

Securing our future by insuring the past

The insurability of cultural burning

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At yamagigu, we are an Indigenous-led initiative partnering with Deloitte to drive meaningful change for Aboriginal Australians. With a majority-Aboriginal team and a diverse network of experts, we bring deep experience in policy design, governance, professional services, and project management. We empower communities by transforming engagement strategies, fostering economic prosperity, driving digital innovation, supporting system change, and strengthening community connections. With eight hubs across Australia, we have worked with over 800 communities, delivering impactful solutions that unlock opportunities and create lasting, positive outcomes for Aboriginal peoples.

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A misty forest scene with large trees and a small plant in the foreground. The image is a vertical photograph showing a dense forest. In the foreground, a small, dark green plant with many small leaves stands on the left. The ground is covered in dry leaves and twigs. In the background, several large, gnarled tree trunks rise up, their branches reaching into a thick mist or fog. The lighting is soft and diffused, creating a serene and somewhat mysterious atmosphere. The word "Introduction" is overlaid on the right side of the image in a dark red, serif font.

Introduction

Fire is a crucial element of the Australian ecosystem, with much of the country's flora relying on it for regeneration.

Over thousands of years, Australia's First Nations people have developed sophisticated burning techniques to manage the land, similar to methods used on other continents. However, after colonisation, these Indigenous practices, including cultural burning, were suppressed or prohibited. This has led to an accumulation of undergrowth, particularly in areas that have seen significant development. With climate change expected to increase the frequency and severity of bushfires, the need for effective land management practices has become more urgent.

The following map illustrates the potential bushfire hazard levels across Australia, which are mainly driven by physical drought, dryness conditions and the existence of fuel loads.



Location Risk Intelligence, Wildfire Map, 2025 (Munich Re)

Cultural burning has played an important role in managing and reducing the fuel loads across Australia's diverse landscapes.

Aboriginal people are experienced with responding to changing environmental conditions, having lived through four ice ages on this land, and intermittent hot and dry times. A time when Tasmania was joined to the mainland and a time when much of central Australia was under water are both within Aboriginal cultural memory.

This paper offers guidance on creating commercially viable public liability insurance coverage for cultural burners. In this context, 'cultural burning' refers to the array of burning practices used by First Nations people prior to colonisation. This covered a spectrum from traditional burning for hazard reduction, to cultural burning which prompted renewal of the land, allowed the germination of seeds that require the stimulation of the right level of fire, provided new young grasses for kangaroos and other fauna, and other outcomes beneficial to the land. Cultural burning will combat the growing threat of bushfires across Australia using methods which are proven to be safe.

Promoting cultural burning can serve as both a catalyst for national economic development and a means of social healing. Aboriginal people seek to express and share their culture, and allowing and supporting cultural burning is an act of practical reconciliation. **This is an opportunity for mainstream Australia to acknowledge the evidence-based wisdom of Australia's First Nations people.**



What is cultural burning?

Fire has been cultivated for tens of thousands of years by Australia's First Nations peoples, not just as a land management tool, but a deeply ingrained part of life and connection to country.

There are many aspects of cultural burning that practitioners must master, but a core principle of cultural burning is the use of smaller, cooler fires that clear away ground-level debris, depriving future fires of a fuel source and reducing the risk of major fire events. A deep knowledge of seasonal patterns and local flora and fauna is also fundamental to the practice.

The burning activities typically take place at night or early morning when wind conditions are gentle and where the dew helps to cool the fire. The practice involves lighting low fires in small areas on foot, with matches or traditionally, with fire sticks. The fires are closely monitored, ensuring that only the undergrowth is burnt. The fire temperature is kept low enough to avoid boiling and destroying the seeds and nutrients beneath the surface of the soil. In fact, cooler fires support changing the fuel load composition by reducing the density of risk factor plants, such as Bracken Fern and Casuarina.¹

¹ Watarrka Foundation Aboriginal fire management: What is cool burning?



The challenge

This paper sets out an approach to providing suitable public liability insurance to cultural burners, which is a first and necessary step to enabling and scaling the practice of cultural burning to mitigate the risk of bushfire which is becoming a regular and catastrophic event across Australia.

