



Tilba District Chamber of Commerce Inc.

C/- Post Office | Central Tilba | NSW 2546

(02) 4473 7226

email: tilbachamberofcommerce@bigpond.com

www.visittilba.com.au

NSW Independent Bushfire Inquiry
GPO Box 5341
SYDNEY NSW 2001

Re: NSW Independent Bushfire Inquiry

The Tilba District Chamber of Commerce has prepared a submission to the NSW Independent Bushfire Inquiry.

I would like to recommend this submission to you and request that you read it.

I believe it to be a very well researched and very detailed document that highlights the Tilba region's unpreparedness for an event such as the 2019-2020 Badja Forest Road Fire, which devastated nearby Cobargo on New Year's Eve 2019.

The submission also describes the trauma experienced by this community in knowing that Tilba was likely to be severely impacted, if not destroyed, should RFS fire model predictions come to fruition.

Either by a quirk of nature, or by the grace of God, or just by sheer luck, Tilba was not wiped off the map during these prolonged catastrophic fires.

Our Chamber would like to highly commend the Central Tilba Rural Fire Brigade – RFS NSW, for its steadfast and tireless support through the most challenging fire period in our history. The daily briefings delivered by this small band of volunteers at the Central Tilba fire shed were well attended by the community. It should be noted that at times, these briefings were the only information local residents were able to access.

In preparing this submission, we have looked objectively at the risk to the future protection of our historic National Trust villages, in the very likely event of future fires.

Our submission draws attention to serious fire risk issues that came sharply into focus in January 2020. It is imperative that these issues are urgently addressed to ensure Tilba is better prepared to survive future fire events.

The submission also sets out solutions to the major shortcomings in preparation that were evident during this recent unprecedented crisis. These solutions are clearly stated and we believe they are not cost prohibitive or unachievable.

The safety of Tilba residents and the preservation of their homes, businesses, livelihoods, properties as well as the natural environment, depends on greatly improved preparation for future fire events.

'... Southern gateway to the Eurobodalla Nature Coast'

I would highly recommend that you give serious attention to the attached document and the need for timely strategies to ensure the protection of the Tilba region in future.

Thank you for your consideration of this important matter.

Yours faithfully
Peter Lonergan
President
Tilba District Chamber of Commerce Inc.

18th May 2020

NSW INDEPENDENT BUSH FIRE INQUIRY

SUBMISSION FROM TILBA DISTRICT CHAMBER OF COMMERCE

MAY 2020



NSW INDEPENDENT BUSH FIRE INQUIRY
SUBMISSION FROM TILBA DISTRICT CHAMBER OF COMMERCE

1. EXECUTIVE SUMMARY

This submission is presented by Tilba District Chamber of Commerce (TCOC) on behalf of:

- Village residents and owners of farms and other properties further out from villages
- Local businesses and community organisations

for the purpose of:

- Sharing Tilba community's experience of the 2019/20 bushfires
- Describing factors that placed Tilba at high risk during the recent fire season
- Proposing urgently needed measures to improve Tilba's chances of surviving future fires.

Tilba villages, together with the surrounding landscape, are a uniquely well preserved example of a typical rural community at the end of the 19th Century. Tilba in its entirety is of **priceless heritage value** and was **listed in 1974 by the National Trust as the Tilba Conservation Area**. It is imperative that this precinct be protected and preserved.

The RFS fire model predictions of the complete destruction of Tilba during these bushfires highlight that **in times of drought and extreme weather conditions, Tilba Conservation Area, the community, businesses, outlying properties and natural environment are at very high risk.**

In the early stages of the dramatically escalating fire emergency, serious shortcomings in power and water infrastructure became apparent. **During early January, Central Tilba reservoir was empty for a short period due to power supply interruptions**

The experience of last summer's fires has focused Tilba community's attention on the **potential for future fire events** and the **need to urgently address:**

- **water supply and infrastructure**
- **hazard reduction management**

Details on these shortcomings and recommended measures are set out in Attachments C, D, E, F, G.

Tilba's experience of the 2019/20 bushfires

After the onslaught of fire in the Cobargo region (less than 20 km away) on 31 December 2019, Tilba was threatened four times by the nearby Badja Forest Road fire. This fire continued to burn actively to the south west, west, north west and north of Tilba until declared at patrol status on 13 February 2020. The weather forecasts and RFS fire model predictions for Tilba region on each of these occasions were dire. Tilba residents were advised to leave well before each of these potential fire events to seek safety in more built up areas.

