate Office has implemented proper protocols to ensure we comply with the Public Health Orders issued by government in relation to managing the COVID-19 risk.

These protocols apply to my staff, local constituents and visitors to my Electorate Office. Meetings are being done by various means such as Zoom, Webex, Face Time, Messenger and telephone or whatever is suitable.

Please be understanding. Myself and my team (permanent Harry, Elisa, Carmel and Peter) (casual Lee) will do our best to make sure that everyone's needs are responded to and Electorate Office services are maintained, to help all in this unique time of COVID.

NOTICE – This email is solely for the named addressee and may be confidential. You should only read, disclose, transmit, copy, distribute, act in reliance on or commercialise the contents if you are authorised to do so. If you are not the intended recipient of this email, please notify the sender by email immediately and then destroy any copy of this message. Except where otherwise specifically stated, views expressed in this email are

those of the individual sender. The New South Wales Parliament does not guarantee that this communication is free of errors, virus, interception or interference.

From:

Sent: Wednesday, 30 March 2022 4:16 PM To: Janelle Saffin Cc:

; ElectorateOffice Lismore <<u>ElectorateOffice.Lismore@parliament.nsw.gov.au</u>>

Subject: My email to my contact in Manly Hydrology Lab

Hi Janelle,

I'm forwarding this to you so you can see our thinking re management of the creek gauges.

I will be sending you a letter soonish about the need for urgent restoration of the creek and rain gauges, in the hope that state authorities can take charge of this and expedite it in the next 2 weeks.

I am really worried that La Ninja has not finished with us, and we now have even less gauges than we had a month ago. warm regards,

Begin forwarded message:

From:

Subject: Thankyou - and seeking further information

Date: 30 March 2022 at 1:51:09 pm AEDT **To:**

Thank you

Of all the organisations I have spoken with, you have been the most helpful.

The rain has at last eased off for now. But poor Lismore. And in the rural areas all recent work on roads & creek crossings has been destroyed. We're back to square one.

We are launching a citizen science project, prompted by the discovery that the creek gauges on Terania Creek at The Channon were not repaired after the 2017 flood disaster.

Please see this video of the state of this gauge one month after the mega flood and just before the current one began.

https://www.dropbox.com/s/mwzofuw7f3togvg/220328%20Creek%20Gauge_Channon%20copy%20low.mp4?dl=0

It's important that Manly Hydraulics Lab know what's going on at sites that are meant to provide data.

We now wonder how many of the creek gauges has their manual reading installations fixed after 2017, and their automatic stations calibrated. We intend to examine the manual gauges ourselves because we don't trust that anyone is really looking after these essential parts of the early warning system for Lismore. Using manual gauges, we could have provided data for The Channon and also Corndale where the automatic station was disabled last month.

A resilient system has to have redundancies.

Terania creek is very important for flood modelling - its catchment records very high rainfall at times - during 2017 a reliable local recorded >700mm. During the recent mega flood another reliable informant measured 930mm in 18 hours before his rain gauge overflowed. You are no doubt very aware that flood modelling for Lismore was wrong for 2017 and massively, *massively* wrong for 28/2/22.

I've created this spreadsheet to try to understand the opaque, confusing and inaccessible mess of who is responsible for creek gauges (The <u>WaterNSW site</u> is appalling - and seems more geared to selling water than to saving lives of people on rooftops)

We don't think this is any single person's fault but rather systemic failure, given that responsibility is shared in a messy way between agencies, and some of these agencies probably lack funds. This is not a minor problem but a systemic failure that risks the lives of thousands of people. Given that this La Ninja could run on for months, it could not be more serious.

We will probably have to extend our project to cover rain data too, seeing as BOM is showing zero rain for The Channon where I live (we got 112mm). This is dangerous misinformation, and easily remedied by writing "station not working' instead of giving zero values.

For your interest here is the spreadsheet where i've tried to understand the creek gauge system. I've only included those relevant to warning Lismore.

https://docs.google.com/spreadsheets/d/1mGfTSmkqzAMk6lh0oCca1ik8BEhFFV60GdwN3ev4jAU/edit#gid=0

Would you be able to tell me who owns???

- Leycester Creek at Rock Valley
- The number of that gauge and if it is the same one that BOM reports as 'Tuncester'
- Coopers Creek at Fairmeadow (and if it's LCC its number)
- Byron Creek at Binna Burra (presumably this is the same site referred to elsewhere as 'Nashua"?)
- Wilsons Creek at Eltham
- Wilsons Creek at Woodlawn

Photo shows the sign on the automatic creek gauge shed at The Channon. The shed is still covered in flood debris from total submersion 27/2/22.

