



A COMMUNITY-CENTRED DISASTER LEARNING REVIEW OF THE 2023 BUSHFIRES IN TENTERFIELD, NSW

LESSONS FOR BUSHFIRE RESILIENCE

FIRE to
FLOURISH 

Authors

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Disclaimer

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Acknowledgement of Country

We acknowledge the Traditional Custodians and Owners of the lands on which we work and live across Australia.

This report was created by people living on Ngunnawal/Ngambri, Boonwurrung/Bunurong and Wurundjeri Countries. It draws on the experience of our Fire to Flourish program, that operates on Bidwell, Brinja-Yuin, Bundjalung, Djiringanj, Gumbaynggirr, Gunaikurnai, Kamilaroi, Monero, Walbunja and Yaegl Country.

We pay our respects to Elders past and present, and acknowledge the sovereignty of Indigenous peoples. We are committed to collaboration that furthers self-determination and creates a better future for all.



Photo: Tenterfield community decision-making workshop participants

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EXECUTIVE SUMMARY

This report presents the process and findings of the Tenterfield Bushfire Learning Review, including the community-developed strategic priorities for future disaster resilience in Tenterfield, and the community-led projects that were subsequently funded to strengthen disaster resilience.

The Tenterfield Bushfire Learning Review was conducted as part of the Fire to Flourish program. Led by Monash University, Fire to Flourish is co-creating and trialling innovative solutions that enable our four partner communities – Clarence Valley, Tenterfield and Eurobodalla in NSW, and East Gippsland in Victoria – to strengthen their own resilience to disaster while addressing systemic disadvantage.

What was the Tenterfield Bushfire Learning Review?

In recent years, Tenterfield has faced long-term drought, bushfires in February 2019, the 2019-20 bushfire season, floods in 2022, and the COVID 19 pandemic. Climate change forecasts indicate that the region is likely to continue to experience more frequent natural hazard events. Tenterfield community members have shown significant resilience in the face of these disasters. But as personal resilience is pushed to the limits and many residents live with significant socioeconomic disadvantage, strengthening the existing community disaster resilience in Tenterfield is a must.

Tenterfield and its surrounding region was impacted by significant bushfires in October and November 2023. Shortly afterwards, Fire to Flourish was invited by local residents to conduct a post-event learning review. Tenterfield community members are the experts in their own disaster resilience. The aim of the Tenterfield Bushfire Learning Review was to foreground community voices in identifying, developing a shared understanding of, and delivering on, resilience-building priorities.

While post-event reviews are commonly undertaken by emergency services to reflect on operational service responses, it is rare for them to take a community-centred view. In addition to reviewing Rural Fire Service mapping, media and social media commentary on the

bushfires, four community workshops were held and interviews conducted with community members who were either affected by the bushfires or were involved with community preparedness, response and recovery.

This process identified lessons on what worked well and priorities for what could be improved for next time a disaster hits the region. These priorities are focused on strengthening community resilience, not firefighting operations.

What was found?

Insights were gathered from Tenterfield community members through community workshops, individual interviews and conversations with locals. Via this process, Tenterfield community members identified many areas of strength (what worked well) and areas for improvement, before, during and after the 2023 bushfires.

This Review found that the Tenterfield community showed immense strength and care for their landscape and community before, during and after these bushfires. Community members were proactive in taking action to prepare for bushfire, protect their properties and speed up recovery. A group of local volunteers called the Friends of Tenterfield Aerodrome (FOTA) dramatically increased local firefighting capability. During the fire itself, the community pulled together to support affected community members and the firefighters.

After the fire, community organisations led a coordinated recovery effort and bushfire risk management increased. The very fact that there was interest in a learning review is evidence of the substantial resilience in the Tenterfield community.

Via this Review, Tenterfield community members identified a number of areas for improvement. Firstly, they highlighted deep seated challenges the community is facing that were magnified by the 2023 bushfires. Namely, lack of adequate recovery from previous disasters - which are becoming more frequent - and the need for greater social cohesion and trust. The community felt there was a lack of coordinated community disaster preparedness. This played out during the event when aspects of the evacuation, communications and mental health support did not

meet community needs. A handful of people took on the lion’s share of responsibilities.

After the bushfire, there have been gaps in clean-up and recovery support that extended the recovery period and magnified damages. Community members reported a lack of accurate data on the fire’s impact, an issue that this report contributes to addressing.

It is important to note that the responsibility for the areas of improvement lies with a range of individuals, groups, agencies and governments. There are many areas for improvement that are actionable at the community level, while others are the responsibility of governments and agencies at various levels.

Priorities for action

The findings of the Review were shared back with the Tenterfield community via workshops. With these findings in mind, Tenterfield community members developed a clear vision for of what they would like to see in the near future when it comes to bushfires:

“Future bushfires in the Tenterfield region will be more predictable, cause less community anxiety, will feature reliable communications, and will be well supported by community agencies. There will be no deaths or injuries. Community projects to increase Tenterfield’s bushfire resilience will be designed to ensure they have a legacy going into the future.”

Considering the strengths and areas of improvement, together with the vision of where they want the community to be in the future, Tenterfield community members then identified five key priorities for increasing resilience that a) build on their strengths, b) address areas for improvement, and c) advance their vision:

Priority 1: Collaborative, collective and inclusive community disaster response and recovery planning.

Assist the Tenterfield community collaboratively and collectively prepare for the next emergency event, to increase the community’s resilience.

Priority 2: Caring for ourselves and our neighbours.

Build caring social community networks that engage diverse people and social groups from across the Tenterfield community.

Priority 3: Caring for our natural environment.

Encourage ecological regeneration to support fuel management, and particularly to support ecological sustainability of areas impacted by previous fires.

Priority 4: Caring for our local economy.

Support local businesses to reduce their risk, prepare for disasters and recover well.

Priority 5: Collecting data on disaster impacts.

Plan and implement initiatives to collect accurate data on local disaster impacts.

The path forward

The Tenterfield Bushfire Learning Review was an opportunity for community members and local stakeholders to come together to reflect on what did and did not work well before, during and after the 2023 bushfires. Via this process they developed a positive vision for the future and five priority areas for resilience strengthening. Acting on these priorities and ultimately making this vision a reality is a shared responsibility between community members, local organisations, agencies, and local, state and federal governments.

Table 1: Key findings of the Tenterfield Bushfire Learning Review

Timing	Worked well	Needs improvement
Before	<ul style="list-style-type: none"> Individual household and property preparations Infrastructure upgrades FOTA (Friends of Tenterfield Aerodrome) preparations 	<ul style="list-style-type: none"> Ongoing recovery from the 2019/20 bushfires: infrastructure, grants, mental health, ecologies, fuel management Social cohesion and trust: loss of town identity, diverse population groups, declining volunteer rates Coordinated community disaster preparedness: no coordinated training on how to prepare and plan
During	<ul style="list-style-type: none"> Community worked together: residents, local community organisations, FOTA supporting Rural Fire Service operations 	<ul style="list-style-type: none"> Evacuation planning: evacuation spaces Mental health support Information, warnings and communications: coordination and communication Personnel: multiple responsibilities
After	<ul style="list-style-type: none"> Community organisations supported recovery: community volunteer orgs, community coordination Bushfire risk management coordination increased 	<ul style="list-style-type: none"> Psychosocial support services Post-bushfire clean-up Post-bushfire financial assistance: financial aid, grants Bushfire impact data

The findings of this Review, which come directly from the Tenterfield community, are relevant for all groups and organisations invested in the disaster resilience of Tenterfield, including the Tenterfield Shire Council and emergency services agencies. Understanding the experience of Tenterfield during this bushfire has salience for other at-risk communities and stakeholders too. For Tenterfield community members and local community-based organisations, being part of the review has strengthened networks and coordination which are critical for disaster resilience.

Following the identification of the priority areas, Fire to Flourish further facilitated community-led disaster resilience strengthening by establishing a \$200,000 participatory grant round to fund community projects that contribute toward meeting the priorities. Expressions of Interest were sought from local community groups to propose projects and a community granting decision-making group was convened to review the proposals and decide on the final allocation. The

community decision-making group awarded the funds to eight projects that are strengthening Tenterfield's community disaster resilience.

Overall, the Review process found that communities are capable of identifying and implementing practical means of strengthening community disaster resilience. The Tenterfield community are ready, willing and capable of reflecting on their disaster experience and identifying priorities for resilience strengthening, in a strengths-based, trauma-informed and collaborative way.

More support of communities is needed to strengthen Australia's disaster resilience. But community-led does not mean community alone; working together is essential. Community-based disaster learning reviews are a powerful way to elevate community leadership and agency in the post-disaster period, and for community voices, insights and priorities to be centred in planning and decision making led by institutions. Community-led engagement and projects that quickly strengthen resilience are both possible and effective.



Figure 1: Tenterfield community members working together to envision the measures needed for Tenterfield to cope well with future bushfires

GLOSSARY

AFAC – The Australian and New Zealand National Council for fire and emergency services.

Agencies – The various formal organisations that exist to help support communities. The term includes organisations from all levels of Government, and non-Government organisations.

Bushfire – An unusual or extraordinary free-burning vegetation fire which may be started maliciously, accidentally or through natural means, that negatively influences social, economic, or environmental values. Bushfires should be understood as different to landscape fires. Bushfires are linked to extreme fire weather, mostly high intensity and control measures often exceed regular firefighting resources.¹

Bushfire hazard reduction activities – Bushfire hazard reduction activities reduce flammable vegetation in strategic locations to reduce bushfire risk to particular areas such as towns or key infrastructure. The activities include both burning and mechanical ways of removing vegetation, and are conducted by fire agencies and land managers. Ideally, they are planned and implemented through local Bush Fire Management Committees.

Capacity – The combination of all the strengths, attributes and resources available within an organisation, community or society to manage and reduce disaster risks and strengthen resilience. Capacity may include infrastructure, institutions, human knowledge and skills, and collective attributes such as social relationships, leadership and management.²

Community – A social group with a commonality of association and generally defined by location, shared experience, or function and with some things in common, such as culture, heritage, language, ethnicity, pastimes, occupation, or workplace. For the purposes of this report, ‘community’ refers to residents of Tenterfield town and surrounds.

Community assets – An approach to community where formal and informal associations, networks, and extended families are treated as assets and also as the

means to mobilise other community assets. Treating these relationships as assets is a practical application of the concept of social capital.

Community-centred – An approach from external agencies to work with communities, that uses practices of centering community voices, concerns and ideas.

Community-led – The community leads the process as it works with partners to develop solutions to problems that it identifies. Community-led approaches are locally led and owned, centre community voice, include marginalised groups, build authentic relationships and empower communities to lead.

Disaster event – 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 and environmental losses and impacts.³ The effect of the disaster can be immediate and localised, but is often widespread and could last for a long period of time. The effect may test or exceed the capacity of a community or society to cope using its own resources, and therefore may require assistance from external sources, which could include neighbouring jurisdictions, or those at the national or international levels.

Disaster preparedness – The knowledge and capacities developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.³

Disaster recovery – The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and “build back better”, to avoid or reduce future disaster risk.³

Disaster response – Actions taken directly before, during or immediately after a disaster in order to save lives,

reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.³

Annotation: Disaster response is predominantly focused on immediate and short-term needs and is sometimes called disaster relief. Effective, efficient and timely response relies on disaster risk-informed preparedness measures, including the development of the response capacities of individuals, communities, organisations, countries and the international 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. Disaster risk reduction is the policy objective of disaster risk management, and its goals and objectives are defined in disaster risk reduction strategies and plans.³

Exposure – The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.³

Fuel – ‘Fuel’ is a term used to describe the quantity (load), type and the level of dryness (curing) of bushfire fuel, which is usually vegetation. Fuel load and condition builds up over several years and is also influenced by seasonal conditions. Generally, the more dry fuel present, the worse the hazard.⁴

Hazard – A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. For bushfire disasters, the natural hazard is the combination of fuel load and bushfire weather.⁵

Lessons Management – An overarching term that refers to collecting, analysing, disseminating and applying learning experiences from events, exercises, programs and reviews. These learning experiences include those that should be sustained and those that need to improve. The goal of this activity is ongoing improvement.

The lessons management framework differentiates between:

A *‘lesson identified’*: when the learnings from particular experiences are captured and a course of action recommended.

A *‘lesson learned’*: when that course of action has been implemented, and there has been a definite change as a result.⁶

LGA – Local Government Area

NGO – Non-Government Organisation

NRCF – Northern Rivers Community Foundation

Psychosocial services – The various services that people might need to access during and after disaster events to help them feel safe, calm, connected to others, able to help themselves, and to see a positive pathway to recovery.

Resilience – Disaster resilience is defined as ‘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.’ See also ‘Coping, adaptive and transformative capacities’.

Community resilience refers to communities developing and engaging their understanding of systems relationships, identifying strengths and networks, and self-organizing collective action ‘to respond to and influence change, to sustain and renew the community’ and ‘thrive in an environment characterized by change, uncertainty, unpredictability, and surprise’.⁷

Resilience domains – Disaster resilience is increasingly understood as a multidimensional concept. Fire to Flourish identifies five resilience domains that collectively represent a holistic approach to resilience. These themes inform the development of local resilience planning and initiatives, and guide knowledge generation focus, including impact evaluation.

The resilience domains are:

Health and wellbeing: Mental and physical health, knowledge, access to services (education, social services etc).

Social capital: Our people, connections and networks, cultures, knowledges and skills, access to decision-making and resources, government. See also ‘Social capital’.

Economic wellbeing: Our economies - agriculture, tourism, local businesses, the economic health and diversity of these, access to individual and collective financial resources.

Natural environment: Features and values of our landscapes, climate, vegetation, natural hazards, recurring natural events, the natural resource base and its sustainability.

Built environment: Housing and other built assets, roads, lifeline infrastructures (communications, water, power, waste management etc).⁸

Social capital – The connections, reciprocity and trust among people and groups. There are three types of social capital: bonding (strong ties between similar people, e.g. family and friends), bridging (looser ties between a broader range of people, often cutting across race, gender and class) and linking (ties connecting people with those in power, such as decision-makers). These norms and networks facilitate collective action, and involvement and participation in groups can have positive consequences for both the individual and the community.⁹

Strengths-based approach – Drawing on approaches from fields including community development, health and social work, strengths-based approaches to disaster resilience focus on the capacities and resources that people and communities have, and how these can be drawn upon and developed to increase resilience, rather than focusing on deficits, needs and vulnerabilities.¹⁰

Systems change – Systems change has been defined as, ‘shifting the conditions that are holding the problem in place.’ It is about looking beyond any single organisation to understand the system by identifying all the actors involved, exploring the relationships between these

actors, the distribution of power, the institutional norms and constraints within which they operate, and the attitudes and assumptions that influence decisions.¹¹

Trauma-informed approach – Trauma-informed practices include the following understandings: (a) trauma has widespread impact and there are various paths to recovery; (b) an individual’s experience of trauma may be accompanied with specific signs and symptoms of trauma; (c) the response from individuals, programs, organizations, and systems to the person experiencing trauma should be comprehensive and integrative; and (d) attempts should be made to prevent re-traumatization.

