

Cover artwork by Konstantina MINAK (NIGHT) RAINING SERIES

February 2020

The Raining Series of works are as viewed from my place in bed, whilst pondering motherhood, womanhood and its like to be a woman. Many mothers feel a stronger connection to country and culture after the birth of a child, and for me this is absolutely the case.

DIDACTIC:

As a super emotional human and mama, the weather affects me, sometimes quite profoundly, guiding me to a better intention and place within. But sometimes Mother Nature takes me to a darkness and likely deeper place of self reflection and learning. With all this rain (and Im grateful, if not slightly soggy), Ive been in my own head A LOT!



"Everyone in the Northern Rivers unfortunately now has 'a flood story'. But none more intense than our Aboriginal communities. It feels shameful that the relief efforts run by Aboriginal Organisations, private citizens and small not-for-profit community groups had to fill the void of professional and government services. The long-tail effect on the economic and social well-being of our community will be felt for generations.

That is why I have gifted my artwork for this very necessary report, in the hope it helps reach the right audience and together we can do better for our people in their time of crisis."

Konstantina - Artist Gadigal woman Eora Nation Resides Bundjalung Nation

Cultural Acknowledgement

We humbly provide this report to the NSW State Government which is centred on unceded Gadigal Lands of the Eora Nation.

We acknowledge and pay deep respect to the enduring and unbroken relationship of all the First Nation communities and clans of the unceded Aboriginal Nations. We honour the communities and peoples of the Wiradjuri

Gumbaynggirr language and cultural nest, and the Gamilaraay-Yuwaalaraay-Yuwaalayaay and Paakantji/ Baakantji language and culture nest which are the First Nations peoples of NSW. We acknowledge every single First Nations person who has spoken to NSW Government in any way shape or form, and we acknowledge the dialogue, the meetings, the testimonies, the provided reports, the consultations, and the conversations. We acknowledge our ancestors, the mighty living environment which cradles us, informs us and teaches us, and gives us life. We acknowledge all the lands that support our breathing, our living our thriving which are connected to us through lore, language, and relationships eternally.

We echo those voices of all those that have come before us and who have asked that we as First Nation Peoples be heard.

Chris Binge CEO Jali LALC Widjabul Wia Bul Man Bundjalung Nation

Arabella Douglas CEO Currie Country Group Currie Country Social Change Aboriginal Corporation Minyungbal Woman Bundjalung Nation Rebecca Woods CEO Bogal LALC Quandmooka Woman

Rebecca Woods CFO Bandjalang Aboriginal Corporation PBC RNTBC



Introduction	
Overview	8
Key findings	10
Wilsons River and Bulina (Richmond) River (Leycester Creek)	13
Casino (Bulina - Richmond River)	13
Lismore CBD (Wilsons River)	16
Coraki - Wilsons and Bulina- (Richmond) Rivers	17
Woodburn - Bulina (Richmond) River	20
Broadwater - Bulina (Richmond) River	2
Wardell - Bulina (Richmond) River	22
Buluna (Ballina) / West Buluna - Bulina (Richmond) River	22
Cabbage Tree - Buluna (Ballina) River	23
Gungay (Tweed) and Brunswick River (Marshalls Creek)	2
Murwillumbah CBD - Gungay –(Tweed) River	2
South Murwillumbah - Gungay –(Tweed) River	2
Billinudgel (Marshalls Creek)	2
Main Arm and Upper Main Arm - Gungay (Brunswick) River	26
South Golden Beach and Ocean Shores - (Marshalls Creek)	2
Mullumbimby – Gungay (Brunswick) River	2
RECOMMEDATIONS	36

Artwork by Konstantina HOME (RAINING SERIES)





INTRODUCTION

Between the 25th of February and 2nd of March 2022, a catastrophic weather and flood event impacted the northeast coast of New South Wales in the area known to the First Nations Peoples as the Bundjalung Nation, consisting of the Bundjalung Language and Culture Nests.

For the purpose of reporting a range of information from the Australian Censuses of Population and Housing, the Bundjalung Language and Culture Nest includes the Local Government Areas of Buluna, Byron, Lismore, Richmond Valley, Tenterfield, Tweed, Clarence Valley, Glenn Innes-Severn and Kyogle. No claim is made that this boundary is exact or uncontested.

The catastrophic weather and flooding event impacted areas stretching from the Sunshine Coast, Southeast Queensland to the South Coast of New South Wales. In New South Wales, the Northern Rivers region of the Bundjalung Nation (Figure 1) was heavily impacted, with the Tweed, Brunswick and Richmond / Wilsons River catchments experiencing severe flooding, where relevant the Aboriginal name for those rivers is

This submission is from those Bundjalung Peoples who were directly affected and impacted by the unprecedented flooding event, and documents their experience from 2 March 2022 until 20 July 2022, during which time communities and their members were largely left to help themselves.

Our findings are stark and include:

- An emergency response that was under resourced, unprepared, uncoordinated and simply non-existent for many in our community

 despite the valiant efforts by personnel on the ground
- Woefully inadequate planning and environmental systems that are not informed by the best available First Nations science, cultural knowledge and data
- A dis-coordinated and under-resourced response from Commonwealth, NSW and Local Governments during and in the immediate aftermath of the disaster
- A lack of First Nations people and voices in Government structures making decisions about our lives during and after natural disasters
- A failure to properly resource and prepare Aboriginal organisations to deal with natural disaster
- A failure of Government in the administration of Aboriginal Housing organisation/entities heightened risk at time of disaster and post disaster support
- That despite the failures above, First Nations people not only succeed in protecting life and well-being, but are now driving the solutions that will benefit the whole community

These failures put the lives, property and well being of entire communities at risk and will continue to do so without urgent action to fix

This submission is made by Jali Local Aboriginal Land Council situated in Buluna LGA; Bogal Local Aboriginal Land Council and Bandjalang Aboriginal Corporation (RNTBC) situated in Richmond Valley LGA; and Currie Country Social Change a registered charity situated in the Tweed LGA and all of these organisations have Traditional Owners as part of their constituency. These organisations have been dealing directly with flood affected victims, communities, and Local, State and Federal agencies since 2 March and up until 20th July 2002 and provide their recommendations having worked with those most affected.



The areas highlighted in yellow represent the local towns affected and identifies the location of First Nations voices contributing to this submission. The area highlighted in orange are the river systems that swelled and dramatically impacted areas and caused serious damage. Tweed River is known as its Aboriginal name 'Gungay'; the Richmond River and Buluna River is known as 'Buluna' (Photo courtesy of Risk Frontiers 2022).

Our recommendations are provided with the unique perspective of Bundjalung Peoples, their deep spiritual and cultural connection to land and waters and with a culturally appropriate and responsive lens.

They contain concrete measures to:

- Improve planning, flood mitigation and environmental mapping processes and data to mitigate against inevitable future flood events by incorporating local First Nations Traditional Owners scientific and cultural knowledge
- Improve the coordination of Government and community emergency responses during and after natural disasters, and ensure First Nations voices are driving decisions within Government in a way that's connected with experiences on the ground
- Ensure crucial infrastructure is disaster ready for future events
- Protect First Nations cultural heritage during and after natural disasters
- Build the capacity of Aboriginal organisations to function and respond in times of natural disaster

Underlying our recommendations is a fundamental truth known to First Nations People not just in Australia but around the world – human, physical, mental, and spiritual wellbeing and the natural, interconnected environmental systems in which we exist, are indivisible.

It's a fundamental truth that's now being translated into the language of climate science and state of the nation environment reports.

It's a truth that created the volume of water that fell from the sky and moved like a wall through our communities early this year.

Without changing our mindsets and actions to this reality, our efforts to prepare for and mitigate future natural disaster will be futile.

How we respond to this challenge is a defining moment for our country.

Are our minds and hearts big enough?

Is our creativity boundless and our courage fierce enough?

Can we rise to the occasion and come together a create a better future in the face of growing adversity?

We think we can. And we know we must.

The urgent implementation of our recommendations from First Nations Peoples who are deeply rooted to the Bundjalung Nation is a great place to start.

^{*}For the purpose of reporting a range of information from the Australian Censuses of Population and Housing, the Bundjalung Language and Culture Nest includes the Local Government Areas of Buluna, Byron, Lismore, Richmond Valley, Tenterfield, Tweed, Clarence Valley, Glenn Innes-Severn and Kyogle. No claim is made that this boundary is exact or uncontested, or that there are no other Traditional Owners in the Bundjalung Nation.



Photographer Jacklyn Wagner

Kerry Andersen is a Cabrogal Woman of the Dharug Nation , Western Sydney living on Wijabul land of the Bundjalang Nation

Kerry Andersen knew it was going to be bad.

"I looked up the river levels for my house and it said 12m would come into the house, so I knew I had to leave".

"I am lucky I had somewhere to go".

