



Nature Conservation Council

The voice for nature in NSW

BUSHFIRE POLICY 2022

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1. Purpose

The purpose of this Bushfire Policy is to provide a framework for the Nature Conservation Council (NCC) to attain its primary goal – **the achievement of sustainable fire management in the landscape that maintains, enhances or restores biodiversity values and landscape resilience.**

NCC will continue to advocate for the implementation of ecologically appropriate fire regimes and suitable bushfire planning, operational and mitigation practices, while taking into account life, property and environmental protection imperatives. The associated “Information on the Bushfire Program” document provides greater detail and the rationale that supports this Policy. The NCC 2021 State of Nature Report focuses on priority issues and outlines current bushfire concerns, key policy developments, and expected developments in the near term.

Achievable fire management planning strategies and bushfire suppression and recovery efforts are being forced to adapt to meet the challenges presented by climate change and the realities of rapidly changing bushfire behaviour scenarios.

NCC’s overarching position is that:

- the planning and implementation of fire management activities should aim to restore, maintain or enhance ecosystem resilience and biodiversity values;
- land use planning should minimise the degradation and fragmentation of landscapes and improve the safety of human communities from bushfire; and
- bushfire strategies and works for the protection of human life as well as built, cultural and natural assets should be driven by scientifically based evidence and for maximum effect and be prioritised to areas located in close proximity to communities.

Sections 2 and 3 of this document outline NCC's policy principles and objectives. The remainder of the document from section 4 onwards is categorised into specific themes of bushfire management and consequences of bushfire that NCC considers need to be addressed and reviewed on an ongoing basis. The policy does not attempt to respond to all bushfire issues that could be addressed, particularly all those occurring within the bushfire management or operational sphere. Instead, the policy focuses on planning and strategy aspects of bushfire which NCC considers can have a significant impact on environmental and cultural matters.

2. Policy Principles

- 2.1 The Nature Conservation Council of NSW will lead campaigns, promote community-focused programs, work toward partnerships and advocate for changes in bushfire management which ensure the protection of nature and the community in NSW.
- 2.2 The Australian landscape has evolved with a natural and cultural regime of fire in the landscape. Human activity (Indigenous and Non-Indigenous) has influenced the known history of fire in Australia and impacted greatly on its biological systems (Kershaw et al. 2002). Since European settlement, human assets have been built in bushfire prone landscapes,

not only placing those communities at risk from bushfire but progressively fragmenting the landscape to the detriment of the natural environment.

- 2.3 Current levels of anthropogenic greenhouse gas emissions are the primary driver of climate patterns, resulting in more extreme fire weather and more frequent and intense bushfire events. The escalating bushfire risk poses an existential threat for natural ecosystems and people.
- 2.4 As climate change becomes an increasingly major driver in fire behaviour, the effectiveness of existing fire mitigation and suppression capabilities are being reduced. Without action on climate change standard responses to bushfire emergencies will be ineffective.
- 2.5 As well as human life and assets, bushfire planning must provide adequate protection to environmental and cultural values. These values need to be identified in Bush Fire Risk Management Plans (BFRMPs), and appropriate treatments allocated to them to enable better protection from bushfire impacts.
- 2.6 A State level strategic plan which recognises regional and seasonal variations and encompasses all land tenures, and that actively engages with communities in bushfire prone areas is required to develop effective land management options, to give direction to bushfire risk management plans and to protect ecosystems across the landscape. Modification of the existing bushfire risk planning process is needed to accommodate this expanded strategic planning model.
- 2.7 Effective and strategic land-use decision making needs to incorporate climate change adaptation and resilience strategies (Final Report NSW Bushfire Inquiry, 2020). There is a need to develop a bushfire land use planning and construction framework so as to build greater resilience from likely increased catastrophic bushfire conditions (for new and existing communities), whilst maintaining the State's natural and cultural values, rather than as an expendable casualty for community protection.

3. Objectives of the Policy

NCC has an important role to play to ensure bushfire management is ecologically sustainable over the long term. To do this it will:

- 3.1 Promote knowledge, understanding and capacity in the community about bushfire management, ecological issues and bushfire policy by convening stakeholder conferences, workshops and other forums that provide an opportunity for sharing of ideas and information.
- 3.2 Continue to support its representatives on bushfire committees throughout NSW and through NCC's statutory roles under the *Rural Fires Act 1997* on local Bush Fire Management Committees (BFMCs), the Bush Fire Coordinating Committee (BFCC) and the Rural Fire Service Advisory Council (RFSAC), represent community concerns relating to environmental matters and be the voice for nature in bushfire management.
- 3.3 Apply and support scientific research, evidence, innovation, best practice and operational knowledge that incorporate adaptive management to improve bushfire management, and advocate for and assist in the

development of ecologically sustainable bushfire policies, guidelines and legislation across all levels of government and relevant organisations.

