



**FINAL REPORT 2024**  
**GUUNG BUTHERUN**  
(Water Stories)



Guung Butherun was delivered through the NSW Environment Protection Authority's Flood Recovery Program for Water Quality Monitoring, supported by the Riparian Stabilisation Package, co-funded by the Australian and NSW Governments under Disaster Recovery Funding Arrangements.

We would like to acknowledge the generosity of the Bundjalung Elders and local community who shared their stories, their knowledge and their connection to Baluun/Richmond River, along with their vision for its future management.

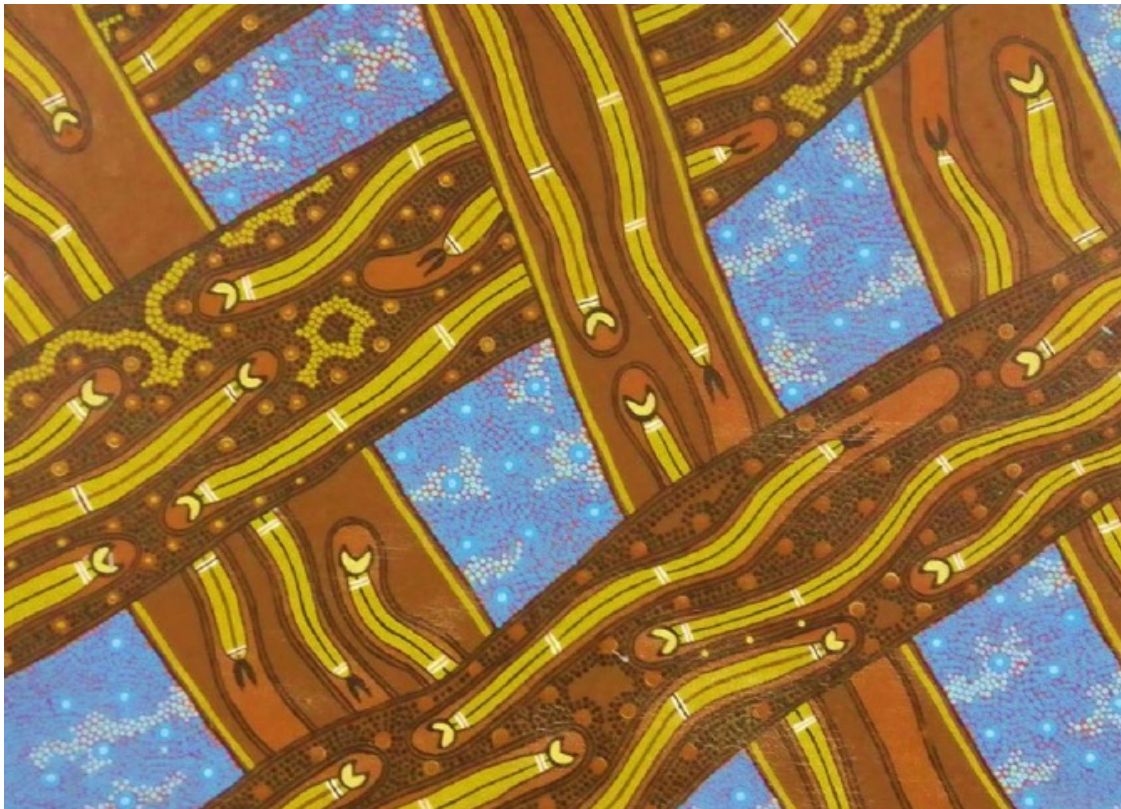
Jagun Alliance Aboriginal Corporation has put Knowledge Holder Ownership and Ethics Protocols into practice when engaging community during the duration of this project. These protocols are key in the protection, management and use of confidential information, intellectual property, Indigenous Cultural and Intellectual Property, moral rights, knowledge, data and research material in relation to the activities and outputs when integrating Indigenous knowledge and western science.

This Guung Butherun (water stories) report has been nominated to be included in this year's National Council for Fire and Emergency Services (AFAC) Strategic Direction Achievement Report.

# GUUNG BUTHERUN

(water stories)

FINAL REPORT 2024



Nguugum (wood worm) by Marcus Ferguson



Jagun Alliance Aboriginal Corporation acknowledges Country and all the Traditional Custodians of the lands on which we live and work.

We respectfully seek guidance from and pay respects to the old people, ancestors, spirits, lands, waters and skies upon which the Guung Butherun (water stories) project has taken place and shared connections.

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# EXECUTIVE SUMMARY

## V. Finding – environment

- Floods have positive and negative impacts on the environment.
- Moving to treating floodplains as assets means re-thinking environmental impacts from floods. Indigenous people can lead us all to understand the impacts of these changes and hazards and what needs to be done to restore and remediate Country.

## 27. Recommendation – environment

That, to maximise protection for the environment in and around floodplains, Government, working with local communities especially Indigenous communities, the NSWRA, other agencies and local councils ensure Indigenous voices are well heard in land use planning and natural resource management by:

- developing an Indigenous led cultural landscape restoration strategy for the Northern Rivers for nature-based flood mitigation and adaptation which would see large-scale native revegetation and wetland restoration across the Richmond River catchment, including the Tuckean swamp
- supporting Indigenous people to engage in cultural stewardship practices to build the resilience of people and Country, including the Jagun Alliance “Healing our River Country for Community and Landscape Resilience” proposal
- establishing a NSW Indigenous Natural Hazards Trust for research into and development of Aboriginal caring for Country and ‘green’ infrastructure to build back resilience in nature and community
- embedding Indigenous voices and representation in governance

The Guung Butherun (water stories) project flowed from the Buubaan Butherun (flood stories) submission that Oliver Costello, local Bundjalung man and Executive Director of Jagun Alliance Aboriginal Corporation authored for the 2022 NSW Flood Inquiry.

The Buubaan Butherun submission informed the key findings and recommendations for the environment outlined in the adjacent extract from the 2022 NSW Flood Inquiry Volume One: Summary report.

Jagun Alliance’s vision to continue following our Lores and cultural practices, to keep people connected, healthy and empowered within what is known as Bundjalung Jagun (Country).

Buubaan Butherun highlighted the cultural connections of Bundjalung peoples across the whole landscape through Lore, language, and kinship, recognising that Bundjalung and other Aboriginal communities have lived along the banks of the Northern Rivers for millennia and hold deep kinship and knowledge of the importance of cultural values and practices to inform water quality monitoring and flood recovery activities.

The aim of the project was to provide Cultural assessments of waterway recovery within the Richmond River Catchment following the 2022 floods. Jagun Alliance Aboriginal Corporation was approached by the NSW Environment Protection Authority (EPA) to design and deliver the project as part of the broader Flood Recovery Program for Water Quality Monitoring (EPA Program). The EPA Program was funded by the joint Australian and NSW Disaster Recovery Funding Arrangements in response to the February, March and June 2022 flood events.



*“When the River is sick,  
our people are sick”*

*- Bundjalung Elder, Namabunda workshop*



*To restore the rivers, firstly, we need to start with the stories,  
bringing knowledge holders together to share the knowledge of  
Country to identify important places and values of significance.  
We need to start a journey and we need to keep walking, talking  
and flowing together.*

*- Buubaan Butherun (flood stories) submission, July 2022*



Lismore Flood Gauge at Browns Creek



Guung Butherun has supported a critical process of reflection and truth telling on how Bundjalung cultural values, knowledges and practices have been impacted by flooding and offers ways to inform catchment, water quality and flood management across the Richmond River Catchment. The project has helped to recognise and create foundational knowledge to support increased engagement of Bundjalung people in water catchment conservation and restoration.

Guung Butherun will continue to improve awareness and respect for Bundjalung cultural water stories through demonstrating the benefits of knowing the way water shapes the land and the way people are shaped by the water. Guung Butherun strengthens awareness that improving water quality across the catchment will help reduce the impacts of flooding on the community and environment. Guung Butherun teaches us that cultural water knowledge and practices can improve landscape and community resilience through a greater understanding of the connection between people's values and practices. Water stories can teach people ways of thinking and acting that can reduce negative or increase positive impacts caused by flooding. The project highlights the role of Bundjalung water quality knowledge to inform a deeper understanding of the impacts of poor water management and land use practise that exacerbate the negative impacts of flooding.

Over the project's nine-month timeframe, Guung Butherun has enhanced the cultural authority of Elders and community through a series of workshops and on-river visits creating opportunities for community to share their knowledge and experiences in relationship to the river, creating collaborative partnerships and safe spaces to yarn about issues affecting community and Country. It has helped establish new connections with Elders and has supported them to share their knowledge and experiences, and importantly provided opportunities for Elders and community to get out on Country, for some it is the first time in over 25 years they have been back to parts of the river.

Our Baluns (Rivers) have and will always be central to Bundjalung people's identity, survival and dreaming. The Richmond River catchment is a key feature in the Bundjalung cultural landscape, through stories, song lines and kinship. Maamang is the name of the middle brother in the Bundjalung Three Brothers Creation Story and was a common Bundjalung name for the Richmond River prior to European colonisation. An example of the story and artwork by Marcus Ferguson (featured below) can be found here.



Three Brothers story, painted by Marcus Ferguson, featured on the Broadwater northbound overbridge of the Pacific Motorway.

The waters flowing in the river are the veins of Country, connecting life and providing sustenance throughout the landscape, just as blood circulates through us carrying nutrients and life force. The river is also linked to identity, to cultural practices and connection to each other, to roles and responsibilities, to species, seasons, ceremony, life cycles, to fire, pathways, song, story, stars, language, to all aspects of life. By understanding this interconnectedness, we can understand how deeply peoples' livelihoods and their Cultural values are embedded in the river. In short, the health of the Richmond River and the health the Bundjalung community are intricately connected.

When monitoring water quality from an Indigenous Cultural perspective, the parameters that define healthy waterways are logical and based on a relational understanding. The questions framing the guidelines for river health are qualitative and comparative to mob's well-being. In this way, water quality is defined by whether one would eat, drink, swim and/or wash in the river? Additionally, with the severity of debris, sedimentation and erosion, we must also ask, can we travel on the river? Since the 2022 floods, the answers to each of those questions is largely, no.

