

NSW Independent Bushfire Inquiry – Australia ICOMOS Submission

Introduction – Australia ICOMOS

ICOMOS (International Council on Monuments and Sites) is an international non-governmental not-for profit organisation dedicated to the conservation of the world's cultural heritage. ICOMOS is also an Advisory Body to the UNESCO World Heritage Committee under the World Heritage Convention.

Australia ICOMOS, established as a national committee in 1976, is the peak body for heritage professionals in Australia and comprises a network of multi-disciplinary experts dedicated to the conservation of Australia's heritage places. Our mission is to lead cultural heritage conservation in Australia by raising standards, encouraging debate and generating innovative ideas.

The strategic priorities for Australia ICOMOS include:

- Advance and promote national standards and best practice;
- Engage with contemporary issues in cultural heritage; and
- Be an influential voice to government.

Cultural Heritage

Cultural heritage includes both tangible (e.g. buildings, archaeology, townscape, cultural landscapes, trees, objects and collections) and intangible heritage (eg. customary activities, stories and beliefs associated with heritage places and their communities).

The *Burra Charter* (The *Australia ICOMOS Charter for Places of Cultural Significance*, 2013) sets the standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians. It states:

Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records, that are important expressions of Australian identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.

These places of cultural significance must be conserved for present and future generations in accordance with the principle of inter-generational equity.

This Submission

This submission has been prepared for the NSW Independent Bushfire Inquiry on behalf of Australia ICOMOS by Catherine Forbes and Dr Tanya Park, members of the Australia ICOMOS and ICOMOS New Zealand Joint Working Group on Cultural Heritage Risk Preparedness and Australia ICOMOS representatives on the Australian national committee of Blue Shield (Blue Shield Australia – BSA). Blue Shield is also a not-for profit non-governmental organisation that works to protect cultural heritage in times of crisis. This includes the protection of Australia's cultural heritage affected by natural disasters. Australia ICOMOS is a foundation member of BSA. The submission is made after review by Helen Lardner, President of Australia ICOMOS. Australia ICOMOS is currently reviewing and updating guidelines for managing cultural heritage places affected by disasters.

Lost and Fire Damaged Heritage in NSW

The loss of cultural heritage in the NSW bushfires was immense. Lost or severely damaged cultural heritage included:

- World heritage sites – including the Greater Blue Mountains and Gondwana Rainforests, including their flora, fauna, cultural sites and intangible cultural heritage.
- Aboriginal places located in national parks, on public land and on privately owned land – including marked or scarred trees, rock art sites, traditional food sources, plant and animal totems of immense cultural value to local Aboriginal people.
- rural heritage – including historic homesteads, farm buildings and associated infrastructure much of which was not heritage listed, but highly valued by owners, local communities and visitors to rural areas. These items were often local landmarks and contributors to the cultural landscape of regional areas. It also includes the loss of breeding herds (stock developed over generations for their specific characteristics) and historic orchards that were important to local economies and local identity (e.g. apple orchards in Batlow and Bilpin).
- heritage buildings and archaeological sites within national parks, including heritage sites damaged during the emergency response operations to create fire containment lines through bulldozing.
- historic towns and streetscapes, such as the main streets of Cobargo and Mogo, including shops, post office, churches and community buildings.
- cultural tourism sites that promote local history experiences, such as the Original Gold Rush Colony at Mogo.
- cultural landscapes – large areas of the state including rural, mountain and bushland areas, often very scenic, but also carrying the stories of generations
- historic boundary markers, such as the original boundary markers defining the boundaries of the ACT.
- and many other types of heritage

Heritage Consultation in Post Fire Recovery

Australia ICOMOS was invited by Heritage NSW (Community Engagement Group, NSW Department of Premier and Cabinet), the NSW Heritage Council, the Aboriginal Cultural Heritage Advisory Committee and NSW Public Works to participate in a bushfire recovery meeting to plan the bushfire response for cultural heritage in NSW. The meeting discussed not only heritage places on the NSW State Heritage Register (SHR), but also locally significant heritage sites listed on local government Local Environmental Plans (LEPs), non-listed heritage sites and Aboriginal cultural heritage (heritage places, living heritage, objects and intangible heritage). Although the NSW Heritage Council is primarily the responsible authority for SHR listed places, Heritage NSW provides funding and technical support to local government through its heritage advisors network and grants programs. In NSW, only two SHR listed sites were known to have been affected at the time of the January planning meeting, but many locally listed heritage sites, non-listed heritage sites and Aboriginal sites were known to have been severely affected.