Trauma-informed practices prioritize trust-building, transparency and social connectedness to reduce the impact of trauma through collaborative community processes. Community members become seen as active participants in the process, rather than victims without control of their future.¹²

Vulnerability – The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.¹³



INTRODUCTION

This report presents the findings of a Community-Based Disaster Learning Review facilitated by Fire to Flourish researchers with the community of Tenterfield, after the region was impacted by significant bushfires in late 2023. It is written for the Tenterfield community, to help in their ongoing work to strengthen community disaster resilience.

The Tenterfield community – its residents and many community organisations – are its first and last responders when disasters occur. This report documents what worked well and what could be improved at community level from the 2023 bushfires. By outlining a path forward, this report can be used to strengthen the community's capacity to prepare for, respond to, and recover from future disasters. This report does not try to impose ideas from external sources. Instead, it documents a path forward envisioned by Tenterfield community members, for the Tenterfield community.

This report is also written to facilitate knowledge sharing within the disaster resilience sector - from local and state governments, or from NGOs - with an interest in supporting post-disaster learning and community disaster resilience strengthening.

Firstly, the report shares insights about effective community disaster management practices in Tenterfield across different phases (before, during, after), potentially benefiting other communities facing similar challenges.

Secondly, this report documents the practical implementation of, and outcomes from, facilitating a Community-Based Disaster Learning Review methodology. It documents how centering community voices, experiences, skills and knowledge can support community members through a process of strengthening their own disaster resilience.

The report has been prepared by researchers with Fire to Flourish, a community resilience program led by Monash University and funded by philanthropic partners.

Fire to Flourish is a five-year program (2021-2025), trialling innovations in community-led disaster resilience and influencing the conditions for them to scale. For more information, see the Fire to Flourish website at firetoflourish.monash.edu.au.

Disaster Resilience in Tenterfield

Tenterfield is one of Fire to Flourish's four partner communities, and was severely affected by the 2019/20 bushfires. A dedicated staff team has been working in the Tenterfield Local Government Area since 2022, using their strong local connections to work deeply with their communities, mobilise community networks and trial different participatory grantmaking approaches to build disaster resilience.

These Fire to Flourish approaches, supported by participatory action research, have brought Tenterfield community members together to reflect on their lived experiences, analyse their current situation, create shared visions of resilience, identify community priorities, develop community-led resilience project ideas, and allocate grant funding through self-determined community governance processes.

It was in this context that Fire to Flourish was invited by the Tenterfield community to support them to systematically reflect on the lessons learned from their experiences of a subsequent and significant bushfire in October and November 2023. The Tenterfield community wanted to use these lessons to further strengthen its bushfire preparedness and resilience efforts. These efforts would then be supported by an allocation of \$200,000 in Fire to Flourish grant funding to support community projects that address the community-identified priorities coming from this learning review.

This community-based disaster learning review is critical for Tenterfield. Much of the population within the town and in the surrounding districts have been impacted by a range of disastrous events in recent years. These include bushfires in February 2019, the 2019/20 bushfire season, drought, floods and the COVID 19 pandemic. Climate change forecasts indicate that the region is likely to continue to experience more frequent fires¹⁴. As personal resilience is pushed to the limits, strengthened community disaster resilience is a must.

Learning Review Approach

While post-event reviews are commonly undertaken by emergency services to reflect on operational service

responses, it is rare for them to take a community-centred view. In order to support the Tenterfield community to learn from the 2023 bushfire disaster, Fire to Flourish applied its Community-Based Disaster Learning Review methodology (Box 1). This approach centres community voices, experiences, skills and knowledge, so that community members can lead in strengthening their own disaster resilience.

For this Tenterfield Bushfire Learning Review, Tenterfield community members co-developed the scope and the priority areas for action. Researchers gathered and shared the Tenterfield community's lived experiences, perspectives and priorities regarding community bushfire resilience. Tenterfield residents generated insights about what happened before, during and after the 2023 bushfires – with reference to previous disasters as well – and what should happen next. This was a strengths-based learning opportunity to build on existing community capabilities.

The priority areas that community members identified were intended to be a guide for practical and actionable community projects to reduce the impact of future bushfires on the Tenterfield community. Fire to Flourish set up a community participatory grantmaking round to enable community members to identify and fund community-based projects that began to meet those priorities. In the field of lessons management,

lessons have to be first identified and then acted upon, before they can be claimed to have become 'lessons learned'. Through the process documented here, the rich lessons identified in this Review can become lessons learned.

The Tenterfield Bushfire Learning Review prioritised community perspectives at every stage. A Community Advisory Group, comprising local residents with direct experience of the October 2023 bushfires, helped scope and design the review process. It emphasised strength-based learning to build disaster resilience, rather than assigning blame. It examined community-based experiences of the bushfires, rather than focussing on formal fire-fighting operations.

Researchers collected data through interviews and workshops with diverse community members and organisations. In June 2024, community participants engaged in sensemaking discussions about these findings, which directly informed their vision and priorities for bushfire resilience.

These community-developed priorities then became the criteria for assessing project applications in a participatory grantmaking process. A panel of local leaders, selected through an open Expression of Interest, evaluated proposals. Following a two-stage application process, eight community projects received funding at the November 2024 decision-making meeting.

Box 1: What is a community-based disaster learning review?

The community-based disaster learning review (CBDLR) methodology is an opportunity for community members and local stakeholders to come together to reflect on what did and did not work well before, during and after a recent disaster, in order to inform action. It is a review of community-based actions, not emergency services operations.

A CBDLR is ideally undertaken between 2–12 months following a disaster event, during a window where communities are motivated to act and have more access to funds for resilience initiatives.

It involves engaging community members who have been directly and indirectly affected by the disaster, community leaders and organisations who were involved before, during and/or after the disaster, and other locally involved stakeholders such as emergency services, local Government and service providers. This engagement takes the form of workshops and interviews, supplemented by desk-based research of publicly available information, such as reports, risk maps and traditional and social media about the disaster.

The CBDLR approach has been significantly informed by the Post-Event Review Capability (PERC) methodology, developed by the Zurich Climate Resilience Alliance¹⁵. The PERC methodology offers a process and framework for the systematic analysis of a disaster event. The CBDLR draws a number of elements from the PERC and extends the methodology to explicitly centre community members as the primary owners and audience of the learning review. It provides a strengths-based and trauma-informed process for conducting the review.

A CBDLR is guided by nine key principles:

1. No-blame mindset
2. Centre community benefit
3. Think holistically
4. Think systemically
5. Be strengths-based
6. Be trauma-informed
7. Be inclusive
8. Be neutral
9. Follow research ethics

See the Practice Guide for more information.

I. TENTERFIELD AND ITS FIRE CONTEXT

Bushfires do not occur in a vacuum – they happen at particular points in time, on particular landscapes, and intersect with the lives of particular people. The aim of this section is therefore to provide a snapshot of the many complex social, environmental and political factors that contributed to the Tenterfield’s bushfire risk reduction, preparedness for, response to, and recovery from the October and November 2023 bushfires.

Socioeconomic profile

Gazetted in 1851¹⁶, the northern NSW town of Tenterfield is one of the district’s oldest settlements. It is the biggest town within the Tenterfield Local Government Area (LGA), and is its administrative centre. It is located just south of the state border with Queensland, on the junction of New England and Bruxner Highways. Original industries in the region were farming, forestry and mining¹⁷, but this has changed over time, with more small landholders and so-called ‘tree-changers’ moving

into the town and its surrounds. More recently, tourism has become an important industry for the area¹⁸.

The 2021 Census reports that the Tenterfield LGA has a population of 6,810¹⁹. Nearly a third of that population, approximately 3,000 people, live within the town of Tenterfield itself²⁰. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) shows that many of the residents within the town of Tenterfield, as well as across the LGA, are experiencing deep disadvantage²¹. At the same time, 22.2% of Tenterfield Shire’s residents reported in that Census that they had done voluntary work with an organisation in the past 12 months, which is significantly above the NSW state average of 13%, and the national average of 14.1%²².

As a rural town, Tenterfield’s residents often find themselves bound by policies and decisions made by regional or state-based organisations and agencies highly removed from the locality, or of its specific circumstances. Many residents interviewed expressed their frustrations about this reality of living:



Figure 2: A map of the Tenterfield region. Source: Tenterfield Shire Council

“You have to have local people who understand how to manage land to make sure that the long-term impacts from fire are dealt with and the preventative things are put in place and not stymied by bureaucratic policies where they write them behind a desk in Sydney or wherever. They think it’s a great idea, but it doesn’t work in practice or by not listening to local knowledge.”

–Tenterfield community member (interview)

Community strengths and assets

There is a rich mix of locally based community assets that contribute to Tenterfield’s sense of community and social capital.

“I think that’s when you have to step in, and with community, start looking after your neighbours ... In the long run you’re still part of the one community, and if you don’t look after each other, you’re going to get lost.”

–Tenterfield community member (interview)

These community assets include the not-for-profit community groups operating in the area, local institutions, local places, culture and heritage. Many, but not all, of these community assets have been involved in the community’s preparation, response and recovery from the 2023 bushfires. Table 2 below captures many of them, although is not an exhaustive list.

Tenterfield’s landscape and fire

The Tenterfield LGA covers an area of 7,332 square kilometres and is divided by the Great Dividing Range. The western half of the LGA, which includes the town of Tenterfield, is part of the Murray-Darling Basin catchment. The eastern half is part of the Clarence River Catchment. Its altitude ranges from approximately 150–1,500m above sea level.

Land use across this landscape is mixed. There are significant areas of farmlands, as well as five national parks and ten state forests²³. Many areas across Tenterfield LGA are recognised as being of high environmental value²⁴ (see Appendix B).

Fire has always been used to manage the Tenterfield landscape, first by the Kamilaroi, Jukembal and Bundjalung Indigenous peoples, and then also by farmers and major landholders, such as NSW National Parks and Wildlife Service²⁵. However, bushfires (uncontrolled vegetation fires) are also endemic to the region. Much of this landscape is recognised as being prone to bushfire²⁶ (see Appendix C). Living in the Tenterfield LGA means living with bushfires.

Tenterfield’s bushfire risk

According to the Northern Tablelands Bush Fire Strategic Plan, the entire Northern Tablelands district

Table 2: Tenterfield community assets

Not-for-profit community groups/NGOs	Local institutions	Local places, culture and heritage
Country Women’s Association	Tenterfield Shire Council	Tenterfield Showground
Rotary Club	NSW Rural Fire Service	Tenterfield Memorial Hall
Lions Club	NSW Local Land Services	Tenterfield School of Arts
Anglicare	NSW Forestry	Community Halls across the LGA Rotary Park
Salvation Army	NSW National Parks	Jubilee Park
St Vincent de Paul	Tenterfield TAFE	Tenterfield Park
Friends of Tenterfield Aerodrome	NSW Police	Mt Mackenzie
Family Support Tsdc	Ambulance	Tenterfield Creek
Aboriginal Health/Armajun	Tenterfield District Hospital	Catholic Church
The Hub	Essential Energy	Presbyterian Family Church
Tenterlife Suicide Prevention	High school (1)	Seventh Day Adventist
Moombalene Local Aboriginal Land Council	Primary schools (3)	Kingdom Hall of Jehovah’s Witnesses
Tenterfield Chamber of Tourism and Commerce	Preschool (1)	Tenterfield Community Church
Granite Borders Landcare	Tenterfield Care (2) (Aged Care)	Christ Anglican Church
Ozfish	Tenterfield Tigers Rugby League Club	Tenterfield Railway Museum
Backtrack	Tenterfield Pony Club	Tenterfield Transport Museum
Best Employment	Tenterfield Gun and Pistol Club	Tenterfield Autumn Festival
Benevolent Society	Tenterfield Swim Club	
Tenterfield Total Care	Bumblebees Rugby Union	
Angry Bull Trails	Tenterfield Touch Football	
Make It	Tenterfield Archery	
Community Facebook groups	Tenterfield Park Run	
Ten FM Community Radio		
Tenterfield Helicopter Op Shop		
Players Club Theatre Group		

(made of Tenterfield, Glen Innes-Severn and Inverell) experiences an average of 170 bushfires per year. It estimates that, on average, around five of these become major bushfires²⁷. The report also states that the sources of ignition of these fires are predominantly escaped private fires, dry lightning and machinery.

Tenterfield's bushfire risk governance

The Tenterfield region has two governance bodies that aim to reduce and manage the bushfire risk for residents living in the region. The first body – the Tenterfield Local Emergency Management Committee – plans for disaster response generally in the Shire, while the second – Northern Tablelands Bush Fire Management Committee – looks specifically at reducing bushfire risk. Both bodies are made up of representatives from local agencies, who are familiar with the local landscape.

Local Emergency Management Committees (LEMCs) are legislated bodies in NSW, established under the *State Emergency and Rescue Management Act 1989*²⁸. They exist to discuss and coordinate the local Government's current emergency services, prepare plans in the event of any emergency and plan how to assist the community to recover from any disastrous event.

Tenterfield LEMC members are representatives from the various services involved in disaster risk response and disaster recovery, including the Tenterfield Shire Council, State Emergency Service, the NSW Police Force, Rural Fire Service, Family and Community Services, and health services. Committee members are responsible for the development and exercising of the Local Emergency Management Arrangements. Its most recent Emergency Management Plan (Emplan) was published in October 2019²⁹.

Bush Fire Management Committees (BFMCs) are legislated bodies in NSW, established under the *Rural Fire Act 1997*³⁰. They exist to provide cooperative interaction between the major landholders – organisations, agencies and the community – to enable effective coordinated bushfire risk management. The Northern Tablelands BFMC covers the Tenterfield LGA as well as Glen Innes-Severn and Inverell. Its members are representatives from the organisations across the area, including emergency services, land management agencies, local Government and local Aboriginal land services.

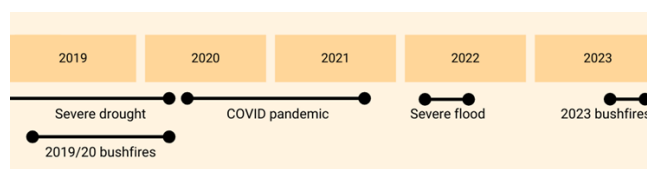
These stakeholders work together with the NSW Rural Fire Service to produce a Bush Fire Risk Management Plan every five years, which identifies the bushfire risks across the region, and sets out the types of work to mitigate bushfire risks. These works include

hazard reduction burning, grazing, community education and fire trail maintenance. Its most recent Plan was published in 2018, and it has a new Plan currently being developed³¹.