There is no doubt that the Richmond River is sick and has been so for quite some time and has been further exacerbated after the floods. With the increased pressure of climate change on top of nearly 200 years of mismanagement, we have created the perfect recipe for disasters in the form of floods, landslips, erosion, fish kills, poor water quality and so on. Both globally and nationally, it is Indigenous people who are disproportionately affected by climate induced natural disasters (Williamson, 2022). Throughout the consultation process of this project, we have been mindful of the trauma and pressure put on community in requesting to share their cultural and intellectual property, advice, recommendations and knowledge in relation to post-flood management. We also recognise and acknowledge that this is not through the actions of Indigenous communities that these conditions have occurred. The current state of river health is the direct result of historic colonial land use modifications and contemporary mismanagement, with the additional and cumulative pressure of climate change.



# INTRODUCTION

This is the final report for Jagun Alliance's contribution to Guung Butherun (water stories) project that has provided Cultural assessments of waterway recovery within the Richmond River Catchment following the 2022 floods.

## Project Background

The aim of this project, Guung Butherun, was to provide Cultural assessments of waterway recovery within the Richmond River Catchment following the 2022 floods. Jagun Alliance Aboriginal Corporation was engaged by the NSW Environment Protection Authority (EPA) to design and deliver the project as part of the broader Flood Recovery Program for Water Quality Monitoring (EPA Program).

The EPA Program was delivered through two projects. This project, Guung Butherun, was led by Jagun Alliance, and the other project was a technical water quality project led by the Science Division of the NSW Department of Planning and Environment (DPE). The EPA Program was funded by the joint Australian and NSW Disaster Recovery Funding Arrangements in response to the February, March and June 2022 flood events (categorised by Australian Government Reference Numbers 1012 and 1025).

The objectives of the EPA Program were to:

1. Improve understanding of flood-impacted water quality
2. Support local capacity to monitor water quality for flood events
3. Facilitate environmental recovery from AGRN 1012 and 1025.

The key objectives for Jagun Alliance's role in the project were to:

1. Create opportunities for connection and discussion by bringing Knowledge Holders together on Country to provide custodianship;
2. Enhance cultural governance for the duration of the project's timeframe in what is now known as the Richmond River Catchment.

## Cultural Context

The roots of this Guung Butherun project stem from the Buubaan Butherun (flood stories) submission authored by Oliver Costello to the 2022 NSW flood inquiry and Jagun Alliance's vision to continue our Lores and cultural practices to keep people connected, healthy and empowered within what is known as Bundjalung Jagun (Country). Buubaan Butherun highlighted the cultural connection of Bundjalung peoples across the whole landscape through Lore, language, and kinship, recognising that Bundjalung communities have lived along the banks of the Northern Rivers for millennia and hold deep kinship and knowledge of the importance of cultural values and practices to inform water quality monitoring and flood recovery activities.

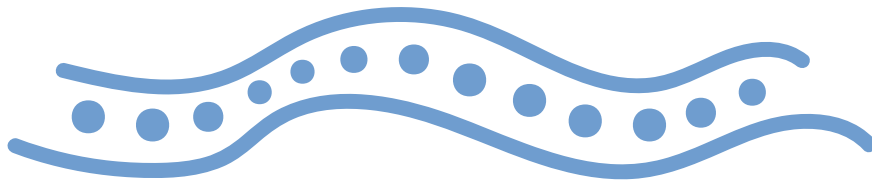
Before European settlement there were many clans and dialect groups within Jagun (Country) that maintained seasonal gatherings to share resources and maintain abundance through cultural practices to care for country. The post-colonial impacts on Bundjalung communities and Country have led to declines in connection to Country and kinship between groups, in turn this has impacted the health of both people and Country. There are many Traditional Custodians and local descent-based groups who can be engaged that identify themselves in different ways based on their diverse connections to Country. The groups are Aboriginal communities centred around population centres and historical Aboriginal reserves/missions, Native Title Groups, Local Aboriginal Land Councils and Aboriginal community-controlled organisations.

Buubaan Butherun recounted Oli's visceral experience of the 2022 flood and the history of flood throughout his life growing up in the Northern Rivers on Bundjalung Country. Oli reflects on how, throughout his life, floods were generally, "a positive experience" but in 2022, it was different. Oli's history of working in the space of Cultural fire echoes his knowledge and understanding of how water also moves through Country. Further, he states that these two elements, bad fire and bad flood both communicate that Country is sick.

***I'm upset about the way Country has been and is being treated both locally and globally. Many of the Old People looked after and knew how to live on Country in a healthy way. I'm not sure what's wrong with us these days. I fear we will just blame the rain, not learn from it. We have a big opportunity to learn, and I hope we do for our own sake. We need to honour the Old People ways and help restore Country.***

***- Buubaan Butherun (flood stories) submission, July 2022***

The Northern Rivers region of NSW has experienced consecutive and compounding climate related disasters that have had extreme impacts on communities and the environment. First Nations communities were impacted significantly by the major floods in the Northern Rivers of 2022 which had a devastating effect on Country and cultural values, as well as the livelihoods of the wider communities, people, species and the economy of the region. The region is ranked as one of the highest natural hazard risk zones in Australia with the highest total annual economic loss including damage from bushfire, flood, cyclone, and hail in the country (Australian Institute for Disaster Resilience, 2020). The frequency and severity of natural hazard disasters is increasing, vulnerability remains extremely high and coping capacity has been eroded by recent extreme weather events and disasters.

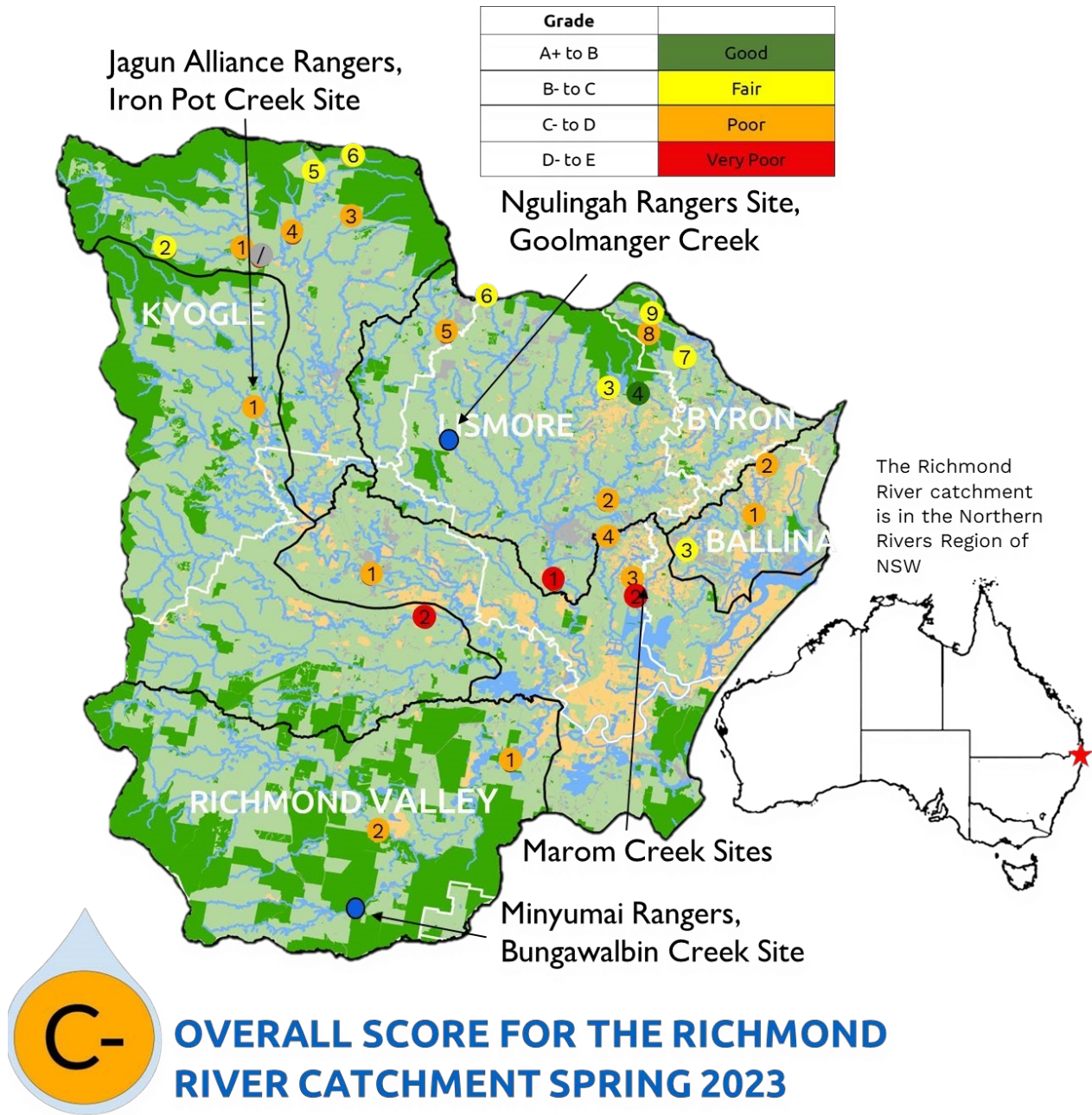


## Water quality in the Richmond

Overall water quality in the Richmond River is poor - a reflection of its abusive history of colonial extraction and mismanagement, further exacerbated by recent flooding events. A recent report card (Autumn 2023) by the Richmond River Ecological Health Program that has sampled and measured riparian condition, water quality and river health using macro-invertebrates indicators has summarised the overall ecological health grade of C- for the catchment:

Results indicate that the lower catchment sites tend to have poorer water quality and low macro-invertebrate diversity. However, even for our upper catchment sites, where the water quality is better, macro-invertebrate diversity is still quite low. This indicates that aquatic habitat is compromised throughout the catchment, including in the upper reaches. Aquatic habitat can be impacted by reduced riparian vegetation, which in turn increases the risk of sediment entering our water ways. Widespread landslides occurred throughout the upper catchment because of the 2022 floods, and this sediment load may have a significant legacy impact on aquatic health in the Richmond River catchment into the future. The ecological health grades decline further down the catchment. The low ecological health grades in the lower catchment are likely due to a combination of reduced riparian condition as well as urban and agricultural nutrient and sediment inputs.