- 3.4 Enhance connections between the diverse range of stakeholders and communities involved in or affected by bushfire management by promoting the integration of ecological requirements into bushfire risk management, land use planning, research and policy whilst facilitating and participating in constructive engagement between stakeholders.
- 3.5 Provide expertise and leadership, producing a wide base of support from various public, private and government sectors, for bushfire management campaigns focused on environmental conservation and ecological sustainability.
- 3.6 Promote sustainable bushfire planning and building standards for new and existing development by supporting policies and practices that reduce risk to occupants which maintain the ecological and cultural values of the surrounding landscape.
- 3.7 Support First Nations people and communities to be actively engaged in bushfire management including through representation on committees, involvement in relevant forums and encouraging of appropriate mitigation activities.

4. Pre-fire Bushfire Management and Mitigation

Vision: Bushfire risk management planning needs to be ecologically responsible and justified by science and may use a variety of treatment options to address bushfire mitigation. Access for all BFMC members to reliable spatial data and the latest research findings is essential to enable meaningful contributions to decisions regarding planning and strategies.

Only environmentally sound methods of hazard reduction are to be implemented by land and fire managers across the landscape, and essential fire trails and other bushfire infrastructure is to create minimal intrusion upon natural values.

4.1 Risk Management Planning in NSW

- 4.1.1 NCC supports a multi-stakeholder, cross-tenure bushfire risk management planning process facilitated through the development, resourcing and implementation of locally based BFRMPs.
- 4.1.2 NCC considers the development of an overarching State level strategic bushfire framework is required that recognises regional circumstances to ensure land management strategies address protection of all assets across all tenures.
- 4.1.3 BFRMPs should be based on a collaborative effort to provide details of a variety of treatment options for addressing bushfire mitigation based upon sound ecological considerations across the landscape.
- 4.1.4 As well as human life and associated built assets, BFRMPs must value and incorporate all environmental and cultural assets and values (including regionally and locally significant) so that the best information is available to minimise adverse impacts to all assets during bushfire operations.
- 4.1.5 BFRMPs should contain performance criteria and a monitoring strategy for implementation, monitoring, reporting and auditing of environmental outcomes and the results made available to all BFMC members.
- 4.1.6 All treatment options should be considered, including 'no action' and 'no burn' when required for the protection of environmental assets. Treatment options should not exclude adaptive management approaches designed to benefit ecological values and NCC advocates the use of more than one management option where appropriate to improve mitigation of the risk to life, property and the environment.
- 4.1.7 All fire prescribed as a treatment option should be based on existing regulations and reference the best research available. Until further information becomes available, the *Guidelines for Ecologically Sustainable Fire Management* (Kenny *et al.* 2004) and *Bush Fire Environmental Assessment Code for NSW* (Rural Fire Service 2021) should be the absolute minimum requirement for referencing.
- 4.1.8 Community engagement programs which focus on mutually informative conversations with at-risk communities should be recognised in the BFRMP process as very effective treatments in mitigating risk to life and property and creating more knowledgeable and resilient communities.

- 4.1.9 BFRMPs should incorporate independently constructed ecologically sustainable fire management plans for private properties, such as those designed by the Hotspots Fire Project or other ecologically sound fire management planning programs.
- 4.1.10 BFRMPs should be prepared in consultation with neighbouring BFMCs when assessing priorities and treatments, as well as being inclusive of and complementary to other local and regional management plans that include fire management and risk within their scope.
- 4.1.11 BFRMPs should be reviewed at least every five years. NCC supports an annual review of BFRMPs and the early review, revision and or creation of new bushfire risk management plans as required, such as following major bushfire events.
- 4.1.12 Adequate resources should be available to BFMCs to facilitate community consultation and involvement during the development of BFRMPs and during the mandatory public exhibition process for BFRMPs.
- 4.1.13 NCC urges that weed, feral animal and erosion management strategies be recognised in BFRMPs to facilitate regeneration of native species following vegetation disturbances during fire mitigation and suppression works.
- 4.1.14 District Operational Plans should be consistent with District BFRMPs and should incorporate all information necessary for fire practitioners to make ecologically sound decisions.