This is a Howden report, led by Matt Weaver, written in collaboration with Rick Shaw of yamagigu, who is the only (public) Aboriginal actuary. We present insights from fire practitioners to suggest a path forward for developing the insurance necessary to address a major and growing peril.

It is important to build a suitable framework that supports the practice of cultural burning across Australia. A recent New South Wales report notes resistance in Australia to Aboriginal cultural practices²:

When the Australian continent was colonised by British settlers, new laws suppressed the use of fire for cultural purposes. Cultural fire was directly prohibited, with penalties for burning at certain times, in certain places, and for cultural purposes. Cultural fire was also indirectly suppressed through attacks on Indigenous communities, forcible displacement from country and disruption to, or prohibitions on, cultural practices more generally.

Despite terra nullius having been rejected in Mabo, it's characteristics are nevertheless apparent in the purposes, substance, procedure and implementation of native vegetation management and other laws relevant to cultural fire in NSW. The presumption at colonisation that Aboriginal people in NSW had no agency, laws, governance or political arrangements in relation to fire management has resulted in a legal regime that predominantly seeks to control the threat of 'uncontrolled' and 'unowned' fires.

The current challenge faced by many cultural burners is sourcing adequate, suitable and commercially-viable insurance to support their cultural burning practices – specifically public liability insurance. Public liability insurance covers the burners from legal claims if a third party suffers injury or property damage as a result of the burn, including potential fire spread beyond the intended area, smoke inhalation or accidents occurring during the burn. In essence, the insurance covers costs incurred if someone is injured, or something is damaged. There are existing public liability insurance products that cover hazard reduction burns but these policies do not account for the unique risk profile of cultural burning - both in terms of pricing and risk management requirements.

²McCormack et al (2024) Identifying and overcoming legal barriers to cultural burning

Hazard reduction burn versus cultural burn

Currently insurers do not distinguish cultural burning from traditional hazard reduction burning carried out by fire services and other approved organisations. The two processes are radically different. Hazard reduction burns typically involve accelerants and incendiaries, resulting in higher temperatures and an increased risk of losing control. Cultural burning, by contrast, is performed more frequently, in smaller areas, under more controlled conditions and using traditional techniques that have been passed on from generation to generation. Cooler fires are essential to cultural burning, as the aim is to maintain biodiversity, reduce fuel loads and encourage the growth of more fire-resistant vegetation. We can find no evidence of damage to property arising from cultural burning.

Additionally, hazard reduction burn insurance imposes risk management requirements and restrictions that are not suitable for cultural burning activities. For example, many policies prohibit burns within one kilometre of any dwelling - an approach that differs cultural burning principles. Cultural burning specifically aims to clear ground-level debris near dwellings to enhance resilience and fire safety, making proximity to homes a crucial aspect of the practice.

The rules setting out when and where hazard reductions can be carried out are much simpler than the holistic understanding that cultural burners apply. In summary, hazard reduction is a risk-taking activity which can have adverse impacts and warrants high premiums. In contrast, cultural burning poses significantly less risks to property and people, for which we can find no documented examples of loss, only examples of how it generates positive impacts on the land, flora and fauna. We have, however, found several examples of media reports where hazard reduction burns have lost control:

- July 2024: Northern Beaches, Sydney, NSW - Hazard reduction burn in Oxford Falls escalated due to strong winds, leading to a bushfire. The hazard reduction burn was planned for 25 hectares but about 140 hectares of bushland was scorched.³
- November 2023: Walpole, WA - A prescribed burn in WA's south, driven out of control by strong winds, incurred a cost of \$680k to manage. It took two weeks to extinguish the fire, which ultimately burned 25,000 hectares—10,000 hectares more than initially planned.⁴
- July 2020: Carson River Station, WA - A prescribed burn escaped containment and burned out of control for a week. The flames reached Faraway Bay retreat more than 70 kilometres away, where it caused about \$20k worth of damage.⁵
- March 2025: Southern Highlands, NSW – A critical two-day hazard reduction burn took place at Joadja Hill, approximately 30 kilometres west of a renowned vineyard. Although the crop itself wasn't physically damaged by the fire, the grape farmer reports that he and other winemakers have incurred millions of dollars in losses due to the smoke affecting their crop just before harvest.⁶