Jagun Alliance with several other local Aboriginal ranger groups and community organisations are participating in the Richmond River Ecological Health Program (RREHP) – Indigenous Rangers Program 2023 – Ongoing.



**Map 1.** Water quality scores in the Richmond River Catchment and RREHP sites, including sites sampled and sites to be sampled in May 2024 by the Ranger groups (blue circles).



## PROJECT DESCRIPTION

### Objectives (goals)

As mentioned, the key objectives for Jagun Alliance's role in the project were to:

1. Creating opportunities for connection and discussion by bringing Knowledge holders together on Country to provide custodianship; and
2. Enhance cultural governance for the duration of the project's time frame in what is now known as the Richmond River Catchment.

Underlying these objectives were some core tenets including empowering community by amplifying their voice in the management of the river and in that way, providing constructive advice and insight on how improve the condition of the Richmond River and help to bring it back to a state suitable to drink, fish, swim and travel on. The project also aimed to dismantle stigmas around biases held between Indigenous organisations - lead by example!

### Methodology

The planned methodology for the project was to hold a series of workshops and events with the aim of bringing together community members and Indigenous Knowledge holders to identify values and knowledge of water quality and the impacts of the 2022 floods on Bundjalung Jagun. These methods included:

- workshops to support the integration of First Nations knowledge where stories of the river can be shared along with ideas that may be helpful in returning the River to a healthier state,
- walking, talking and interacting with the river, to spark dialogue and discussion around waterway recovery and how best to manage it from a Cultural perspective - and to allow the river to regain its voice!

The aim was to prioritise cultural places, values and practices within the waterways, floodplains and wetland areas of the Richmond River catchment and to:

- engage in community consultation with Elders, relevant stakeholders, local community groups, local government bodies and individuals to discuss what is known about the historical management of the river, its associated riparian vegetation and the species who inhabited it,
- pose the question, “How did the old people do it?” and collate thoughts and information to inform how the river should be managed now,
- build familiarity with Aboriginal stakeholders and the public to increase exposure to our projects, collaborative intentions, and desired outcomes, build relationships as a foundation to work with other local organisations with interests in monitoring within an Indigenous framework, and aim to collaborate efforts, avoid replication, consultation fatigue and increase unified presence on river related projects within the Bundjalung nation.

An important component of all this work was to develop and adhere to Indigenous Cultural and Intellectual Property (ICIP) protocols to provide a Culturally safe and intimate space for community to confidently share their knowledge when contributing to Guung Butherun, (see page 29 for further details).



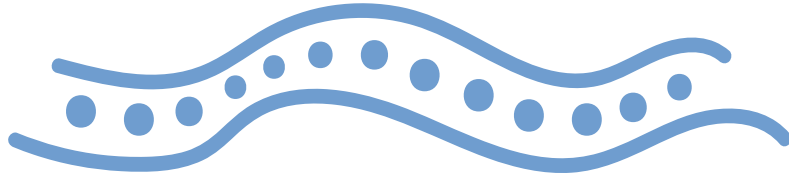
## Project Delivery

*Gather at places of importance to share the vision for healthy Country and create a journey of healing.*

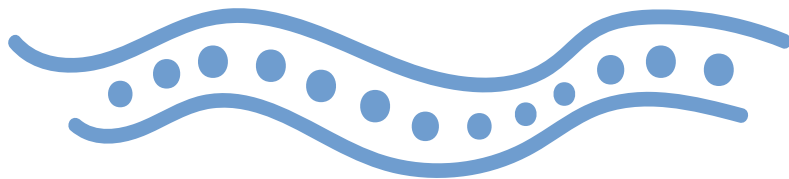
*- excerpt from Buubaan Butherun (flood stories) submission, July 2022.*

As planned, the Guung Butherun project team held a series of workshops and events over the project's timeframe. Each of these workshops have either helped to establish or reinforce our relationships, trust, and intentions with the Bundjalung community and Elders as well as with local government, conservation groups, individuals, and other stakeholders. This level of engagement has also been supported, accelerated and fortified through our and collaborative efforts with local organisations such as Namabunda Farm, Bundjalung Tribal Society, the Elders of Cabbage Tree Island, Jugan Dandii weavers, Gnibi College of Indigenous peoples of Southern Cross University, Australian National University, The Living Lab, Koori Mail, Richmond Riverkeeper Association, Minyumai IPA Rangers, Ngulingah LALC Rangers, Githabul Rangers, Jali LALC Rangers, Rous County Council, Karkalla, Kids Caring for Country group, Flow Projects, Something Deadly filmmakers, Lismore and Ballina Shire Council and Richmond Landcare.

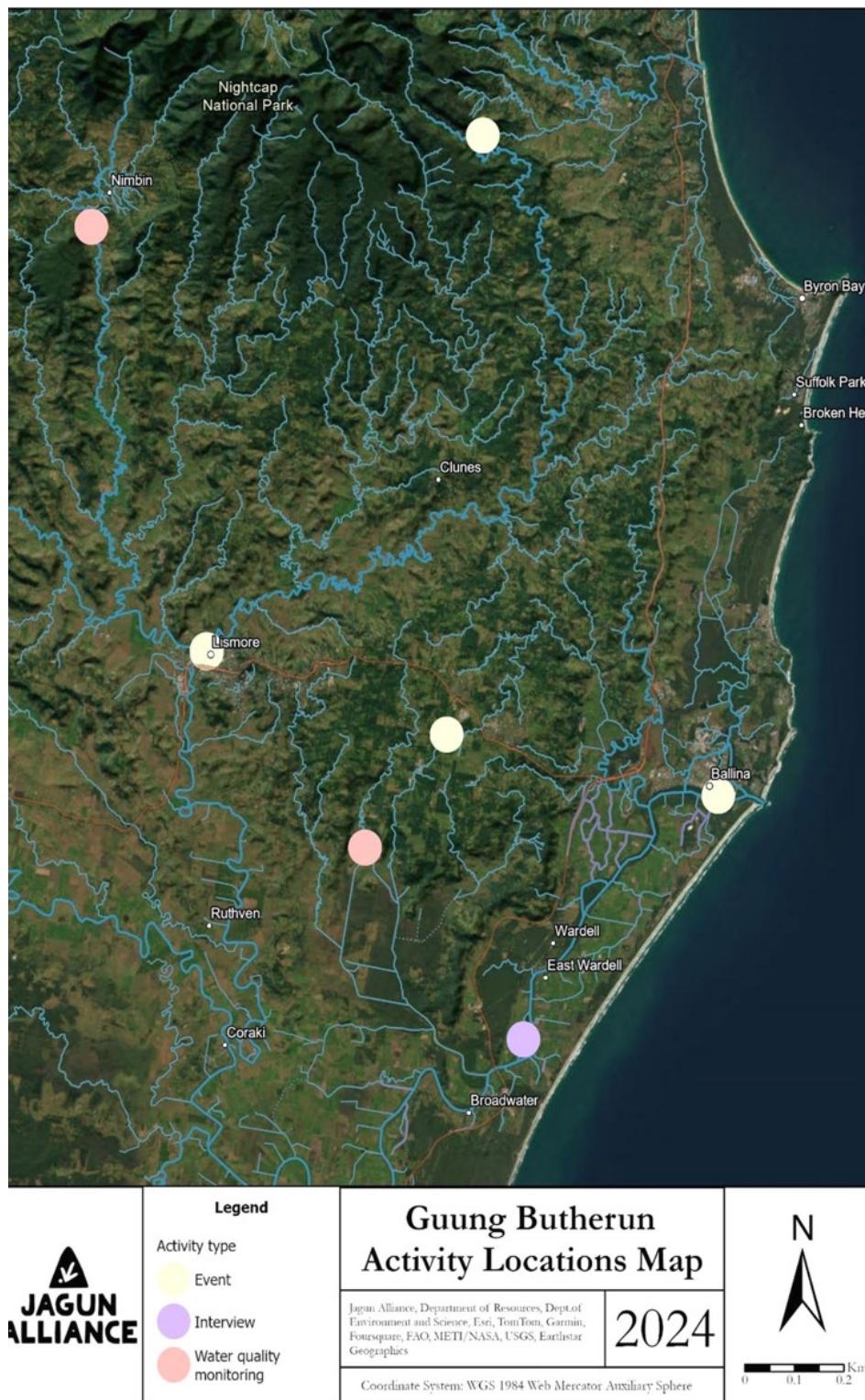
We have worked to enhance the cultural governance of Elders and community through creating opportunities for mob to comfortably share their knowledge and experiences in relationship to the river. With each event, we've created safe environments for participants to share their knowledge and experiences in addressing the magnitude of the river's poor condition, what that means for the future of Bundjalung culture and how to collectively find ways to bring it back to a healthy state. We have been mindful in our prioritisation of best practice procedures including Cultural sensitivities and following ICIP guidelines within our consultation processes. The following sections provide summaries of each of the six main workshops and other activities over the life of the project.



Some of the participants who attended Workshop 5: “How Do We Love the River Back to Health?“, held at Namabunda Farm



## Project Map



**Map 2.** Guung Butherun activity locations, including interviews, water quality monitoring and workshops.

## WORKSHOPS

### Workshop 1: Water Quality Monitoring workshops

With Richmond Riverkeeper and The Richmond River Ecological Health Citizen Science Program (RREHP), Goolmangar Creek (1 Nov 2023).

Twenty Rangers from four Indigenous Ranger groups including Jagun Alliance, Minyumai, Jali and Ngulingah engaged in water quality monitoring over two workshop training days at three sections of streams within the Richmond River catchment. These training sessions were part of the Richmond Riverkeeper project in collaboration with Rous County Council and their Reconciliation Liaison Officer, Greg Telford, and River Ecology Australia's water quality scientist Brendan Cox (SCU). The two test sites assessed were Goolmangar and Marom Creeks.

The aims of the workshop were to:

- build knowledge and skills in water quality monitoring methodologies including chemical and macro-invertebrate monitoring techniques, together with an opportunity to consider these alongside cultural indicators of river health,
- provide information and two-way knowledge-exchange between Rangers and researchers as a basis for ongoing collaboration and involvement in water quality monitoring programs across the region.