OVERVIEW

On the 17th of March 2022, Risk Frontiers deployed teams to the Northern Rivers and Far North Coast regions of New South Wales to observe and report on severe flooding in the area (Figure 1). The teams visited severely flood-impacted towns and rural areas in several catchments including:

- Richmond River and Wilsons River catchments (including Leycester Creek)
 Key locations include Lismore, Casino, Coraki, Woodburn, Broadwater, Wardell West Buluna and Buluna (Figure 2).
- Gungay (Tweed) River and Brunswick River catchments (including Marshalls Creek) – Key locations include Murwillumbah and South Murwillumbah, Mullumbimby, Main Arm and Upper Main Arm, Billinudgel, Ocean Shores and South Golden Beach (Figure 14).

The survey teams spoke with residents, business owners and volunteers in impacted areas and recorded the observations of impacted residents and business owners, and we have added Aboriginal voices, experiences, and observations as an overlay to inform government. The teams also recorded flood depths, significant structural damage to build assets and geomorphic impacts in rural areas.



Photographer Jacklyn Wagner

Vicki and Mark Youngberry of South Lismore have lived in their home for 34 yrs. They have seen a few floods and water has never come close to being inside before.

They stood on their front railing to get into a boat in which there were seven adults and three dogs.



Photographer Jacklyn Wagner

Marion Conrow of South Lismore is an artist. "This is my home. I have been paying it off for thirty-three years"

All her walls are stained with asphalt from the flood. (from a nearby asphalt plant)



*Kristopher Cook Photography (c) 2022 Bundjalung Man One of the many homes destroyed on Cabbage Tree Island

KEY FINDINGS

01

The failures of successive Federal and State Governments to make concerted efforts in planning and prevention for all types of climate disasters has led to poor predictive systems and responses to man-made climate change. These failures have also included the opportunity to work with First Nations communities to include Aboriginal information sciences and historical information as part of

02

The resultant poor planning and absence of community integrated plans has put vulnerable communities at risk of loss of life and danger. Aboriginal communities within the Bundjalung Nation are some of the most vulnerable communities because of systematic oversight, lack of Aboriginal values in planning, lack of connection to ordinary services in times of crisis and inherent racism in post-disaster responses and ongoing service delivery

03

Community leadership was observed as the pivotal driver in many locations, and this was extremely evident in Aboriginal communities.

04

Aboriginal leadership played a key role in community recovery hubs established in informal locations such as community halls to assist communities with their immediate recovery needs. These were in addition to formal government recovery mechanisms. All Aboriginal communities in Bundjalung were affected because each community and the people of the Bundjalung Nation are either directly or indirectly connected by the floods through communal links, bloodline's and services.

05

Aboriginal community leadership

came into full action because the Aboriginal community household and communities were not being attended to by direct intervention by local government leadership. There is regrettably still a division and disconnect between local councils and their attention and service to Aboriginal communities.



Annette Maekus bought her house in June 2021

Her neighbours rang at 4.30am to alert her. She looked out and saw brown water. The toilet started gurgling, she opened the back door and water came gushing in.

Photographer Jacklyn Wagner



Every home was condemned on Cabbage Tree Island

06

Warnings – Residents in all locations reported using a patchwork of sources (Facebook, community groups, BOM, phone calls and SMS from friends, radio and SES emergency messaging) to receive information on rising water levels, expected peaks and evacuation messaging. Aboriginal communities and Aboriginal organisations on Facebook were a key feature of information dissemination, assistance and a vehicle for direct community response.

07

Without exception, residents in all areas visited expressed alarm at the speed with which water levels rose and surprise at the ultimate height of the floods.

Residents expressed dissatisfaction with the limited frequency of warnings as waters rose quickly and perceived peak heights had been underestimated. There were also reports of emergency services not using public warning sirens. Some areas received limited warnings due to telecommunication outages (e.g., Mullumbimby, Upper Main Arm and Upper Wilsons Creek).

80

Cabbage Tree community and those in surround of Buluna has to rely upon the local community leadership used mobile phones, Facebook messages up and until service disruption and had to rely upon informal community message communicating. Cabbage Tree did not receive evacuation advice with support, so they had one flooding road in which to evacuate over 200 people of all ages. The local men and women community leadership from Jali lead this evacuation.

09

Coraki received communication via Facebook messaging, and mobile service up and missed messages of evacuation were received and it was recovered without assistance to action evacuation. Some part of Coraki took up to 15 weeks for communication services to return, as the time of writing this report only 1 of the 8 caravans committed by NSW Gov has arrived in Coraki. More than 60 people are homeless and living in tents or in overcrowded situations.

KEY FINDINGS

10

Fingal Head, Chinderah, Murwillumbah and Aboriginal families in Uki were limited to message via other people in other locations, when services were disrupted, power cut and internet disabled. Fingal Head, and Chinderah was cut off and locals moved to watercraft for evacuation, jet skis, boats and paddleboard to help others. The age and mobility of population heightened risk of evacuation.

11

In some cases (e.g. Lismore), even if residents and businesses were provided enough time to move stock, they likely would have found their preparations ineffective due to the extreme water depths. It is clear, though, in some locations (e.g. Murwillumbah CBD), residents and businesses saved some possessions. The exact extent would be useful to learn to assist in measuring the overall financial benefit of warning systems.

12

The failures of successive Federal and State Governments to make concerted efforts in planning and prevention for all types of climate disasters has led to poor predictive systems and responses to man-made climate change. These failures have also included the opportunity to work with First Nations communities to include Aboriginal information sciences and historical information as part of such a system.

13

The resultant poor planning and absence of community integrated plans has put vulnerable communities at risk of loss of life and danger. Aboriginal communities within the Bundjalung Nation are some of the most vulnerable communities because of systematic oversight, lack of Aboriginal values in planning, lack of connection to ordinary services in times of crisis and inherent racism in post-disaster responses and ongoing service delivery.



"I couldn't get volunteers to clean my house because of the contaminant from the abandoned asphalt site".

"I have worked and saved and gone without so I could be in my house".

Photographer Jacklyn Wagner

KEY FINDINGS

14

Aboriginal community leadership came into full action because the Aboriginal community household and communities were not being attended to by direct intervention by local government leadership. There is regrettably still a division and disconnect between local councils and their attention and service to Aboriginal communities.

15

Fingal Head, Chinderah, Murwillumbah and Aboriginal families in Uki were limited to message via other people in other locations, when services were disrupted, power cut and internet disabled. Fingal Head, and Chinderah was cut off and locals moved to watercraft for evacuation, jet skis, boats and paddleboard to help others. The age and mobility of population heightened risk of evacuation.

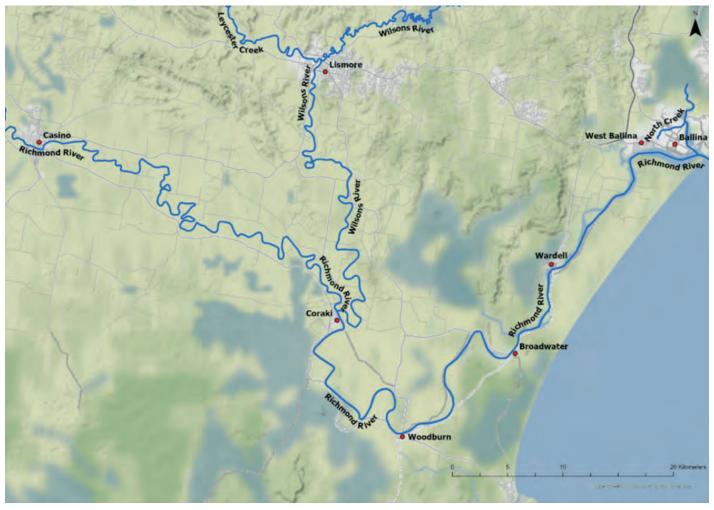


Kristopher Cook photography (c) 2022 Bundjalung Man The Premier is shown around Cabbage Tree by CEO Chris Binge and local Cabbage Tree resident and father of eight.



*Kristopher Cook Photography (c) 2022 Bundjalung Man The Governor-General meets with Indigenous members of the military who assisted with the clean-up on Cabbage Tree Island.

Wilsons River and Bulina (Richmond) River (Leycester Creek)



(Map courtesy of Risk Frontiers 2022)

Casino (Bulina - Richmond River)

- Reports from shop owners in the city centre were that the CBD was inundated by between 40 $60 \, \text{cm}$ of water
- Some shop owners thought that widespread complacency among businesses (from many years without experiencing floods) had prevented many from preparing such as moving stock. Businesses took well over a week to reopen as a result.
- Significant erosion of the rivers banks was evident, as was a destroyed roadway beneath the Irving Bridge
- Between Casino and Lismore, there were numerous examples of infrastructure damage (from flood waters) and landslides from heavy rain (Figure 4).
 Some roads between the two towns were still closed to general traffic because of rockfalls and damage to roadways, causing detours to be put in place.
- One of the major concerns affecting First Nations was that the flood exposed cultural artefacts in some regions and to date this would have not been assessed.