Both the LEMC and the BFMC have requirements to undertake public consultation in the development of their plans. However, participants in community workshops, who were local residents and volunteers with various community groups, were not aware of these important bodies.

Compounding and complex disasters in the region

In the last five years, the Tenterfield community has experienced a range of compounding events making life difficult for residents, and testing the limits of their personal resilience. Appendix C provides an overview of declared disasters from 2010 to 2013.



Graphic: Five years of compounding disasters in Tenterfield

"2019 was the end of a very long drought. That year we also got the double-whammy of fire. A lot of people are not aware that the Tenterfield Shire started burning in February 2019 and we didn't really stop fighting fires until November. It was a year of ash, dry ground, of farmers in crisis, of depleted and contaminated drinking water but I was always amazed at how the community came together. We were finally ready to recover from the 2019 disasters and then Covid hit. It has been an incredibly difficult few years for the community."

—Stories of Resilience, Tenterfield Chamber of Tourism, Industry and Business³²

The region experienced its worst drought on record leading up to, during, and after the 2019/20 bushfires³³. From May 2019 to March 2020, there were severe and critical drought conditions. River flow rates were significantly lower than they had ever been since record keeping began in the 1890s. Water restrictions were placed on town residents and landowners³⁴.

Major bushfires occurred in the area from February 2019 through to March 2020³⁵. These bushfires not only caused direct losses for the region, they helped trigger further disastrous events. Ash and debris from the bushfires swept into Tenterfield dam in November 2019, overwhelming the town's ageing water treatment plant and making the water undrinkable for months on

end³⁶. Despite an environmental water release in April 2018 to support native fish populations, in November 2019 there were widespread fish kills due to lack of oxygen in the water in Tenterfield Creek, as well as Reedy Creek, Dumaresq River, and Millers Creek³⁷.

In March 2020, Tenterfield residents, along with all Australians, began to experience the effects of the COVID-19 pandemic through lockdowns, travel restrictions and border closures. It has been recognised that this event showed major stresses in healthcare systems, supply chains and in industries such as tourism³⁸. The major disruptions it caused people's lives saw significant decreases in their wellbeing³⁹.

Then, in early 2022, the Tenterfield Shire was one of the many areas in northern NSW impacted by severe weather and floods, triggering a disaster declaration to

help support the impacted farming community⁴⁰.

The social and personal impact of these compounding disasters has tested and strained community resilience. One interviewee described the effects as:

"[I see] marriage breakdowns, financial hardships, and watch families go through ongoing hardships – these really affect Tenterfield. People are living week to week – people are at breaking point. They are so angry, with no help, with fires, it's a real blame game ... Recovery paths are so complex, especially with the effect of compound complex disasters. People have lost their soul."

–Tenterfield community member, interview



II. WHAT HAPPENED IN OCTOBER–NOVEMBER 2023

Tenterfield LGA has a temperate climate, with a warm summer and a cool winter. Its bushfire season generally extends from August through to March.

In March 2023, however, Tenterfield’s bushfire season – along with 43 other LGAs across NSW – was extended for an extra month, due to its high fuel loads and warmer than average temperatures⁴¹. In August, AFAC published its Seasonal Bushfire Outlook Spring 2023, which also indicated that much of NSW was at increased risk of bushfire⁴². This area of increased risk included the Tenterfield LGA (Figure 3).

Tenterfield’s bushfires in 2019 and 2020 increased its 2023 fire risk further (Figure 4). The AFAC Seasonal Bushfire Outlook Spring 2023 noted that:

“In areas affected by the 2019-20 fires, fuels continue to recover in response to ideal growing conditions over the last three wet La Niña years. However, high severity fire during 2019–20 fires has altered the way this regrowth is structured. Some parts of the forest (for example shrubs) are regrowing quicker, other parts are accumulating slower (surface and canopy fuels). Overall fuel loads are close to what are expected and regrowth in these areas is being monitored closely.”

The Tenterfield LGA had also received rainfall that was very much below average during both winter and spring of 2023 (Figure 5). The Bureau of Meteorology’s Climate Statement for 2023 records that the time between August and October was Australia’s “driest three-month period on record since 1900”⁴⁴.

All of these conditions leading up to October 2023 made it very difficult for fire agencies and land managers involved in hazard reduction to actually complete their plans. In their Fire Season Outlook report tabled in the NSW Parliament in September 2023, NSW Rural Fire Service noted that only 28% of the hazard reduction activities planned across the state in NSW for the 2022/23 financial year had been completed⁴⁶.

Locally, in the previous financial year, only three hazard reduction burns are officially recorded as having occurred across the Tenterfield LGA – all done by the National Parks and Wildlife Service. They took place in Hurleys East in November 2022, in Bluff River at the end of May 2023, and in Mud Flat Road near Drake in June 2023⁴⁷.

One Tenterfield resident also noted that local

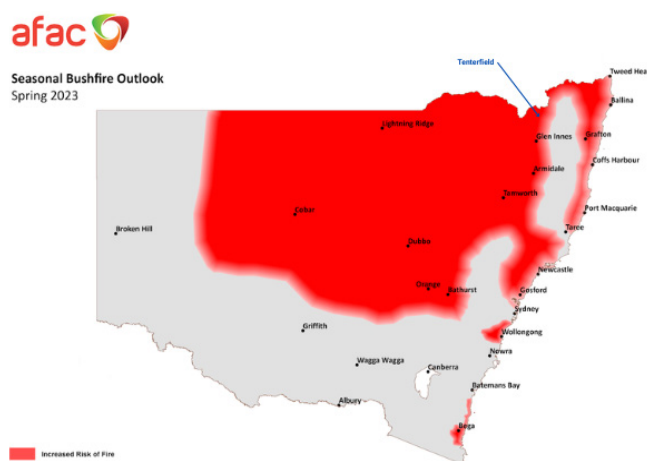


Figure 3: AFAC Seasonal Bushfire Outlook for August 2023. Source: AFAC Seasonal Bushfire Outlook Spring 2023.

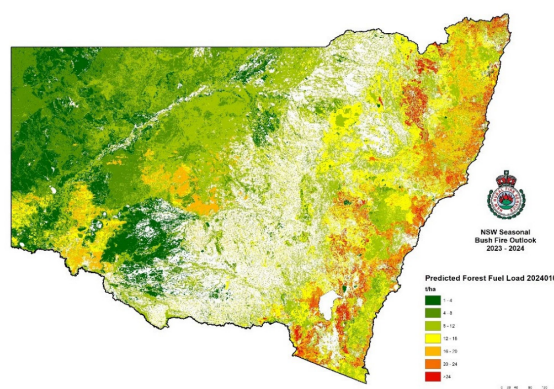


Figure 4: NSW Rural Fire Service’s predicted fuel loads for 1 January 2024: Source: NSW Rural Fire Service⁴³.

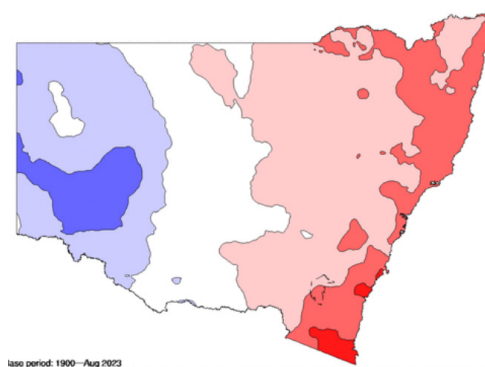


Figure 5: BOM data showing NSW Rainfall Deciles from 1 June to 31 August. Source: NSW Rural Fire Service⁴⁵

farmers had been unable to prepare for fire in the lead up to spring as they might usually do, by burning off their paddocks:

“We’d had a couple of really wet years. Really, really wet years. In the early parts of the fire season, trucks were getting bogged left, right and centre ... [The local fire brigade] were getting called out because people were doing the right thing, they were trying to burn off. They had the utes with the slip-on [firefighting unit] there, but the utes were getting bogged, and then the fire’s getting away. So that’s quite challenging when you’re trying to fight an actively running fire and getting bogged at the same time.”

–Tenterfield community member (interview)

Bushfire ignitions and behaviour

There were various bushfires that occurred in the Tenterfield region over the five-month period from July to November 2023 (Figure 6). Most of these fires were small, and posed little threat to properties.

However, by October, conditions were changing. From around 13 October, dry electrical storms struck the region, starting fires. As one farmer said:

“There was lots of lightning around a few days before the event. Eleven different fires started just in my area that I could see. There were at least 100 different fire events around Tenterfield. Most went out, but some got into the back country and took.”

–Tenterfield community member (interview)

On 31 October 2023, total fire bans were in place across much of NSW. This included the Northern Tablelands where Tenterfield is located, as the area’s fire danger rating was ‘Extreme’⁴⁸ due to forecasts of winds upwards of 50 km/h and temperatures soaring to 40 °C. The ABC reported NSW Rural Fire Service Commissioner Rob Rogers saying early that day:

“Properties are well at risk today, and to be honest if we get out of today without losing a number of properties I’ll be very happy”⁴⁹.

Throughout the day, as the bushfires quickly grew and worsened, ten emergency warnings were issued throughout NSW including for Tenterfield and nearby Tabulam⁵⁰. Residents that received these warnings were advised that they could no longer evacuate safely – they had to seek shelter from the bushfires.

By the time the fires were declared ‘contained’ ten days later, on 9 November, there had been six major bushfires surrounding the township of Tenterfield, and five other fires that impacted the towns of Tabulum, Deepwater, Bonshaw, and Wallangra⁵¹ (Table 3).

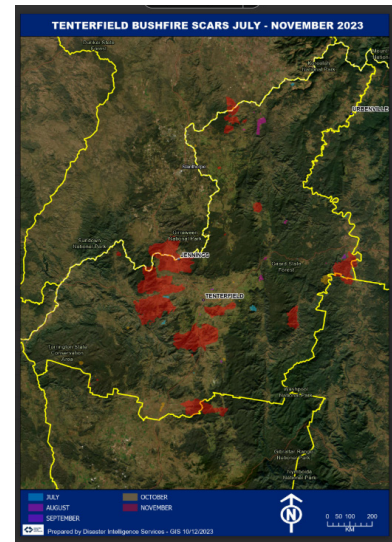


Figure 6: The bushfires that burnt in the Tenterfield LGA between July and November 2023. Source: Disaster Relief Australia

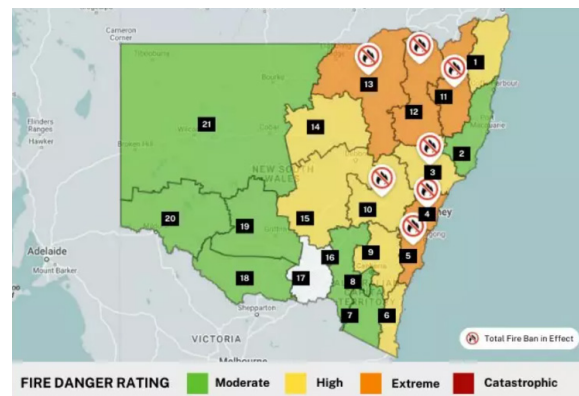


Figure 7: Total Fire Bans were in place across the Northern Tableland Image: Lismore City News

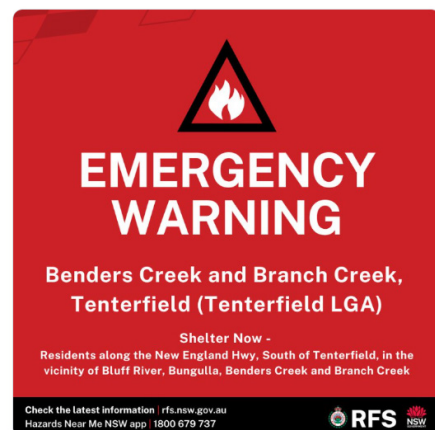


Figure 8: The emergency warning issued by NSW Rural Fire Service at 6:16 pm on 31 October, for people along the New England Highway south of Tenterfield. Source: ABC website



Figure 9: Bushfires surrounding the town of Tenterfield. (Tyr Liang/AAP PHOTOS) Credit: AAP

According to an ABC news article dated 3 November 2023, 21 buildings were destroyed in Tabulum, Donnybrook and Wallangarra – including four homes⁵². Self-reported data from Tenterfield LGA property owners to the Department of Primary Industries and Regional Development indicated that the bushfires had caused a total of \$1,919,444 worth of damage to farm infrastructure, livestock and pasture⁵³.

Firefighting response

The initial firefighting response was from community members – from residents who volunteer with local Rural Fire Service brigades, as well as farming families helping one another in informal ‘farm fire units’.

The formal firefighting response was a mix of local and out-of-area Rural Fire Service brigades, from across the state and country. Strike teams arrived from other New South Wales regions, Western Australia and South Australia.

The NSW Rural Fire Service response was supported by many partner agencies, including Fire and Rescue NSW, NSW National Parks and Wildlife Service, Forestry Corporation, NSW State Emergency Service, NSW Police and NSW Ambulance⁵⁴. This was coordinated from the nearby town of Glen Innes.

Tenterfield Aerodrome was set up as the temporary home of NSW Rural Fire Service aerial operations for helicopters and small fixed-wing aircraft. Its

Table 3: Bushfires in the Tenterfield region during October and November 2023

Fire name	Closest settlement	Area Burnt (hectares)
Sawyers Creek Fire	Tenterfield	7,955.42
Christies Fire	Tenterfield	6,137.95
Woodside Fire	Tenterfield	10,033.91
Scrub Road Fire	Tenterfield	18,587.76
Benders Creek Fire	Tenterfield	9,432.22
Rockdale Road River Fire	Tenterfield	1,026.98
Ogilvie Drive Fire	Tabulam	6,753.88
Magistrate Trail Fire	Deepwater	5,157.96
Bonshaw Road Fire	Bonshaw	10,723.9
Yetman Road Fire	Wallangra	4,143.5
Wallangra Road Fire	Wallangra	6,074.64

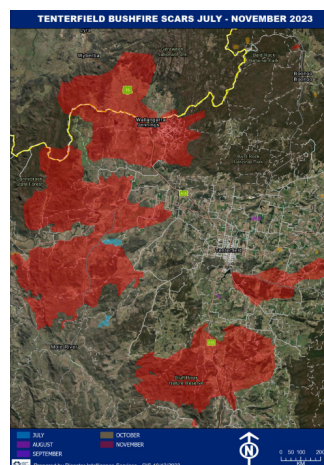


Figure 10: The fire footprints of the six major bushfires that surrounded Tenterfield township. They were the Sawyers Creek, the Woodside, the Scrub Road, the Benders Creek and the Rockdale Road Fires. Source: Disaster Relief Australia

newly-installed 210,000-litre water tank enabled the aircraft to turn around rapidly and deliver over 80,000 litres to nearby fires in a single day. See Box 2 (page 22) for further details.