Jagun Rangers along with the Jali and Minyumai Rangers measuring water quality at Goolmangar Creek

The workshop was instrumental in building skills and connecting all the Rangers involved in ongoing water quality monitoring programs in the Richmond River catchment, and further strengthening relationships between the engaged Aboriginal organisations. It also provided opportunities to discuss cultural indicators of water health monitoring and to identify some key questions to ask, including:

- Are there cultural values or indicators here?
- Does the river look sick?
- Would you wash in or eat or drink from this water?
- What plant species and resources are present? Are they native or weed species?
- Are there fish, crays, or turtles present?
- Is there evidence of agricultural or urban impacts?

Conclusions from an evaluation report by Brendan Cox of the Richmond River Ecological Health Program on the collaboration with Indigenous rangers were as follows:

The collaboration between Indigenous ranger groups and RREHP is enhancing the monitoring and management of the Richmond RRC. The training workshops conducted with Ngulingah Rangers, Jagun Alliance, and Minyumai Rangers have successfully equipped the Indigenous rangers with the knowledge and skills needed to assess river health using macroinvertebrates and other ecological indicators. Through these workshops, the ranger groups have shown a solid understanding of the monitoring protocols and have actively engaged in data collection activities. The training has not only increased the data collection capacity of the RREHP but has also empowered the ranger groups, instilling a sense of ownership and responsibility for the health of their rivers. This sense of ownership and commitment among the rangers is crucial for the ongoing monitoring and restoration efforts in the RRC.

The engagement of Indigenous ranger groups in the RREHP highlights the importance of integrating traditional ecological knowledge with contemporary scientific approaches for effective river health assessment. By combining local expertise with scientific methodologies, the program can gain valuable insights into the ecological condition of the rivers in the catchment. Moving forward, the continued participation of Indigenous ranger groups in the RREHP will be essential for maintaining the integrity of the monitoring program and informing future restoration and management strategies. The success of this collaboration showcases the significance of community involvement in environmental initiatives and paves the way for continued partnerships in the conservation and protection of the Richmond River and its surrounding ecosystem.

Overall, the training and refresher workshops have laid a solid foundation for ongoing monitoring and management activities, highlighting the potential of citizen science and Indigenous rangers to drive positive change in the ecological health of waterways and landscapes. The dedication and commitment of the Indigenous ranger groups are essential in the ongoing efforts to restore and preserve the Richmond River ecosystem for the benefit of current and future generations.



## Workshop 2: Richmond Room Weaving Circle and String Making

Workshop held at the Richmond Room, Ballina (4 Nov 2023).

This event was created as a precursor to an Indigenous Ranger forum in Ballina organised by Jagun Alliance and the Githabul Rangers. Approximately thirty people attended the workshop, along with Jagun and EPA staff. The intention was to create a space to bring community together where members of the Jagun and Githabul teams, the EPA and Gnibi College (SCU) teams could join in a circle and get to know each other while having a yarn about the river and learning more about traditional string/net making.

Key outcomes from this workshop included:

Forged relationships of key players (including SCU researchers/ string makers, local weavers - Jugan Dandii, EPA and Jagun staff). These partnerships provided the basis for future collaboration.

Highlighted the cultural importance of maintaining resources (native riparian species) to keep cultural practices alive that also teach us to care for the river. For example, the concept of creating a fishing net was deemed Culturally imperative because there are so few nets in existence (due to their biodegradable nature) and without knowledge being passed on, this skill/tool/Cultural artefact was at risk of becoming extinct.

Maintaining knowledge of the Seasonal Calendar to inform the process of choosing and collecting the materials at the right time and location and prepping them for their various applications. This requires knowledge of seasons, locations, and applications. The availability of these endemic riparian plant materials is another indicator of river health, as much of the riverbanks within the Richmond catchment have suffered increased loss of these species due to the floods but also from historical degradation from cattle, sugar cane and macadamia farming and other negligent practices.



Our first workshop at the Richmond Room, Ballina.

### Workshop 3: Weaving and Yarning: Stories Behind the Fishing Net workshop

A community focused event for people to connect and share stories and knowledge in a post-flood space. Workshop held at the Living Lab Northern Rivers (30 January 2024).

The aim of this workshop was to provide an opportunity for the flood affected community of Lismore including Elders, mob, and local people, to engage in the practice of traditional string making with the goal of ultimately making a fishing net and to support people to engage in Cultural Stewardship, share Indigenous Knowledge and contribute to Gnibi College professor Kylie Day's research project.



This popular event was held in collaboration with the Living Lab Northern Rivers and Southern Cross University, Gnibi College. Over seventy people attended and there were twice as many who registered their interest. The event was a great success on many levels, measured on multiple metrics. By bringing Bundjalung Elders and other community members together, who have not seen each other since before the floods, we provided a social and cultural opportunity for people to get together. Moreover, participants worked together collaboratively and creatively while contributing to this long-term project of traditional string making used for fishing net production.

Before her passing, Bundjalung Widjabul-Wia-bul Elder and master weaver, Aunty Gwen Williams consulted with Kylie Day and expressed her concern about the potential loss of this Traditional knowledge, artform/practice if it was not shared and actively kept alive. Notably, Aunty Gwen said that the practice could be shared with non-Aboriginal people. Aunty Gwen's sister, Aunty Jacqui Williams opened the event with a Welcome to Country that was focused on sustainability and the importance of following local protocols; reminding us to only take what we need as she has witnessed so many people overfishing and wasting resources. Professor Day provided some background on the history and significance of weaving and why it is imperative to conserve and continue this cultural practise for future generations.

Towards the end of the workshop some of the Aunties, who are traditional knowledge holders of these cultural practises spoke about their experiences growing up in this area, they spoke about the many hardships and challenges they endured as First Nations people in colonial Australia and how these hardships continue to impact Indigenous people to this day. And while it was this experience was cathartic for all who attended, it was an important reminder for the non-Indigenous community members in attendance, to be respectful of the cultural and intellectual property so generously shared during the workshop. By creating this opportunity for community to come together, Jagun Alliance, the EPA, Gnibi College and the Living Lab have provided an incredibly important space for post-flood healing, gathering, and sharing in this traditional practice that people are still relaying positive feedback on today.



## Workshop 4: Buubaan Butherun (flood stories) Flood Memorial event

Held on a property in the Koonyum Range on the 28th of February 2024, the two-year anniversary of the Northern Rivers flood event



Uncle Gilbert Laurie is a Bundjalung, Widjabul Wia-bul and Yaegl elder, who did the smoking and acknowledgement. He also shared knowledge on the gradual loss of Indigenous language and the importance of keeping it alive



This flood memorial event was conceptualised in collaboration with Jagun Alliance, Bundjalung, Widjabul Wia-bul and Yaegl artist, poet and performer, Mitch King (working under the title “Flow Projects”, pictured below) with projection artist, Karenza Ebejer.



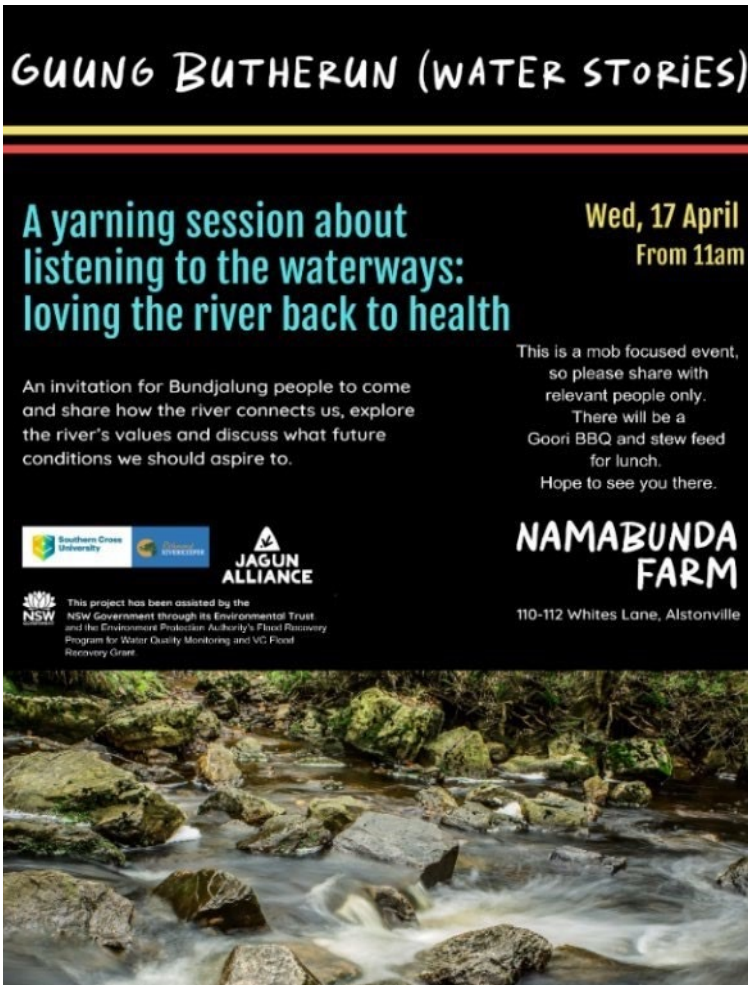
The JAAC team were joined on the night by Elders, local mob, the wider community, and a range of stakeholders who gathered in anticipation of commemorating our collective resilience and continuation in supporting each other on this, the second anniversary of the floods that devastated the Northern Rivers region in 2022. Even now, months after this memorial event was held, the response and feedback from community about the Buubaan Butherun (flood stories) event has been overwhelming; people have reached out to express their gratitude and more specifically their ability to process, heal and let go of trauma by having attended and taken part in an event such as this.

As an Indigenous-led organisation, it was imperative that this event communicated and celebrated cultural values around water in a post-flood context through song, dance, poetry, spoken word, and performance - ways that mob have traditionally communicated and celebrated, ways that evoke action and emotion - all ways that written words often fall short.

## Workshop 5: Yarning session about listening to the waterways

Workshop held at Namabunda Farm, Alstonville: How do we love the River back to health? Identifying gaps within the Bundjalung community voice and determining aspirations for future river health (17 April 2024).