Australia ICOMOS was also invited to participate in the Ministerial Round Table held by the Hon Sussan Ley MP to discuss the impacts of the bushfires on Australia's National and World Heritage sites and the response needed for recovery. Impacted sites in NSW included the Greater Blue Mountains World Heritage Area, the Gondwana Rainforest World Heritage Area and the Great North Road (one of the World Heritage convict sites). Although the world heritage sites are listed for their natural values, they also recognised for their Aboriginal and non-Aboriginal cultural values. These were discussed alongside urgent recovery needs

for native flora and fauna. Aboriginal cultural burning and its potential use in managing biodiversity, ecosystem health and fuel loads was also a major topic of discussion.

Response to Terms of Reference

This submission addresses aspects of the NSW Independent Bushfire Inquiry's Terms of Reference where the expertise of Australia ICOMOS can make a substantial contribution.

1. The causes of, and factors contributing to, the frequency, intensity, timing and location of, bushfires in NSW in the 2019-20 bushfire season, including consideration of any role of weather, drought, climate change, fuel loads and human activity.

The contributing factors to the fires are multiple and include all those factors identified in the Inquiry TOR – severe drought and the highest temperatures on record, both exacerbated by the effects of climate change, high fuel loads and human activity. Our submission particularly highlights the role of high fuel loads and human activity. While all bushfires cannot be prevented, good preparation can assist in minimising the effects. Adaptation and mitigation measures, emergency response plans and actions, including removal of fuel through controlled or cultural burning, will be critical to the survival of Australia's heritage.

Since European settlement, the Australian landscape, and particularly that in NSW, has been drastically modified and poorly managed in relation to fire. The new settlers did not understand this fire country and set out to exploit the apparently abundant resources it offered. Historically human activity has involved extensive land clearing, for both grazing and cultivation, with settlements established in scenic mountain areas as well as on the rolling slopes and plains. Activities also included preservation of large bushland areas, set aside as National Parks. Whilst the objective of the parks is to conserve Australia's unique flora, fauna, natural and cultural landscapes, and provide opportunities for leisure and scientific research, Aboriginal people have been prevented from managing and maintaining the country using the traditional land management practices as they had done for thousands of years prior. These practices, which include cultural burning, have been developed over time to sustainably maintain the land, its ecosystems and biodiversity, and to manage fuel loads. The failure to continue these practices has left the land in poor condition and in a highly flammable fuel laden state. The bushfires that have ravaged the country over recent years as a result of the rising temperatures, reduced rainfall and increased fuel loads have escalated to a point where they are horrific in their intensity and unpredictability and are now impossible to control. The 2019-2020 fire season extended for more than 6 months and involved firefighters working continuously for over 200 days.

Other contributing factors included the increasing number of people choosing to live within or on the edge of fire prone areas and in close proximity to bushland. Most homes and settlements are inadequately designed and prepared for such catastrophic fire events, leaving people and their property exposed and vulnerable, sometimes with fatal consequences.

2. The preparation and planning by agencies, government, other entities and the community for bushfires in NSW, including current laws, practices and strategies, and building standards and their application and effect.

Cultural heritage places in NSW are protected under the NSW *Heritage Act 1977* as well as under local and regional planning instruments. Aboriginal heritage is protected under NSW National Parks and Wildlife legislation. Commonwealth owned and nationally listed heritage places are protected under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). Heritage places are identified on the many lists, including:

- Local Environmental Plans, identified on schedules and heritage maps (Local Government)

- State Heritage Register (Heritage NSW)
- Various Section 170 registers of NSW state government departments and agencies (e.g. Department of Education)
- National Heritage and Commonwealth Heritage Lists (Department of Agriculture, Water and the Environment)
- World Heritage List (UNESCO)
- Aboriginal Places (NSW National Parks and Wildlife Service)
- National Trust of Australia (non-statutory)
- Australian Institute of Architects (non-statutory)

Unfortunately, heritage lists are not always comprehensive or up to date. The data relating to a site may be limited, with little more than an address and may not include a clear statement of cultural significance or identify the components that comprise the significant fabric of the place (for example homestead, shearing shed, dairy, cattle yards, garden, archaeological site). Thus, the data on damaged or lost heritage places as a result of the fires will be incomplete.