While Tilba was fortunate to have come through the recent fire season physically intact, **the indirect impact of the fires on this community has been significant.**

Tilba's concern regarding future bushfires

Added to the trauma and financial hardship experienced by Tilba residents is an **all-pervading concern that Tilba may in future be faced with recurring bushfire threat, with potential for:**

- similar loss of income for the season
- personal losses on a much larger and long-term scale – properties, businesses, livelihoods

The highly inflammable and tightly clustered nature of the 19th Century timber buildings within Central Tilba and Tilba Tilba places the villages at very high risk of complete destruction in a fire:

- structures that are more than 100 years old would be **irreplaceable if destroyed**

- residents living in and operating businesses from timber cottages, would lose **both homes and livelihoods**
- the destruction of the villages would be a **tragic loss of a valuable, historic asset**
- the serious interruption (if not cessation) to the operation of Tilba's working farms and dairy processing operations, with serious **implications for food production**, particularly dairy and meat products

Fire risk for Tilba

A summary of fire risk factors for Tilba community and the natural environment:

- prolonged drought beforehand and subsequent extreme weather conditions December 2019 to February 2020
- inadequate water supply and infrastructure for the villages in a fire event
- high fuel loads in neighbouring Gulaga National Park
 - o inaccessible, overgrown infrastructure (e.g. fire trails, access roads) in the Park
 - o lack of a robust fire buffer zone between villages, outlying properties and Mountain
- vulnerability owing to age, design, fabric and arrangement of buildings in Tilba's villages
- unduly restrictive hazard reduction rules
- unreliable power supply and communications systems during bushfires

DESIRED OUTCOMES FOR TILBA FROM THIS INQUIRY

Address inadequate water supply and associated infrastructure for the villages (Attachment C)

- An **independent review of water supply and associated infrastructure** for the villages
- Review of **arrangements between Bega Valley Shire and Eurobodalla Shire for access to the nearby Meads Road reservoir** as a back up supply for Tilba
- **Upgrade to infrastructure** for the Engine Road reservoir
- Construction of an **additional reservoir** at or near Central Tilba
- Upgrade to **infrastructure for Central Tilba Public School**
- Investigation into the **feasibility of using Dromedary Weir and pipe-works** during bushfire emergencies in the forests to the north west of Tilba

Reduce high fuel loads in neighbouring Gulaga National Park / Bellbrook Farm (Attachment D)

- Protocols for **regular communication** between Gulaga Board of Management, Tilba community and relevant services
- Appropriate **resourcing** for the Board's development and implementation of management and operational plans to achieve more regular, systematic programs for **'clean up', maintenance, fire risk management, elimination of invasive vegetation** in Gulaga National Park and Bellbrook Farm
- An **immediate program of hazard reduction** commencing in the cooler months of 2020 to address fuel loads in Gulaga National Park and Bellbrook Farm, incorporating, where possible, traditional (indigenous) fire practices **to restore a robust fire buffer on Bellbrook Farm** between Gulaga mountain and Tilba villages including nearby properties
- Formalised agreements between Gulaga Board of Management and relevant services for **access to and maintenance of infrastructure** (e.g. fire trails, access roads) in Gulaga National Park

Address vulnerability of Tilba's villages in a fire event (Attachment E)

- Investigation into and funding for effective fire protection systems including sprinklers to protect the villages

Address issues impacting on the operation of working farms (Attachment F)

- Improve road maintenance and management of fuel loads in densely forested areas where major roads (e.g. Kings Hwy, Princes Hwy) pass through them
- review issues relating to the bulk storage of fuel on rural properties
- strategies to maintain clean, potable water supply for working farms during fire events
- access to additional water supply for fire fighting response so as not to compromise water requirements for working farms

Amend unduly restrictive hazard reduction rules (Attachment G)

- **Reduction of minimum prescribed periods between hazard reduction burns** to allow more regular hazard reduction measures on both public and private land
- Amendment of the **prescriptive and limited rules for RFS undertaking and requiring hazard reduction works**

Address unreliable power supply and communications systems (Attachment H)

- Review and improve the **adequacy of power and telecommunications systems** for regional areas, including Tilba during bushfire and other emergency events
- Investigation into and advice for regional and remote communities on **the most effective communication backup devices** for constant connectivity during emergencies

2. ABOUT TILBA

See Attachments A and B (map) and Tilba District Chamber of Commerce website – Visit Tilba: www.visittilba.com.au

Tilba is recognised as unique and significant at local, state and national levels for its historical / cultural heritage, its striking natural landscape and its tiny historic villages.

Present day Tilba is an important drawcard for Australian and international tourists. Tourism is key to the local economy.

For the purpose of this submission, Tilba collectively refers to:

- Tilba Conservation Area – a relatively confined region consisting of:
 - o two National Trust villages – Central Tilba and Tilba Tilba
 - o Gulaga (Mount Dromedary) – the ancient remnant volcano
 - o a large portion of the eastern foothill slopes of Gulaga
 - o Tilba Tors
 - o Tilba Tilba Valley
 - o Little Dromedary (Najanuga)
 - o Rocklands Valley
 - o Northern valleys (an area of cleared landscape north of Central Tilba)
 - o South to Couria Creek

- Working farms and other properties further out from Tilba Conservation Area which are supported by Central Tilba Rural Fire Brigade – RFS NSW.

Tilba Conservation Area sweeps from peak of the ancient remnant volcano of Gulaga mountain – a powerful focal point for the area and backdrop to villages, east to the parasitic cone – Little Dromedary (Najanuga) and includes steep foothill slopes and valleys which are home to the two villages, working farms and other properties.

The critical proximity of Gulaga National Park, including Bellbrook Farm, to the Tilba Conservation Area and outlying properties can be seen in the *map at Attachment B* - copied from the *Plan of Management for Yuin Bangurri (Mountain) Parks 2014*.