- Large rail corridor infrastructure projects are continuing without pause to allow assessment of the area, or cultural impact.
- The railway is being uprooted while the area suffers from unstable and insecure infrastructure options.
- Rail is vital to First Nations communities, and as roads continue to be impacted almost 20 weeks after floods. Stable and reliable public transport is more urgent that ever before. Cabbage Tree alone lost more than 19 vehicles impacting access for the many people while displaced and living in temporary dwellings.
- First Nation communities, like other communities, lost many vehicles, community buses and other modes of transport some of which was uninsured. The impact to travel for work and education has been severe, and the skyrocketed second-hand car market has made replacement impossible.



Figure 3: The Richmond River in Casino beneath the Irving Bridge. Red line indicates the approximate peak height of flooding on the 27th of February. Note the destroyed roadway and trees lain over by the force of flood water. (Photos courtesy of Risk Frontiers 2022)





Figure 4: Washed out railway line (left) on Naughton Road between Casino and Lismore and a rockslide (right) closing one lane of Bentleys Road approximately 10km from South Lismore. (Photos courtesy of Risk Frontiers 2022)

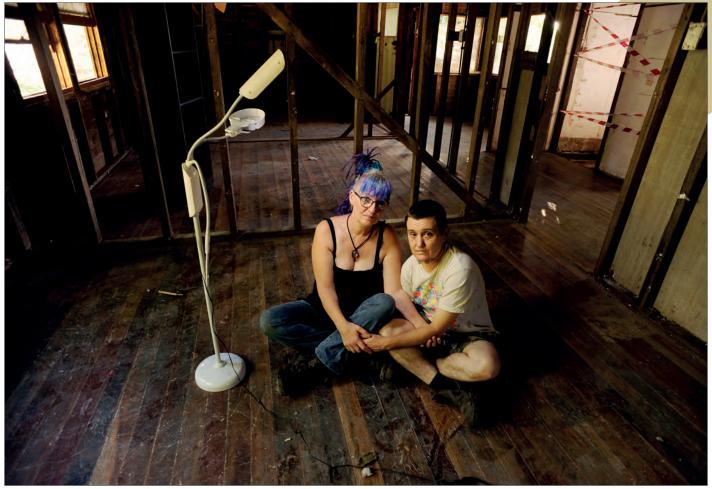
Lismore CBD (Wilsons River)

- The Lismore CBD was extensively impacted with examples of structural damage. Koori Mail Newspaper, an Aboriginal organisation, is best placed to make comment to government on business impact in Lismore CBD, and we understand Koori Mail has been engaged with the NSW State Flood Inquiry.
- Flood water in the Lismore CBD exceeded 14
 metres, completely inundating most residential and
 commercial buildings and reaching to the top of
 telephone poles and other major business signage
 (Figure 6)
- As at the 19th of March, virtually all businesses in the Lismore CBD remained closed (including McDonald's). Notable exceptions were a hotel, and a local car dealership.
- The car dealership, located in the CBD (in the vicinity of McDonald's (Figure 6)), had also been totally inundated, but was able to reopen after only one week, by following their flood plan and evacuating early. The dealership owners have adopted a conservative approach to flooding which

- is reflected in the businesses flood plan. This included monitoring surrounding catchment rainfall totals, BoM warnings, and nearby creek levels and their personal experience with past flooding at the dealership's location. By the time the SES warning to evacuate the Lismore CBD was received at 2am on Monday 28th February, the business premises were already extensively flooded, though all the dealerships' vehicles had been relocated and the office had been dismantled and moved by truck more than a day earlier.
- Lismore In the 2016 Census, there were 43,135 people in Lismore. Of these 48.6% were male and 51.4% were female. Aboriginal and/or Torres Strait Islander people made up 5.0% of the population representing 2,171 First Nations people.
- The owners of Koori Mail who are Traditional
 Owners within the Bundjalung Nation and the Board
 of Koori Mail led initiatives for direct community
 support for the Aboriginal peoples impacted by
 Food Impact. This community leadership of this
 organisation began at time of impact and throughout
 the period of stabilisation.



Figure 5: Examples of structural damage in the Lismore CBD. Clockwise from top left - stormwater drain and gutter, car park surface, a stone wall adjacent to the Richmond River and the rear bar of the Richmond Hotel. (Photo courtesy of Risk Frontiers 2022)



Photographer Jacklyn Wagner

Deb Ray and Cass Thorman of South Lismore

"Home has always been my safe place , now it's not. It's a shell and I feel vulnerable". (Deb)

When they left they grabbed the dog and their passports.





Figure 6: The flooded McDonald's restaurant and sign showing the height of flood water in the Lismore CBD on the 28th of February (left) and the same sign on the 18th of March (right) when survey teams visited (Image source (left): AAP images). (Photo courtesy of Risk Frontiers 2022)

South Lismore (Wilsons River)

- Many people in South Lismore made the decision to remain in their homes. The 2017 level had not risen to the second level of the 'Queenslander'style homes common in many areas of Lismore. Many residents went to bed on Sunday night (27th February), only to wake in the early hours of the morning to find water in their second-storey bedrooms. The flood peak reached 14.4 metres.
- People reported being forced to take refuge in their roof cavities, with the speed of rising water preventing them from exiting homes via windows and doors. There were also accounts of people dismantling roofs from inside to gain access to the roof to escape rising waters. Many people were forced to take refuge and await rescue by boat.
- Residents were critical of the lack of emergency resources to perform the number of rescues required in Lismore, highlighting the role of private citizens in saving numerous lives.
- Examples of structural damage to the exterior of homes and businesses in South Lismore ranged from cracked walls and masonry to partial or total building collapse (Figure 7).

- The Aboriginal communities of Lismore and surrounds were led by the Lismore Local Aboriginal Lands Council, local Aboriginal community leadership and Jali LALC and those in the surrounding area, unifying the Aboriginal communities affected.
- At Lismore Airport, at least eight planes were swept away and deposited in nearby paddocks. With limited warning, several other aircraft had been successfully relocated to the highest point in the airport and were saved as a result.
- A caravan park appeared completely abandoned after the large-scale dislodgement of every dwelling in the park. All cabins and caravans with fixed annexes were lifted off piers and smashed into those nearby, once again highlighting the vulnerability of caravan parks in low-lying areas to flooding. Most caravans had all, or part of their towing mechanisms removed, totally negating their mobility.









Figure 7: Examples of structural building damage in South Lismore. (Photo courtesy of Risk Frontiers 2022)



Figure 8: The Club Hotel at Coraki. (Photo courtesy of Risk Frontiers 2022)

Coraki - Wilsons and Bulina-(Richmond) Rivers

- Extensive flooding was evident throughout the town, with water levels > 2 metres in lower lying residential areas, although the water remined I situ for well after 4 weeks and in within the whole of the town grounds continued to be pooled and saturated at almost 12 weeks after the flood due to the systems of water being unable to move further into the ground or move.
- Coraki Aboriginal communities were heavily impacted by flood through all of their lands.
 Richmond Valley In the 2016 Census, there were 22,807 people in Richmond Valley (A). Of these 49.6% were male and 50.4% were female. Aboriginal and/or Torres Strait Islander people made up 7.2% of the population representing 1,638 Aboriginal and/or Torres Strait Islander people (ABS 2016).
- Coraki Aboriginal population reside in Coraki town proper or in the surrounding areas and in an area called Box Ridge Mission which accommodates almost 200-220 people.

- The Aboriginal owned business and organisations affected included local Aboriginal business, Aboriginal owned farm and community centres, internet and services were not returned in some cases for more than 12 weeks after floods.
- The Aboriginal community of Coraki at the time of this report is still awaiting seven (7) caravans of the promised eight (8) by NSW Government to arrive for urgent elder accommodation, and has more than 70 people displaced, suffering from extreme overcrowding and many still living in tents on the streets.
- The local hotel, which had just undergone a major refurbishment, suffered significant damage. Water levels rose quickly to approximately 1 metre above the 1974 level (Figure 8) and inundated the entire ground floor and destroyed antiques and an entire kitchen of brand-new appliances before they could be relocated.