Heritage places of state and national significance are usually required by the relevant government authorities to have Conservation Management Plans (CMPs) or Heritage Management Plans (HMPs). These assess and identify the cultural significance / heritage values of the cultural heritage place and include policies to guide their ongoing management, maintenance and care, as well as provide guidance for change, adaptation and future development. In the preparation of these plans, risks to the heritage places and their cultural values are identified and policies drafted to address them. Although bushfire may be identified as a risk to a place and advice may have been sought from the local rural fire service, few heritage places would have developed comprehensive disaster risk management plans or bushfire plans that set out protection, mitigation, preparation, evacuation, emergency response and recovery strategies to address the risks. These are generally not required and if they exist are often not fully implemented.

Although Heritage NSW (previously the Office of Environment and Heritage) is identified in the state emergency plan as the key authority to be consulted in regard to heritage, the heritage division does not seem to have a well-structured and rehearsed emergency plan that it can activate efficiently in an emergency to mobilise a response. In this instance, Heritage NSW and the NSW Heritage Council called an emergency meeting to develop a plan of action. What became evident is that the different levels of government have their own responsibilities in regard to the protection of heritage, but there was little overlap. Heritage NSW and the NSW Heritage Council are responsible for state listed heritage items, but not local items. Local councils are responsible for locally listed heritage items. As most of the damage was to locally listed heritage places, it was local councils' responsibility to respond. As many councils were overwhelmed, the local response to assess damaged heritage was limited. Not all councils have heritage advisors and most only have the services of their heritage advisor one or two days per week or month. Thus, they have limited capacity to undertake emergency response actions in relation to heritage.

Australia ICOMOS attempted to assist local heritage advisors and council officers by developing a rapid assessment sheet that they could adapt to their needs in assessing the condition of local heritage items in fire affected areas. This was made available on the Australia ICOMOS website and was circulated through the Heritage Advisors Networks in each state. It was also shared with NSW Public Works and interstate government agencies for the clean-up. Following a fire, heritage sites should be assessed prior to demolition and clean-up work being undertaken. The rapid assessment could be used as the basis for decision making regarding potential demolition (this would normally require a heritage impact assessment to accompany a demolition application to council) and delisting in the case of total loss, or stabilisation, salvage and recovery

in the instance of partial damage. Australia ICOMOS is currently developing guidance on post fire recovery of heritage sites and on bushfire risk management for heritage sites. These will be also be available to property owners and managers, heritage practitioners and council heritage officers through the Australia ICOMOS website.

Most heritage places predate bushfire planning and building code requirements. They are often built of flammable materials, such as timber, and are thus highly vulnerable to fire. At present there is no requirement for heritage sites to be upgraded to meet these planning and code requirements unless substantial alterations and additions are being made to the buildings. The NSW RFS 'Planning for Bushfire Protection' (Section 8.2.3 Historic buildings) recognises that there may be conflict between heritage conservation requirements and bushfire protection requirements, and highlights the importance of the application of the conservation principles, processes and practices of the *Burra Charter* (Australia ICOMOS, 2013). Performance based solutions are recommended for the fire protection of heritage sites, including heritage fabric and/or setting. These should be developed in accordance with a bushfire design brief (BFDB) to be agreed with the NSW RFS.

3. Responses to bushfires, particularly measures to control the spread of the fires and to protect life, property and the environment, including:

- immediate management, including the issuing of public warnings
- resourcing, coordination and deployment
- equipment and communication systems.

4. Any other matters that the inquiry deems appropriate in relation to bushfires.

And to make recommendations arising from the Inquiry as considered appropriate, including on:

5. Preparation and planning for future bushfire threats and risks.

The identification and management of bushfire risk to Australia's heritage places will add another layer to current management practices for heritage sites. However, if heritage sites are to survive future bushfires, bushfire risk management planning must be undertaken, and appropriate measures implemented to reduce the risks. The Australian Institute of Architects strongly recommends that an accredited bushfire-hazard assessor qualified in Bushfire Planning and Design (BPAD) be engaged to assist in developing a site specific BFDB. Clearly this person would need to work closely with a heritage practitioner on heritage sites.