Community safety and wellbeing response

Evacuation centres were set up on 31 October at Tenterfield Showground in Tenterfield, and Memorial Hall in Tabulam⁵⁵. As required under the State Emergency Management Plan⁵⁶, once activated by the person in charge of the incident, the evacuation centre operations were then managed by the Department of Communities and Justice. These operations had to consider issues such as:

- sources for goods and services that were required for the duration of the evacuation centre such as food, hygiene, pharmaceutical and other necessary supplies
- health, mental health and welfare services
- supporting the needs of people with disability security and safety⁵⁷.

The main aim of the evacuation centres was to provide people with emergency accommodation. People who used the centre were mostly from north of Tenterfield – Wallangarra and Jennings⁵⁸. Local Land Services assisted onsite with care for livestock. The Tabulam evacuation centre closed within a day, and the Tenterfield evacuation centre closed after three days.

Once the bushfires were contained, a Recovery Centre was opened from 10 November through to 15 November, set up at Tenterfield's Memorial Hall⁵⁹. Agencies there included Service NSW, Business Concierge, NSW Reconstruction Authority, Insurance Council Australia, Department of Primary Industries and various NGOs, such as the Salvation Army and St Vincent de Paul⁶⁰. Its aim was to provide face-to-face bushfire recovery support for affected local residents, including:

- accommodation advice
- access to relevant charitable services
- mental health and wellbeing services
- support for businesses
- financial assistance
- insurance and legal support
- replacing lost ID⁶¹.

Where necessary, people sprang into action to rescue their pets, livestock and any native animals in their care. Feed for livestock became an immediate issue after the bushfires, as so much farmland had been burnt. Dead livestock also had to be buried quickly. The NSW Government immediately supplied emergency feed⁶², and the local stock and station agents, in partnership with the local Lions Club, organised the

group Hay Runners to bring in stockfeed from around the state.

Disaster assistance for community recovery in the Tenterfield LGA was announced even before the major bushfire events on 31 October. This funding, provided under the Disaster Recovery Funding Arrangements, was jointly provided by the Commonwealth and NSW Governments. Its aim was to help provide assistance for people who lost their homes, for the Tenterfield Shire Council to help with costs of cleaning up damage, and concessional interest rate loans and freight subsidies for primary producers⁶³.

Fire to Flourish, in partnership with the Northern Rivers Community Foundation, set up a Bushfire Rapid Response Fund so that people and community organisations could apply to receive grants of up to \$3,000, to be used for whatever support they needed.

Other local community volunteer groups such as CWA, Rotary and BackTrack⁶⁴ became involved in providing support during and after the bushfires, as they became aware of specific needs.

III. KEY INSIGHTS – WHAT WORKED WELL AND WHAT COULD BE IMPROVED?

Insights in this section were gathered from Tenterfield community members through two community workshops, individual interviews and impromptu conversations with people on the streets of Tenterfield.

Where relevant, these community insights are compared with the results from the Tenterfield Community Disaster Resilience Assessment⁶⁵ that was conducted by Fire to Flourish at the same time – see Appendix A for a full explanation of the research design.

Table 4: Key findings from the Tenterfield Bushfire Learning Review of what worked well and needed improvement before the 2023 bushfires

Worked well	Needs improvement
<ul style="list-style-type: none"> Individual household and property preparations Infrastructure upgrades FOTA (Friends of Tenterfield Aerodrome) preparations 	<ul style="list-style-type: none"> Ongoing recovery from the 2019/20 bushfires: infrastructure, grants, mental health, ecologies, fuel management Lack of social cohesion and trust: loss of town identity, diverse population groups, declining volunteer rates Lack of coordinated community disaster preparedness: no coordinated training on how to prepare and plan

Before the 2023 bushfires

Worked well

Individual household and property preparations

Community members reported that they had individually done work to prepare for bushfires. This included some work around their homes and properties, and some hazard reduction burns on farms. One interviewee reported that, before the bushfires, they had prepared a detailed evacuation plan for their household, which proved invaluable during the event:

“I had a good bushfire plan. On the day of the fire I’d already done some preparation. I’d moved the horses and trucks to town, had water, and moved the cars to a cleared area ... Having a written [bushfire] plan was really good because it could be consulted. I wasn’t able to operate without it, when your body is just saying ‘get out of there.’”
 –Tenterfield community member, interview

This reported level of household and property preparedness was backed up by results of the Tenterfield Community Disaster Resilience Assessment community surveys:

- 53% of people reported that someone in their household had completed first aid training in the last five years
- 81% of people agreed or strongly agreed that they

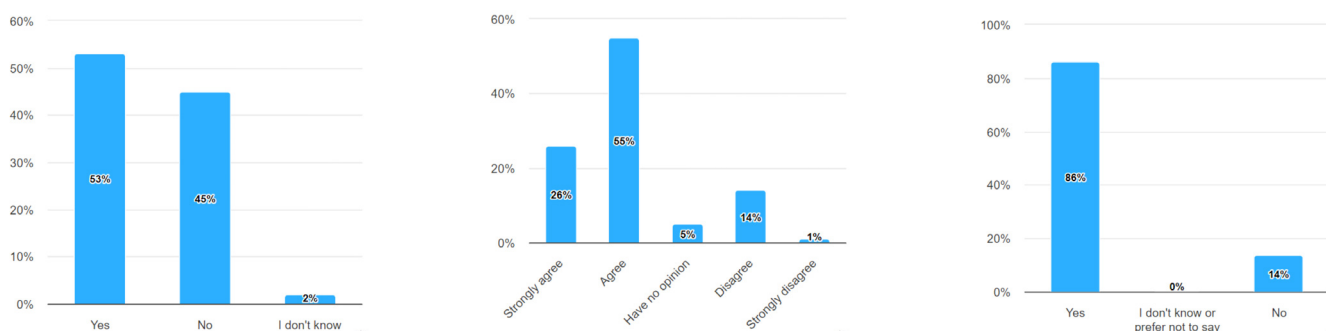


Figure 11: Tenterfield’s reported level of individual preparedness for first aid training (left), risk awareness (middle) and household preparedness (right) was backed up by the results of the Tenterfield Community Disaster Resilience Assessment, Fire to Flourish

- knew where fires in their area were likely to burn
- 86% of people reported that they had carried out work around their house to reduce bushfire risk.

Infrastructure upgrades

There had been significant community infrastructure upgrades since the 2019/20 bushfires. One project had upgraded Tenterfield’s water treatment plant in 2023⁶⁶,

while another had upgraded facilities in the town’s Memorial Hall, to increase suitability to become an evacuation centre during emergencies.

Needs improvement

There were a wide range of issues that the community identified needing improvement in the lead up to the 2023 bushfires. These issues were complex, and fell

Box 2: Tenterfield Aerodrome

Planning, preparation and evaluation done by the Friends of Tenterfield Aerodrome meant that the airfield facilities could be used as a highly effective NSW Rural Fire Service (RFS) aircraft operations base during the bushfires, as well as into the future.

In late 2022, the Tenterfield Shire Council signalled that it was unable to financially maintain the Tenterfield Aerodrome and asked for tenders to take over the facility. In response, a group of local aviation enthusiasts, called the Friends of Tenterfield Aerodrome (FOTA), remarkably succeeded in taking over its management.

Since then, the community-based organisation, relying on volunteers, donations and grants, has worked to upgrade the facility to support local tourism, medical evacuation and bushfire response capacity.

FOTA organised for a 210,000-litre water tank to be installed at the Aerodrome, which was finished on 18 October 2023⁶⁷. That week, the Aerodrome became the RFS base of operations for aerial fire-fighting during the Section 44 bushfire emergency. Local landholders have credited FOTA, located 15 kilometres north of Tenterfield township, with saving their properties, which may not have been possible if the RFS was required to refill at Glen Innes airport

– 22 minutes flying time away – as it did during the devastating 2019/20 bushfire season.

The functioning Aerodrome, equipped with the water tank as well as a smaller water tank adjacent to the apron and a neighbouring landholder’s water pump, enabled the AT802 aircraft to turn around rapidly and deliver over 80,000 litres to nearby fires in a single day. When the RFS delivered fire suppressant gel, it did not come with mixing equipment; FOTA volunteers were able to set up a system to combine the gel with water in the correct proportions as it was loaded into the aircraft.

The actions of FOTA volunteers over a number of years to upgrade and maintain the Aerodrome – evidence of strong community social capital – resulted in water application at least five times greater than would have been achievable operating from Glen Innes. It is estimated to have saved \$60,000 per day during the bushfire. The Aerodrome provided a safe, dedicated aircraft operating environment and RFS Operational Base.

The FOTA continue their work to develop the Aerodrome to support the Tenterfield community, based on their learnings from the 2023 event⁶⁸.



Figure 12: Aerial firefighting aircraft at Tenterfield Aerodrome, 2023. Source: Rob Evans



Figure 13: Water tank and fire truck, Tenterfield Aerodrome, 2023. Source: Rob Evans

largely to two main categories. These were ongoing recovery needs from the 2019/20 bushfires, a perceived lack of social cohesion and trust across the wider community, and limited inclusion of community groups in formally coordinated disaster preparedness planning processes.

Ongoing recovery from the 2019/20 bushfires

It was clear that in 2023 the community was still feeling the impact from the 2019/20 bushfires, and this is likely still the case at the time of writing. Financial recovery has been slow, and bushfire recovery grants available immediately after those bushfires have not covered all the community's recovery needs.

For instance, due to the amount of damage done to **infrastructure** such as bridges during those bushfires and subsequent floods, the Council was faced with a huge task in replacement and repair.

The success of some people and organisations in obtaining **grants**, while others had not, had become a divisive community issue. This financial hardship had particularly been felt by farmers, as replacing their agricultural assets (especially fences) and livestock was unlikely to have been covered fully by either recovery grants or insurance. One person interviewed expressed dissatisfaction that farmer's firefighting equipment had to be funded from their own pockets:

"RFS can get a grant to upgrade their stuff but people on a farm can't get a grant to upgrade their pod (IBC) when they're so important for fighting fires. When you look at how much land was put out, the helicopters cost us [taxpayers] millions but those little pods did just as good a job."

—Tenterfield community member (interview)

People expressed concern about **mental health** support available for community members, whom they reported to be experiencing fatigue from the various disasters experienced in the previous five years. Not only were mental health services limited in availability, people were reluctant to use the services that were offered. Many people expressed concerns that farmers in particular were unlikely to reach out for support and that the support available did not meet their needs.

"And that's this mentality too with the farming and rural industry, they will not ask for help ... And plus with a small community, if they did want to go and seek help, they wouldn't want their neighbour knowing ... because we've still got this stupid stigma about mental health."

—Tenterfield community member (interview)

Ecologies were still heavily impacted from the 2019/20 bushfires. While vegetation damage and change was most visibly apparent, interviewees also talked about native animal populations that are part of Tenterfield's ecosystems being severely affected during those fires, including koalas, spotted-tail quolls, greater gliders and native fish species. These ecosystems were further impacted by the 2023 bushfires – see Box 3: Native animals and bushfires.

Community members interviewed wanted to see improved management of highly flammable areas of vegetation – **fuel management** – than was currently occurring. This was backed up by the Tenterfield Community Disaster Resilience Assessment survey, which found that 90% of people agreed or strongly agreed that they would support more investment in environmental protection to reduce the risk of bushfires.

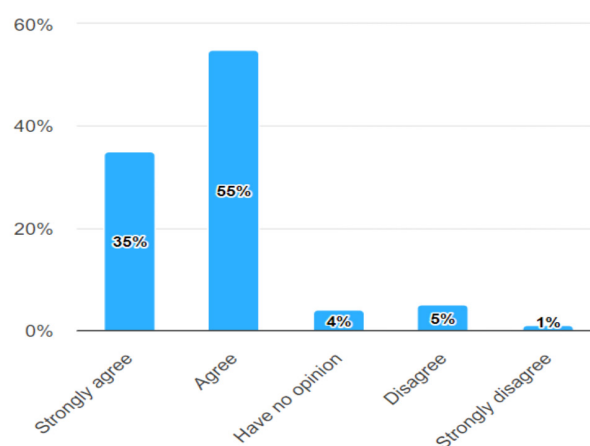


Figure 14: 90% of survey respondents agreed or strongly agreed that they would support more investment in environmental protection to reduce the risk of bushfires. Source: Tenterfield Community Disaster Resilience Assessment, Fire to Flourish

There was a predominant local perception – relayed by local agencies and residents during interviews – that the landscape has been transformed over the last 20 years to include more plants that increase its flammability.

One cause of concern to residents are the wattles regrowing in the forested areas impacted in the 2019 and the 2019/20 bushfires. Wattles often regeminate quickly after fires, and their regrowth helps restore ecosystems by restoring nitrogen to the soil⁶⁹. However, their high flammability, and the heat that they generate when burning, meant that people were worried about how they would affect the next bushfires in the area.

Many interviewees argued that the wattles were symptomatic of the landscape no longer being managed with fire as it has been in the past:

“Wattle regrows like hairs on a cat’s back post-fire and what it really needed was another little fire trickling through there 12 or 18 months after [the 2019/20 bushfires]. You don’t need much of a fire to kill wattle regrowth and thin it right out, but if you don’t, you end up with a huge amount of standing timber, like standing fuel that then gets choked out, dies and it’s just perfect for fire again.”

—Tenterfield community member (interview)

Another plant causing people concern was African lovegrass. African lovegrass is a highly flammable exotic grass that thrives with fire. Unlike some NSW LGAs, the Tenterfield LGA has not declared the grass a noxious weed⁷⁰. Its spread over farmlands in the area has been significant over the last 20 years. Having lovegrass on farmlands has inextricably linked the landscape and fire.

One interviewee described it as:

“You’ve got two broad camps of people with lovegrass – the people that burn it every year and the people that don’t like to burn it at all. And the problem is if you burn it every year, it’s a lay down misère that you’re just going to have a monoculture of lovegrass that can burn so hot that your natives drop out, your other naturalised palatable species drop out and you just have all lovegrass. But then if you don’t burn it and you don’t have the stock density to manage it, then it also gets long, and you’ve got a big fuel load.”

—Tenterfield community member (interview)

Climate change was also raised by some of the people interviewed as factor changing Tenterfield’s bushfire risk. According to climate projections published by Adapt NSW, Tenterfield’s temperatures will continue to increase, as will the likelihood of bushfire conditions⁷¹.

Interviewees saw climate change as a driver of the increased frequency and intensity of bushfires across the region.

“I think there’s a recognition that weather has changed. Whether it’s cyclical, in terms of climate, or anthropogenic, there’s a recognition that there’s a definite change here. Because then the next thing people talk about is, ‘my God, what we saw [with the bushfire] at Bluff River’. They go back to their experience and say, ‘you’ve never seen it like this’. They make that connection where, the weather’s changed, and bloody hell, look what we saw.”