4.2 Adequate Information for Fire Management Plans

- 4.2.1 Ongoing funding and support must be provided to ensure bushfire and biodiversity databases provide the mapping and information needed for BFMCs to consider and include all relevant information in the preparation of BFRMPs.
- 4.2.2 NCC urges all relevant information be regularly updated and available to all BFMC members, and the public also be provided with appropriate information that is sufficient to allow meaningful contributions to be made to the fire management planning process.
- 4.2.3 NCC urges all fire authorities and land management agencies to record details of all areas burned (e.g. fire extent and fire severity), including impact on threatened species and ecological communities, soil erosion impacts and water quality effects.

4.3 Risk Reduction Strategies

- 4.3.1 In accordance with the recommendations in the Final Report of the NSW Bushfire Inquiry (2020), NCC concurs that the priority of asset protection should be to manage the flammability of assets and their immediate surroundings, however as well as prescribed fire there are other environmentally appropriate fire protection measures that should be considered.

- 4.3.2 NCC encourages the appropriate use of fire for ecological benefit across the landscape. Fire can be a useful tool in hazard management, but hazard reduction in natural areas should always take into account ecological management considerations.
- 4.3.3 NCC opposes fire management treatments that are primarily driven simply to meet annual targets such as hectares treated or number of properties protected, however does recognise that these metrics may assist with the monitoring of generic performance across landscapes.
- 4.3.4 NCC opposes the introduction of risk management strategies or self-assessment codes that are not evidence based such as the inclusion of Ignition Management Zones in Bush Fire Risk Management Plans; the Rural Boundary Clearing Code; and the 10/50 Vegetation Clearing Code, which do not have supporting scientific evidence that shows they will clearly reduce risk, but which are likely to negatively impact the environment.
- 4.3.5 NCC supports hazard reduction programs that are strategically designed and coordinated across the landscape as per the approach of risk management planning undertaken by BFMCS and include scientifically based protection of the environment in their implementation.
- 4.3.6 NCC supports hazard reduction proposals that are subject to prior best practice environmental assessments, are consistent with the relevant risk management plan(s), and assessment of their strategic value has been undertaken during the initial planning stage.
- 4.3.7 NCC considers it inappropriate and largely ineffective for large natural areas such as water catchments, national parks estate, and wilderness areas to be subject to broad area hazard reduction burns that do not also aim to achieve beneficial ecological outcomes, such as mosaic burn patterns and unburnt patches within burn areas.
- 4.3.8 NCC supports a strategic risk-based approach to hazard management based on Bush Fire Management Zones used to identify the fire management intent and appropriate strategies for a specific area, provided the rationale for those zones is based on sound science and evidence. Only zones that fully take into account ecological and operational factors which are founded on science or clear evidence of effectiveness should be introduced.
- 4.3.9 NCC supports the view that bush fire management is a shared responsibility and therefore notices issued under Section 66 of the *Rural Fires Act 1997* should not be issued on public or private land where the complainant is an adjacent private landholder who cannot demonstrate they have taken steps to reduce the risk on their own property, or where the purpose of the complaint is to gain benefit for existing or future development opportunities.
- 4.3.10 The precautionary principle should be applied to all hazard management strategies and NCC also recognises the benefit and importance of adaptive management initiatives at the local scale. NCC considers the application of fire should aim to ensure appropriate fire regimes are based on the latest scientific information for criteria such as specific

ecological characteristics of key species, fire frequency, severity, spatial and temporal distribution, topographical variations and seasonality.

- 4.3.11 NCC strongly supports the monitoring, reporting and objective evaluation of hazard reduction activities, and improvement processes to ensure planned risk management outcomes eventuate and are maximised.

4.4 Threatened Species and Ecological Communities

- 4.4.1 NCC supports the implementation of fire regimes that are designed to account for the requirements of threatened species and threatened ecological communities across the extent of a local population.
- 4.4.2 NCC commits to continue to engage with fire practitioners and the general community about the different responses of individual threatened species and ecological communities to fire and to provide direction for new research programs.
- 4.4.3 NCC supports and promotes the availability of grant funding to assist private landholders to implement fire management for the purpose of providing suitable habitat and protection for threatened species and enhancing biodiversity conservation.
- 4.4.4 NCC supports analysis of the requirements for threatened species to enable the implementation of fire regimes that will protect a majority of the ecological community as well as the protection of individual threatened species.
- 4.4.5 NCC considers it important that a threatened species database is maintained, updated and appropriately disseminated and urges the provision of sufficient funding by the NSW Government that enables the responsible agency to carry out this duty more effectively.
- 4.4.6 NCC urges an ongoing process be introduced by the NSW Government to update the Threatened Species Hazard Reduction Lists used as assessment tools under the Bush Fire Environmental Assessment Code 2021, as they are essential for determining relevant conditions when hazard reduction works are proposed and threatened species, populations or ecological communities occur.
- 4.4.7 The preparation of plans for the protection from bushfire of areas declared as Assets of Intergenerational Significance (AIS), and the habitat of other threatened species or ecological communities must ensure that all ecological values within these areas are properly considered, and the fire regime requirements of surrounding vegetation communities are not compromised when implementing bushfire activities.