Where fire is used across Australia by government bodies to manage landscapes, it can be hazardous if the deep knowledge underlying cultural burning is not applied. In 2020, the NSW Government accepted the recommendation of the NSW Bushfire Enquiry for an increase in cultural burning as part of its fire management strategy.⁷ It joins other states and territories in building up a wider understanding and use of cultural burning to reduce the impacts climate change is having on our fire seasons.

³9 News Questions over how Sydney hazard reduction burn got out of control

⁴ABC News Prescribed burn that broke containment lines in WA's south cost \$680k to control, figures show

⁵ABC News Inappropriate DFES planning contributed to runaway prescribed burn in Kimberley, report finds

⁶Winemaker blames hazard reduction burn for ruining multi-million-dollar crop - ABC News

⁷New South Wales Government (2020) Final Report of the NSW Bushfire Inquiry

Barriers to cultural burning

In addition to the lack of adequate, suitable, and commercially viable insurance to support cultural burning activities, there are several legal barriers that create challenges for cultural burning practices:

- The legal framework in place in Australia does not have a formal recognition for cultural fire, making it difficult to secure approvals or integrate traditional practices into official fire management policies.
- The law fails to recognise 'practicing culture' as a reason to light a fire, which limits Indigenous led burning efforts.
- Cultural knowledge holders are not recognised decision makers. This leads to a disconnect between policy and Indigenous expertise.
- When determining fire regimes and assessing proposed burns, cultural knowledge is not used to inform decisions, resulting in missed opportunities for ecological and cultural benefits.
- Many Australian ecosystems require regular fire for health and biodiversity; this is something existing laws fail to acknowledge.
- Cultural burners are not protected from liability the same way that fire brigades/fire agencies are.
- Legal barriers to cultural burning are difficult to address due to difficulties identifying and articulating them.

Ignoring Aboriginal practices in this way can be considered a modern expression of terra nullius. This principle was used to justify the British claim over the Australian land. This included a presumption that there was no Aboriginal governance over fire management, which was and continues to be incorrect.

How can the insurance market play a role in enabling this critical practice?

Insurance is crucial for most economic activities. Without the financial risk mitigation and governance that insurance offers, most business operations and investments would cease to exist. Historically, there are many practical examples of insurance acting as an enabler to social and economic activity. The first steps towards a global economy would never have taken place without the availability of marine insurance to de-risk investments in trading voyages. The devastating city fires that were once commonplace in settled societies were virtually eradicated after insurers led the way in formulating and implementing new safety standards. In perhaps the closest parallel to climate transition, insurance providers paved the way for revolutionary economic advances like steam power and electrification by creating the conditions under which these innovative but potentially risky new technologies could receive mainstream investment to be implemented at scale.

The practice of cultural burning cannot function without suitable insurance to meet compliance requirements and protect against the unexpected. Cultural burning requires public liability insurance that protects the burners from financial losses resulting from bodily injury or property damage to third parties if a fire loses control due to negligence. Government agencies and private organisations mandate that cultural burners obtain public liability insurance, which is currently unavailable at a commercially viable price and/or has unsuitable terms and conditions. Although there is a clear and growing demand, the insurance barrier makes it impractical to conduct cultural burns at scale across the landscape.

Outlined here are several potential insurance solutions to address the lack of adequate coverage. It is important to note that every option discussed below would be underpinned by an Aboriginality designed accreditation process, in close consultation with insurance partners. The concept of accreditation is a sensitive one and is further discussed in a subsequent section – but no solution would be possible without this. This list is not exhaustive, as the purpose of this paper is to seek support for further exploration of viable insurance options.



1

Adjust existing coverage

Assess the existing public liability coverage for hazard reduction burns and adjust the cover to suit the risk profile of cultural burning. This is the least innovative solution to the problem and will require close collaboration with an insurance partner to design a fit-for-purpose policy that recognises the risk profile and offers a commercially viable premium and reasonable terms and conditions, which allows for the different (and lower) risk profile.