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/yuin-bangguri-mountain-parks-plan-of-management-150003.pdf>

3. FIRE RISK FOR TILBA

(see Attachments C D E F G H)

The 2010 and draft 2019 Bush Fire Risk Management Plans for Eurobodalla Shire assess the likelihood of a bush fire at Tilba as “unlikely” and the risk of a bushfire as “low” with the result that Tilba has no priority for any bush fire works.

This assessment of 'likelihood' hopefully remains appropriate. However, for reasons unknown to TCOC and beyond its belief, this Plan totally ignores the significant cultural and commercial value of the Tilba villages and assesses the consequences of a bushfire at Tilba as "moderate" despite the obvious fact that a fire affecting a tightly clustered group of 19th century timber clad buildings would cause total devastation.

In the **prolonged drought and extreme weather conditions late 2019**, the drying out of high fuel loads of bush, vegetation and grasslands– **abnormally high temperatures and gale force winds from north west and south west throughout December 2019 to February 2020 certainly placed Tilba at high risk** when the 2019/2020 fires raged on South Coast NSW.

4. TILBA'S EXPERIENCE OF 2019/20 FIRES

Fire danger warnings for Tilba on four dates (4, 11, 23 January and 1 February 2020) following the devastation of nearby Cobargo on 31 December 2019 were dire:

- Tilba residents were informed by Central Tilba Rural Fire Brigade prior to each of these dates that, should the forecast wind direction on any one of these days play out, the Badja Forest Road fire (which continued to burn actively until 13 February to the south west, west, north west and north of Mount Dromedary), would potentially be driven over the top of the mountain and around its north west and south west flanks.
- In this scenario, Central Tilba and Tilba villages and outlying properties would be directly in the path of major impact including grass fire and ember attack. There was no doubt in any one's mind the prediction that Tilba would be 'smashed' may well have come to fruition.
- For each of these four dates, Tilba community was advised by Central Tilba Rural Fire Brigade to leave well in advance of forecast weather conditions setting in and seek refuge in built up areas.
- Many Tilba residents also left their homes on 31 December owing to the uncertainty of the direction of the fire that stormed through Cobargo in the early hours of that morning – giving five occasions of 'evacuation' for a majority.
- Owing to the enormity of the overall bushfire disaster and how totally 'stretched' RFS and other services were, Tilba community had to **face the chilling reality that the only resources available to Tilba for most of the bushfire period was Central Tilba Rural Fire Brigade (a brigade comprising less than a dozen active members) and two fire trucks (Cat 1 and Cat 7)**
- The shared feeling of apprehension and fear that comes with knowing one's home, business and long term livelihood may be lost on any of these dates was palpable among Tilba's tightly knit community.
- In the aftermath of the 2019/20 fires, it is the general consensus that **Tilba was "lucky to have dodged a bullet" and that in different, less favourable wind patterns Tilba villages and environs is likely to have been totally destroyed.**

- Given the likelihood of **rapidly changing climate conditions** and the **possibility of more regular episodes of drought, extreme temperatures and wind patterns**, Tilba community fears it may find itself placed at high risk again in future.

5. THE IMPACT OF 2019/20 BUSHFIRES ON TILBA

Tilba's two villages, outlying farms and other properties on the coastal side of Gulaga (Mount Dromedary) were fortunate to have escaped the 'direct' impact of 2019/20 fires, largely because wind direction remained favourable throughout.

However, the **indirect impact of fires on the Tilba economy and the community's wellbeing has been significant:**

- Tourism is a vital source of income for Tilba small business owners including retail shops and providers of accommodation and experiences.
- Visitors to Tilba contribute not only to the local economy but also to Eurobodalla Shire generally and beyond as they pass through and take day trips to these areas.
- The peak months for tourism extend from October through to the end of April, with the busiest periods being from Christmas through to the end of January and then Easter. From end of April, Tilba experiences a decrease in tourism and decline in income for business owners as it heads into cooler, quieter months. Trade will typically begin to pick up again from around the October long weekend.
- The recent fires on NSW South Coast along with associated road closures and prolonged fire threat to Tilba had **a seriously negative effect on the income Tilba business owners would normally earn during the summer season**. This in turn has impacted on income for other community members employed by Tilba businesses and local trades people.
- Accommodation providers are aware of a loss of confidence by international tourists in South Coast NSW as a viable travel destination. Many advanced bookings right through to December 2020 were cancelled early in 2020 – well before the advent of COVID 19.
- Road closures which prevented employees living in areas beyond Tilba travelling to work
- Local farmers suffered both financial and emotional stress as a result of:
 - o road closures impacting on incoming supply of stock feed and timely dispatch of food products – causing significant 'dumping' of food products (e.g. milk)
 - o prolonged power outages resulting in heavy reliance on diesel operated generators and the potential for fuel supply to run out, given limitations to bulk storage of fuel on farms
 - o the detrimental effect of smoke and ash on water quality and subsequently animal health and food processing machinery
- The financial impact of bushfires is now exacerbated by the restrictions imposed by COVID 19.