—Tenterfield community member (interview)

Interviewees also saw the changing climate in practical terms as a challenge to existing land and fire management knowledge and techniques. They saw it in context of other societal change:

“The climate has changed both weather wise, but also legislatively and politically. You can’t now have the confidence that in winter you can run a burn here for however long you want it to go for, and then go home and have a beer. That’s what used to happen. The cockies used to ride their horses, taking cattle to the sale yards. They would put their cattle in there and on their ride home, chuck matches. It’s what we used to do. We can’t do that nowadays. And the climate, the weather, the legislation, has all changed.”

—Tenterfield community member (interview)

Lack of social cohesion and trust

The second area of concern about the community leading up to the 2023 bushfires was a perceived lack of social cohesion and trust experienced across Tenterfield. This was experienced and reported in a variety of ways, and contributed significantly to issues the community experienced during the bushfires.

At a high level, people expressed that there has been a **‘loss of town identity’**. People expressed unhappiness with recent local Council decisions to close and sell buildings that had been community spaces, such as the School of Arts building and the Visitors Information Centre.

The community’s **diverse population groups** – such as farmers, tree-changers and Indigenous people – were reportedly very siloed, and it was difficult for community organisers to successfully engage across those divides. One significant population that was experienced as difficult to reach for engagement with in the lead up to and preparation for bushfires, were absentee landlords and landowners – people who own property in the area, but live elsewhere.

People also expressed concern about **declining volunteer rates** across the community, as the town is enormously reliant on volunteer groups before, during and after extreme events. Despite Tenterfield having a high percentage of people who volunteer in comparison to state and national averages⁷², existing volunteers in Tenterfield are ageing, and very likely to be volunteering in multiple roles across the community. This pattern of volunteer decline is one that is reflected nationally over the last two decades⁷³.

Local NSW Rural Fire Service brigade members particularly expressed concern about their dropping volunteer numbers, arguing that for many people a major disincentive to join was that they had to cope with lack of pay and other out-of-pocket costs when they responded to a bushfire:

“I’m blessed that I get paid for a 7.6 hour day, whether I’m here punching my computer or on the fireline

responding to a [bushfire emergency]. But if you're a farmer or a contractor...every day you step in that fire truck, you are losing money."

–Tenterfield community member (interview)

Some interviewees were keen to think of innovative ways to attract new brigade members:

"There's talk of being paid positions, but the Fire Rescue NSW, they're paid positions, there's retained firefighters here and they still can't get a full complement of retained firefighters. They get paid for being on call. So yeah, I've had thoughts about whether there's tax breaks. So if you're a responder and you do so many hours, well you get so many percent tax break."

–Tenterfield community member (interview)

Notably, however, the local branch of the Country Women's Association seemed to be reversing this trend, reporting increased membership numbers. Members interviewed attributed this to its culture of welcoming social inclusiveness.

Fire to Flourish's Tenterfield Community Disaster Resilience Assessment survey also showed that **trust** across the community is low. For instance, 65% of people did not agree that all residents were being given fair or equal employment opportunities, and 47% of people surveyed agreed or strongly agreed that they were worried about becoming a victim of crime. Additionally, 69% of people express agreement that the local Government could be trusted to make good decisions on behalf of the wider community.

Conversely, there was a high trust in local emergency services. This trust was reflected in many interviews, where people talked of the ability of local brigades, made up of people with good knowledge of the local landscape, to make good decisions during bushfires.

Lack of coordinated community disaster preparedness

Tenterfield residents reported that, before the bushfires, there had been **no coordinated training or collective planning to prepare** for bushfires with local residents and organisations. This included a lack of planning with social groups who are potentially particularly vulnerable to bushfire events, such as residents new to the area, people living in aged care facilities, people living with disabilities, and homeless people.

This finding was at odds with the fact that the district's disaster risk reduction bodies, the LEMC and the BFMC, had current plans and processes in place. Through further exploration with residents, it became clear that community welfare organisations and representatives of community groups had not been

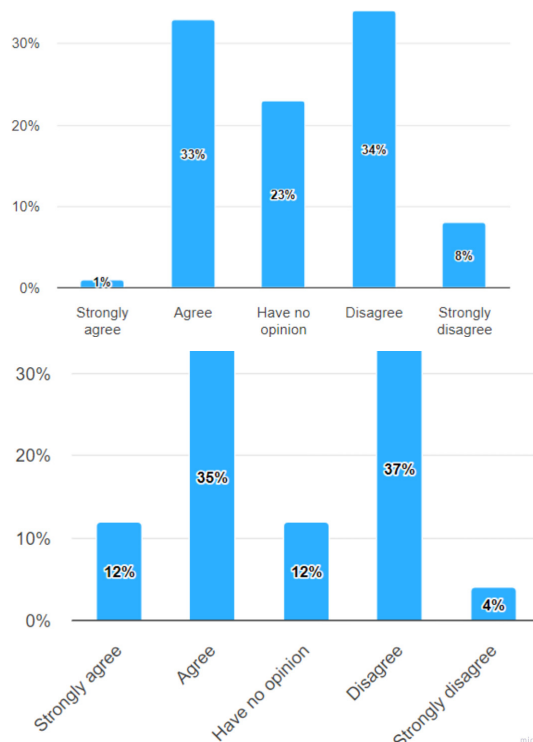


Figure 15: People living in Tenterfield did not trust that people were being treated fairly in regards to local employment opportunities (above), and did not trust that they would not become a victim of crime (below). Source: Tenterfield Community Disaster Resilience Assessment, Fire to Flourish

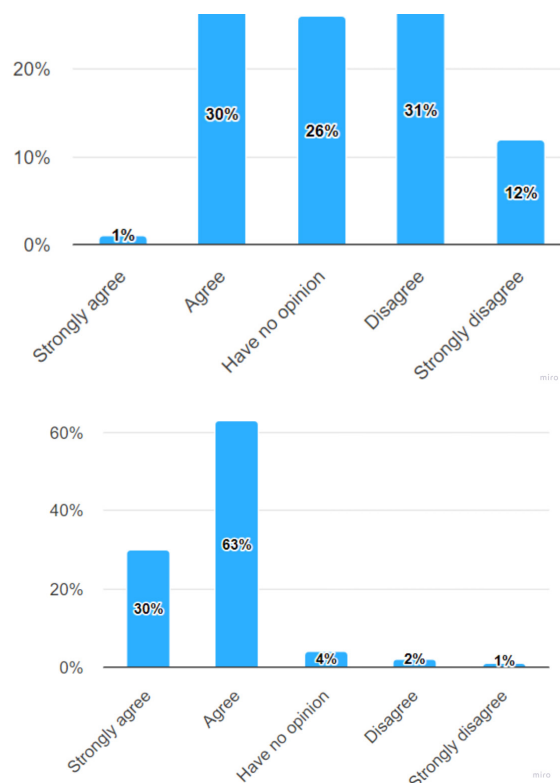


Figure 16: Trust in local government is low (above), but this contrasts with a very high trust in local emergency services (below). Source: Tenterfield Community Disaster Resilience Assessment, Fire to Flourish

included in formal bushfire preparedness planning processes.

During the 2023 bushfires

Worked well

There were clear aspects of Tenterfield’s community response to the 2023 bushfires that were reported as working well.

Community worked together

Local residents worked together to help each other, their families and their friends respond during the bushfires. There were many reports of helping people evacuate, as well as helping them defend properties. To do this, they relied on personal networks, and word of mouth to find out where and how they would be needed.

Table 5: Key findings from the Tenterfield Bushfire Learning Review of what worked well and needed improvement during the 2023 bushfires

Worked well	Needs improvement
<ul style="list-style-type: none"> Community worked together: residents, local community organisations, Tenterfield Aerodrome supporting Rural Fire Service operations 	<ul style="list-style-type: none"> Evacuation planning: evacuation spaces Mental health support Information, warnings and communications: coordination and communication Personnel: multiple responsibilities

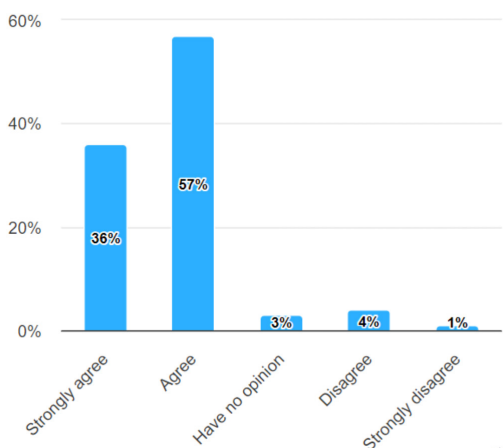


Figure 17: 93% of Tenterfield people surveyed agreed or strongly agreed that they could rely on their neighbours to help them. Source: Tenterfield Community Disaster Resilience Assessment, Fire to Flourish

“On the evening of the fire, I was right amongst the fire, because my sister and brother-in-law’s house was right in the line of the fire. I had got a call from [a friend] and she said ‘you need to get ... to their house, and we need to start helping them get stuff out.’”

–Tenterfield community member (interview)

This willingness to provide assistance accorded with findings in the Tenterfield Community Disaster Resilience Assessment survey, where 93% of respondents agreed or strongly that they could rely on their neighbours to support them if they were in need.

Local community organisations also sprang into action during the 2023 bushfires. The local Country Women’s Association, with the assistance of other local volunteer groups such as Rotary and Lions Clubs, helped feed NSW Rural Fire Service firefighting personnel – in town as well as at the Tenterfield Aerodrome. St Vincent de Pauls was able to supply people with emergency food packs and clothing. As with efforts of individual local residents, these locally volunteer-run organisations relied on personal networks, and word of mouth to find out where and how they would be needed.

The level of support provided by these local community organisations is even more impressive considering the lack of coordinated community disaster preparedness before the event.

One very effective community initiative that was put into action during the bushfires was the **Tenterfield Aerodrome**. Run by the community group Friends of Tenterfield Aerodrome, which leases the property from the local Council, the airfield was finishing an upgrade of its water storage capabilities just as the bushfires were beginning to impact the town. This upgrade made it possible for the Aerodrome to support NSW Rural Fire Service aerial firefighting operations. Many people interviewed credited this with helping save many local structures from burning during the bushfires.

Friends of Tenterfield Aerodrome, with their vision and adaptive approach to helping Tenterfield become ‘disaster ready’, provide an excellent case study for community-led bushfire planning and response. See Box 2: Tenterfield Aerodrome for further details.

Needs improvement

During the 2023 bushfires, a range of social capital issues were reported as needing improvement during the bushfires. Residents particularly highlighted a perceived lack of coordination and communication between agencies, services, local residents and community volunteer organisations.

Evacuation planning

People reported that the organisation of a community **evacuation space** was a last-minute exercise. The Tenterfield Memorial Hall, despite its infrastructure upgrades, was found to be unsuitable as an evacuation space. As a result, the Tenterfield Showground had to be quickly opened at short notice and set up as a base for community services, as well as a shelter for both people and livestock, although notably not for rescued wildlife. One interviewee commented that:

“The Showground was the emergency evacuation [centre], but they didn’t have any beds so people were sleeping in their cars the first night. They didn’t get beds till the second night, but by then the farmers had gone back to their houses.”

—Tenterfield community member (interview)

Mental health support

The psychosocial support services for affected residents during and immediately after the fires was perceived to be uncoordinated, in that it was provided on an ad hoc basis by local mental health professionals providing support in a volunteer capacity. These services were also only offered to the people staying at the evacuation centre at the showground, which one mental health support worker later found had limited their effectiveness:

“I was there [at the showground] for about three days, but then I realised, when I popped into the cafe, I realised I should have been in the cafes talking to people. Even though the fire hadn’t directly affected them they were scared. At the evacuation centre people had support, but in terms of informal support I should have been at the cafes. They were on their own, trying to deal with things emotionally. If it ever happens again, I’ll be in town. We were surrounded by fires, getting messages about ember threats. People who had been through the 2019/20 fires were pretty triggered, surrounded by smoke.”

—Tenterfield community member (interview)

Information, warnings and communications

Residents reported a **lack of coordinated information and confusing communication** during the bushfires, leading to community frustration and at times, anger.

Firstly, cross-border communication issues between Queensland and NSW emergency services resulted in confusing messaging from authorities, where people were reportedly getting different levels of advice, or being urged to evacuate to areas that were not safe.

Secondly, local people felt that there was a missed opportunity for their intimate knowledge of the landscape to be utilised during firefighting operations.

Thirdly, some people reported that they or their neighbours did not understand what they should do when they received notification of different emergency alert levels (Figure 18). In accordance with the Australian Warning System introduced in 2021, the alert levels broadcast to residents during the 2023 bushfires were Advice, Watch and Act, and Emergency Warning.

Two interviewees, both working in emergency management, expressed surprise that residents did not evacuate when they received the ‘Watch and Act’ alert. Instead, people seemed to take action only when they had received an ‘Emergency Warning’ alert, by which time they found it was too late to evacuate safely.

A NSW Rural Fire Service member recalled the distress this misunderstanding about alert levels caused:

“I could sense that there was a lot of distress, and a lot of the distress were issues like the lack of warnings, the lack of information, the duration of time that it took for people to get the alerts. There was a common theme amongst the community though, saying ‘the first bit of information that I had about the fire was when I received the emergency warning text.’”

—NSW Rural Fire Service member (interview)

Personnel

People reported feeling torn between multiple responsibilities during the fires. People with volunteer roles during the 2023 bushfires also had family responsibilities and paid roles to fulfil. This, combined with fires breaking out in multiple locations needing response, added to the mental stress of the situation.

“Our property got burnt in another area that same night ... The next morning my husband was back out on [our family property], just trying to mop up [after the bushfire] there and do stuff. Then someone said to him, ‘why aren’t you down at your other place? There’s a fire down there.’ And he’s gone, ‘What do you mean?’ And they’ve said, ‘There’s a fire down on your other property’. So, no one had communicated that to us.”

—Tenterfield community member (interview)

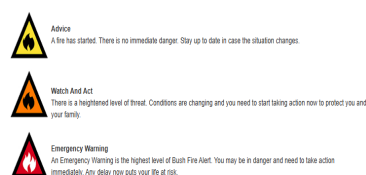


Figure 18: Alert levels implemented by the Australian Warning System in 2021. Source: NSW Rural Fire Service website

Box 3: Native animals and the 2023 bushfires

Native animals, and the impact that the bushfires had on them, was a theme in many conversations and interviews. People gave examples of animal populations, such as koalas, greater gliders, and native fish, that had been badly impacted by the 2019/20 bushfires, and which were struggling to recover. To sustain these populations, native animals and the ecologies in which they live needed advocacy and action from the Tenterfield community.



Figure 19: Ivy the rescue joey

For instance, the OzFish Northern Tablelands Chapter has been undertaking ecosystem restoration to make Tenterfield Creek suitable for native fish populations once again. In December 2019, the creek was the site of a 38-kilometre-long fish kill after a heavy rain event where months of bushfires upstream had washed ash, dirt and firefighting retardant into the waterway⁷⁴. At the time, surviving fish had been relocated to refuge pools downstream. These refuge pools were directly impacted by the October 2023 bushfires, however this time the fish survived.