This workshop was conceived in partnership with Tommy Dick and other members of the Namabunda Farm collective, Amanda Reichelt-Brushett, Faculty of Science and Engineering at Southern Cross University and the Jagun Alliance, Guung Butherun team. The focus of this workshop was on investigating and highlighting community values and aspirations around the Richmond River, discussing aspirations for its future condition, and enhancing collaboration with community Elders. Bundjalung Elders talk about the river having a voice - that it is a living entity to be listened to and respected, but what we need to do is be willing to hear what the river is saying and act accordingly. The workshop highlighted that we must recognise the cultural authority that Traditional Owners hold. There was a feeling that we are all asking the same questions and the arrows are all pointing in the same direction - the answers are clear and now we need the powers that be to take this information and turn it into action.



**GUUNG BUTHERUN (WATER STORIES)**

**A yarning session about listening to the waterways: loving the river back to health**

**Wed, 17 April**  
**From 11am**

An invitation for Bundjalung people to come and share how the river connects us, explore the river's values and discuss what future conditions we should aspire to.

This is a mob focused event, so please share with relevant people only.  
There will be a Goori BBQ and stew feed for lunch.  
Hope to see you there.

**NAMABUNDA FARM**  
110-112 Whites Lane, Alstonville

**JAGUN ALLIANCE**

This project has been assisted by the NSW Government through its Environmental Trust and the Environment Protection Authority's Flood Recovery Program for Water Quality Monitoring and VG Flood Recovery Grant.

Southern Cross University

Environment Australia

NSW

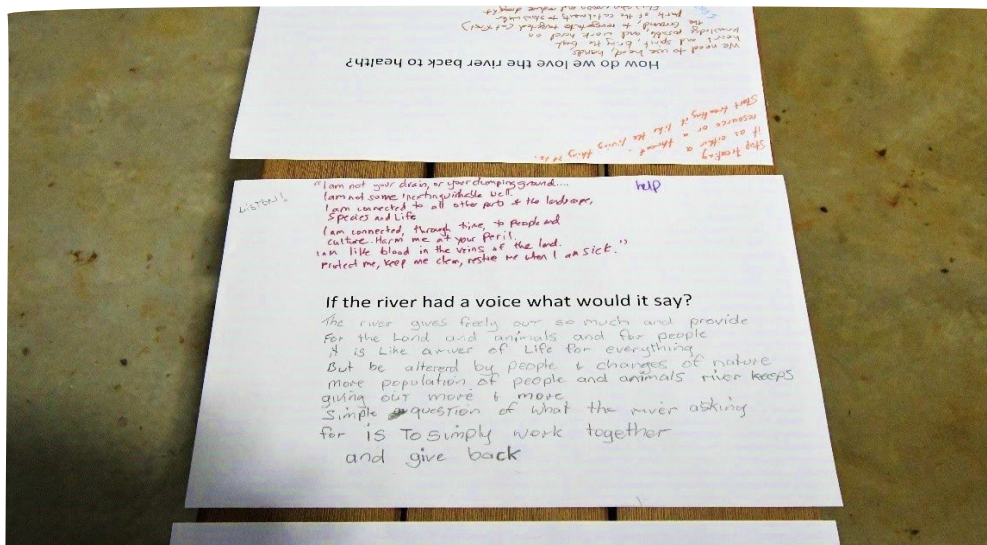
Interestingly, in their responses to the questions, many people wrote from the perspective of the river itself:

"Help me, I'm sick!"

"It's not too late to listen..."

"I need trees, not cattle and weeds!"

"I am not your drain nor your dumping ground. I am connected to all other parts of the landscape, species, and life. I am connected through time to people and culture. Harm me at your peril. I am like blood in the veins of the land. Protect me. Keep me clean. Restore me when I am sick."



Recorded responses from questions posed to workshop participants at our 'How Do We Love the River Back to Health?' workshop.



Some Elders spoke of the long history of abuse that the Richmond has suffered over the years with the installation of weirs, siltation build-up and sedimentation, the introduction of sugar cane and cattle, the disappearance of species that used to be plentiful and commonplace, the removal of native trees and grasses and the draining of wetlands for agriculture.

Examples of other thoughts that came from participants within the workshop circle were:

“Most of us have come to the realisation that we understand that it goes both ways – people are the problem, but we are also the solution.”

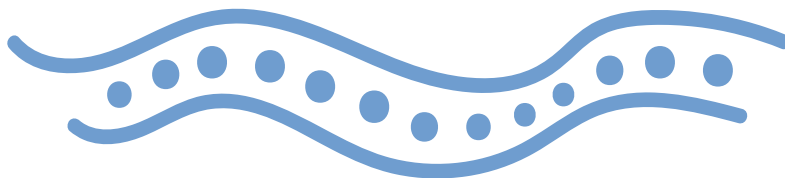
“If people can’t get on Country and practice culture, this impacts our health and Country suffers too.”

“Understanding the kinships of a system is necessary when consulting with Aboriginal communities.”

“The answers are going to come from community. They are not going to come from scientists or the politicians, they are going to come from the ground up.”

“I grew up with floods, it was a given. But the floods back then are not like what we get now.”

“Unfortunately, regional, state and federal governments have their own plans and unfortunately Aboriginal people have been locked out of that planning.”



Dr. Reichelt-Brushett provided stats that helped everyone to better understand just how flood prone the Richmond River is:

- the Richmond catchment is about 7,000 km<sup>2</sup>, and its floodplain is 1,000 km<sup>2</sup>,
- in comparison, the Clarence catchment is 22,000 km<sup>2</sup> but its floodplain is only 560 km<sup>2</sup>,
- about 97% of the Richmond River's riparian zone is located on private land.



Mandy Reichelt-Brushett and workshop participants discussing how flood water moves through the catchment.

She also brought along an oyster installation which featured several tanks of oysters both Sydney Rock Oysters and the much larger Leaf Oysters from Woolgoolga Lake, to illustrate how they filter the water and by doing so they help to keep the river systems clean. When the water quality is bad, oysters die off, and they no longer can play their role as natural filters of ecosystems.

Discussion centred on the need for healthy systems that can support healthy organisms which then can better maintain healthy water quality levels when the river is under stress from events such as floods. The focus on the system as whole ecosystem and looking at it on the landscape scale of the provided maps but also on the much smaller scale of the oysters, was very effective in illustrating these points. It helped people to envision the river as a living entity in need of attention and how it is going to take the work of the whole community to bring it back to health.

## Workshop 6: Long form interviews with seven Bundjalung Elders of Cabbage Tree Island

Interviews conducted on Nyangbul Country between April -May 2024.

These long form interviews were conducted and recorded in situ by Jagun Alliance's Cultural Advisor, Marcus Ferguson with some of the last remaining Elders of Cabbage Tree Island (Cabbo) including, Uncle Ricky Cook, Uncle Greg Ferguson, Uncle Aide Combo, Uncle Ivan James, Aunt Sandra Bolt, Aunt Rose 'Raz' Walker and Dean Bolt. These recordings focused on their earliest memories of the river, how the river has changed over time, their general knowledge of the river and recommendations of how to get the river back to good health.



Uncle Ricky Cook holding up a historical photo of life on Cabbo.

Importantly, these interviews dually serve to commemorate the lives of these seven Aboriginal Elders and to pay respect to them and their endured experiences. The recordings highlighted the central role that the river has played in their remarkable lives of while shining light on their valued knowledge and first-person perspectives - witnessing the drastic changes that have occurred around Cabbo over their lifetimes.

There used to be willow trees all along the river, all along where the old tip used to be across and along there. Mullet. Exactly. That's right, even get bream and the dogfish, can't forget about the dogfish, but you know, we never ate dogfish back in them days.

There used to be a big channel up in the middle there in Cabbo and they filled it in. There used to be a big hole there and when the water used to come high, used to come up at the back there.

Recorded within these interactions are a wealth of stories from the past as well as emerging issues. Some of the content from these recordings include the historical abundance of species that are no longer present, visible quality of the water is unsuitable to swim or fish in, resource use and management practices, impact from weirs and dredging, cultural significance of specific sites and plants/animals, as well as historical perspectives of change and aspirations for the future.

We had a place further down we called Rocky River, and that's where we had a meeting place for all the families, and around that area we all were taught, mainly the boys but us younger girls too taught how to dive for 'bingin' which we call turtles.

Rocky River was a river with beautiful stones and crystal-clear water.

We used to catch a fish called Butter Fish, I don't see the Butter Fish anymore, off the wharves. We'd sit on the wharf, and we could pick, what they call these days king prawns, we used to call them hand prawns because they had these big, long whiskers and were as big as our hands and we'd wait and grab them by the whiskers.

I think about the water, it was important to us. Marom Falls, that where the water was always pristine clear. We used to swim in and now there's hardly a trickle of water around the place or the water is grubby and dirty because of the cattle.



Uncle Aide Combo with a photo from 1928, featuring his grandfather, Harry Combo.

He says of the photo, "They asked all the Goori Bundjalung fellas to gather up for the centenary of Rous sailing up Richmond River where he come past Ballina. That's the celebration of 100 years of those fellas stuffing the river up."

The river was our source of food, and it was our playground. We'd play in the mangroves. The barrage at Bagotville, the was nice clean and water to swim in there. There used to be a ferry across there too at Bagotville before they put the barrage there.

There's Culturally active places still in the landscape today - unfortunately due to development some of them have been built over, but as Indigenous people, it's important that still go back to these places and just be present on that land and let the Old People know we are still here and take the younger people round too because we are not going to be here forever.

You can alter the top of the landscape, but the stories and energies are still in the land and soil where the old fellas danced and sang. We have got to be careful when are going out on Country and going on people's Country - always talk, be careful, tell the Old People what you are doing.

The farmers when they settled it, they cut all the trees down so they could plough it up and irrigate their corn - take the water out of the rivers to grow their corn and everything. Water was important and there were periods when they had no rain, and they took underground water from the windmills.

They put that weir down below the rocks, when the flood come all that gets silted up now. You can walk straight across, there's no water there - the riverbeds are all filled up now. The top weir got water backed up right to Fairy Hill, it doesn't flow like it used to, just a little trickle now.



Uncle Greg Ferguson and Marcus Ferguson discussing how the waterways around Cabbo have changed over the years

A key outcome from these interviews is having a first-hand reference resource from some of the last remaining knowledge holders for areas within the Bundjalung. This outcome is very significant for the general community and shows the value of projects such as this one. This is especially relevant considering the multiple projects focused on rehabilitation of the Richmond River catchment.