ABOUT TILBA

See also map at Attachment B and Tilba District Chamber Of Commerce website – Visit Tilba:
www.visittilba.com.au

Tilba Conservation Area sweeps from peak of the ancient remnant volcano of Gulaga (Mount Dromedary) – a powerful focal point for the entire area and backdrop to villages, east to the parasitic cone – Little Dromedary (Najanuga) and includes steep foothill slopes and valleys and which are home to the two villages, working farms and other properties.

Tilba is recognised as unique and significant at local, state and national levels for its historical / cultural heritage, its striking natural landscape and its tiny historic villages.

Aboriginal / European history and cultural heritage

The area is rich in Aboriginal history and culture and the history of interaction between first inhabitants – Yuin people, and European settlers who began to populate Tilba from mid 1850s:

- Yuin people “have lived on and with ‘Yuin Country’ for time immemorial”
- For Yuin, ‘Country’ refers to Mumballa mountain and Gulaga mountain (Mount Dromedary) and surrounding lands down to the sea, including Baranguba (Montague Is)
- Yuin hold a deep spiritual connection to Country and regard all dimensions – bush, rainforest, plants, animals, rocks, water, trees and mountains, as sacred.
- In recognition of the importance of these lands to Yuin people, two national parks have been created:
 - o 1994 Biamanga National Park (including Mumballa mountain)
 - o 2001 Gulaga National Park (including Gulaga mountain)
- In 2006, both Parks were formally handed back to the traditional owners and are leased back to the Government to be used as National Parks
- In 2013, a large parcel of land (formerly Bellbrook Farm) in Tilba Tilba Valley and bordering Gulaga National Park was purchased by traditional owners.
- Bellbrook Farm now joins Gulaga (Mount Dromedary) as part of Gulaga National Park (see map at Attachment B)
- A Board of Management, with majority of members being Aboriginal owners, has been established for each Park. The Boards are responsible for the care, control and management of the two Parks including the Mountains.
- A *Plan of Management – Yuin Bangurri (Mountain) Parks 2014* has been developed to govern the activities of all people in the National Parks – including the two Boards of Management and National Parks & Wildlife Service (NPWS)

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/yuin-bangurri-mountain-parks-plan-of-management-150003.pdf>

European settlers began to populate the Tilba from mid 1800s with the discovery of gold and the subsequent establishment of the forestry industry, dairy farms, milk / butter / cheese industries and Tilba’s two tiny villages – Central Tilba and Tilba Tilba.

A drawcard for Australian and international tourism

Tilba's aesthetic, historical and cultural features are valued by locals and visitors from near and afar:

Natural landscape:

Tilba's beautiful natural landscape – a rugged mountain / coastal / rural terrain, comprises:

- a single high mountain with a variety of forest types, mature trees, narrow gullies and massive weathered tors
- steep foothills studded with massive rock faces and boulders
- fertile undulating slopes which are home to scattered farm holdings
- an underdeveloped coastal strip

Historic villages:

- Tilba's carefully preserved historic villages have retained the intactness and integrity of tiny townscapes established in the late 19th Century
- In 1974, Central Tilba was recognised by National Trust and listed as a historic village.
 - o It remains a valuable example of a 19th Century dairy farming and cheese making village, and is home to beautifully maintained historic icons including:
 - ABC Cheese Factory (established 1892) – home today to an important local industry – Tilba Real Dairy
 - Dromedary Hotel (circa 1898) – an important hub for the local community and a popular drawcard for visitors
 - Tilba's two community owned halls – built in late 1900s and present day venues for a wide range of community activities, including Tilba Market, celebrations, fundraising events, concerts, meetings etc
- Further recognition of the value of these villages is evidenced in the establishment of the Tilba Villages and Conservation Area Development Control Plan by Eurobodalla Shire

Farmland:

- Outlying working farms and other properties scattered around the fertile slopes to the east of Gulaga mountain, are characterised by patterns of fence lines, weathered timber stock yards, rustic cottages, sheds, outhouses. These properties:
 - o have maintained the integrity of nineteenth century dairy farms
 - o add to Tilba's picturesque charm, tranquility and the sense of a 'stepping back in time' that is valued by locals and visitors alike

Coastline:

- Proximity to a stunning coastline with rocky headlands, pristine uncrowded beaches, rivers, creeks, tidal lagoons and coastal lakes and nearby Montague Island further enhances Tilba's popularity as a tourist destination

FIRE RISK FACTORS AND RECOMMENDATIONS

Inadequacy of water supply to Central Tilba and Tilba Tilba villages during a fire event (See map at Attachment B)

The inadequacy of water supplies and infrastructures to the villages is a critical issue to be resolved.

Water supply is also a critical issue for local farms during a bushfire event (see Attachment F).

Water is supplied to Central Tilba by Eurobodalla Shire Council from a reservoir immediately behind the village. This in turn is supplied via a gravity feed system from a reservoir on Engine Road, located in densely forested country to the north between Central Tilba and Narooma. Engine Road reservoir is filled by water pumped from Narooma South reservoir.

Tilba District Chamber of Commerce (TCOC) understands that, due to their relative heights above sea level, Engine Road reservoir needs to be approximately 70% full before it can provide water to Central Tilba reservoir.