Woodburn - Bulina (Richmond) River

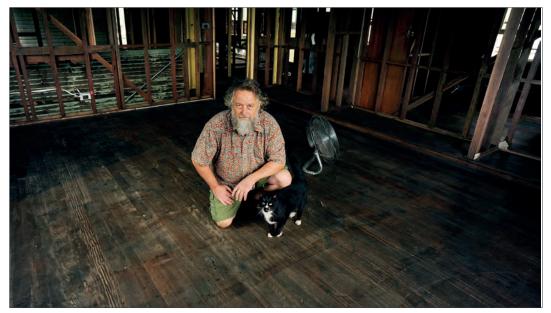
- Woodburn, directly adjacent to the Richmond River, experienced significant water depths, > 3 metres (Figure 9) and > 4 metres in lower-lying areas.
- One clothing store owner reported that warnings
 of the oncoming flood came far too late and had
 severely underestimated both the peak level of flood
 waters and the speed with which the water rose.
 The owner reported hastily moving floor stock to
 a high mezzanine storage platform inside his shop,
 although this too was inundated, causing the loss
 of approximately \$60,000 in clothing stock. There
 were also reports of looting occurring, with one
 offender being trapped by the speed of rising waters
 before apprehension.
- There was no evidence of any small businesses open and trading in Woodburn, with all premises showing evidence of severe inundation until almost 4-6 weeks after floods.

- Power and NBN were only just being re-established to Coraki and Woodburn in week 4-6 after the floods.
- Most residences in Woodburn appeared to have suffered major inundation, with clean-up of disposed possessions still occurring. Water levels in lowerlying residential areas exceeded 4 metres and reached the eaves of two-storey dwellings.
- Currie Country Social Change and other community hubs, and organisations began to assist Aboriginal families in Woodburn with essentials from March 6 and up and until June 30 with bedding, clothes, foods whitegoods and supporting homes that were in overcrowded conditions, in some homes with 12 children and 6 adults living in a 3-bedroom home. As of the date of the report overcrowding is still an issue.





Figure 9: The main Street of Woodburn on the 1st of March 2022 showing water levels from flooding of the Richmond River and a looter (on roof) taken into custody after being trapped on rooftops by fast rising water (left) and the same streetscape, unflooded (right). (Image source (left): Shop owner). (Photo courtesy of Risk Frontiers 2022)



Laurie Axtens of North
Lismore knew he, his mother
and brother had to get out.
"Mum got a bit scared when
the tinny conked out".

"it could happen again, it could happen worse, it could be an instant 16M flood".

Photographer Jacklyn Wagner

Broadwater - Bulina (Richmond) River

- A number of residences in Broadwater appear to have suffered structural damage to walls and outside extensions. There were examples of large sand deposits left behind by floodwaters in front yards and along roadways seen through the town (Figure 10).
- Local trades people are still urgently required in Broadwater and Coraki and as yet overcrowding from these communities continues to affect the Aboriginal families located in these areas.
- The Broadwater Sugar Mill and Cape Byron Power Plant (occupying the same premises) were out of operation. Over 1.5 metres of water inundated the ground floor of the site which sits directly adjacent to the Richmond River. The mill and power plants are major employers in the area. Employees mentioned that operations could take months to resume.
- In some areas of Broadwater, flood heights exceeded 3 metres, with businesses remaining closed and premises showing the signs of significant inundation. There were also numerous examples of cars still lying on their sides and roofs among deposits of sand and other debris after more than two weeks (Figure 11).
- The vulnerability of caravan parks to flooding was again highlighted at the local park, where all dwellings had suffered severe inundation, some with structural damage.



Figure 10: Broadwater residence showing structural damage and large amounts of flood-deposited sand in the front yard. (Photo courtesy of Risk Frontiers 2022)



Figure 11: The approximate height of flood water (red arrow) against a still-closed Broadwater service station (top) and some of the many flood-deposited vehicles from over two weeks earlier. (Photo courtesy of Risk Frontiers 2022)





Wardell - Bulina (Richmond) River

- The Wardell CBD, located directly adjacent to the flooding Richmond River, experienced mass inundation of all business and residences in the main street. Water level marks on walls and on those fences left standing indicated water heights of >1 metre.
- Only one business, the post office and pharmacy (occupying the same premises), had resumed limited trading. Several other businesses were still cleaning premises in the hope of reopening once certified safe.
- There were numerous examples of fences flattened by fast-moving flood water which contained significant mud, grass and sugarcane debris which was swept into waters from paddocks. upstream. In the main street, an entire tree still lay where the flood had deposited it
- Many flood-impacted people across the region had lost the important documentation useful in making claims for business grants and recovery assistance, and personal documents, this is huge impact upon Aboriginal people triggering the complexity of identification, causing mental stress and emotion stress, and challenges identified in Aboriginal Affairs Report 'Aboriginal identification in NSW: The Way Forward Report(2015). At the time of writing this report, there has been no direct NSW Government effort to ameliorate these issues.
- At the time of writing this report only 25 housing pods have been delivered to Wollongbar for temporary housing use.



Buluna (Ballina) / West Buluna - Bulina (Richmond) River

- Homes directly adjacent to the Richmond River showed signs of inundation, with water-damaged possessions on the footpath awaiting collection and clearly defined water level indicators on garden walls and garage doors of approximately 75cm.
- Buluna in the 2016 Census, there were 41,790 people in Buluna (A). Of these 48.2% were male and 51.8% were female. Aboriginal and/or Torres Strait Islander people made up 3.3% of the population, representing 1.370 Aboriginal and/or Torres Strait Islander people.
- The Burns Point car ferry was still out of service (more than two weeks later) following the flood. The ferry's primary submarine cable snapped in the high flow, causing the ferry to be pushed high on its entry driveway, causing damage to its hull (Figure 12). The ferry operators had prevented the ferry from being totally swept away by chaining the ferry to large, fixed pilings on the West Buluna disembarkation point. The ferry was still several days from resuming operation, awaiting a new cable from Brisbane which had been delayed due to the Brisbane floods, leaving the residents of Burns Point the burden of a 28 km round trip to travel to Buluna.
- Several West Buluna caravan parks in low-lying areas exhibited signs of significant water inundation, with most caravans and semi-permanent dwellings now appearing uninhabited and abandoned.
- A key aspect of flooding mentioned by numerous people in Buluna was the large number of fish found dead and washed up on beaches and riverbanks which had drowned in the flush of fresh water coming from upstream.
- The saltwater and freshwater ecosystem and damage is yet to be determined and will be revealed upon fishing and breeding patterns. Hundreds of thousands of fish have died after the flooding by "severe deoxygenation". Department of Planning and Environment believes the final fish death toll will be in the hundreds of thousands. The spiritual impact of river ruin is yet to be assessed for cultural and spiritual value to First Nations peoples in the Nation.

Figure 12: The Burns Point Ferry, stranded after its submarine cable snapped during the flood. Note the chain mooring the ferry to the piling on shore in the foreground, which prevented the total loss of the vessel. (Photo courtesy of Risk Frontiers 2022)



*NSW Premier, Dominic Perrottet meets Jali CEO, Chris Binge at Cabbage Tree Island to see first-hand the devastation.

Cabbage Tree - Buluna (Ballina) River

- Cabbage Tree has 26 homes and three community building for education and health, a population of 190 people although due to cultural family reasons and movement the living population upon the Island is closer to 230 on any given night, at the night of the population was 220 on the night of evacuation.
- In 1893, the State gazetted Cabbage Tree Island as an Aboriginal reserve and families from surrounding areas began to move onto the island. Initially, the community could maintain a self-sufficient way of life, but in 1911 the reserve was redesignated as an Aboriginal station.
- Cabbage Tree Island was a former Aboriginal station, a self-sufficient farming community which is still home to many of the original families who have lived there for generations, it holds cultural and historical value, there are Elders buried upon the land surrounding Cabbage Tree Island and it is safe place for the Aboriginal communities who consider Cabbage Tree a part of this traditional estate and lands.
- On the night of the floods Cabbage Tree flooding reached 16metres and or 2ft into the second story of homes that were build to withstand the highest level previous predicted (Binge 2022).
- All homes, community building including a school and health centre were destroyed, as well as more than 16 vehicles and 4 minibuses used for transport for the community and private cars most of which were uninsured. At the time of writing this report, these vehicles have not been replaced.
- Buluna In the 2016 Census, there were 41,790 people in Buluna (A). Of these 48.2% were male and 51.8% were female. Aboriginal and/or Torres Strait Islander people made up 3.3% of the population, representing 1.370 Aboriginal and/or Torres Strait Islander people.



The Governor-General, David Hurely and Her Excellency Mrs Linda Hurley meet with Jali CEO, Chris Binge and Arabella Douglas and Margarita Escartin from Currie Country Social Change on Cabbage Tree Island.



The clean-up starts at Cabbage Tree Island.