**NOTE: Full details of these interviews and other knowledge and information outlined in this report will be included in the Integrated Knowledge System (see below for description of the IKS) with appropriate permission and ownership protocols.**



## OTHER PROJECT ACTIVITIES

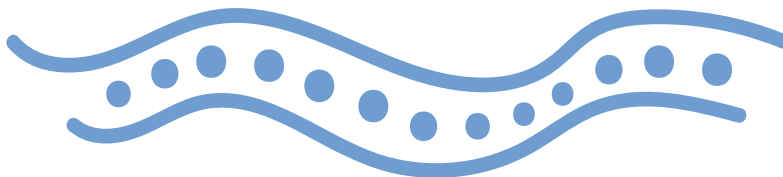
### On the Lower Richmond with Nyangbul Uncles, Ricky Cook and Graham Marlowe

It had been about 25 years since Uncle Ricky Cook and Uncle Graham Marlowe had been on a boat on the Richmond River, so this expedition carried a deep significance for them and for our Cultural Advisor, Marcus Ferguson who has been eager to get the Uncles back on the river. Marcus had organised two boats for the day to take them, and videographer, Peter Frare to locations around Cabbage Tree Island and the Lower Richmond River; areas of the river they have not been to in decades.

The degradation of the river was a shock to all. There was severe sedimentation, mangrove die-back due to the influx of fresh water from of the flood, loss of riparian species and rubbish and erosion around the island that was “mind-blowing”. The drastic siltation of the river blocked their ability to travel any further than where the mangroves are visible.



Uncle Graham and Uncle Rick with Michael Paden, Jagun Alliance Project Coordinator,  
on the Lower Richmond.



Marcus was aiming to find some nguugum (wood worms) as they are a key indicator species for river health (as well as being the totem species for the Guung Butherun project). Sadly, Marcus reported that he could only find one nguugum and it was fat, bloated and lacked the salty taste they are known for. The condition of the nguugum was due to the severe siltation blocking the salt water from flowing into the lower part of the river, indicating the river is sick.

When Marcus poses question to the Elders about what message they would like to give to the future generations, Uncle Rick responds by saying, "You better look after this river and work to make it better than it is now. The river is sick, and you can see that by looking around at all the signs telling us that things are not right."



Evidence of nguugum (wood worm)  
in a piece of driftwood from times past.





Jagun Rangers Silas Telford, Kobi Stewart and Richard Heywood joined the DPE Flow-through survey boat, retrieving data from water sampling buoys.

## Flow Through Boat Surveys at Ballina and the Clarence

### Water knowledge sharing on Bundjalung Jagun with Jagun Alliance

Recognising that cross cultural knowledge sharing projects such as this provide an opportunity to integrate cultural value assessments of the river by knowledge holders to assist in recovery from the 2022 floods EPA provided opportunities for Jagun Alliance Rangers to join the EPA project team for a flow through boat survey from Ballina to exchange water quality knowledge of the Richmond River.

There was a second flow through survey offered to the Jagun team in January from the DPE which embarked from the Clarence River with Rangers, Phil Walker and Silas Telford. Importantly, this expedition also incorporated a Smoking and Welcome ceremony after feedback from the Rangers about the need to feel culturally safer on the water. We organised Yaegl Elder, Grant Brown to meet the team at the dock at Yamba for provision of the ceremonies.

## Cultural Protocols

An initial focus of the project was the development and implementation of Indigenous Cultural Intellectual Property (ICIP) protocols and processes to give Indigenous workshop participants control over how their Intellectual and Cultural property is used, stored and shared. Paper copies of ICIP forms for use at workshops were developed and adapted into

ArcGIS Survey 123 forms for future workshops and community events. Jagun Alliance has adopted Knowledge Holder Ownership and Ethics Protocols, which are key in the protection, management and use of confidential information, intellectual property, Indigenous Cultural and Intellectual Property, moral rights, knowledge, data, and research material in relation to the activities and outputs when integrating Indigenous knowledge and western science.

Key Principles:

- Respect this country
- We belong to this country
- We look after this country
- Don't do wrong or harm to this country

Jagun Alliance stresses the need for a partnerships approach to ensure Aboriginal people receive economic and social benefits from the effective management of their land and Native Title rights. The NSW Land Rights Act and Commonwealth Native Title legislation have created significant economic and social opportunities in the sector however these opportunities have not been fully realised in part due to:

- a lack of recognition of communities' rights and responsibilities,
- lack of adequate capacity building of Aboriginal people and their organisations; and
- the way Aboriginal people view their country as a cultural landscape and their aspirations to manage it accordingly.

Jagun Alliance Executive Director Oliver Costello co-developed the 'Principles and protocols for cultural land management governance and research.' Jagun Alliance has adopted and recommends this document to guide more ethical and collaborative cultural land management research.

Read more here: <https://www.naturalhazards.com.au/research/research-projects/cultural-landmanagementresearch-and-governance-south-east-australia>

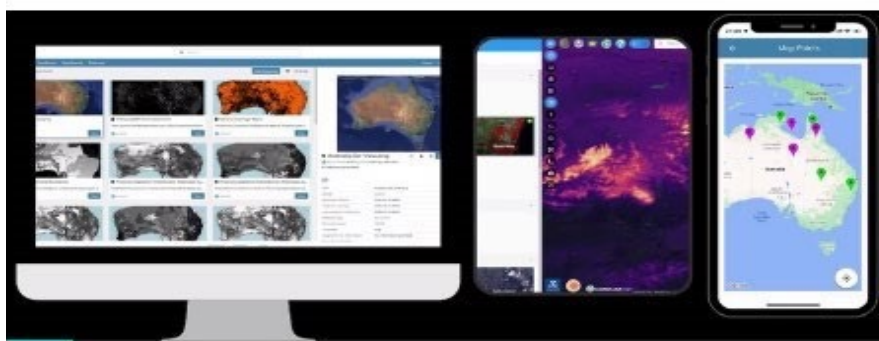
## Video Project

During the project, the EPA provided additional funds to enable Jagun Alliance to engage videographers to document and share project stories and outcomes in accordance with ICIP protocols. These funds were used to

purchase appropriate video equipment and engage local film makers to attend project workshops and field visits to capture video of community engagement activities and produce story reports for individual workshop and field events. Additional filming was also conducted with knowledge holders on the Richmond River. Video materials were used to produce a final summary video highlighting community voices and river stories.

## Integrated Knowledge System

We propose to use the state-of-the art Conservation Futures Integrated Knowledge System (IKS) to share information from the project to support community-led research, knowledge sharing and resilience. The IKS interface (illustrated below), is being developed in partnership with University of Melbourne (UoM) and Bush Heritage Australia (BHA). The project is led by John Pender and Oliver Costello, who bring together a strong and capable team in systems development, spatial analytics, partnerships and engagement, and an extensive network of NGO, researchers, government and First Nations partners. Through this work, the project has co-designed and developed an Integrated Knowledge System (IKS), built on foundational principles of protecting Indigenous Cultural and Intellectual Property and data sovereignty while enabling First Nations and other knowledge holders to safely store and share their spatial, audio-visual, narrative and other knowledge and data. A core capability for the IKS is that knowledge holders can visualise their data against other data sources and choose where and how to share their knowledge with others, while retaining control over that knowledge and how it may be used or reproduced.



An example of the IKS interface.

The vision for Conservation Futures is to create a place to understand, protect and heal Country (land, water, sky, plants, animals and people) through recognising, safeguarding, and weaving knowledge systems. The IKS will provide access to open data sources including integrated landscape and spatial data and provides pathways for First Nations and local communities to store, use and share knowledge, and to combine it with other open data sources. It will support communication, engagement and decision-making by First Nations groups, land managers, business, community and government and aims to help guide strategic and regional land use planning, funding and investment, climate adaptation and mitigation, natural capital reporting and accounting, Cultural Heritage management and Caring for Country.

## Communication Activities

Communication activities throughout the project included:

- Social media posts on Facebook, Instagram, LinkedIn with our collaborative organisations and contributors to both advertise upcoming workshops and to report on outcomes from completed workshops and events,
- Filming and photographing of events, recorded interviews with Elders,
- With additional funding from EPA, we have been able to establish a talent pool of videographers and purchase a video camera kit for the project, training and for ongoing use at community events,
- Contributions to EPA newsletter and Richmond Riverkeeper newsletter on the Ranger water quality monitoring efforts and promote updates on our workshop events,
- Communication through interorganisational collaborative networks with Richmond Riverkeeper, Namabunda Farm, Landcare groups, Living Lab Northern Rivers, NESP and CSIRO.



Indigenous Rangers now have the skills to assess and monitor the health of streams and rivers across the Richmond River Catchment. Photo: Michele Lockwood

### Rangers and River Health

As part of Jagun Alliance's Guung Butherun (water stories) project and with training from the Richmond River Ecological Health Program, Rangers from Ngulingah Local Aboriginal Land Council Rangers, Jagun Alliance, Jali Local Aboriginal Land Council, and Minyumai IPA now have the skills to assess and monitor the health of streams and rivers across the Richmond River Catchment.

## Spatial Training

During the project, EPA offered and provided additional support to Jagun Alliance through a Spatial Training workshop which was attended by several members of the Jagun Alliance team whose projects are focussed largely on developing mapping systems or have spatial components within their deliverables. The training was headed by EPA's Spatial Insights head, Michaela Bobeck with support from the EPA's Flood Projects Team members Jasmin Ives and Ethan Redman.

Feedback from the Jagun Team was wholly positive; and participants valued the benefit of one-on-one problem solving for the individual mapping questions they had. One of the main issues that was addressed was the questions around how best to design project specific maps for capturing complex multi-tiered information collation within their mapping software that is user-friendly, efficient and easy to analyse. This add-on offered by the EPA was another example of the organisation's commitment to supporting effective engagement with Aboriginal organisations and initiatives and provided valued support in the mentoring and training space for our quickly growing organisation.



## PROJECT FINDINGS AND LESSONS-LEARNED

Across the Northern Rivers there are many ongoing programs and newly funded projects aiming to improve water quality and catchment management. The Guung Butherun project highlights the important role of First Nations voices and how their Cultural Authority must be better recognised and empowered. A positive is that these conversations, no matter how long overdue, have begun or are being advanced through Guung Butherun.