During the bush fire emergency in January, **Central Tilba's reservoir was empty as the power interruptions which occurred prevented operation of the pump at Narooma South until an emergency generator was installed.**

TCOC recognises the prompt action taken by Eurobodalla Shire engineers to overcome this crisis and understands that the necessary wiring and generator support is now in place to meet any recurrence of such circumstances.

In normal circumstances, Central Tilba's water supply is considered by Eurobodalla Shire Council (ESC) to be adequate to the village's needs. However, when access to any additional volumes of water is needed quickly, such as in a bushfire or 'urban' fire event, the supply is inadequate and the ability of Engine Road reservoir to replenish it is limited.

It should be noted that the Central Tilba's reservoir was constructed many years ago, and despite increased population, expansion of the operations at the ABC Cheese Factory and modern building codes that require sprinkler systems for new buildings, has not been upgraded.

In times of increased usage:

- the Central Tilba reservoir is drained very quickly as it holds only 120,000 litres (ie 4 large domestic tanks): estimated time to drain under fire fighting under 30 minutes (before considering sprinkler systems installed to comply with building code requirements).
- refilling the reservoir is too slow to provide the water required by fire fighting units in an emergency owing to:
 - o the inefficient gravity feed system
 - o inadequate size of the pipe into the reservoir

Central Tilba Public School's water supply infrastructure (a 32ml poly-pipe) is inadequate, especially in a fire event.

Tilba Tilba community owns and controls its own water supply – from a spring on Gulaga within the Park. While this supply may be considered adequate in normal times, it struggles to cope in dry times and is totally inadequate for fire fighting requirements.

There is a large reservoir just west of Meads Road – with 90 megalitre capacity (see map at Attachment B) that belongs to Bega Valley Shire but has rarely been used since the construction of the Brogo Dam in the mid 1980's. This reservoir is in close proximity to Tilba Tilba. It has a treatment plant and pumping station to push water along Bermagui Road and so a spur pipe to the villages could perhaps be supported by this existing infrastructure, thereby providing a significant resource for the Tilba villages in a fire event. However this valuable water resource is currently not accessible at all to the Tilba villages or local Rural Fire Brigades other than for inefficient drafting to fill trucks.

Bulk water carriers had to be brought in to supplement water supply for both villages due to the bushfire threat last summer. TCOC considers this an inadequate long-term solution.

Recommendations:

- An independent review to determine the water supply and associated infrastructure needs for the two villages including investigation into:
 - o fire fighting requirements
 - o design of sprinkler systems which may be installed to protect the villages

- Review of arrangements between Bega Valley Shire and Eurobodalla Shire in relation to access to the Meads Road reservoir as a back up supply for Tilba. This would include:
 - o Providing access to local Rural Fire Brigade units to the overhead filling station and pumping station
 - o Installing a fire hydrant at Meads Road corner
 - o Installing a water supply line to Tilba Tilba village to supplement its water system with several fire hydrants suitably placed
 - o Extension of this pipeline to Central Tilba reservoir to supplement supply from Engine Road reservoir

- Upgrade infrastructure for the Engine Road reservoir by installing pumping equipment within a fireproof structure

- Construct an additional reservoir at or nearby Central Tilba reservoir

- Upgrade to water supply infrastructure for Central Tilba Public School.

- Investigate the feasibility of using Dromedary Weir and pipeworks during bushfire emergencies in the forests to the north west of Tilba (see map at Attachment B).

FIRE RISK FACTORS AND RECOMMENDATIONS cont***High fuel loads in Gulaga National Park and Bellbrook Farm***

Gulaga National Park, (including Bellbrook Farm) is in close proximity to its neighbours – Tilba Conservation Area and properties further out. Some areas of Tilba Conservation Area now lie within the Park. Fire hazards existing within the Park therefore present a grave risk to its Tilba neighbours.

The matter of high fuel loads in Gulaga National Park (including Bellbrook Farm) continues to be a pressing concern for Tilba community. This concern is heightened by the experience of 2019/20 bushfires.

Prior to the creation of Gulaga National Park over the southern and eastern areas of Gulaga (Mount Dromedary), all of Gulaga mountain was managed by Forestry Commission of NSW:

- logging roads, fire trails and access tracks were open, used, maintained and accessible to fire fighting units

Historically, Bellbrook Farm was an important dairy farm and later given over to beef cattle grazing. The land was well managed in that:

- the property was cleared and well stocked which kept fuel loads down
- vegetation was managed and noxious weeds controlled
- farmers were permitted to conduct seasonal control burns to the base of the mountain
- the presence of stock controlled pasture growth and control burns provided a good fire buffer zone between Gulaga mountain on the one hand and Tilba villages and nearby properties on the other

Under the control of Gulaga Board of Management in conjunction with NPWS, Bellbrook Farm is managed differently.