^{*}Kristopher Cook Photography (c) 2022 Bundjalung Man

Gungay (Tweed) and Brunswick River (Marshalls Creek)

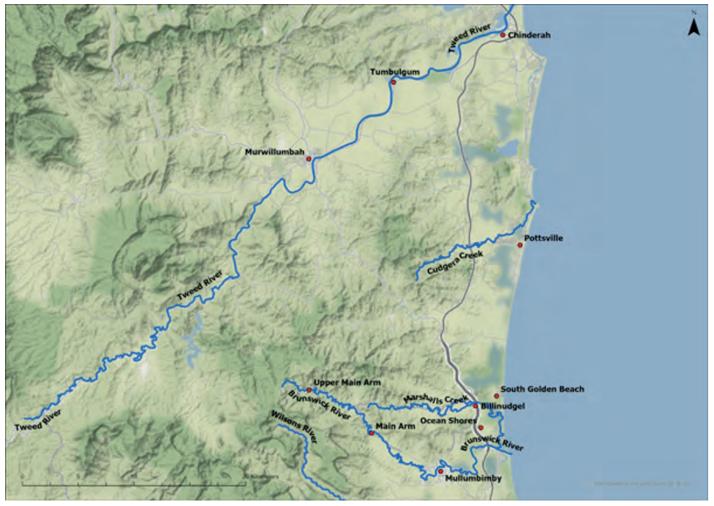


Figure 13: Locations and main waterways responsible for the flooding in the Tweed River and Brunswick River catchments. (Photo courtesy of Risk Frontiers 2022)

Murwillumbah CBD - Gungay - (Tweed) River

- The Murwillumbah CBD was flooded when the levee protecting the area was overtopped
- Many businesses had reopened within three weeks
 of the flood. However, most of these were smaller
 shops (bakeries, homewares) that appeared to have
 flood-resilient design features, including their choice
 of flooring (for example, tiles) and raised spaces
 for storing stock and equipment. In contrast, many
 larger chain outlets remained closed, bringing into
 question why bigger chain outlets did not organise
 resumption of operations sooner.
- Tweed In the 2016 Census, there were 91,371
 people in Tweed (A). Of these 48.3% were male and
 51.7% were female. Aboriginal and/or Torres Strait
 Islander people made up 4.0% of the population
 representing 3.623 Aboriginal and/or Torres Strait
 Islander people.



Figure 14: Plastic water tanks are easily transported by flood waters as seen in this example from South Murwillumbah where a number have been forced beneath a railway bridge. (Photo courtesy of Risk Frontiers 2022)

South Murwillumbah - Gungay - (Tweed) River

- Evidence of extensive flooding was observed including the industrial estate and residential areas with depths of multiple metres.
- Some businesses that had raised floors to mitigate flood risk also appeared to have been flooded, though several appeared to be open and trading.
- There was extensive damage exhibited at a local caravan park with vast piles of destroyed possessions on the front roadway awaiting collection and disposal. This park, like many caravan parks, occupies low lying – flood prone land where the limited mobility of caravans beneath permanent annexes and decking commonly contributes to severe damages occasioned by dwellings.
- South Murwillumbah provided the most notable example of the capacity of flood waters to transport plastic water tanks from farms and rural supply outlets and discard them across the landscape or beneath fixed objects, such as the railway bridge seen in Figure 14. There were numerous examples of destroyed water tanks lying in paddocks and along roadsides seen across the entire Northern Rivers region.

Billinudgel (Marshalls Creek)

- About half of businesses in town had reopened.
 Despite having reopened, most businesses were clearly still repairing or cleaning stock and equipment. Flood waters were reported to be lower than those of the 1974 flood.
- The benefits of flood-resilient design were illustrated by the local hotel which, due to regular flooding, had considered the risk of inundation in the design of fixtures and equipment. This included hardwood timber construction throughout, fridge motors located in the roof and relocating stock, including poker machines, to the top of the bar. The business was not insured but considered the costs of flooding within its business plan. Following the flood, the hotel was closed for only a day and a half, although its kitchen was out for seven days, and the internet was still unavailable.

Main Arm and Upper Main Arm - Gungay (Brunswick) River

 Main Arm Road – the main route from Mullumbimby and Main Arm – remained closed after a large section of the bridge was washed away (Figure 15). Main Arm was isolated for three days following the flood.



Figure 15: The bridge on Main Arm Road between Mullumbimby and Main Arm, showing a large section washed away by the Brunswick River two weeks earlier. (Photo courtesy of Risk Frontiers 2022)

 Landslides – the Brunswick River catchment experienced numerous landslides. Some were even visible at long distances as scars on the surrounding hillsides – the result of a combination of the extreme rainfall, pre-saturated soils and steep terrain.
 Numerous local roads had been blocked as hillside debris collapsed onto road surfaces.

- In the neighbouring Wilsons Creek catchment (to the south), locals described large landslides, some still active with the sounds of cracking, being responsible for isolating properties which were being supplied with provisions by air drops (Figure 16).
- The many causeways on Main Arm Road showed examples of torn up bitumen, eroded banks and exposed tree roots where soil had been stripped away by the force of flows (Figure 17). The valley floor provided numerous examples of deep and fast flowing flood waters having deposited large amounts of sediment from sand to cobbles over riverbanks, floodplains and across paddocks, roads and the grounds of Main Arm Public School, which remained closed. In places, sediment was in excess of 50 cm deep (Figure 17).
- There were numerous examples of destroyed vehicles having been pushed off roads and into the bush near causeways along Main Arm Road.
- Local volunteers had set up a checkpoint at Kohinur Community Hall on Main Arm Road controlling access to Upper Main Arm and beyond in response to disaster tourists travelling through the area.
- Community volunteers coordinating the checkpoint reported that over 100 properties remained isolated in the upper valley by landslides or destroyed driveways. Food and supply drops were being made by air or on foot, with the help of the army.



Figure 16: A landslide in the Wilsons Creek catchment, south of Main Arm, completely blocking a road near Federal (Image source: Local resident known to survey team). (Photo courtesy of Risk Frontiers 2022)



Figure 17: Road base and soil erosion from roadways and tree roots (left & top right) and evidence of fluvial geomorphic change with the deposition of sand, rocks and cobbles on floodplains (mid and bottom right) caused by deep and fast flowing flood waters in the confined Brunswick River catchment between Main Arm and Upper Main Arm. (Photo courtesy of Risk Frontiers 2022)

South Golden Beach and Ocean Shores - (Marshalls Creek)

• Extensive damage to residential areas was evident throughout both towns.

Mullumbimby – Gungay (Brunswick) River

- Relatively shallow flooding was experienced throughout Mullumbimby. Damage occurred to the CBD and residential areas.
- Warnings in Mullumbimby were inhibited due to communication outages – meaning people stepped out of their beds and into floodwater. All but a handful of businesses had reopened three weeks later.

Recommendations

Recommendation 1. Human and Social Recovery Group

That the NSW Government form a Human and Social Recovery Group (HSRG) with First Nations representation from key state agencies and First Nations representation from experienced government local networks.

The HSRG would be responsible for leading First Nations coordination and service delivery during natural disasters and their immediate aftermath. This would include leading and coordinating functional recovery groups activity to protect human wellbeing, and mental health and coordinating immediate triage support with local NGOs and NFPs. These recovery groups would focus on individual needs and remain connected to the individual while they are relocated, and their situation stabilised.

The NSW Government should also form a registry of NSW First Nation peoples who have held senior NSW public servant roles in disasters for membership of these groups.

At times of disasters, a Human and Social Recovery Group - an interagency and NFP collaboration - should be urgently established with First Nations representation from experienced Aboriginal organisations or within State agencies or State boards. Government should work with NFP local social services groups and work on disaster planning with agencies to plan roles and responsibilities for crises.

The HSRG must include agencies that are experienced in Aboriginal service delivery, and the disaster plans must decide on roles and actions for each group, including the management of staff fatigue and HRSG plans should support local work on the ground during natural disasters and for the following 6 months.

The HRSG must have a First Nations voice at its highest level while using as many local NFPs with links to the First Nation communities as possible to deal with social aspects of disasters and post-disaster management.

The triage process should really replicate that function:

 Monitor and evaluate the effectiveness of the human and social relief and recovery arrangements and devise an allocation of a person to a worker for each person that will require assistance, immediate shortterm, and long-term. The NFO or agency placed into human service and recovery should be assisted by NGO NF training and staff experienced in trauma, racism impacts, alienation and:

- Provide information and advice to inform priorities for improvements in the NSW human and social relief and recovery arrangements.
- Promote and facilitate the exchange of good human and social recovery practice, evaluation, research and information including member organisation changes and risks. Including matters of race and racism and impact for effective service delivery.
- Provide strategic oversight of recovery activities including identifying emerging issues and removing obstacles for effective human and social recovery operations.
- Coordinate and/or provide state-level human and social recovery information support and resources to local and district disaster management groups (if required) to enable local recovery plans and arrangements.
- Provide information regarding strategies being undertaken by members to improve human and social resilience.
- Lead anti-racism training to better ensure racial bias, and racial attitudes and negative impacts are minimised in Government service delivery throughout recovery and record such incidents to First Nations Executive HSRG.