“This time, the fire was right on those refuge holes, and I was very, very worried. There was no way I could save them, but I’m pleased to say we didn’t lose one fish. We got away with it, because we didn’t have a substantial rain event afterwards, and this time they mostly used water for bombing. We had an excess of water because we’ve had lots of rainfall, so we weren’t seeing retardant going into the waterways.”

–Tenterfield community member (interview)

There was no formal help for wildlife, or for wildlife carers, during the fires. A few people interviewed were caring for rescued animals before the fires, and so were responsible for evacuating them to safe places. These were either homes in town, or to friends’ properties safe from the fires, as people could not take native animals to the evacuation centre. The WIRES organisation did provide some support a couple of weeks after the bushfires, which was limited to helping to euthanise injured animals.

After the 2023 bushfires

Worked well

After the bushfires were declared as ‘contained’ on 9 November 2023, there were some very positive activities across the Tenterfield community. These were mostly led by locally-based people and organisations, and designed to respond to local needs.

Community organisations supported recovery

Community volunteer and social organisations provided invaluable assistance with targeted recovery needs. For instance, the Tenterfield Lions Club helped provide stockfeed for local farms, and St Vincent de Paul provided food and clothing. Blaze Aid provided assistance

in repairing some farm fencing. The Tenterfield Fire to Flourish team organised ‘coordination breakfast’ events to bring together local organisations to share information, avoid duplication and ensure support was

Table 6: Key findings from the Tenterfield Bushfire Learning Review of what worked well and needed improvement after the 2023 bushfires

Worked well	Needs improvement
<ul style="list-style-type: none"> Community organisations supported recovery: community volunteer orgs, community coordination Bushfire risk management coordination increased 	<ul style="list-style-type: none"> Psychosocial support services Post-bushfire clean-up Post-bushfire financial assistance: financial aid, grants Bushfire impact data

reaching all parts of the community. Much of the local communication about these services and events was facilitated by local service The Hub, which operates as a community services and information point.

Community coordination was particularly apparent in a ‘Thank You’ Day held at the Tenterfield Showgrounds in November, to thank the NSW Rural Fire Service and everyone else that had provided community support during the bushfires. It was attended by hundreds of people from across Tenterfield – all of whom had been either directly or indirectly impacted by the bushfires. It was a day deeply valued by many people.

The coordination of volunteer and social organisations that emerged during the fires continued well afterwards – with Tenterfield’s community volunteer organisations reporting that they continued to meet regularly to cross-coordinate events. This motivation to continue coordination was apparent during the Review workshops, which were attended by many representatives from these organisations. The value of a coordinated community response highlighted the need to pre-plan this coordination before future events.

Fire to Flourish Tenterfield, in partnership with Northern Rivers Community Foundation (NRCF), provided rapid relief grants of up to \$3,000 to affected households and landowners, resulting in a total of around \$160,000 being granted in the immediate aftermath of the fires. The grants piloted a model of financial assistance that reduced bureaucratic hurdles. The money was able to be used flexibly – uses reported included supporting individuals who required critical care,

emergency fencing for farmers to save their livestock, and delivering much-needed supplies to wildlife rescue workers who were caring for injured animals.

“[The grants] gave people a sense of peace. To be able to help people with their immediate needs, put food in their cupboards, or help save their livestock relieves some of that immediate trauma. There’s a lot of pain while people try to work out ‘What on earth am I going to do now? How am I going to feed my family?’. You need the support of people around you in the immediate aftermath to keep you going so you can say, ‘Now I feel strong enough to start the recovery process.’”

–Tenterfield Fire to Flourish staff member

Bushfire risk management coordination increased

In the months afterwards, there were other positive changes. At the request of a Bluff River landowner, NSW National Parks and Wildlife Services and the NSW Rural Fire Service held a workshop with local landowners in the Bluff River district to understand their priorities for fire management. Residents expressed hope that this would initiate a model of landscape-level fire management that local landowners around Tenterfield can both drive and participate in. See Box 4 for further details.

The area of Tenterfield was added to the Northern Tablelands’ District Risk Plan, which is expected to facilitate a more detailed risk management plan for future bushfires.

Box 4: Bluff River community fire planning

In April 2024, a NSW National Parks and Wildlife Services officer, at the request of a Bluff River landowner, held a workshop in conjunction with the NSW Rural Fire Service with local landowners in the Bluff River district to understand their priorities for fire management. The workshop was a consensus-style format, to ensure that everybody – including people who might be shy or with low levels of literacy – were able to contribute.

This workshop had the potential to help build more positive relationships between private and public landowners, and develop shared landscape-level fire management plans. There is potential that this could develop into a very positive community outcome, as interviews showed that some in the farming community mistrusted NSW National Parks land management strategies due to concerns that they had increased bushfire risks around farmlands.

The Parks officer was enormously pleased with the

workshop and the outcomes, and was hopeful that this could be replicated across localities across the district, so that all of the Tenterfield region could have something similar.

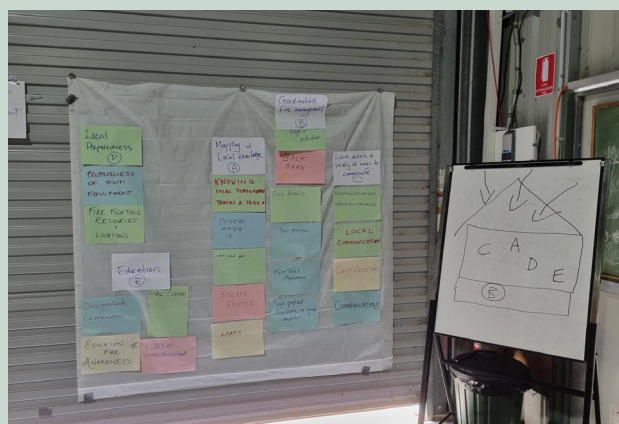


Figure 20: Bluff River community workshop ideas. Source: National Parks and Wildlife Services

Needs improvement

There were four key areas that were identified as needing improvement to facilitate community recovery processes. These were the areas of community psychosocial support, post-bushfire clean-up, post-bushfire financial assistance, and in the data collection around the bushfire's impact.

Psychosocial support services

A range of psychosocial services were made available to Tenterfield residents during and after the bushfires. However, there were aspects of those services that people thought needed improvement.

While a Bushfire Recovery Centre was set up by the NSW Reconstruction Authority in the Tenterfield Memorial Hall, it was closed after only one week⁷⁵. People observed that, for many people directly impacted by the bushfires, this time period was too short as they were often too busy during that week to attend the Recovery Centre, or even realise that the Centre had been set up and might be useful in meeting their post-bushfire psychological needs.

People also felt that support services offered were disconnected from each other, and from the local community volunteer organisations.

"None of them were local. Services NSW sent someone in, RFS sent someone in, people [asking for support] had to go through [their stories] constantly. Even the Salvos came in and didn't even engage the local Salvos. They had no idea about the local community. They weren't local people whatsoever. The whole thing felt like it was disconnected."

—Tenterfield community member (interview)

There was a sense that the support being offered was not tailored to the specific needs of the Tenterfield community. Rather, it was what the agencies thought would be needed. One person commented:

"You know what people don't like? They don't like being told what they need."

—Tenterfield community member (interview)

Post-bushfire clean-up

Post-bushfire clean-up was of concern to some residents, as some clean-up actions appeared to some community members to increase bushfire risk.

One example given were the trees along the New England Highway, which had been burnt in the bushfires, and were cut down but only moved into piles



Figure 21: Burnt trees felled after the bushfires, along the New England Highway, had not been cleared, potentially adding to fire risk

instead of being cleared. This made neighbouring landowners concerned that their fire risk had been increased, and heightened their perceptions that Government agencies involved in land management had a pattern of mismanagement.

Post-bushfire financial assistance

Another area of community concern was post-bushfire financial assistance. It was reported that farms were unlikely to have insurance that covered the extent of infrastructure, feed, livestock and cultural losses.

"We lost 10 km of fencing. It will cost \$50–\$100,000 in materials, plus paying someone to do it. The old barn, an historic icon 140 years old, had food stored in it. We've lost it and the food, and now we can't store food."

—Tenterfield community member (interview)

Residents of NSW found that, due to the federal Government's classification of the 2023 bushfire event, they did not qualify for higher-level Government recovery grants, whereas people living just across the border in Queensland did. Therefore, there were less opportunities for financial aid available to those living in NSW areas of Tenterfield.

"The farmers in NSW cannot access it because of the category of disaster. The Queensland farmers can, but not the ones here, they can only ... apply for a loan, a reduced interest loan."

—Tenterfield community member (interview)

People also reported that, where grants were available, criteria were often too restrictive. Community members reported feeling frustrated when attempting to apply for grant funding, especially when those

criteria were not made clear at the outset of the process. One resident said:

“The messaging [about grants] has to be done properly ... That sort of thing has been happening with all of the fires in Tenterfield. You get the messaging, ‘Oh yes, we can do this for you’, and then it’s like, ‘No, you don’t fit the bill, you don’t meet the criteria.’”

–Tenterfield community member (interview)

Bushfire impact data

The final area that residents felt needed improvement in the fire recovery process was how data on the bushfires’ impact were gathered and used.

“I can tell you that the data that comes from the Government is not even a quarter aligned to what was damaged. To replace a set of cattle, to replace fencing - what it costs is phenomenal, and it’s not taken into consideration properly in these disasters.”

–Tenterfield community member (interview)

Good data on the bushfire impacts underpinned many of the Tenterfield community activities to support one another, such as delivering feed for livestock where it was needed, and directing Blaze Aid assistance to areas where burnt farm fencing needed rebuilding. However, people reported limitations and barriers to collating and using such information.

Tenterfield community members reported limitations in the data gathered by agencies. The main information gathered on bushfires, and which is most easily accessible, are the bushfire boundaries. Agencies that collected bushfire impact data were NSW Rural Fire Service and the NSW Department of Primary Industries and Regional Development. The NSW Rural

Fire Service teams, in line with their policies⁷⁶, collect bushfire impact data that focuses primarily on house and major shed losses.

Farming infrastructure and livestock fall outside their remit. Farm bushfire impact data is instead gathered by the NSW Department of Primary Industries and Regional Development, through an online form that farmers fill in themselves⁷⁷. This department’s bushfire impact information seeks to be a “source of ‘ground truth’ information [which] helps the Government and communities understand the scale and regional distribution of the impact of a disaster on agriculture and target resources and assistance in an area.”

Data collected through this online portal (Figure 22) shows a self-reported impact of the 2023 bushfires across the Tenterfield LGA. It provides an estimated cost of the damage done to farm infrastructure, livestock and pasture – a total of \$1,919,444.

A number of people interviewed in this study reported that the online form was a barrier to entering data, especially for older farmers less used to internet technologies. If they did enter the data, people still lacked confidence it would help their own farm or the wider community, as this was not made clear on the website. The resulting under-reporting is a problem that the Department of Primary Industries and Regional Development acknowledges is inherent in their data collection⁷⁸.

One person interviewed reported that – in order to get data needed to help community members during and in the immediate aftermath of the fires – they sourced information through a network of friends and local organisations. However, this informal method of data gathering, which did not involve formalised consent from residents, meant that it was unable to be shared with any other organisations or agencies due to privacy concerns.

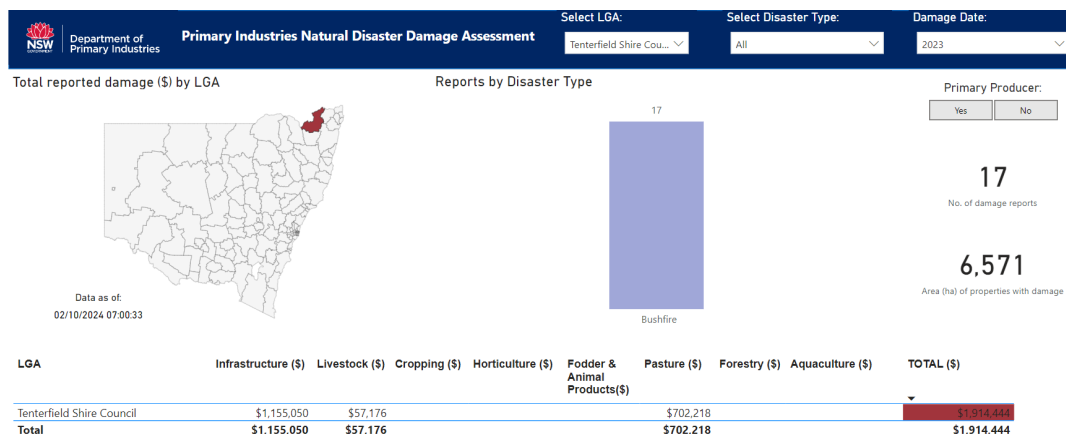


Figure 22: The value of bushfire damage reported to the Department of Primary Industries and Regional Development by farmers from the 2023 bushfires. It shows that 17 damage reports were entered, with damage reported to farm infrastructure, livestock and pastures across an area of 6,571 hectares. Source: Department of Primary Industries website.

IV. THE PATH FORWARD

Tenterfield community vision and priorities for future bushfire resilience

Insights in this section were gathered during a Tenterfield community workshop. The attendees were first shown the findings gathered from community interviews and workshops. They were then asked to work in groups to imagine another bushfire occurring in 2029, and to envision it being a better experience for the community. They then envisioned why it was a better experience, and what had been needed to bring about that change. See Appendix A for a full explanation of the research design.

Tenterfield's shared vision for bushfire resilience

At this workshop, Tenterfield community members agreed on the following vision for their bushfire resilience.

Future bushfires in the Tenterfield region will be more predictable, cause less community anxiety, will feature reliable communications, and will be well-supported by community agencies. There will be no deaths or injuries.

Community projects to increase Tenterfield's bushfire resilience will be designed to ensure they have a legacy going into the future.

In response to the community voices and ideas that were heard during this process, Fire to Flourish researchers synthesised four priority areas for action. These priority areas were shared back to community members at the workshop, where they refined and added to them.

The result was five priorities for Tenterfield's bushfire resilience, which also shaped the criteria for Fire to Flourish's subsequent participatory grantmaking round.

Priority 1: Collaborative, collective and inclusive community disaster response and recovery planning

"How many times does this town need to be under siege from fire before the town gets its act together around some sort of pre-planning, or resilience building?"

—Tenterfield resident

The aim of this priority was to assist the Tenterfield community with collaboratively and collectively preparing for the next emergency event, to increase the community's resilience.

The community workshop that identified these priorities suggested some projects that would meet this priority, before the call for grants went out:

- providing and maintaining community emergency infrastructure
- strengthening lines of communication between community and emergency services during events
- evacuation preparation and planning
- planning for shortages of food, water, fuel and other essentials.