Issues of great concern to Tilba community are:

- the escalation of fuel loads and the presence of noxious weeds in the Park
 - o the last fire on the Mountain in 2009 significantly reduced fuel loads but fuel loads have now returned to dangerous levels
- much of the Mountain has been locked up and left largely unattended
 - o TCOC understands that access roads and fire trails are overgrown and inaccessible
 - o it is difficult to be proactive in preparing for fires and to respond efficiently during emergency events
- Bellbrook Farm no longer serves as a buffer zone between the villages and the Mountain:
 - o Since 2013, the number of cattle has gradually been reduced on Bellbrook Farm
 - o Since late 2017, no stock have been agisted on the land immediately behind Central Tilba village and properties to the north east out along Punkalla-Tilba Road
 - o In the absence of stock, fuel loads have become increasingly high and combustible in times of drought
 - o The land is overrun by introduced grasses – predominantly knee deep, densely matted kikuyu

- Considerable work has recently been undertaken to control lantana on Bellbrook Farm, but this and other invasive species – e.g. blackberry, black wattle and bridal creeper continue to flourish, provide habitats for feral animals and undermine biodiversity and health of ecosystem
- With the high fuel loads Bellbrook Farm now carries, this land has in itself become a serious fire hazard:
 - The property is exposed to ember attack from a fire on or beyond Gulaga mountain
 - There is also the potential for a large scale grass fire to originate on the property, e.g. from lightning strike
 - The long dense kikuyu grass would seriously impede a fire fighting response
 - A fire in long kikuyu generates an extraordinary amount of smoke – in the event of fire, the presence of so much kikuyu in very close proximity to Central Tilba has the potential for significant health and visibility impacts
- A fire on Bellbrook Farm (whether originating locally or further out) would pose a threat to both villages, Tilba Public School, Open Sanctuary Church and neighbouring properties

Tilba Chamber wrote to the Board in April 2018 (copied to Andrew Constance MP and Dr Mike Kelly MP) on behalf of the community following the Tathra fires. Chamber's letter:

- stated concerns about lack of maintenance on Bellbrook Farm and Gulaga
- sought information on plans for use and management of Bellbrook Farm and Gulaga, specifically fire hazard reduction plans
- requested urgent action to put in a fire buffer zone in Bellbrook Farm to protect the villages and nearby properties

Chamber did not receive a reply.

Tilba community welcomes the intention (stated in *Plan of Management – Yuin Bangurri (Mountain Parks 2014)* 'to maintain good communication with Park neighbours about park management issues and other matters of mutual concern' and looks forward to establishing good communication and a constructive working relationship dialogue with the recently formed Gulaga Board of Management.

Tilba community acknowledges the role of the Board in caring for and managing the Park and its stated priority: 'to effectively manage the Mountains, with our partner NPWS, to look after them and protect what makes them special'.

While the *Plan of Management – Yuin Bangurri (Mountains) Parks 2014* makes reference to fire management, Tilba community is not aware of the details of management and operational plans and timetables and continues to feel uncertain and vulnerable.

Tilba community welcomes the Board's recognition of the **importance of fire risk management** and the **role of fire as an integral part of 'cleaning up country'** over thousands of years.

Tilba supports the Board's *keen interest in continued research into the development and use of traditional fire management practices and the adoption and application of these to the Park as appropriate.*

As it is the responsibility of Gulaga Board of Management and NPWS to manage fire risk in the Park, it is imperative to ensure adequate resources are available to enable these parties to fulfil their responsibilities.

Recommendations:

- Establish **protocols for regular communication and collaboration** between the Gulaga Board of Management/NPWS and the Tilba community including relevant services about management and operational plans and matters of mutual concern, particularly fire risk management
- Appropriate resourcing to **enable the Board to develop and implement management and operational plans** – with priority given to strategies for fulfilling their responsibilities to maintain the Park, manage fire risk and clear invasive vegetation
- An **immediate program of hazard reduction** commencing in the cooler months of 2020 to address fuel loads in the Park, particularly on the eastern side of the mountain and in Bellbrook Farm (including to the north behind properties on Punkalla Tilba Road), with:
 - o incorporation, where possible, of **traditional fire practices** into hazard reduction planning and fire management
 - o collaboration between the Board, NPWS and relevant agencies including RFS to ensure the protection of sacred places in the Park as well as the interests of the Park’s neighbours – Tilba Conservation Area, villages and outlying properties
- Formalised agreements / protocols between the Board and relevant services for **access to and maintenance of infrastructure** (e.g. fire trails, access roads) within the Park that is critical to preparing for and responding to fire event
- **More regular, systematic programs for ‘clean up’, fire risk management, elimination of invasive vegetation and maintenance (including infrastructure)** in the Park and Bellbrook Farm, to restore a **robust fire buffer** between Tilba villages, nearby properties and Gulaga Mountain. This includes:
 - o Regular slashing / mowing of all areas of Bellbrook Farm and removal of cut material
 - o Permission from the Board for an **agreed number of stock and installation of fencing** in select areas of Bellbrook Farm that are not home to sacred sites or current environmental works
- Adequate resourcing for the **maintenance of infrastructure** (e.g. fire trails, access roads) in the Park that is critical to preparing for and responding to fire events
- Funding to support continued **research into development and use of indigenous fire regimes and traditional fire management practices** and opportunities to conduct research trials in the Park
 - o Drawing on and in turn contributing to the evidence base for indigenous fire management strategies
 - including the NSW South Coast experience of Aboriginal fire practitioners working with Bega Local Aboriginal Land Council and Bega Valley RFS to ‘heal and protect the land’ after Tathra fires