### Building Relationships

A foundational component of this project has been about relationship building, community engagement and creating opportunities to develop a familiarity with local mob and respecting and moving at the pace in which these aspects of trust unfold. Patience and progressive trust-building has been central in the process of being a relatively new organisation in the context of this ancient landscape with the pre-existing relationships and kinships. With some division within community, this slow trust building is imperative.

Over the span of this project's timeline, we have engaged many people of various demographic backgrounds to participate in workshops on investigating the water quality of our creeks, celebrating our resilience as a community to mark the memorial of the flood, sharing knowledge of traditional practices of string and net making, creating space to yarn about the river and amplify the Bundjalung community voice and take the time to sit and yarn with the Elders of Cabbage Tree Island.



Aunty Sandra Bolt, Nyangbul - Cabbage Tree Island Elder has been a great contributor to the Guung Butherun project.

We have had the fortune to be able to build upon and steadily evolve our workshop concepts over the project timeline. A prime example of this is from our first workshop at the Richmond Room in December; stripping the dinaagaa (cottonwood trees) amongst a small group of mostly internal stakeholders and Jagun team. This came about after speaking with Jagun's Cultural Advisor Marcus Ferguson and SCU researcher Kylie Day, who was mentored by the late Aunty Gwen Williams. Before her passing, Aunty Gwen communicated with Kylie about the importance of this knowledge and how it must be kept alive and shared freely to the public.

Just over a month after this seminal workshop, we hosted a follow up workshop at the Living Lab where over 70 people, mostly women twisted that dinaagaa to create lengths of nurri (string). And then in March, we brought the process to a close at Namabunda farm, where we had over 30 Bundjalung men, many who came to the Farm from Namatjira Haven to work together turning the nurri into a mundang (fishing net), seeing the process through from inception to completion. We recognise that this type of progressive engagement is a unique opportunity not normally afforded in such time-sensitive circumstances but has been integral in supporting our processes and creating satisfaction in seeing them through to completion. As an organisation, we would like to acknowledge the benefit of this process and how it has allowed us to build upon and develop a concept to completion. This gradual and cumulative exploration of a process is an ideal model for future workshop-based projects.



## Understanding the river and relationships with peoples and culture

“For millions of years, water has flowed across this place we call Bundjalung Jagun, shaping the landscape and teaching us Lore. Bundjalung people have stories of this change such as Dirawong – the Goanna, that taught us Lore and continues to help protect our people. The Dirawong story teaches us about how the Evans and Richmond Rivers were shaped by a battle between Dirawong and great Rainbow Snake. Dirawong headland is a rainmaking site and when Lores are not followed, the big rains and floods will come. There are many traditional stories that teach about the Lores we must follow, and the way the ancestors’ beings shaped the Country.”

- excerpt from Buubaan Butherun (flood stories) submission, July 2022.

The rivers were pathways, they were meeting places and increase sites. They were systems of life support providing sustenance and ensuring survival for First Nations People for millennia. Rivers were respected and considered living and sentient beings - forces of the natural world with whom people shared kinship connections (Marshall, 2017). With white settler arrival, the river was exploited in every way possible. Settlements were ignorantly built on floodplains, trees were removed, cattle were given free range, infrastructure was installed that in some cases increased the river’s speed and in others, stopped its flow completely. The knowledge of First Nations people was disregarded; however, their sovereignty was never ceded (Marshall, 2017).

Those who have suffered from witnessing the degradation of their waterways, their traditional highways, their food sources, their playgrounds, their sacred ceremonial water spaces and birthing places have undeservedly inherited an intergenerational burden from the trauma of settler conquests. What Guung Butherun has helped to do, is recognise, incorporate, and amplify Indigenous people’s authority of the Richmond River and create space for reconnection and healing of the river and of mob.

Guung Butherun has successfully engaged with and provided opportunities for both Bundjalung people and the wider community to connect with each other to discuss the state of the Richmond River about how we can work together to heal the river. The following lists contain concerns and recommendations, that were shared by workshop participants during our, “Loving the River back to Health” workshop at Namabunda Farm.



Goanna and Snake story painted by Marcus Ferguson and Oral Roberts, featured on the Broadwater southbound overbridge of the Pacific Motorway.



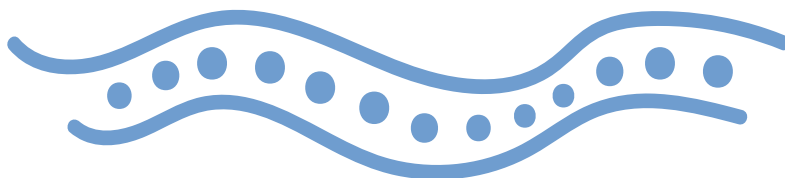
## Concerns:

- Floods impact cultural values and practices, cutting off access to culturally significant sites, increase sites and food species; poor water quality from floods negatively impacts significant species.
- Sites destroyed or damaged from flooding, native species not breeding, invasive species taking over, i.e.- introduction of feral carp and their impacts on water quality and our native eastern freshwater cod.
- Freshwater is trapped due to sedimentation and cannot get out - fish cannot breed nor move through the river as they should.
- The river is all full of sand, it is more like a creek now - you can walk across it in sections.
- Oysters are not safe to eat and there are not many left to filter and clean the river.
- Impacts from the weirs and flood gates - preventing natural water flow.
- Undercut banks, loss of trees and soil erosion.
- Severe erosion and cattle accessing the river for water and grazing on riparian vegetation, farmers not fencing their creeks and water quality issues are exacerbated by flooding.
- Mangrove dieback is visible in many areas of the river.
- Cattle grazing and macadamia farms have changed our waterways through increased sedimentation and now the rivers and creeks are much more vulnerable.
- The draining of Tuckean Swamp has caused numerous bird species to become locally extinct as the Tuckean was a breeding area for these water birds.
- Tuckean Swamp was an inland sea, so draining and exposing the swamp makes the soil acidic causing blackwater events and large fish kills.



## Recommendations:

- Ensure on-going support for First Nations cultural water assessments and monitoring programs.
- Use historical records to reference how the river was before colonisation, and what has worked and what needs to be made better - weir removal, revegetation and overall restoration of waterways and catchments.
- Sharing knowledge and mapping of the Cultural significance of riverine and indicator species which can be identified and/or added to local Cultural Calendars.
- Consider river dredging where appropriate to support access to cultural places where soil erosion has accumulated, preventing access to these places, and preventing natural salt and freshwater flows.
- Find particularly vulnerable places and begin there, e.g., Youngman's Creek, at the start of the catchment was an incredible wetland but has been drained and ploughed for agriculture.
- Develop and expand nature-based solutions as appropriate.
- Increase investment in Indigenous led ranger and caring for Country programs.



## Further insights to improve resilience of Country and Community from the Buubaan Butherun (flood stories) submission, July 2022:

1. Development of a First Nations led cultural landscape restoration strategy for the Northern Rivers that could be funded by governments and key stakeholders and be co-led by an Aboriginal peak body or an alliance of Aboriginal Controlled Community Organisation (ACCO). It could develop and maintain a natural hazard resilience program including seasonal forums, working groups, on Country actions, and support ACCO's coordination roles to educate and assist during natural hazards. This would enable First Nations led programs to engage in cultural stewardship practices that build the resilience of people and Country. An example of this is the Jagun Alliance proposal, "Healing our River Country for community and landscape resilience project."
2. A First Nations Natural Hazards Trust in NSW could provide strategy, resources, and leadership across NSW and beyond by supporting opportunities to develop Indigenous governance, collaboration, knowledge sharing, and operational capabilities in natural hazards management. This could enable Aboriginal communities across NSW to build their natural hazards resilience capabilities and capacity.
  - Indigenous engagement principles could be developed by government and key stakeholders; alternatively, the "Principles for Enhanced Collaboration between Land and Emergency Management Agencies and Indigenous Peoples" could be adopted.
  - The NSW government could review and incorporate mechanisms to support Aboriginal knowledge and engagement with the NSW State Emergency Management Plan (EMPLAN) and sub plans.
  - The inclusion of First Nations voices would yield better representation in governance and decision-making structures. For example: Institutions and agencies including Resilience NSW, State Emergency Services, Royal Fire Service, Fire & Rescue NSW, Police, Defense, and The Northern Rivers Reconstruction Corporation (NRRC) State, Regional and Local Emergency Management Committees.
  - Work force development, strategy, planning, emergency incident management functions, and other relevant activities that may affect Aboriginal Communities, Cultural Heritage, and Country.
3. Stronger and more rapid action on climate change through the reduction of carbon emissions and increasing carbon sequestration is critically needed.
4. Prioritising research and development of Aboriginal caring for Country and 'green' infrastructure to enable nature-based flood mitigation and adaptation.
5. Mapping of impacts on cultural and natural values in NSW including culturally significant species, places, and heritage sites relative to Aboriginal Custodians;

as well as ongoing threats such as weeds, landslides, and riparian erosion (urgently needed), along with other hazards and values. Undertake remediation and restoration activities across the catchments.

6. Invest in large-scale erosion control, native species conservation, invasive species control, revegetation and restoration across the Richmond River catchment including the Tuckean Swamp and key waterway ecosystems. Fund education and community initiatives to reduce unsustainable consumption and waste in flood effected areas.
7. Providing new land releases and streamlined development pathways for non-profit community settlements (eco villages) could assist with building more resilience communities.

Many of these extreme events and their impacts result from poor land use, planning, land and water management. This is evident in relation to the 2022 floods and 2019-20 bushfires. These recent extreme events have had more severe impacts on the life, property, heritage and environment due to dramatic shifts in vegetation and landscape resilience caused by degrading land and water practices over the last 234 years. Navigating community engagement in a post-flood recovery context takes time and careful implementation.

Our focus within Guung Butherun was to create safe spaces for community to share their trauma and recovery stories, their observations and insights on the river's water quality as well as their visions for the future of the river. We opened discussions and explored questions and methods on how water quality is measured - from broad overarching qualitative assessments including historical knowledge of times passed to the micro-realm of investigating the presence/absence of water bug species. We made string for fishing nets from riparian tree fibres. We created space for community to share whatever was on their mind, which allowed insights to come to the fore, and we sparked conversations through posing questions, partaking in activities, creek walks and getting Elders back on the river.