2

Structured insurance

Implement a longer-term collaboration with an insurance partner or a panel of insurers whereby the cultural burners can obtain suitable insurance to support the practice, initially at similar rates to existing hazard reduction burn insurance, which will require some funding, for which there are relevant overseas precedents. Over time, as the insurer becomes more comfortable with the loss experience, and the burners demonstrate that the risk profile is indeed far lower than that of traditional hazard reduction burn insurance, they will be able to participate in an experience-based return premium.

This concept is akin to a no-claims-discount commonly utilised in traditional motor insurance, whereby insurers reward their customers for good driving behaviours. This solution places the onus on the burners to prove that the risk profile is lower, and if the experience is proven, they will benefit with lower premiums in future years and some form of no-claims-discount based on experience to date.

3

Self-insurance

It is common to move towards self-insurance in cases where there are groups of risks that feel misunderstood by the insurance industry. A self-insurance vehicle itself can take many forms, such as a discretionary trust, mutual or captive. The burners would insure themselves, depositing their premiums into the vehicle which can then be used to pay claims. Typically, these self-insurance vehicles choose to pass excess risk (i.e. risk outside or above the group's appetite) to the insurance market. In the early stages of any self-insurance scheme, where funds are still building up, they tend to pass more risk to the insurance industry and over time, as the scheme matures, it can retain more risk.

Since it is self-insurance, the group has a vested interest in the scheme's performance and is empowered to implement suitable risk management frameworks. For example, any new burner wishing to join the scheme must meet the requirements of the scheme's accreditation process. This tends to be attractive to the insurance market for risks that the market considers to be uncertain because the scheme retains part of the risk, and the insurer only participates in the risk above this excess. This approach allows the burners to demonstrate the lower risk profile of cultural burning and benefit from lower insurance costs over time, for the excess risk they pass to the insurance market.

4

Funded approach

This option is similar to self-insurance but involves government funding (at least initially) to help establish the scheme. Under this model, insurance would still play an important role in absorbing excess risk above the fund's risk appetite while accelerating the fund's path to self-sufficiency and reducing reliance on insurance. A similar model can be seen in California where the State Government has established a US \$2 million pilot fund to support burning across the state, this is covered in a subsequent section of this paper.



Accreditation

We strongly suggest attending a cultural burn to witness the practice and to listen to a cultural burner discuss the considerations of when, where and how to burn.

This experience quickly gives an understanding of the depth of thinking and expertise involved. Cultural burners find the current rules-based system governing fire permission both patronising and facile. A rules-based system cannot deal with complex interactions that inform a cultural burner, such as temperature, wind, vegetation, time of day and prior burns. Such knowledge is deeply engrained and is learned incrementally under generational guidance. In Aboriginal culture, who can burn and how to burn differs by region, which allows for the great diversity of Australia's eco-systems. A burner that knows how to burn in coastal north Queensland will not have the requisite insight to burn in the Victorian hills, for example.



Any accreditation process for cultural burning must be led by Aboriginal people. In the times prior to colonisation, there was an established governance system overseeing burning and other activities. As set out by Barada and Gabalbara woman Megan Kelleher:

“ Indigenous governance is interconnected, interdependent and intergenerational. Protocols pertain to you as an individual and how you relate to other people, places, and entities, where you can and can't go, places that are sacred, where practices might be restrained or encouraged, and who you'll engage in those practices with. It has been described as a system of fractal governance.

Indigenous governance is polycentric. There is no central group, no hierarchy, no one group that dominates other tribes. Indigenous governance relies on complementarity, where responsibilities and rights differ depending on one's relationship to country. For example, whether you're on father side country or mother side country. Men may hold the responsibility to burn country, for example, but they require the permission of the men whose mother side country they're on. And the women are responsible for organising the burning and if the men do it incorrectly, then they are accountable to the women who will punish them. It is not possible to fulfil one's obligations without the complementary cooperation of other kin, and this may extend across multiple regions.”