FIRE RISK FACTORS AND RECOMMENDATIONS cont***Vulnerability of Tilba's historic villages in a fire event***

The layout and architectural features that contribute to the historic and aesthetic value of Central Tilba and Tilba Tilba also create significant vulnerability for the villages in **any** fire event:

- each village comprises a small number of tightly clustered, very old timber cottages in a linear arrangement
- most buildings which were established in late 19th Century and would not conform to modern day building standards
- more recent buildings which might conform to modern standards are in such close proximity to older buildings it would be difficult for any to 'dodge' and survive an intense fire in the village
- it should be noted that many Tilba business owners both live in and operate their businesses from these old timber cottages- so that destruction by fire would mean a dual loss of homes and livelihood for many residents

It is the unequivocal view of Tilba Chamber that if any fire occurs in any of the buildings in Central Tilba it will be extremely difficult to stop the fire from spreading to adjacent buildings due to their close proximity and timber construction, particularly in the absence of adequate water supplies for sprinkler systems and fire fighting generally.

For the 2010 and draft 2019 Bush Fire Risk Management Plan to assess the consequences of a fire in Central Tilba village as "moderate" is absurd. The situation in Tilba Tilba is little better.

Recommendations:

Given the vulnerability of the two villages, there is a need to set in place **fire management strategies further out that will mitigate the risk of fire sweeping toward Tilba Conservation Area**. As stated above, these strategies should include:

- restoring Belbrook Farm as a robust fire buffer zone between Gulaga mountain and Tilba villages including nearby properties
- hazard reduction on properties further out

While it may be argued that it is up to each property owner in the Tilba villages to take appropriate action to minimise the fire risk to his or her property, given the close proximity of the buildings, the age and out of date building standards of most structures, their wooden construction and the overall heritage value of the villages it is the view of TCOC that **expert advice should be obtained as to the most efficient steps that can be taken to fire proof the villages on a community basis with Government support**.

An obvious measure is the installation of **sprinkler systems** between adjoining buildings and between the buildings and bush fire sources. Such a measure is **only viable if supported by significant improvements to the water supply** as noted in Attachment C and pumping for adequate water pressure. Ideally, the design of the sprinkler system would permit it to be activated automatically by direct heat from a fire but also by Central Tilba Rural Fire Brigade where a bushfire attack is imminent or a local fire occurs.

A review of each structure's ability to resist ember attack, the installation of downpipe plug systems and a review of smoke detectors should also be considered.

FIRE RISK FACTORS AND RECOMMENDATIONS cont***Impacts for the local farming community***

Tilba's agricultural industry suffered both financial and emotional stress due to the looming and repeated bushfire threat:

- Road closures due to fires adversely impacting road integrity and safety – resulting in the **dumping of well over 20000 litres** of milk as farmers were unable to process milk or dispatch finished product
- Road closures also restricted, and at times stopped the **supply of diesel / fuel** to service stations
- Power outages were prolonged, resulting in **heavy reliance on alternative sources of energy** – namely generators, which in turn operate using diesel
 - o Most farms do not have bulk storage of fuel due to legislative and financial restrictions
 - o Without the back up of fuel for generators, machinery grinds to a halt and food production ceases
- The constant presence of smoke presented a significant challenge for cattle as they are highly sensitive to changes in the environment
 - o their respiratory health was compromised
 - o the quality and quantity of milk produced is severely diminished
- The quality of water was significantly affected by ash. This in turn had a detrimental effect on:
 - o Technologically advanced dairy processing equipment such as that used in the ABC Cheese Factory
 - o Animal health
- Tilba Real Dairy, an important local industry employs 18 individuals directly as well as numerous contractors who provide various services to the business
 - o Transit into the workplace was affected by road closures – reduced staff numbers inhibited factory production. On some days, no production was possible and product (milk and cheese) had to be dumped

- This in turn resulted in loss of wages for casual staff on the days they were unable to attend work
- Reduced production means reduced sales resulting in an economic downturn for Tilba Real Dairy
- Some local farmers were concerned that their dams may have been targeted as water resources for fire fighting – this would jeopardise farming operations in an already drought stressed situation
 - Many farmers have invested heavily in water storage systems as a drought proofing measure
 - A standard sized dairy farm needs to have access to up to 150 000L / day in summer

Recommendations:

To minimise the impact of potential future bushfires on the Tilba farming community:

- Improve road maintenance and management of fuel loads in densely forested areas where major roads (e.g. Kings Hwy, Princes Hwy) pass through them
- review issues relating to the bulk storage of fuel on rural properties and develop risk mitigation strategies to permit safe storage of the increased volumes of fuel required to protect food production
- strategies to maintain clean, potable water supply for working farms during fire events
- strategies to ensure the water requirements for a fire fighting response are met without compromising the water supply needed on a day to day basis for working farms
 - this includes the recommendation in Attachment C regarding access to an additional water resource – Meads Road Reservoir, as a back up supply during fire events.