Priority 2: Caring for ourselves and our neighbours

"I think that's when you have to step in, and with community, start looking after your neighbours ... In the long run you're still part of the one community, and if you don't look after each other, you're going to get lost."

—Tenterfield resident

The aim of this priority was to build caring social community networks that engage diverse people and social groups from across the Tenterfield community.

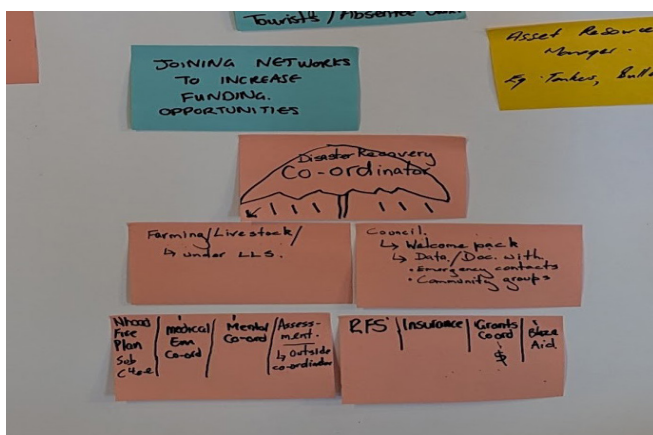


Figure 23: Some of the community visions developed in a Fire to Flourish Tenterfield Learning Review workshop

The community workshop that identified these priorities suggested some projects that would meet this priority, before the call for grants went out. Their suggestions included:

- strengthening the culture of volunteering
- appropriate and accessible mental health support, in general and particularly in the aftermath of disasters
- strengthening of social cohesion.

Priority 3: Caring for our natural environment

“It’s not just my little property, it’s how my little property fits in with the neighbour, and then fits in with the national park down the road. It has to be. Because fires now seem to be so big. So we’ve got to go bigger in terms of our planning.”

—Tenterfield resident

The aim of this priority was to encourage ecological regeneration to support fuel management, and particularly to support ecological sustainability of areas impacted by previous fires.

The community workshop that identified these priorities suggested some projects that would meet this priority, before the call for grants went out. Their suggestions included:

- fuel management programs that span multiple landowners/managers in a local landscape
- planning for wildlife care during and after disasters
- local Indigenous Rangers planning and conducting cultural burning.

Priority 4: Caring for our local economy

“If Tenterfield is going to get this post-bushfire financial support, [we] don’t want to see the money get spent aimlessly on projects that aren’t going to have any benefit. We want to see it going to useful projects that are going to have long-standing outcomes for our Shire.”

—Tenterfield resident

The aim of this priority was to support local businesses to reduce their risk, prepare for disasters and recover well.

The community workshop that identified these priorities suggested some projects that would meet this priority, before the call for grants went out. Their suggestions included:

- support for local businesses to take action to reduce their disaster risk, via knowledge and coordination
- support for local businesses to take action to

prepare for disasters, such as supporting contingency, continuity and recovery planning.

Priority 5: Collecting data on disaster impacts

“I can tell you that the data that comes from the Government is not even a quarter aligned to what was damaged. To replace a set of cattle, to replace fencing - what it costs is phenomenal, and it’s not taken into consideration properly in these disasters.”

—Tenterfield resident

The aim of this priority was to plan and implement initiatives to collect accurate data on local disaster impacts.

The community workshop that identified these priorities suggested some projects that would meet this priority, before the call for grants went out. Their suggestions included to:

- provide evidence to support local residents, landholders and businesses recover from the direct and indirect impacts of disasters
- provide evidence to assist the Tenterfield community to lobby for systemic change.

In addition to these priorities, the community workshop identified that all community projects should have elements that address sustainability, to ensure they leave a legacy for the future. For instance, by:

- building the local capacities and capabilities of residents and community organisations to implement these changes
- being socially inclusive, and engage diverse people from across the local community
- encouraging local skills building and using local suppliers where possible.

Strengthening disaster resilience through participatory grantmaking

In response to the community priorities identified through the review, Fire to Flourish established a participatory grantmaking round that enabled community members to identify and fund community-based projects that respond directly to their priorities. Expressions of Interest were sought from local community groups to propose projects.

In keeping with Fire to Flourish’s commitment to community-led disaster resilience strengthening, a community granting decision-making group was formed to assess and decide on which proposals would be funded. A flyer was used to solicit community decision-making group members, which was distributed widely across the community. A process was agreed upon for decision-making group members who had a

conflict of interest with a particular project proposal to not influence decision-making about that proposal.

The community granting decision-making group reviewed the proposals and invited full applications from those that met the criteria. Community decision makers then assessed the applications against the criteria, both individually and as a group, to ensure the process was equitable.

In November 2024, the community granting decision-making group came together at the Steinbrook Community Hall to allocate \$200,000 of grant funding. Each proposed project was discussed in detail and voted on by the group, in line with their previously established priorities. All project proposals were successfully funded. The final eight projects are:

1. **Focus on Feathers:** Environmental management to protect vulnerable native wildlife from bushfire.
2. **Emergency Communication:** leveraging existing communications infrastructure to provide accurate and accessible emergency information for the community.
3. **Aerodrome Kitchenette:** food preparation infrastructure to support firefighters and volunteers responding to emergencies.
4. **Aerodrome Volunteer Support:** infrastructure to support firefighters and volunteers responding to emergencies.
5. **Angry Bull Trails Emergency Communication:** providing accurate and accessible emergency information to tourists and visitors.
6. **Mingoola Hall Social Cohesion:** building social cohesion through sport and providing a forum for discussing community disaster preparedness.
7. **OzFish Fish Trailer:** fish rescue and rehoming to protect aquatic wildlife in the event of bushfires, floods and drought.
8. **TenFM Equipment:** upgrading local community radio for social cohesion and emergency communications.

In addition to grant funded projects, this Review process also identified a number of potential initiatives that are no-or-low-cost. A community based post-disaster review is powerful in facilitating the identification of diverse resilience-building projects, regardless of whether grant funding is available to support significant investment in priorities.



Figure 24: Tenterfield community members vote on projects to be funded.

CONCLUSION

The Tenterfield Bushfire Learning Review brought community members and local stakeholders together to reflect on the 2023 bushfires, developing both a positive vision for the future and five priority areas for community resilience strengthening. Making this vision a reality will ultimately require shared responsibility across community members, local organisations, and all levels of government.

These community-sourced findings hold relevance for all stakeholders invested in Tenterfield's disaster resilience, including the Tenterfield Shire Council and emergency services. The experience also offers valuable insights for other at-risk communities. For participants, the review process itself strengthened networks and coordination critical to disaster resilience.

Following the identification of these priorities, Fire to Flourish established a \$200,000 participatory grant round for community-led projects. A local decision-making group awarded funds across eight initiatives that are actively strengthening Tenterfield's disaster resilience capabilities.

This process demonstrated that communities can effectively identify and implement practical resilience-building measures when given the opportunity.

The Tenterfield community proved ready and capable of reflecting on their disaster experience and identifying priorities in a strengths-based, trauma-informed, and collaborative manner.

The Review showcases the power of prioritising community leadership in the post-disaster period and validates the Community-Based Disaster Learning Review methodology. This methodology can now be applied as a practical model when helping any community respond to a hazard.

While these approaches are both possible and effective, community-led doesn't mean community alone. Strengthening Australia's disaster resilience requires additional support and collaboration between communities and institutions. Community-based disaster learning reviews are a powerful way to elevate community leadership and agency, and for community voices, insights and priorities to be centred in planning and decision making led by institutions.



Figure 25: Tenterfield community decision-making workshop participants

APPENDICES

Appendix A: Research design

The Bushfire Learning Review research project (Project ID: 41514) was approved by the Monash University Human Research Ethics Committee (MUHRC). The Participatory Granting for Community Disaster Resilience process (Project ID: 40457) was approved by the Monash University Human Research Ethics Committee.

Research scope and approach

Tenterfield Bushfire Learning Review was designed to ensure a community-centred perspective of the bushfires. The study employed a strengths-based approach focused on learning opportunities to build community disaster resilience rather than assigning blame. The review explicitly excluded formal firefighting operations from its scope.

Participant recruitment

The study engaged community members through a purposive sampling approach. Twelve community advisors were recruited through Fire to Flourish networks and existing resilience planning groups. Selection criteria focused on individuals who:

- were local community members with strong social networks
- had direct involvement in Oct 2023 bushfires
- were familiar with community disaster resilience concepts through previous Fire to Flourish involvement.

Data collection process

The research employed a sequential multi-method approach conducted between Feb–Jun 2024:

Phase 1: Initial scoping (Feb 2024)

- An in-person workshop with community advisors identified primary issues for examination.
- Advisors provided high-level community perspectives of the bushfires, highlighting successes and concerns.
- Desktop research gathered contextual information about the bushfires.

Phase 2: In-depth exploration (Mar–Apr 2024)

- Seven follow-up individual interviews with community advisors via Zoom.
- Eleven additional interviews with recommended community members during a site visit by Fire to Flourish researchers.
- One community workshop. Participants included local residents and representatives from businesses and organisations.
- Further desktop research to explore emerging themes.

Phase 3: Validation and vision development (Jun 2024)

- A final community workshop where researchers shared analysed findings.
- Workshop attendees utilised findings to create a vision for bushfire resilience.
- Identification of priority areas for achieving vision.

Data management and analysis

- All workshops and interviews were recorded and transcribed.
- Workshop materials (post-it boards) were photographed and transcribed.
- Thematic analysis identified key patterns across data sources.
- Thematic analysis compared with results from the Tenterfield Community Disaster Resilience Assessment conducted by Fire to Flourish in 2024⁷⁹.

Granting Community Projects

The community priorities identified through this Review process directly informed community projects funded through a participatory grantmaking process.

- Community-developed vision and priorities served as evaluation criteria.
- A decision-making panel of experienced local leaders was assembled through an open EOI process.
- Community projects submitted applications through a two-stage process (EOI and full application).
- Eight community projects received funding in Nov 2024.

Appendix B: Tenterfield maps and diagrams

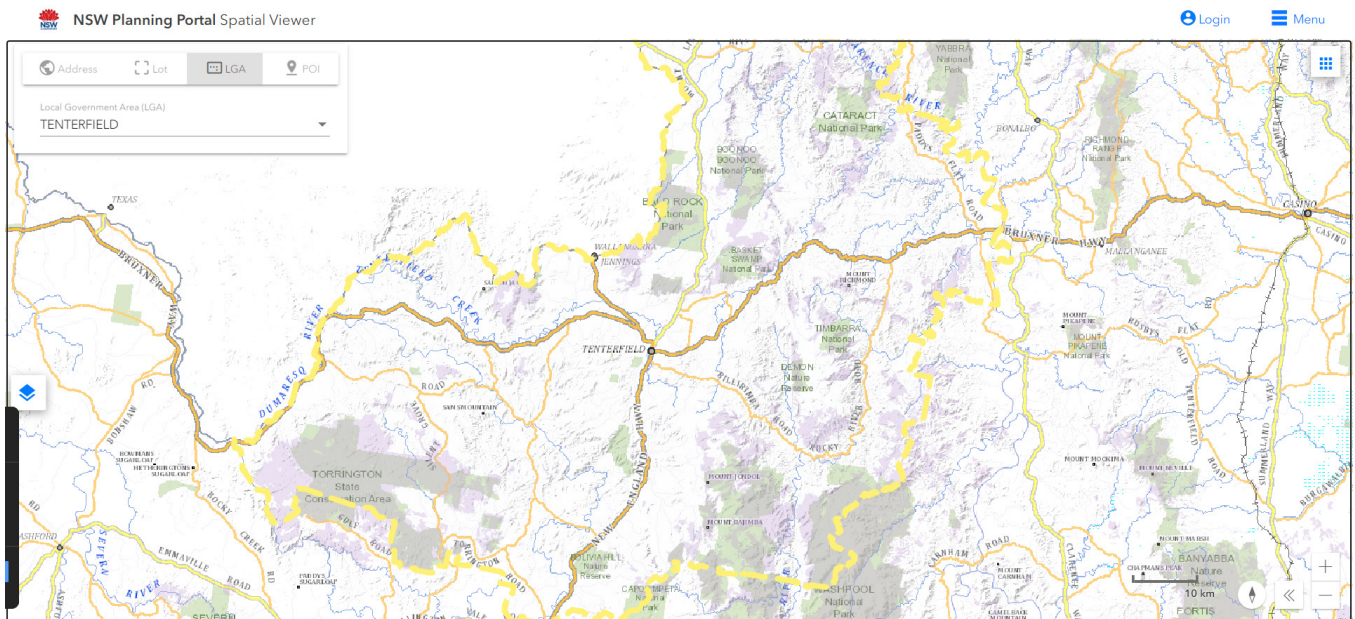


Figure 26: Tenterfield Shire’s National Parks and State Forests (marked in green), and areas of high environmental value (marked in purple). Source: NSW Planning Portal⁸⁰

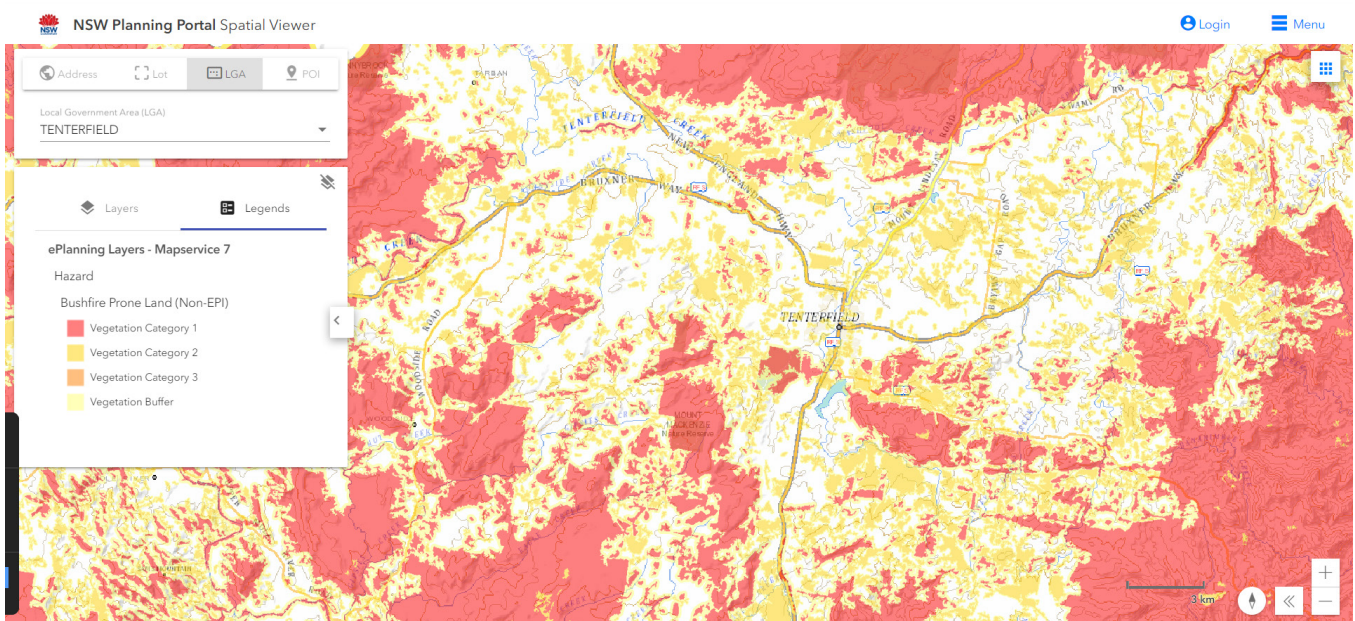


Figure 27: Bushfire-prone land around the Tenterfield township. The red areas indicate vegetation that poses the highest risk of bushfires, and ideally has a 100m buffer between it and assets. The yellow areas indicate vegetation at lower risk of bushfire, only requiring a recommended 30m buffer. Source: NSW Planning Portal⁸¹