Functional Recovery Groups

Key responsibilities would include:

- Provide advice on priority focus areas for human and social resilience.
- Monitor and provide advice on current and potential public and mental health issues which may impact the local community/population in concert with Aboriginal agencies in health and housing to prevent mental health acts.
- Enable access to information and/or coordinated government and non-government human and social recovery services through a range of service delivery channels which may include: promotion and/or referral to local community services 1800 Community Recovery Hotline grants portal multi-agency recovery hubs case coordination of vulnerable persons outreach teams.

- Engage additional human and social recovery services where local capacity is exhausted.
- Facilitate the matching and enabling of Emergency Volunteering, to include education and oversight of racism and bias and poor attitudes affecting service and delivery into Aboriginal communities.
- Enable the matching of donated goods, services, and offers of assistance.
- Facilitate access to emergency and temporary accommodation assistance.
- Administer financial support to individuals (including Personal Hardship Assistance Grants).
- · Manage the NSW Community Recovery Hubs.

Recommendation 2. State and Local Planning Schemes

That the NSW Government and Local Governments ensure all planning schemes incorporate flood overlay mapping informed by First Nations local knowledge.

1 The NSW Government should include in the model flood planning controls a requirement that councils have a flood overlay map in their planning schemes.

The map should identify the areas of a council region:

- · that are known not to be affected by flood
- that are affected by flood and on which councils impose planning controls (there may be subsets in each area to which different planning controls attach)
- for which there is no flood information available to council.
- 2 The NSW Government should include in the model flood planning controls a model flood overlay code that consolidates assessment criteria relating to flood.

Alternatively, councils should include in their planning schemes a flood overlay code that consolidates assessment criteria relating to flood.

- 3 The NSW Government should include in the model flood planning controls a model planning scheme policy that:
- for development proposed on land susceptible to flooding, outlines what additional information an applicant should provide to the assessment manager as part of the development application, or
- for development proposed on land where the
 potential for flooding is unknown, requires an
 applicant to provide: as part of the development
 application, information to enable an assessment of
 whether the subject land is susceptible to flooding,
 and upon a determination the subject land is
 susceptible to flooding, more detailed information,
 to allow an assessment of the flood risk.

If the NSW Government does not include such a policy in the model flood planning controls, councils should include in the points above in their planning schemes.

4 Aboriginals' experts in cultural and heritage to include flooding data and disaster information from Traditional Owners of Aboriginal Sciences and Systems for Local Councils with the expressed consent of registered Aboriginal parties or recognised Traditional Owners of the subject area.

Local councils should make their flood and overland flow maps and models available to applicants for development approvals, and to consultants engaged by applicants. Including Aboriginal maps of historical data and encourage access to Aboriginal experts in sciences for large scale development which includes (all the sciences).

Local Council should insist all DA to have consideration of ancient Aboriginal knowledge systems and weather patterns when developing and engage Aboriginal consultants with requisite professional qualification to assist in planning stage of large-scale development, that considers Aboriginal knowledge systems.

Local Council should not be bound to engage with Local Aboriginal and Council on historical or Aboriginal science information as their structure is not necessarily a Traditional owner's body who holds ancient and historical information.

Council should recommend that applicants of DA engage Traditional Owners and or historical owners in relation to planning for development within a region that relies upon Aboriginal knowledge systems.

Recommendation 3. Local Government and Business

That Local Governments work with the business and landowners to develop individual flood evacuation plans incorporating First Nations knowledge mapping and historical data.

- 1 Local councils should support and encourage business owners, and landowners (including Aboriginal business, organisations and LALCs) to develop private flood evacuation plans by providing the following to business owners in areas known to be affected by flood:
- · information about the benefits of evacuation plans
- contact details of relevant council and emergency service personnel for inclusion in evacuation plans.
- 2 Councils should consider making available to locality-specific information business owners that would assist them to develop evacuation plans for commercial premises, for example, like any evacuation sub-plan created under Emergency Management Queensland's disaster evacuation guidelines.
- 3 The NSW Fire Service should ensure that station officers are familiar with the procedure for contacting management when requesting the calling in of additional staff. Officers must have access to the names and current telephone numbers of the officers to be contacted in the first instance, with alternative contact details if those officers prove unavailable.
- 4 Emergency Management Services, in consultation with Aboriginal and local councils, should develop a directive that makes clear the authority of an officer to command a major SES operation. This could be expected to occur when a deployment of additional SES members is made to a region because the response needed is beyond the capacity of its local units. The directive should make clear the powers of the officer and his or her reporting responsibilities to disaster managers in these circumstances. Emergency Management must also ensure that any officer who assumes such a role has adequate training and skills in the conduct of disaster operations.



Photographer Jacklyn Wagner

"If I had had the data, we would have loaded things in a truck and taken it all to higher ground".

Adam and his family spent eighteen hours in the loft... they had taken supplies with them. The loft also has windows to escape.

Recommendation 4. Property Buy Back

That NSW Government Local Councils consider implementing a property buy-back program in areas that are particularly vulnerable to frequent flooding.

1 The buy-back program would form part of a broader floodplain management strategy informed by First Nations local knowledge, and where possible be funded from the Natural Disaster Resilience Program.

Councils should consider implementing a property buyback program in areas that are particularly vulnerable to frequent flooding, as part of a broader floodplain management strategy, and where possible obtaining funding from the Natural Disaster Resilience Program for this purpose. 2 The NSW Government should initiate an approach to LALCs, PBCs and other Aboriginal organisations affected by flooding, to buy back flood prone land or exchange lands for other Crown lands held by the State in order not to diminish the Aboriginal Estate.

Recommendation 5. Essential Service and Infrastructure

That all authorities responsible for essential services and infrastructure review the location of current assets and mitigate risk to human health and safety and Aboriginal culture and heritage that occurs during natural disasters.

- 1 Authorities responsible for the management of sewerage infrastructure should conduct a review of their existing infrastructure to identify electrical infrastructure that may be vulnerable to inundation and perform risk and cost/benefit assessments to determine if it should be relocated to a higher level.
- 2 All Councils should, resources allowing, map the overland flow paths of their urban areas, which should have Aboriginal heritage and ancient mapping provided by expert in archaeology and geological information.
- 3 Councils should consider amending their planning schemes to include provisions directed to consideration of the flood resilience of basements as a factor in determining the appropriateness of a material change of use.
- 4 In assessing and determining DAs for material change of use in areas susceptible to flood, Councils should consider whether the new developments locate essential services infrastructure above basement level, or, alternatively, whether essential services infrastructure located at basement level can be constructed so that it can continue to function during a flood.
- 5 All councils should periodically conduct risk assessments to identify areas at risk of backflow flooding. In respect of such areas, councils should consider how such risks can be lessened, including in that process consideration of the installation of backflow prevention devices. Backflow devices should not, however, be installed unless and until a full risk-based assessment has been undertaken.
- 6 Councils should conduct education campaigns directed to ensuring that all residents and property owners in areas identified as being at risk of backflow flooding are aware of the circumstances in which backflow flooding can occur, the hazard it presents and what should be done if it occurs.

- 7 The NSW Government should draft assessment criteria to be included in the model flood planning controls that require critical infrastructure in assessable substation developments is built to remain operational during and immediately after a flood of a particular magnitude. That magnitude should be determined by an appropriate risk assessment. This planning must include First Nations people and their consideration of culture and heritage matters.
- 8 If the NSW Government does not include such assessment criteria in the model flood planning controls, Councils should include assessment criteria in their planning schemes that require critical infrastructure in assessable substation developments is built to remain operational during and immediately after a flood of a particular magnitude. That magnitude should be determined by an appropriate risk assessment.
- 9 Carriers, councils and the Australian Communications and Media Authority should consider the risk of flooding when considering the placement of telecommunications facilities. Failure of IT within the Bundjalung Nation has led to heightened risk of poor communication in crisis.
- 10 State Rail should continue to investigate opportunities for increasing the flood resilience of their networks, including raising the height of critical equipment, and work toward increasing rail systems across the Bundjalung Nation. Essential Services

Recommendation 6. Long Term Environmental Planning

That Commonwealth, State and Local Government long term environmental planning, data collection and assessments incorporate First Nations scientific and cultural knowledge, and that funding be provided to First Nations groups to help provide this knowledge on a nation-to-nation basis.

It's clear that any effective environmental protection and climate change mitigation polices must have First Nations Knowledge at its core.

Incorporating this knowledge through partnerships with Governments and bodies such as CSRIO, enhances planning decisions, builds community resilience and will help climate change mitigation efforts. Funding of First Nations Groups to participate in this planning creates significant opportunity for local economic development.

The NSW Government should fund programs that help create a new generation of Aboriginal sciences led youth and land stewards. The programs should seek to partner with organisations like Deadly Science and NASA and the Duke of Edinburgh to build a combined reservoir of knowledge and expertise available to the whole community.