Best wishes,

The Channon Resilience Hub and Emergency Centre

I live on Wijabal Wiyabal country, in Northern Rivers NSW



On 29 Mar 2022, at 2:43 pm, https://mhlfit.net/Publications/publications.php?content=floodreport

wrote:

Water Information Team Leader, MHL

Water | Department of Planning and Environment Manly Hydraulics Laboratory (MHL), 110B King Street, Manly Vale NSW 2093 T | M | E www.mhl.nsw.gov.au The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From:

Sent: Tuesday, 29 March 2022 2:36 PM To: Cc: Data-Request <<u>Data-Request@mhl.nsw.gov.au</u>> Subject: BoM SLS 3.13 http://www.bom.gov.au/nsw/NSW_SLS_Current.pdf

Water Information Team Leader, MHL

 Water | Department of Planning and Environment

 Manly Hydraulics Laboratory (MHL), 110B King Street, Manly Vale
 NSW 2093

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www.mhl.nsw.gov.au

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

DOCUMENT FROM OF THE CHANNON 6/04/2022:

Lismore City Council owns creek and rain gauges that provide data to the BOM. This data is important for flood modelling, emergency agencies and by businesses and the public to monitor rainfall and stream conditions.

In a document outlining responsibilities for this important data, the BOM specifies levels of priority for rain and creek gauges Stations are defined as high priority if an outage at that location makes it very difficult for flood warning accuracy, and has "*direct and significant high level impact for the site and /or downstream locations…degradation of service is highly likely*".¹ The BOM notes that multiple outages within a given network will lead to a "*higher impact and greater service degradation*".

During the March flood, <u>four</u> high priority automatic data stations were inoperable.

- The Channon gauge on Terania Creek is rated by BOM as high priority for accuracy of modeling for downstream flood risk. Rainfall and creek data is also essential to people in the Keerrong valley who use this to assess their risk, some of whom were in grave danger during the mega flood of 27/2. This gauge is apparently owned by Lismore City Council. The automatic data station at The Channon had been totally submerged during the 27/2 flood. A month after total inundation, local residents observed it still had flood debris on it. It looked like no-one had visited to service it during the previous 4 weeks. The March flood came immediately after this observation. During this second flood event the BOM showed zero data from The Channon for creek level or rainfall. There was also no BOM rain data from Terania. These failures meant there was no data on the entire Terania catchment and creek system.
- The Coopers Creek Corndale gauge is rated by BOM as high priority for accuracy of modeling for downstream flood risk. This gauge is apparently owned by Lismore City Council. Its location was subject to flooding on 27/2 and the adjacent Corndale public hall was swept downstream. During this second flood in March the BOM showed no data from this gauge.
- The Coopers Creek gauge at Repentance is rated by BOM as high priority for accuracy of modeling for downstream flood risk. It is apparently owned by NSW Water. It is believed that on monday of the second flood in March that NSW Water technicians tried to get this gauge working, but it failed overnight.
- Leycester Creek gauge at Tuncester is rated as high priority for accuracy of modeling for downstream risk. It is apparently owned by LCC and DPE-BCD. During this second flood in March the BOM showed no data from this gauge.
- BOM describes multiple outages on a network as "greater service degradation". During the March flood there was no data on creek rise on Leycester at Tuncester, the Coopers or the Terania creek networks. In addition there was no rain data in the Terania catchment.

¹ Bureau of Meteorology, Service Level Specification for Flood Forecasting and Warning Services for NSW and the ACT - version 3.13, Table 1, p6

Given that La Nina conditions continue and we could get further intense rain, we seek the information on the following:

- 1. Which agencies OWN, and which agencies MAINTAIN the following creek gauges upstream of Lismore. Identification numbers are shown in brackets:
 - a. Back Creek at Bentley (203009, BOM 058202)
 - b. Leycester Creek at Rock Valley (203010, BOM 058199)
 - c. Leycester Creek at Tuncester (203443, BOM 058201)
 - d. Goolmangar Creek at Nimbin (203901?, BOM 058180? BOM 558075? Can you confirm station numbers?)
 - e. Goolmangar Creek at Goolmangar (BOM 058201)
 - f. Terania Creek at The Channon (203906, BOM 058147)
 - g. Coopers Creek at Repentance (203002, BOM 558000)
 - h. Coopers Creek at Corndale (BOM 058206)
 - i. Wilsons Creek at Nashua (203902, BOM 058162)
 - j. Wilsons Creek at Eltham (203014, BOM 058200)
 - k. Wilsons at Woodlawn (203402, BOM 558012)
 - I. Wilsons at Browns Creek Pump station (BOM 558100)
- 2. For each of the creek and rain gauge stations owned by Lismore City Council, what is the maintenance schedule since the 1st January 2018?
- 3. For each of the creek gauge stations owned by Lismore City Council, what are the arrangements for data transfer redundancy during flood events?
- 4. At what date and time did the following creek gauges cease transmitting data?
 - a. Leycester Creek at Tuncester
 - b. Terania Creek at The Channon
 - c. Coopers Creek at Corndale
 - d. Coopers Creek at Repentance
- 5. At what date and time did the rain gauges at Terania and The Channon cease transmitting data?
- 6. Between the mega flood of 28/2 and the march flood a month later, what efforts were made to get dysfunctional gauges working?
- 7. The BOM requires owners of gauges to inform them when these are not working. When was this information conveyed to BOM?
- 8. In a catastrophic event such that LCC is unable to maintain its gauges, what fail-safe mechanisms are in place so that it could request another agency to get them working as a matter of urgency?
- 9. In the event that automatic data is not available from LCC creek and rain gauges, what fail-safe mechanisms are in place so that manual readings are provided by people with local knowledge and experience?