4.5 Fire Trails

- 4.5.1 NCC supports the establishment of a strategic and integrated fire trail network to improve accessibility for firefighters during operational events.
- 4.5.2 NCC supports the implementation of the NSW RFS Fire Trail Standards that set out guidelines for the classification, design and construction standards and maintenance requirements of fire trails.

- 4.5.3 NCC supports the introduction of a consistent approach across the State to the preparation and implementation by BFMCs of Fire Access and Fire Trail (FAFT) plans which prioritise the strategic operational importance of fire trail networks and take into consideration all environmental assets and values which may be impacted.
- 4.5.4 NCC considers when single use fire trails are found to not play a substantial and strategic role in bushfire mitigation and suppression, they should be closed and rehabilitated.
- 4.5.5 NCC urges the RFS and all relevant land managers to ensure that all fire trail and plant contractors/ operators have attained a minimum certification for fire trail construction and be accredited and placed on a register.
- 4.5.6 NCC supports the requirement for BFMCs to annually complete a fire trail treatment register that sets out a schedule of works for the construction and maintenance of fire trails that constitute the fire trail network. Funding to undertake fire trail works should be sufficient to include a component dedicated to post trail construction maintenance and environmental rehabilitation.
- 4.5.7 NCC supports the closure of listed fire trails to the public during periods of extreme and above fire danger ratings to prevent vehicle access by arsonists, limit the risks of accidental ignitions as well as reduce the potential for public traffic to impede fire fighting vehicles.
- 4.5.8 NCC does not support the establishment of fire trails as a substitute for perimeter roads in new subdivisions of an urban or peri-urban nature.

5. Planning & Development at the Bushland Interface

Vision: The planning and development of built assets near the bushland interface utilises to the greatest extent bushfire protection measures that do not impact on the values of the adjacent natural areas, with systems in place to assist owners to implement upgrades to the fire resistance of existing premises.

Asset Protection Zones (APZs) are only implemented within the land to be protected and are not imposed beyond the area bounded by the development boundaries. APZs should be determined and adjusted on the best available scientific understanding of climate change adaptation and resilience, based on regional fire weather conditions.

5.1 Asset Protection Zones

- 5.1.1 NCC supports the implementation of APZs as a useful strategy for mitigating the impact of approaching bushfires, however notes that the construction and management of APZs may cause environmental problems and therefore discourages over-clearing of vegetation in APZs to minimise environmental harm.
- 5.1.2 NCC does not believe that landowners, planners, consultants and contractors currently receive enough guidance on construction and maintenance of APZs and urges that further guidance on APZ construction and maintenance be made available to landowners and others by Councils, the RFS and other relevant government authorities.
- 5.1.3 NCC strongly supports the implementation of APZs within the land to be protected and not imposed on adjoining lands, particularly those set aside for conservation. However, NCC recognises that previous planning decisions have created a legacy where existing developments have been allowed without buffers included to provide sufficient protection, and that in these cases it may not always be possible to avoid some adverse impacts on adjacent lands. These impacts should be minimal and carefully assessed.
- 5.1.4 APZs for new developments should never be located on adjoining land.
- 5.1.5 NCC opposes any area listed primarily as a Conservation Zone in Local Environmental Plans being developed for any purpose other than a use authorised under the *National Parks and Wildlife Act 1974* or for designated environmental protection works. The locating of development and APZs within Conservation Zones that will have an adverse effect on conservation values is to be avoided and any area that has Threatened Ecological Communities (TECs), threatened species habitat, wetlands or other environmentally sensitive areas should not be used to provide an APZ regardless of the zone designation.
- 5.1.6 NCC maintains that all new development should seek to minimise the size of APZs through the use of construction standards and alternative methods of satisfying the objectives of *Planning for Bush Fire Protection 2019*. APZ proposals should not involve removal of all vegetation, particularly significant trees, and should provide sufficient detail to ensure

that impacts on adjoining native vegetation can be minimised and habitat retained where possible.

- 5.1.7 NCC supports planning that incorporates adequate water supplies, access, emergency management arrangements, vegetation management, wildlife, weed and pest management strategies into the implementation of APZs and their maintenance.
- 5.1.8 NCC supports a system of review for APZs that is based on sound research and which provides scientific justification for the amendment of APZ widths, including adaptation for future regional climate and fire weather conditions.
- 5.1.9 NCC opposes provisions that significantly increase the extent or purpose of allowable asset protection zones which are not based on science, are not feasible to implement, or cannot demonstrate a clear benefit.