That the NSW Government implement the National Disaster Risk Reduction Framework (2018) National Priority 1

National Priority 1

Understand disaster risk - Relates to Sendai Framework priority 1: understanding disaster risk

Priority 1 – Strategies for action: 2019-2023

STRATEGY F

Support long-term and solution-driven research, innovation and knowledge practices, and disaster risk education.

Greater policy-research connection and innovation is needed to ensure necessary evidence bases are available to inform efforts to identify, prioritise and reduce disaster risks. A greater variety of knowledge practices, including Indigenous knowledge practices, should also be better integrated in research and knowledge application. Diverse ways of understanding and reducing disaster risk are needed to address disaster risk in all of its components

Recommendation 7. First Nations Knowledge

That First Nations environmental and cultural knowledge systems be formally incorporated into local government planning assessment and approval processes with engagement of Traditional Owners as a specific stakeholder group.

- 1 Aboriginals' experts in cultural and heritage to include flooding data and disaster information from Aboriginal Sciences and Systems with the express consent of registered Aboriginal parties or recognised Traditional Owners of the subject area.
- 2 Local councils should make their flood and overland flow maps and models available to applicants for development approvals, and to consultants engaged by applicants including Aboriginal maps of historical data and encourage access to Aboriginal experts in sciences for large scale development which includes all the sciences. All the sciences included natural sciences (biology, chemistry, physics, astronomy and Earth science), the social sciences (e.g. psychology, sociology, economics, history)and the formal sciences (e.g. mathematics, logic, theoretical computer science), and engineering and medicine, are described as applied sciences. These sciences should be applied with Aboriginal lens or Indigenous Standpoint Theory (IST) at the core.
- 3 Local Council should insist all DAs have consideration of Aboriginal knowledge systems and weather patterns and engage Aboriginal consultants with requisite professional qualification to assist in the planning stages of large-scale development, that takes into account Aboriginal knowledge systems separate from cultural heritage requirements.
- 4 Councils should recommend that those submitting DAs engage Traditional owners and or historical owners when planning for development within a region that relies upon Aboriginal knowledge systems, in order to incorporate those knowledge systems as they apply to water, ecosystems and land management, in development proposals.

Recommendation 8. River Systems as a 'Legal Person'

That Commonwealth, NSW Government and Traditional Owners formally review the legal protections of river systems with a view to granting these natural systems protections as a 'legal person'.

The rivers are our living ancestral beings, all earth its systems have spiritual value, they connect us to our lore, culture, and relationship as people, and to place. Our rivers help sustain us, help feed us, and give us the ability to thrive and must be treated with dignity, respect, and value for the spiritual

If we are to thrive as humans, and be safe, we must transition from the old and outdated system of treating rivers as our property, and to respect and activate our interconnected relationship. Non-Indigenous Australians must reset their relationship with the environment and allow First Nation people to preserve, protect and safeguard their 'ancestors' of the living earth for the benefit of all humanity.

River rights should be explored to prevent the damage and impact upon the rivers systems which is leading to severe environmental impact and compromising spiritual and cultural connection. The development is part of an international movement aimed at recognising that rivers and ecosystems are not simply resources for humans to exploit, but entities having intrinsic value and the right to exist.

The Rights of Nature have been recognised in the constitutions of Ecuador and Bolivia, and more than 20 municipalities in the United States have passed local ordinances that recognise the rights of ecosystems. The NSW and Commonwealth Governments should invest \$5 million towards establishing the legal framework for the rivers in the Bundjalung Nation, in co-leadership with First Nations Peoples of the Bundjalung Nation.

Recommendation 9. Disaster Plan Cultural and Heritage

That the NSW Government develop a plan with First Nations Traditional Owners to better protect sites of significance and of high cultural and historical value before, during and after natural disasters.

- 1 The NSW Government should develop a plan with Native Title PBCs and Traditional Owner groups (Registered Aboriginal Parties) now in preparation for times of crisis and disaster.
- This should include the development of emergency response activation plans that protect sites of significance and of high cultural and historical value. Ongoing mitigation and management plans should also be developed to prevent flooding and fire to these areas.
- 2 The NSW Government needs to initiate a rapid evaluation post disasters of native title areas as part of the assessment of the climate impact, and work with native title holders to ensure agreement of impact and works of restitution.
- 3 The NSW Government should immediately halt all large infrastructure projects post flood or fire for a period of 16 weeks so that assessment of areas of significance can be undertaken by Native Title Holders and their experts, with mutually agreed mitigation measures.

- 4 The NSW Government should urgently engage with PBCs and native title holders and Traditional Owners in order to activate landholdings, particularly where land may be needed by the Government post disaster; and begin a process of discussion and agreement to open up land options on non-flood plain areas.
- 5 The NSW Government should develop a communication plan with Native Title Prescribed Body Corporates (PBC) and Traditional Owner groups (Registered Aboriginal Parties) now in preparation for times of crisis and disaster that includes the development emergency response activation plans that protects sites of significance, and high cultural value and historical value and the prevention of flooding and fire to these areas.
- 6 The NSW Should initiate a rapid evaluation post disasters of native title areas as part of the assessment of the climate impact, and work with native title holders to ensure agreement of impact and works of restitution.

Recommendation 10. First Nations Naming in Disaster

That Commonwealth, State and Local Government communicate using Aboriginal Nation names during times of natural disaster in all public communication.

We recommend that all Governments at any time of crisis use Aboriginal nations names such as Bundjalung Nation to elevate beyond local government boundaries and allow people to work cooperatively across regions, based on interconnected ecological systems.

The unification under an Aboriginal Nation name will help build cohesion at a time of uncertainty and fear as we prepare to meet our climate crisis.

Recommendations 11. Review of NSW ALRA

That the NSW Government review the NSW Aboriginal Land Rights Legislation to improve and enhance the resilience and capacity of Local Aboriginal Lands Councils (LALC) during times of natural disaster.

The review would focus on the development of a disaster policy based on cultural information from Traditional Owners as a discrete group of stakeholders within these structures and consider insurance of LALC assets and impact to assets, capacity, governance, and the Aboriginal estate.

That the NSW Government implement the National Disaster Risk Reduction Framework (2018) National Priority 4

National Priority 4 - Governance, ownership and responsibility

Relates to Sendai Framework priority 2: strengthening disaster risk governance to manage disaster risk

Priority 4 – Strategies for action: 2019-2023 STRATEGY C

Support and enable locally-led and owned place-based disaster risk reduction efforts.

"Where disaster risks are location-specific, governments and other relevant sectors should support local ownership and delivery of place-based disaster risk reduction and resilience measures."



"If my low set house was possibly lifted, I would possibly stay".

"Monetary help. I know it floods. It has been an affordable area, we need help". '

She is unsure of her future.

Photographer Jacklyn Wagner

Recommendation 12. Disaster Policy for Housing Organisations and Cooperatives

That the NSW Government develop disaster policies for at risk Aboriginal housing organisations, cooperatives and LALCs. The policy should include insurance of housing assets and consider the impact to these assets and the Aboriginal estate. The policy should increase the capacity and capability of these organisations to enhance governance strength.

This policy needs to be developed urgently so that action can be taken to mitigate risk to housing impacts and land housing recovery programs for NSW Government investment.

A recovery policy should include recovery of social housing and asset management as a priority. This is to ensure that organisations that are or have been failing to govern, do not expose vulnerable tenants, tenants remain safe and housed, and their noncompliance and maladministration failures do not prevent or cause homelessness or engagement with government delivery of recovery. A failure to have this policy has resulted in urgent policy gaps that have affected up to 60 people in Coraki and potentially will affect State investment for housing solutions into low performing and poorly governed LALCs, and Co-operatives and other providers of Aboriginal social housing in the Bundjalung Nation.

That the NSW Government implement the National Disaster Risk Reduction Framework (2018) National Priority 2

National Priority 2

Accountable decisions - Relates to Sendai Framework priority 1: understanding disaster risk; priority 2: strengthening disaster risk governance to manage disaster risk; and priority 3: invest in disaster risk reduction for resilience.

Priority 2 - Strategies for action: 2019-2023

STRATEGY C

Build the capability and capacity of decision-makers to actively address disaster risk in policy, program and investment decisions.

Use sector-specific professional development and guidance materials to build the capability of decision-makers to use improved disaster risk information to appropriately identify and address current and potential future disaster risks and impacts within their area of responsibility.

STRATEGY D

Establish proactive incentives, and address disincentives and barriers, to reducing disaster risk.

Current and future policy, legislative, regulatory, cultural, knowledge, behavioural and financial settings should be adjusted to enable and support decision-makers to actively reduce risk within their area of responsibility. This should be pursued while ensuring the sustainable development needs of Australia's growing population are met.