FIRE RISK FACTORS AND RECOMMENDATIONS cont

Unduly restrictive hazard reduction rules

Under the Rural Fires Act it is the duty of owners and occupiers of land (including public authorities such as NPWS) to take all practical steps to prevent the occurrence of bush fires on, and to minimise the danger of spread of bush fires from their land. Authorised RFS officers may give notice to land owners and occupiers (in response to complaints or otherwise) requiring bush fire hazard reduction works to be undertaken. Provision is also made for land owners and occupiers to seek RFS approval to undertake bush fire hazard reduction works.

RFS has developed the Bush Fire Environmental Assessment Code February 2006 to streamline the environmental assessment process regarding its administration of these provisions. In the experience of the Tilba community this Code or the manner of its implementation is unduly restrictive and severely limits the scope for RFS to require owners/occupiers to undertake hazard reduction works or for owners/occupiers and RFS to undertake such works.

Tilba community is concerned that some privately owned properties around Tilba (including properties owned by non-residents of Tilba) carry high fuel loads and pose a fire risk to immediate neighbours and Tilba generally.

In late 2019, Central Tilba Rural Fire Brigade held timely community information meetings on the potential risk of fire and fire protection strategies. All community members were urged to undertake hazard reduction measures. However:

- Hazard reduction was not undertaken by some private land owners
- High fuel loads including large volumes of very dry grass, plant, leaf and tree litter remained a fire hazard for the entire summer on these properties

While some neighbours lodged bushfire hazard complaints with RFS due to grave concerns, particularly given prolonged drought and abnormal weather conditions and the proximity of the properties concerned to the villages, RFS officers were unable to issue notices despite acknowledging the risks posed. The guidelines make no allowance for particular circumstances or current weather conditions, they only apply where (for example) grass is higher than one meter and even if applicable only require the neighbour to undertake hazard reduction within a six meters of the boundary.

There are also properties with high fuel loads in the foothills of Gulaga to the north and north west of Tilba where the owners have been pleading with Central Tilba Rural Fire Brigade to undertake hazard reduction works. On a key property this has not been permitted due to a small pocket of rainforest even though the hazard reduction on that property would assist in creating an important fire containment area to the dangerous north-west and mitigate risk of bushfires from further out sweeping toward Tilba Conservation Area in strong wind conditions which regularly occur.

The Bush Fire Environmental Assessment Code 2006 also prescribes the minimum intervals which must occur between hazard reduction burns. TCOC understands that for sclerophyll forests such as

predominate on Gulaga the minimum period is 15 years. As the last major fire on Gulaga occurred in 2010 this prescriptive approach may prevent an urgently needed hazard reduction burn on Gulaga for at least 5 years despite the current high fuel loads which would have had catastrophic effects in the recent bush fire crisis but for fortunate wind conditions.

Recommendations:

- **Review and reduction of minimum intervals between prescribed burns**

In the likely scenario of rapidly changing climate conditions, the minimum prescribed intervals for between burn cycles for sclerophyll forest are too long and should be reduced or subject to review when conditions dictate and to accommodate, where appropriate, indigenous burn practices.

- **Review and amendment of rules for RFS issuing hazard reduction notices and certificates and restrictions on RFS hazard reduction activities**

In this context the prescriptive and limited rules for requiring or undertaking hazard reduction activities (including but not limited to burns) be reviewed or at least amended to allow RFS officers to take action where fire hazards are able to be clearly identified and risks to villages, property and sensitive locations (eg rainforest areas) appropriately managed.

FIRE RISK FACTORS AND RECOMMENDATIONS cont***Unreliability of power supply and communications systems***

At times of bushfire threat, when robust power and telecommunication services are most essential, Tilba community was challenged by prolonged outages in power, mobile phone, landline and internet access.

As for many regional and remote communities, this had a significant impact on Tilba residents' ability to receive timely, up to date information on the location and progress of fires, weather conditions, evacuation alerts etc.

Tilba community applauds Central Tilba Rural Fire Brigade efforts to keep the community informed on a day-to-day basis regarding all matters relating to threat of fires – despite the fact that the Brigade has no connection to the NBN network (cable, wireless or satellite)!

However, the break down in power and telecommunications systems created huge stress and uncertainty for the community and in turn placed undue responsibility and stress on a very small volunteer brigade already dealing with a multitude of issues.

Residents who rely on tanks for water supply and pumps powered by electricity to access it, had to resort to generators (if available) for back up during power outages.

Prolonged outages were a frightening prospect for any owner relying on power to access tanked water if they did not have a generator at hand.

Recommendations:

- Review and improve the adequacy of power and telecommunications systems for regional areas, including Tilba during bushfire and other emergency events
- Provision of NBN connection to all Rural Fire Brigade Stations including provision of NBN cable if available, wireless if not and satellite back up – not only for operational efficiency but for community information purposes
- Investigation into and advice for regional and remote communities on effective communication backup devices for constant connectivity during emergencies
- Investigation into and advice for regional and remote communities on effective power back up devices
- Investigation into quality of, access to and maintenance of communications infrastructures within mountainous and forested areas around Tilba.