REP SENT FROM JANELLE SAFFIN OFFICE 6/06/2022

		Department of Environment – I and Conservatio Formerly known of Environment (OEH)	Biodiversity on Division. h as the Office		https://waternsw.com .au/12021- coopers- creek/river-data		the owner e g	http://www.b om.gov.au/cgi- bin/wrap_fwo. pl?IDN60140.h tml			https://disa ster.lismore .nsw.gov.au /dashboard /waterways			
NAME	PRIORIT Y	OWNER	MAINTAINE D BY	Manual gauges (have been allowed to decay)	Location (from Water Insights)	Coordinates	AWRC number	BOM number	NSW Water Insights site	normally on BOM	normally on LCC dashboard	COMMENTS		TIME FOR WATER TO REACH LISMORE
Back Creek - Bentley		Lismore City Council			?		203009	058202	NO	YES				8-10 hours (Gordon Serone)
Leycester Ck - Rock Valley		WaterNSW (& Lismore City Council)	Water NSW		(driving north on	https://www.google.co m/maps/search/?api=1 &query=- 28.795754714,153.2401 964755	203010	058199	YES	YES	YES	Lismore City Council has radio telemetry equipment connected to WaterNSW's monitoring equipment for data transfer redundancy during flood events. LCC contracts Northern Rivers Hydrometrics to maintain the radio equipment.		?
Leycester Ck - Tuncester		DPE-BCD & LCC	MHL				203443	058201		not in 29/3 flood		Lismore City Council has radio telemetry equipment connected to MHL's monitoring equipment for	https://www.env ironment.nsw.g ov.au/about- us/who-we-are	Fron
Goolmangar Ck - Nimbin	High	Lismore City Council	MHL not telling		?		203901	058180	NO	YES		Cant be found on NSW Water Insights		?
Goolmangar Ck - Goolmangar	Medium	Water NSW	MHL not telling		Mcnamara Bridge Weir at beginning of Boyle rd		203061	558075	YES	YES				?
Terania - The Channon	High	Lismore City Council	MHL not	by the flood. Location & condition would make manual	Behind the pub. Gauge is on Terania after junction with Tuntable, but before junction with Rocky		203906	058147	NÖ	not in 29/3 flood		Showed on BOM at height of mega flood at high levels? Need data on this. Not showing now?. Reportedly damaged in 2017.		?
Coopers Ck - Repentence	High	Water NSW	Water NSW		Near junction of Repentence Ck Rd with Coopers Ck Rd		203002	558000	YES	not in 29/3 flood		Zane van den Berg has this on his bottom paddock. From FB 'Tt was damaged last flood, but it was still working, then on Monday night it failed altogether. Water NSW came out yesterday and did the best repair they could with what they had and got it working again, but it failed again at about 4am this morning " (posted afferono of 30/3)		2
Coopers Ck - Corndale	High	Lismore City Council	MHL not telling	Only highest gauge remains, exceeded by height of flood. Its location would make manual reading hazardous if not impossible.	Ewing Bridge at Corndale		203024	058206	YES	not in 29/3 flood		Wrecked by mega flood 27/2/22		{
Coopers Ck - Fairmeadow	mystery	Water NSW	Water NSW		Near junction ofCosy Camp Rd, Lockton Rd and Corndale Rd north of Bexhill		203060	?		NO		What is status of this? it doesnt show on BOM or anywhere else. MHL say: " Level and discharge data is up to date on the WaterNSW website"		?
Byron Ck - Binna Burra	mystery	Water NSW	Water NSW		Friday Hut Rd near Lismore Rd		203012	?	YES	NO		sometimes Byron Ck appears in BOM data, but not when checked for this doc. Is this what BOM calls Nashua?		?
Wilsons - Nashua		Lismore City Council	MHL not telling		?		203902	058162	NO ?	YES				
Wilsons - Eltham	High	Water NSW			near junction Johnston Rd & Eltham Rd	https://www.google.co m/maps/search/?api=1 &query=- 28.7569,153.3944	203014	058200	YES	YES	YES	Lismore City Council has radio telemetry equipment connected to WaterNSW's monitoring equipment for data transfer redundancy during flood events. LCC contracts Northern Rivers Hydrometrics to maintain the radio equipment.		?
Wilsons R - Woodlawn mAHD	High	DPE-BCD & Lismore City Council	MHL		Woodlawn College	https://www.google.co m/maps/search/?api=1 &query=- 28.785,153.3036	203402	558012	?	YES	YES	Lismore City Council has radio telemetry equipment connected to MHL's monitoring equipment for data transfer edundancy (radio and mobile phone) during flood events. LCC contracts Northern Rivers Hydrometrics to maintain the radio equipment.		?
Wilsons - Browns Creek pump	?				Browns Creek pump Station			558100		NO?	YES			

AWRC numbering the first 3 digits denote the <u>http://www.b</u>

https://disa

NOTE - DPE BCD = Department of Planning and

https://waterinsig

Appendix D

Selected images

































