Recommendation 13. Insurance of Aboriginal owned Assets

That the NSW Government underwrite Aboriginal owned buildings and assets that cannot be insured while awaiting direction for relocation or results from the Insurance Council and begin a process where the insurance is managed and underwritten by the State like other State-owned entities.

That the NSW Government implement the National Disaster Risk Reduction Framework (2018) National Priority 3

National Priority 3

Enhanced investment - Relates to Sendai Framework priority 3: investment in disaster risk reduction for resilience

Priority 3 - Strategies for action: 2019-2023

STRATEGY E

Improve the accessibility, variety and uptake of insurance.

All sectors should work to diversify the variety of insurance products, better communicate these products, and address barriers to insurability – for example, by supporting assessment of asset conditions.

STRATEGY F

Empower communities, individuals, and small businesses to make informed and sustainable investments.

Communities and individuals can own their role as informed and active investors in disaster risk reduction, subject to their capacity, capability and financial position, to their own benefit and the benefit of their broader networks and economies. This requires communities to be supported to understand disaster risks and impacts relevant to what they value and the choices they make. It is essential to identify what support may be needed by those with limited capacity and capability to act as an informed investor.

Glossary

Climate risk

Climate risk refers to how climate change could impact social, economic and natural environments. Climate risk is made up of two primary types of risk, physical and transitional, which also give rise to secondary risks including liability.

Physical

The physical risks associated with rising aggregate global temperatures. For example, this could be direct impacts to the built environment from increasing intensity and frequency of extreme weather events.

Liability

Liability risks can arise when a person or entity may be held responsible for not acting sufficiently on physical or transitional risks, causing damage to others.

Community

A social group with a commonality of association and generally defined by location, shared experience or function, and with a number of things in common such as culture, heritage, language, ethnicity, pastimes, occupation or workplace.

Culture and Heritage Rights

Australia is a party to seven core international human rights treaties. The right to enjoy and benefit from culture is contained in article 27 of the International Covenant on Civil and Political Rights (ICCPR)- external site and article 15 of the International Covenant on Economic, Social and Cultural Rights (ICESCR)- external site.

See also article 5(e)(vi) of the Convention on the Elimination of All Forms of Racial Discrimination (CERD) - external site, article 13(c) of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) - external site, articles 30 and 31 of the Convention on the Rights of the Child (CRC)- external site and article 30 of the Convention on the Rights of Persons with Disabilities (CRPD)- external site.

Article 27 of the ICCPR protects the rights of individuals belonging to ethnic, religious and linguistic minorities within a country to enjoy their own culture, practise their own religion and use their own language. These rights are particular to members of such minorities, who also enjoy the other rights guaranteed in the human rights treaties.

Article 15 of ICESCR protects the right of all persons to take part in cultural life and to enjoy the benefits of scientific progress and its applications. Article 15(1)(c) of ICESCR protects the moral and material interests of the author of scientific, literary or artistic productions. This right does not necessarily coincide with intellectual property rights under national legislation or international agreements, and need not necessarily reflect the level and means of protection in copyright, patent and other intellectual property regimes.

The Human Rights Committee has regarded Indigenous peoples as a minority for the purposes of article 27.

The Committee on Economic, Social and Cultural Rights has stated that countries should guarantee that the exercise of the right to take part in cultural life takes due account of the values of cultural life, which may be strongly communal, or which can only be expressed and enjoyed as a community by Indigenous peoples. Indigenous peoples' cultural values and rights associated with their ancestral lands and their relationship with nature should be regarded with respect and protected. Countries must take measures to recognise and protect the rights of Indigenous peoples to own, develop, control and use their communal lands,

territories and resources. Indigenous peoples have the right to act collectively to ensure respect for their right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions.

The Native Title Act 1993 contains a preamble that sets out considerations taken into account by the Parliament of Australia in enacting the Act. The preamble includes:

to ensure that Aboriginal peoples and Torres Strait Islanders receive the full recognition and status within the Australian nation to which history, their prior rights and interests, and their rich and diverse culture, fully entitle them to aspire.

The traditional use of land for hunting, food gathering and ceremonial or religious purposes by Indigenous Australians is recognised in the Environment Protection and Biodiversity Conservation Act 1999 (see sections 303BAA and 359A).

Aboriginal Sciences

Aboriginal Sciences are these sciences applied with Aboriginal lens or Indigenous Standpoint Theory (IST) at the core and applied to natural sciences (biology, chemistry, physics, astronomy and Earth science). Social sciences (e.g. psychology, sociology, economics, history), and the formal sciences (e.g. mathematics, logic, theoretical computer science), and engineering and medicine, are described as applied sciences.

Bundjalung Nation

Bundjalung Language and Culture Nest includes the Local Government Areas of Buluna, Byron, Lismore, Richmond Valley, Tenterfield, Tweed, Clarence Valley, Glenn Innes-Severn and Kyogle, and those First Nations People who hold an ancestral connection to these lands, are considered an equal part of the Bundjalung Nation. No claim is made that this boundary is exact or uncontested.

Decision-makers

Individuals, groups, organisations or entities who make investment, spending, policy, program, legislative, regulatory, resource allocation, planning or lifestyle decisions.

Disaster

A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic or environmental losses and impacts.

Disaster mitigation

The lessening or minimising of the adverse impacts of a hazardous event.

Disaster risk

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community.

Disaster risk reduction

Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

Financing

The investment of capital or money for a specific purpose.

First Nations cultural and heritage impact

The Native Title Act 1993 contains a preamble that sets out considerations taken into account by the Parliament of Australia in enacting the Act. The preamble includes:

to ensure that Aboriginal peoples and Torres Strait Islanders receive the full recognition and status within the Australian nation to which history, their prior rights and interests, and their rich and diverse culture, fully entitle them to aspire.

The traditional use of land for hunting, food gathering and ceremonial or religious purposes by Indigenous Australians is recognised in the Environment Protection and Biodiversity Conservation Act 1999 (see sections 303BAA and 359A).

Cultural and heritage impact also means the right to regionalise, protect our sacred song lines, pathways, cultural lines and communal relationship lines, and the right to preserve those connections in the management of lands and waters.

Funding

The provision of financial resources, whether through a supply of money or commercial resources, for a specific purpose.

Indigenous standpoint theory (IST)

An Indigenous methodological approach to research is a process whereby research is not undertaken for the academic institution of the non-indigenous researcher alone, but rather, it is research undertaken for the researched. Knowledge is retained by and of value to the community being researched. This is seen as an Indigenous protocol that can stimulate the Indigenous higher-degree research student to participate in the documentation of Indigenous knowledge within a framework of Indigenous acceptability that also has academic rigor. Indigenous approaches to knowledge are a valid methodological approach within the framework of Indigenous Standpoint Theory. This enables Indigenous researchers to speak from their own cultural standpoint, assist in cultural maintenance and present their own epistemological 'truth' in an attempt to produce a more inclusive and therefore more complex form of knowledge. (Foley. D. International Journal of the Humanities . Apr 2006, Vol. 3 Issue 8, p25-36)

Legal person status of rivers

Legal concept – of our Bundalung rivers as 'ancestral persons'.

Example: Martuwarra Fitzroy River Council (Martuwarra Council) believes it is now imperative to recognise the preexisting and continuing legal authority of Indigenous laws – or 'First Law' – in relation to the River in order to preserve its integrity through a process of legal decolonisation.

In 2017 Indian Ganges and Yamuna Rivers case, the 2016 Atrato case in Colombia, and the 2019 Bangladesh Supreme Court decision – which ruled that all the rivers in Bangladesh had the status of legal persons and living entities. Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (NZ) recognised the Whanganui River and its tributaries as "an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and meta-physical elements".

Nationally significant

Considered to have significant national and crossjurisdictional effect, impact or influence.

Natural hazards

A natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

Residual risk

The disaster risk that remains even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained. The presence of residual risk implies a continuing need to develop and support effective capacities

for emergency services, preparedness, response and recovery together with socioeconomic policies such as safety nets and risk transfer mechanisms, as part of a holistic approach.

Resilience

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.

Sectors

All sectors of society including government, industries, business, not-for-profits, communities and individuals.

Sciences

Sciences included natural sciences (biology, chemistry, physics, astronomy and Earth science). Social sciences (e.g. psychology, sociology, economics, history). The formal sciences (e.g. mathematics, logic, theoretical computer science), and engineering and medicine, are described as applied sciences.

Systems

A complex network or networks of interconnecting and related rules, structures and mechanisms that work towards a common goal.

Traditional Owner

Traditional Owner in relation to the lands means an Aboriginal person who has, in accordance with Aboriginal tradition, social, economic, and spiritual affiliations with, and responsibilities for, the lands or any part of them. A unique and specific group that has established connection to those lands through language and lore.

Vulnerability

The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, community, assets or systems to the impacts of hazards.