The old ways need to be adapted to accommodate the structures of modern Australia. Aboriginal Australia is made up of people who speak hundreds of different languages, and it is at times quite an effort to achieve consensus. The process of accreditation needs to respect local knowledge and local cultural authority. A recently established Aboriginal entity The Living Country (<https://livingcountry.com.au>) would be able to provide support on developing and implementing the accreditation process.

The Living Country is an Aboriginal controlled organisation made up of leaders and lore holders, dedicated to the restoration and practice of the world's oldest continuous culture in a modern world. The organisation is committed to the elevation and restoration of cultural practice and lore for the benefit of all Australians and seeks to provide a path to economic and cultural self-determination for Aboriginal Australia. The Living Country is founded on Aboriginal belief systems that honour and protect Mother Earth.

It is proposed that an Aboriginal designed accreditation process is established in close consultation with insurance partners, which will give the insurance market comfort of the risk profile and benefits associated with the cultural burning activities.

Case study

CAL Fire Program

In 2022, California enacted Senate Bill 926⁸, establishing the Prescribed Fire Liability Pilot Program⁹ to promote the use of prescribed fire and cultural burning as tools for wildfire prevention and ecological management. Administered by CAL FIRE, the program is funded by a US\$20 million allocation from the state.



⁸ California Senate Bill 926 Bill Text

⁹ The Nature Conservancy Innovative Fund Provides Support for Prescribed Fire and Cultural Bill Text

¹⁰ CAL Fire Prescribed Fire Pilot Program Dashboard

Key components of the program

Prescribed Fire Claims Fund

The program created the Prescribed Fire Claims Fund to cover potential losses from prescribed fires and cultural burns conducted by non-public entities, including cultural fire practitioners, private landowners, and non-governmental organisations. The fund provides up to US\$2 million in coverage per project, offering financial protection against third party property damage or bodily injury in the rare event of an escape.

Eligibility and application process

To access the fund, practitioners must apply through CAL FIRE's online portal. Eligible projects are those led by a certified burn boss (a term widely used in California to refer to a certified individual responsible for planning, organising, and executing prescribed fires) or cultural fire practitioner and must adhere to approved burn plans and safety protocols.

Legislative framework

The program is authorised until January 1, 2028, providing a six-year window to assess its effectiveness in increasing the use of prescribed fire and cultural burning across California. The legislation outlines the administration of the fund, eligibility criteria, and the roles of involved agencies.

Implementation and impact

The Prescribed Fire Liability Pilot Program represents a collaborative effort among Indigenous communities, state agencies, and environmental organisations to reduce the barriers faced by prescribed burners. By offering the required liability coverage, the program encourages broader participation in these practices, aiming to enhance forest resilience and mitigate the risk of catastrophic wildfires. A core benefit of the pilot is the establishment of a data-driven and evidence-based approach, supported by an interactive database where prescribed fires can be registered, and the results of activities are recorded.¹⁰

Lessons for Aboriginal Cultural Burning in Australia

Australia can draw valuable insights from California's approach to support Aboriginal cultural burning practices:

- 1. Establish a liability fund:** Creating a dedicated fund to cover potential losses from cultural burns can alleviate financial concerns and promote the revitalisation of traditional land management practices.
- 2. Develop accreditation programs:** Implementing accreditation programs for cultural fire practitioners can standardise practices, ensure safety, and build trust among stakeholders. These programs must be developed by the aboriginal people.
- 3. Foster collaborative frameworks:** Encouraging partnerships between government agencies, Indigenous communities, and environmental organisations can facilitate knowledge exchange and resource sharing.
- 4. Implement legislative support:** Enacting supportive legislation provides a structured framework for cultural burning practices, ensuring their integration into broader land management strategies.

By adopting similar measures, Australia can enhance its bushfire management strategies through the integration of Aboriginal cultural burning practices, leading to healthier ecosystems and reduced wildfire risks.

The recent fires in Los Angeles show the potential impact of not mitigating against fire. The California Prescribed Fire Claims Fund Program, launched in 2023, has seen hundreds of acres of burns approved, with no claims against the fund to date. We also note that none of the approved burns were in the vicinity of Los Angeles.