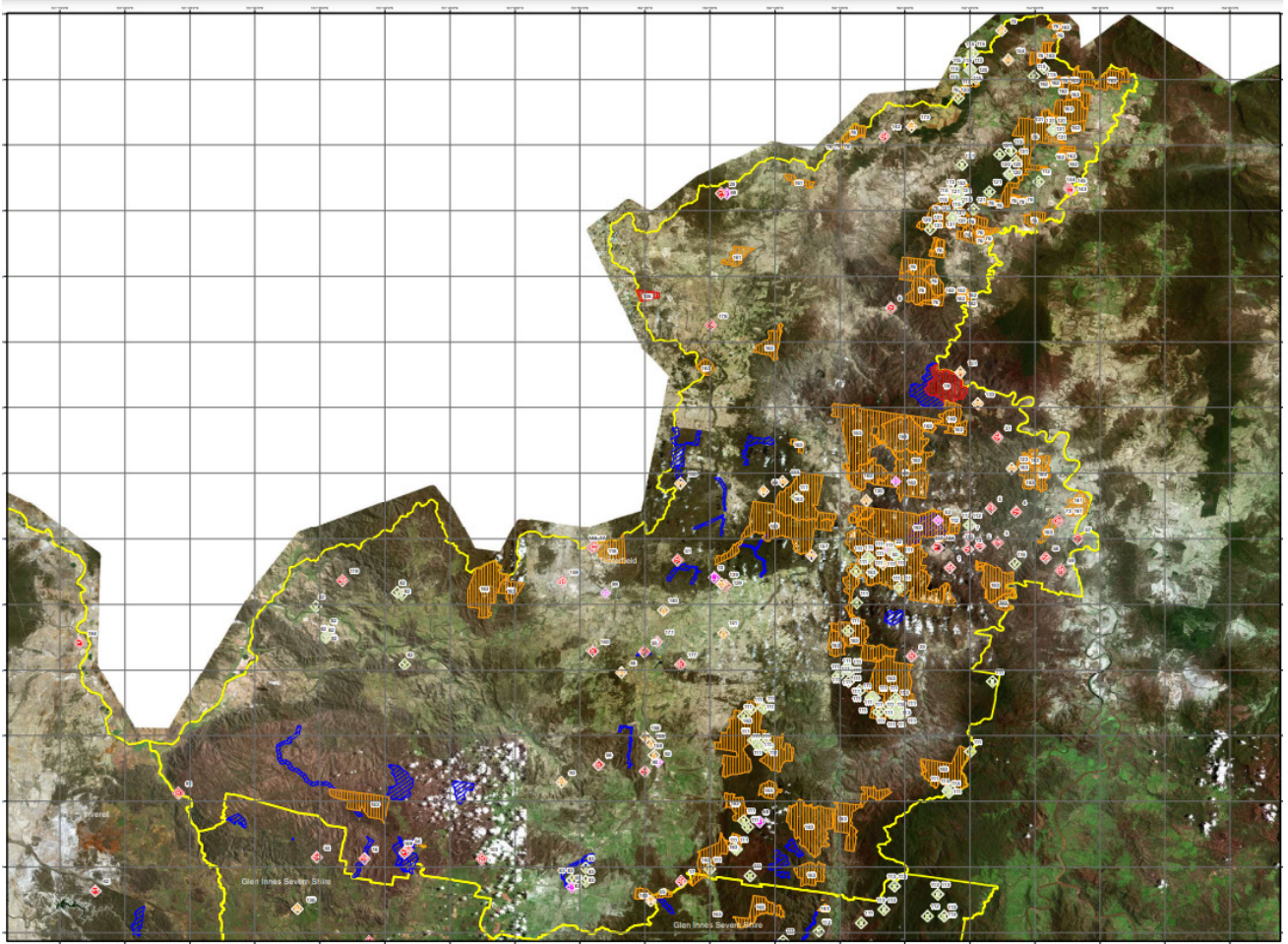
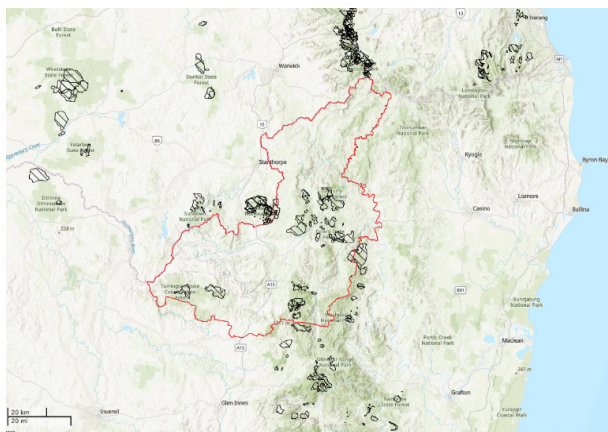
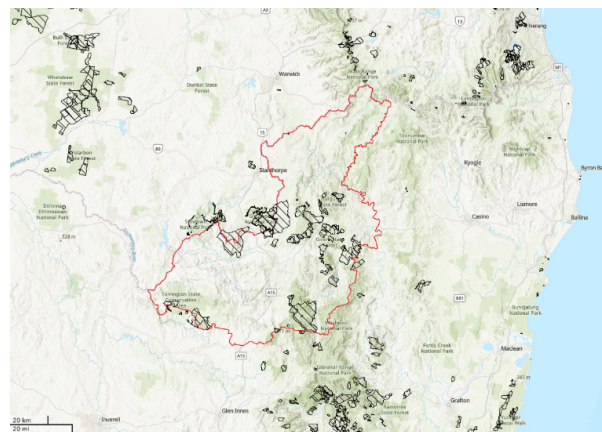


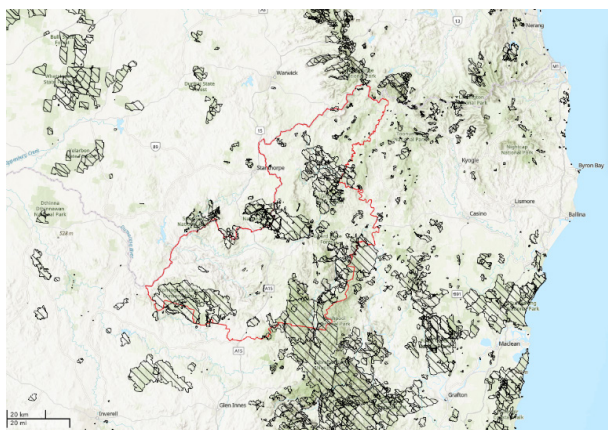
Figure 28: A map of Tenterfield Shire from the current Northern Tablelands Bush Fire Strategic Plan. It maps key community assets - human, economic, cultural, environmental - and rates them as being of extreme, very high, high, medium or low risk of bushfire impact. Source: Northern Rivers Bush Fire Risk Management Plan⁸²



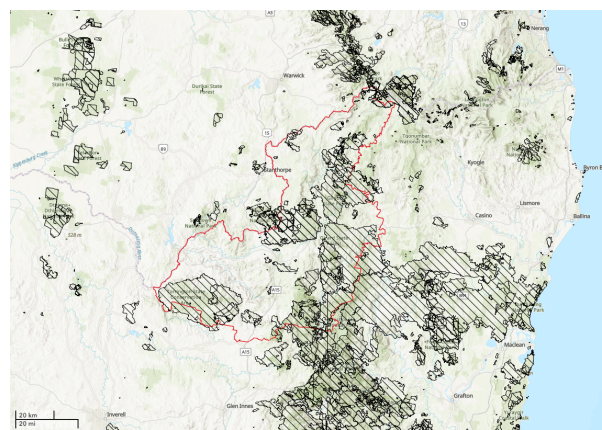
Recorded bushfires between July 1980–June 1990



Recorded bushfires between July 1990–June 2000



Recorded bushfires between July 2000–June 2010



Recorded bushfires between July 2010–June 2020

Figure 29: Recorded historic bushfires (shaded areas) around Tenterfield Shire, by decade. The majority of fires from the 2010-20 decade occurred between February 2019 and March 2020. Source: Digital Atlas of Australia National Bushfire History Viewer⁸³

Drought Stage

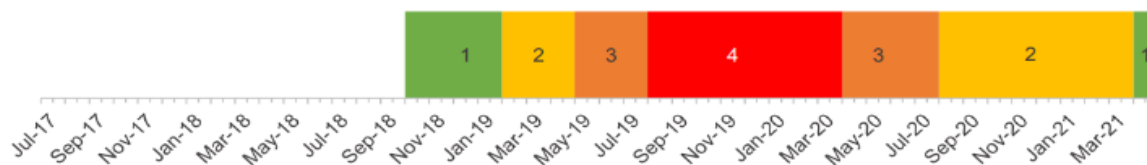


Figure 30: Drought stages in the Border Rivers region, which includes Tenterfield. The region experienced drought conditions from March 2019 to March 2021. Source: DPIE. Legend: 1 (green) = Normal, 2 (yellow) = emerging/recovering drought, 3 (orange) = Severe drought, 4 (red) = Critical drought

Appendix C: Tenterfield LGA's declared disasters 2010–2023

These are the 20 events that occurred between 2010 to 2023 where Tenterfield Shire residents have been eligible for disaster assistance. The types of events, as well the amounts, nature and provider of the assistance is greatly varied – further details can be found in each URL. This list does not include drought, or secondary events such as water supply issues.

Year	Disaster type	Name	Start date	Reference URL
2010	Floods	NSW floods: 26 December 2010 to January 2011	26/12/2010	https://www.disasterassist.gov.au/Pages/disasters/previous-disasters/New-South-Wales/New-South-Wales-floods-26-December-2010-to-January-2011.aspx
2011	Floods	NSW floods: February 2011	4/02/2011	https://www.disasterassist.gov.au/Pages/disasters/previous-disasters/New-South-Wales/New-South-Wales-floods-February-2011.aspx
2012	Storms and Floods	NSW–Northern NSW heavy rainfall and flooding: 27 January 2012	27/01/2012	https://www.disasterassist.gov.au/Pages/disasters/previous-disasters/New-South-Wales/New-South-Wales-Northern-New-South-Wales-heavy-rainfall-and-flooding-27-January-2012.aspx
2012	Bushfires	Clarence Valley bushfire: 6 to 17 September 2012	6/09/2012	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/Clarence-Valley-bushfire-6-to-17-September-2012.aspx
2012	Bushfires	Bushfire: 7 to 13 October 2012	7/10/2012	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/Bushfire-7-to-13-October-2012.aspx
2013	Storms and floods	North Coast storms and floods: 26 January 2013	26/01/2013	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/North-Coast-storms-and-floods-26-January-2013.aspx
2015	Floods	North Coast floods: 30 April 2015	30/04/2015	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/North-Coast-floods-30-April-2015.aspx
2016	Bushfires	Tenterfield Bushfire: 5 November 2016	5/11/2016	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/Tenterfield-bushfire-5-november-2016.aspx
2017	Storms and floods	East Coast Storms and Floods: from 12 March 2017	12/03/2017	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/East-coast-storms-and-floods-from-12-march-2017.aspx
2017	Floods	North Coast Floods: from 28 March 2017	28/03/2017	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/North-coast-floods-from-28-march-2017.aspx
2017	Bushfires	Tenterfield Bushfires: 8 September 2017	8/09/2017	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/Tenterfield-Bushfires-8-September-2017.aspx
2017	Storms	Eastern NSW Storms: 5 and 6 November 2017	5/11/2017	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/Eastern-nsw-storms-5-and-6-november-2017.aspx
2019	Bushfires	Northern NSW Bushfires: 11 February 2019 onwards	11/02/2019	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/northern-region-bushfires-11-february-2019-onwards.aspx

Year	Disaster type	Name	Start date	Reference URL
2019	Bushfires	NSW – Tenterfield Bushfires: 9 March 2019 onwards	9/03/2019	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/tenterfield-bushfires-9-march-2019-onwards.aspx
2020	Storms and floods	NSW Storms and Floods: 15 January 2020 onwards	15/01/2020	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/nsw-storms-floods-01022020-onwards1.aspx
2020	Storms and floods	NSW Storms and Floods: 10 December 2020 onwards	10/12/2020	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/nsw-storms-floods-10122020-onwards.aspx
2021	Storms and floods	NSW Storms and Floods: 10 March 2021	10/03/2021	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/storms-floods-10-March-2021-onwards.aspx
2021	Storms and floods	NSW Severe Weather and Flooding: 9 November 2021 onwards	9/11/2021	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/nsw-severe-weather-and-flooding-9-november-2021-onwards.aspx
2022	Storms and floods	NSW Severe Weather and Flooding: 22 February 2022 onwards	22/02/2022	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/nth-nsw-floods-22-february-2022.aspx
2023	Bushfires	Far North NSW Bushfires (13 October 2023 onwards)	13/10/2023	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/far-north-nsw-bushfires-13-october-2023-onwards.aspx
2023	Bushfires	Inverell and Tenterfield bushfires: 7 to 24 December 2023	7/12/2023	https://www.disasterassist.gov.au/Pages/disasters/current-disasters/New-South-Wales/inverell-tenterfield-bushfires-7-23-december-2023.aspx

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FIRE to FLOURISH



Fire to Flourish is a pioneering five year program, working in partnership with communities affected by the 2019/20 Australian bushfire season to trial innovations in community-led disaster resilience.

Pathways for scaling the insights, models and tools developed through the program are being created through partnerships with Government, philanthropic, not-for-profit and private sector organisations.

Fire to Flourish is led by Monash University and supported by cornerstone philanthropic partners, the Paul Ramsay Foundation and Metal Manufactures Pty Ltd. Additional philanthropic support is provided by the Lowy Foundation.

For more information, go to:
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