We created collaborative and constructive workshop experiences such with as the 'Look Ahead' and 'We're Better Together' projects with the Living Lab Northern Rivers, in addition to our six project focussed workshops. These were opportunities to join skillsets with other groups working in the post flood space and to support each other's efforts.

By creating dialogue between scientific and Indigenous knowledge systems we were able to monitor river health in a new and holistic way. When these systems merge, they can create a new and more complete way of seeing. Helping knowledge sharing is another way to think about 'monitoring'. It is only when trust is established, a new and improved system can come to be. Passing down information may require the knowledge holder to observe and monitor changes in the information they are sharing and curate it based on whom they are sharing it with.

By capturing the perspectives of Elders and the community at large about the history of the river, their personal and intimate experiences including growing up within this river system, we begin to create a reference framework to constructively and collaboratively investigate the current state of the river.

## Lessons on project design and engaging respectfully with communities

As a relatively new Aboriginal-led organisation, Jagun Alliance operates on a 'whole of Country scale', working to transcend barriers and build connections between communities across the Northern Rivers catchments. This is often outside the parameters of other geographic or language-group based organisations in the region and provides Jagun Alliance with the opportunity to work across a wide range of organisations, with a diverse cross-section of community members and operate as a "pillar" or supporting organisation. This model of operation comes with increased responsibilities to ensure communication is clear between groups, relationships are enhanced, respectful and are guided by local cultural protocols and Elders input.

Through this project, we have been able to build our community engagement platform with other collaborative organisations but more importantly with community Elders, Bundjalung artists, individuals, families, and various community members and a range of stakeholders. However, understanding and working with the wide range of Aboriginal organisations and communities in the region is complex and needs careful attention to detail, maintaining respect, solid cultural advice, leadership and building connections and trust with the individuals, organisations and knowledge holders we convene with. Even with best efforts there can sometimes be misunderstandings and people who feel they haven't been sufficiently informed or raise problems that need further discussion or alteration of plans (e.g. moving the location of the Flood Memorial event, Workshop 5). Jagun Alliance is therefore continuing to work on building trusted relationships across the region and increasing efforts to put in place both formal and informal agreements about consultation processes and protocols to minimise these problems in the future (including advisory panels, key contacts, MOU's, etc.).

Another key output from this project is the importance of being guided by Cultural advice and consultation. For example, Jagun's Cultural Advisers have been critical in our ability to engage communities and guide the team on how to appropriately follow protocols prior to, during, and post activities. This includes what organisations, Elders and relevant parties should be consulted/involved in activities in providing cultural context and leading discussions in workshops.

The string and net making workshops, 'Flood Memorial' event and 'Loving the River Back to Health' workshops all shared a community and engagement-based focus. The public attendance and interest for all these events was overwhelming and the feedback has been positive and encouraging. Having Oli's, Buubaan Butherun submission as a referential backbone to underscore our intentions and motives in communicating, creating and collaborating the project's workshops has been invaluable, as illustrated in its inclusion throughout this report. It has guided our intentions and discussions around the cultural values of water quality, general protocols and recommendations for future actions in this post flood recovery space.

Providing opportunities for on-Country activities are especially valuable for Elders and mob. For example, some Elders have not been on the river for 25 years nor have they had an opportunity to catch up with each other. One Nyangbul Elder stated, "The only time we get to see each other these days is for funerals. Today was good, to just sit together and talk about our memories of the river".

This project has been instrumental in getting people back on Country, telling their stories, sharing memories and seeing old friends and family. Feedback from workshops has highlighted the importance of these events in keeping stories and relationships alive, cross-cultural sharing between groups and individuals, building on enhancing community connectivity and educating non-Indigenous community members on understanding, following and respecting protocols.

Other lessons, related to the complexity of relationships and organisations within the region, include:

- Building relationships and trust with community by word of mouth, personal connection and through networks is important. We have found that a mix of social media announcements as well as promotion via word of mouth, including making phone calls to invite Elders has been the most effective way of communicating events. There was a general low response to social media.
- Relationship-building takes time - feedback from some community members was that they were dubious when first invited to a government funded event but have then given positive feedback after attending the event and expressed a willingness to come to subsequent events. This highlights that building trust and relationships is an ongoing process.
- There is a risk of consultation fatigue amongst knowledge-holders and community when there are multiple events spaced too closely together or in a small geographic area on associated topics. For this reason, opportunities to conduct project activities with partners and in coordination with their plans have been valuable.
- It is important to discuss and determine Cultural Safety of sites before any works or visits commence. For example, understanding appropriate welcoming protocols and visitation protocols for men and women is imperative for people to feel they are culturally safe when visiting other mobs' Country and respecting the traditional protocols of gender-specific spaces.
- Feedback from Rangers and partners is that future citizen science projects involving digenous Ranger groups should have more than citizen science outcomes, these projects should also encompass and represent mobs' Cultural connections and inputs on knowledge of water and Country.

- External pressures need to be considered when planning community engagement activities. For example, several groups in the region are going through Native Title claims which can be a very contentious process and potentially create divisions within communities. Groups can be stressed and suspicious of outsiders during this process which can last years if not decades.
- Community events can have unexpected positive outcomes through building connections. For example, after our netmaking workshop, it was reported that the Namatjira Haven men's group, who share the property with Namabunda Farm and Bundjalung Tribal society have not joined an activity with Namabunda since the 1980s. Having these Bundjalung men all working together at our workshop, has had positive repercussions beyond the projects' scope.
- Indigenous Cultural Intellectual Property (ICIP) agreements are important to provide protection for Elders and knowledge holders to remain in control of and own their stories.
- Listen to what the Elders say! Elder criticism and feedback are valuable. They will watch to see if you have remembered their suggestions or instructions - this can come down to what may seem like a minor detail but has greater repercussions.
- We identified a need to clarify expectations of workshop facilitators, knowledge holders and other types of participants in terms of payment and are now extending and refining our list of rates to guide future discussions with individuals and organisations on recognizing their contribution to projects such as this one. Using historical photos, maps, and other documents is an effective way to spark conversations and yarns with Elders and community in general.

The overall project approach was designed to empower Indigenous led research methodologies that focus on community led participatory co-design through shared learning opportunities. The project achieved this through a combination of workshops designed around building connections and collaboration between organisations and community, followed by more detailed yarns with knowledge holders to enhance potential for future collaboration and action in caring for the river.

However, the short time frame of the project means that in order to maintain the accomplishments and relationships made through Guung Butherun, this work must be further supported into the future. With continued support, the relationships and successes forged through this project will exponentially build on future river-based projects through cumulative trust building and knowledge sharing, adding value to EPA's investment in Guung Butherun. Such investment will enhance the success of future activities from organisations and communities across the project area.



Collaborative partnerships played a key role in the success of the Guung Butherun project.

## CONCLUSIONS

To restore the rivers, firstly, we need to start with the stories, bringing knowledge holders together to share the knowledge of Country, to identify important places and values of significance. We need to start the journey and we need to keep walking, talking and flowing together. - from Buubaan Butherun (flood stories) submission, July 2022.

The Guung Butherun project has started this critical process and created a foundation to build on for future river and catchment restoration projects. Over the project's nine-month timeframe, it has enhanced the cultural governance of Elders and community through creating opportunities for mob to comfortably share their knowledge and experiences in relationship to the river, creating collaborative partnerships and safe spaces to discuss both historical and topically relevant issues that are of community concern. It has established a connection with Elders and has been able to support them to share their knowledge and experiences, and in some cases has provided an opportunity for Elders who have not been on the river for many years to get back on their balun.

To build on what we have achieved within Guung Butherun, we will continue to work with knowledge holders and organisations we've engaged through this project and utilise the knowledge and information from the workshops and interviews to inform priorities and practices for ongoing and new projects (including the 'Heal the Rivers' project). We will ensure we return copies of project information to knowledge holders for checking and discussion of potential future uses, and guided by these discussions, we will include permissions and protocols for use as we develop the 'Integrated Knowledge System'. Information on the natural and cultural values of the river and catchment that people have talked about will also be valuable in informing development of monitoring, evaluation and learning across all our projects.



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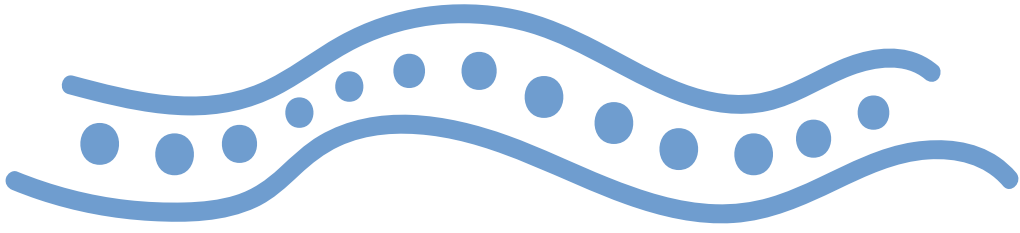
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Nguugum (wood worm), the feature artwork of the Guung Butherun (water stories) project was painted by Marcus Ferguson, Jagun Alliance Cultural Adviser who graciously allowed us its use for this project.

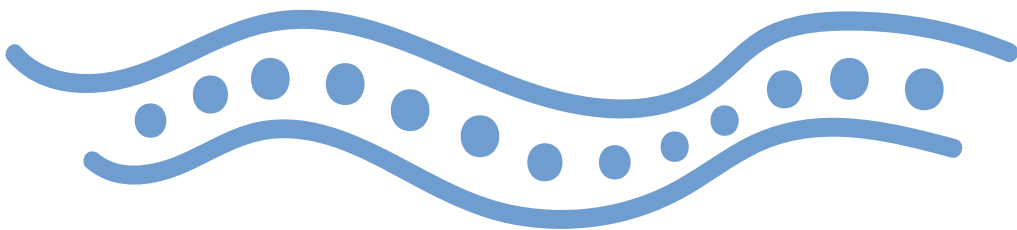
Photographs featured within this report have been provided by: Jahvis Loveday - Something Deadly, Paul Daley - a lush forest media, Peter Frare Video Services and Michele Lockwood, Jagun Alliance Aboriginal Corporation.





**Ngalii – ngaa naa jaguun - gunuu djanda  
mandii nguthung garra guuriaabun,  
beehing, nguubuu-gan**

(We acknowledge Country – our elders past present and future)



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