The gallery, collections and archives sector are better prepared than the heritage sector in having disaster plans and response protocols in place for protection of most major collections. Staff training is also provided. This is far less common in the heritage places sector, but it must become part of common heritage management practice. The availability and adoption of tools like the rapid assessment sheet for fire impacted heritage places, guides on post fire recovery of heritage sites and on bushfire risk management for heritage sites being developed by Australia ICOMOS will contribute to future preparation and planning.

6. Land use planning and management and building standards, including appropriate clearing and other hazard reduction, zoning, and any appropriate use of indigenous practices.

Hazard reduction burns play a role in reducing the risk of large, uncontrollable fires by reducing fuel loads. They are also cost effective and stimulate natural reforestation. However, they do not always promote regeneration of healthy indigenous ecosystems. Often weed species that are highly flammable, such as bracken fern, will dominate the regrowth and reduce biodiversity. Traditional cultural burning, when carried out regularly and in the correct season for the soil and vegetation type, burns cooler, produces less smoke and is much more selective in what it burns. It reduces fuel loads, but also promotes healthy regrowth of the indigenous vegetation, and stimulation of local food sources for animals, plants and people (refer to 'Fire Country' by Victor Steffenson, 2020).

Greater understanding and acceptance of traditional knowledge and land management practices developed over thousands of years must be considered in future fire management regimes. When science, traditional knowledge and sustainable forest management practices work together, benefits can be seen not only in fuel reduction and biodiversity conservation, but also in climate change mitigation and adaptation, soil erosion protection, coastal area protection and water and flood regulation.

7. Appropriate action to adapt to future bushfire risks to communities and ecosystems.

Australia is a signatory to the Sendai Framework for Disaster Risk Reduction and has been taking steps towards its implementation. This has included taking steps to improve Australia's fire warning systems and investing in building the resilience of local communities. Alongside these measures stronger building and planning codes for development in bushfire prone areas have been developed. However, we still have a long way to go.

To date, many heritage sites have been affected by wildfires and yet comprehensive management of bushfire risks is still lacking. If these culturally significant places are to be passed on to future generations, risk management planning must be undertaken and appropriate protection measures implemented.

Following the recent fires and those that affected Tathra in 2018, Aboriginal cultural burning has been highlighted as a valid and effective fire management practice. At Tathra those areas that had been managed using cultural burning techniques suffered far less fire damage than those areas that had not been managed in this way. Similarly, in 2020, the Budj Bim World Heritage site in Victoria, which had also been managed using traditional knowledge and practices, did not suffer the damage that the Greater Blue Mountains or Gondwana Rainforest areas suffered. As previously discussed, traditional cultural burning, when carried out regularly and in the correct season for the soil and vegetation type, has the potential to reduce fuel loads as well as promote healthy regrowth of the indigenous vegetation. Greater understanding and acceptance of traditional knowledge as a valid and effective means of managing wild fires alongside modern scientific knowledge should have far reaching benefits.

Community-based disaster risk management is important particularly in reaching communities at risk and creating local ownership of the risk management systems and processes adopted. These should be based on local or traditional knowledge to reduce vulnerability. Early warning systems that reach a wide audience will be largely beneficial.

Disaster risk management is a comprehensive approach that involves the identification of threats due to hazards; processing and analyzing these threats; understanding people's vulnerability; assessing the resilience and coping capacity of the communities; developing strategies for future risk reduction; and building up capacities and operational skills to implement the proposed measures.

8. Emergency responses to bushfires, including overall human and capital resourcing.

Future policies addressing human resourcing across NSW in relation to bushfires will be more beneficial and effective if a bottom up approach is adopted. Consultation with communities is important. The

Sustainable Development Goals [SDG's] to date have not resulted in major shifts, primarily due to existing economic barriers. [SDG 13 \[Climate Action\]](#)

- **13.1** “Strengthen resilience and adaptive capacity to climate related hazards and natural disasters..”
- **13.2** “Integrate climate change measures into national policies, strategies, and planning”
- **13.3** “Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaption, impact reduction, and early warning”

Careful thought is required about human and capital resourcing, what impacts are expected and what trade-offs are acceptable. Realistically there needs to be some consideration given to capability, human action and what expectations are, rather than advising communities of a standardised or predetermined outcome. Thus, policies addressing human resourcing across NSW in relation to bushfires may prove beneficial and influential if considering such challenges.