The greater opportunity

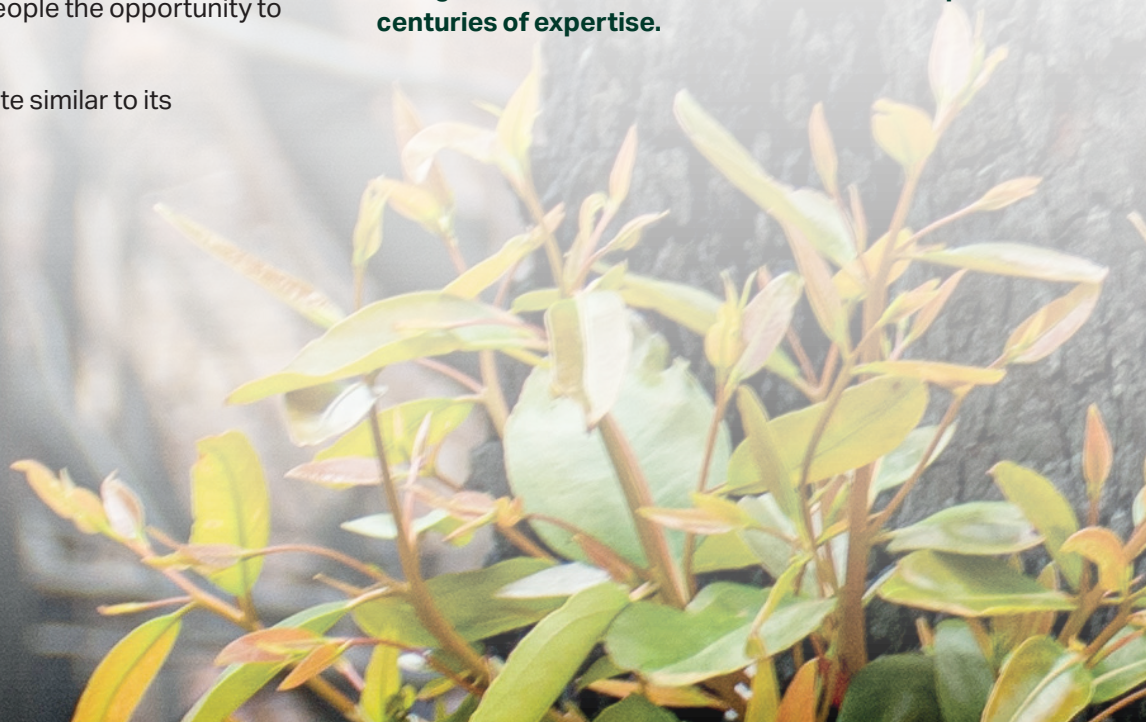
Australia is a land that, for tens of thousands of years, has seen regular burnings. Flora and fauna have adapted to regular fire - it is the natural state of the land. Aboriginal people speak of land 'suffocating', needing reduction of the undergrowth to allow the land to breathe again.

There is an opportunity to carry out cultural burnings region by region, led by local Aboriginal people, funded by the government and supported by the insurance industry which will:

- Dramatically reduce the bushfire exposure to the community
- Increase the extent of insurable land
- Acknowledge that our First Nations people have evidence-based solutions to this national problem, further supporting reconciliation
- Support Aboriginal cultural burners to build sustainable businesses, developing economically
- Afford local Aboriginal people the opportunity to pass on knowledge
- Restore the bush to a state similar to its pre-colonial condition

Implementing cultural burning is essential for establishing systemic mitigation strategies across Australia to combat the threat of bushfires. It is generally agreed that mitigation efforts are needed to reduce exposure to natural perils. There are large parts of Australia deemed virtually uninsurable because of exposure to bushfire risk. Climate change will drive an increase in the incidence of fire, which will exacerbate this issue. It is critical to increase access to appropriate and suitable insurance that supports an increase in scale of cultural burning.

Now is the time for an insurance partner to develop an Australian first: a Cultural Burning public liability insurance policy that is fit-for-purpose and that recognises and rewards our First Nations Peoples' centuries of expertise.



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