This applies to resourcing of local councils to enable them to work with their communities to protect their heritage.

9. Coordination and collaboration by the NSW Government with the Australian Government, other state and territory governments and local governments.

Coordination and collaboration between all levels of government is very helpful in improving the response to fires and in managing bushfire risk. Fires do not recognise borders and valuable lessons can be gained by looking at techniques successfully employed interstate.

The listing and mapping of heritage places throughout Australia varies from state to state, and there are many places of heritage value that have not been formally assessed or documented or where existing documentation is incomplete. All levels of government can work together to promote best practice in the identification and management of disaster risk to Australia's heritage places. Disaster plans and response protocols are not common in the heritage places sector but must become common practice.

Australia also has an obligation under the World Heritage Convention through the World Heritage *Operational Guidelines* to report the exceptional circumstances of fire impacts on our World Heritage properties. This can be an opportunity to demonstrate Australian leadership on responding to the bushfires, capacity building and creating future resilience.

10. Safety of first responders.

Human safety is the highest priority. This includes that of the fire fighters.

Heritage places that are safer and better protected will effectively be safer for first responders. Where possible defensible space should be maintained around heritage properties and safe entry and egress routes maintained. A BFDB that adopts appropriate measures to protect the property (e.g. external sprinkler system and ember mesh to openings) should be implemented to reduce the risk to people and property. They should also provide greater opportunity for the fire fighters to fight any fire that threatens the property.

11. Public communication and advice systems and strategies.

Community expectations regarding the conservation of historic cultural heritage is debated and continually evolving within Australia, as it should be. Legislative protection of cultural property at the national level is under the auspices of the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act).

The Act was recognised at a time of significant change in heritage policy and submissions are currently open during its 2020 Review. The EPBC Act established the National Heritage List in 2004, which currently recognises the outstanding Indigenous, historic and/or natural heritage values of more than 100 places across Australia. Also, of significance is the 2015 *Australian Heritage Strategy* pertaining to the recognition and protection of cultural property, which recognises that heritage is diverse and encompasses natural, historic and Indigenous values. It considers ways in which Australia's heritage places can be better identified and managed to ensure their long-term protection. The Heritage Strategy will be reviewed in 2020 by the Australian Government, with subsequent periodic monitoring, evaluation and review of objectives and actions as required. In order for the Strategy to be effective it will need to be embraced by individual state governments, NGOs and community groups.

In the context of climate change, globally, we are recognising what must be done. "Appropriate design of policies, institutions and governance systems at all scales can contribute to land-related adaptation and mitigation while facilitating the pursuit of climate-adaptive development pathways." (IPCC, August 2019) Australian Aboriginal land management practices, having developed over many millennia, present a fine exemplar of adaptation to our nation's harsh climatic conditions. Responsibility for the continued survival of all of Australia's cultural heritage now rests with us.

In Australia, agencies and organisations, including Australia ICOMOS, particularly through its Australia and New Zealand Working Group on Risk Preparedness for Cultural Heritage, and Blue Shield Australia are striving to communicate and highlight best practice to owners and first responders, while educating government agencies on resourcing requirements and the importance of risk mitigation around cultural property. In 2016 Blue Shield International expanded its remit to include environmental disaster. Blue Shield is "committed to the protection of the world's cultural property and is concerned with the protection of cultural and natural heritage, tangible and intangible, in the event of armed conflict, natural- or human-made disaster." [Article 2.1, 2016 Statutes] Current thinking is that those in uniform are trained for both armed conflict/peacekeeping and as first responders following natural disasters, as the issues overlap by sixty to seventy percent. Australia is a signatory to the Hague Convention, but has yet to ratify Protocols One and Two. Increased awareness of the convention and our obligations under the convention, and increased discussion around protection of cultural heritage will doubtlessly place potential ratification further in the spotlight.