5.2 Building and Construction Standards

- 5.2.1 NCC supports requirements to improve building and construction standards to reduce the need to clear native vegetation for APZs.
- 5.2.2 NCC supports regular review of Australian Standard 3959: Construction of buildings in bushfire-prone areas, to establish suitable construction standards based on Catastrophic Forest Fire Danger Ratings, recognising that climate change has increased risks in many locations, including the Central West and North Coast regions of NSW.
- 5.2.3 NCC supports retrofitting of existing buildings to raise their bushfire resistance, especially where the ability to construct an APZ or defensible space on their own land cannot be achieved.
- 5.2.4 NCC advocates for more effective urban planning strategies to overcome bushfire management problems at the urban-bushland interface, where most property losses occur. This includes amending bushfire prone land mapping to extend the separation distance for buildings at the urban-bushland interface to 140 metres (VBRC, 2010 *pp.* 223) from bushland to ensure the implementation of bushfire protection measures.
- 5.2.5 NCC advocates for up-to-date and accurate mapping of vegetation types, threatened species, specific habitats and Threatened Ecological Communities to be readily available to consent authorities to improve their identification when assessing new developments and development applications and for all fire management purposes.

5.3 Planning Framework

- 5.3.1 NCC recommends the preparation of a NSW strategic bushfire framework across all land tenures for the whole State that identifies land use and land management options with a key component being bushfire risk and land use planning and which takes into account environmental and landscape values (NSW Bushfire Inquiry, 2020).

- 5.3.2 All planning for new development must integrate environmental considerations and incorporate bushfire protection measures without impact to surrounding ecological values.
- 5.3.3 NCC recommends amendments to the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the Standard Local Environmental Plan (LEP) Instrument which addresses bush fire protection measures for all land-uses.

When assessing development consent, Section 4.15 of the EP&A Act should formalise the consideration of all natural hazards including bushfire, floods, coastal erosion and earthquake as matters for evaluation.

The Standard LEP Instrument template should also be amended to remove the current prescribed burning provisions and replaced with an overall process for consideration of development within bushfire prone areas.

Section 4.14 of the EP&A Act should be amended to ensure compliance with subdivision standards, as well as restrictions on title, to ensure compliance with future building and environmental standards.

- 5.3.4 Bushfire consultants should be recognised and accredited by the Department of Fair Trading to ensure ethical and appropriate assessments of bushfire risks are undertaken which recognise the use of suitable bushfire protection measures and natural and cultural values on adjoining lands.

6. Science and Research

Vision: NSW bushfire management is grounded in science and research that recognises the effects of climate change on natural systems and on fire behaviour and which guides ecologically sustainable fire management.

NCC considers that the following issues need to be addressed on a continuing basis to ensure there is a robust scientific foundation on which bushfire management programs can be effectively designed to mitigate the risk to human life, built infrastructure and the environment.

- 6.1 Bushfire management regimes need to be informed by research into post-fire operations with a view to achieving ecological sustainability.
- 6.2 Embedding of ongoing funding for a collaborative research centre such as the Bushfire Risk Management Research Hub is needed to ensure that ongoing research provides additional information on fire regimes and threatened species requirements so that existing guidelines can be updated and refined so they are more sensitive to fire ecology needs.
- 6.3 Coordination of bushfire research needs to occur into the future to ensure agreed priorities are addressed as fully as possible and is carried out in a co-operative and collaborative manner.
- 6.4 Funding to support further research in areas such as fire ecology, biodiversity conservation and sustainable fire management should be provided on a collaborative basis by the NSW and Commonwealth governments.
- 6.5 Mentoring programs should be established for tertiary students studying relevant fields to encourage interest in working in key fire management areas.
- 6.6 Ongoing and effective support should be provided for university and school courses that address bushfire related areas of study including fire ecology, community engagement and property protection.

7. Community Engagement and Involvement

Vision: Fire management is considered a shared responsibility between fire authorities, land managers and local communities, with extensive community engagement considered necessary for the creation of resilient communities in bush fire prone areas.

- 7.1 NCC considers it essential that bushfire management becomes an increasingly shared responsibility between fire authorities, land managers and local communities. NCC urges relevant bushfire planning information be made more readily available to the community and targeted communication occur with affected communities to enable their input into the planning of bushfire mitigation activities to improve resilience in bush fire prone areas.
- 7.2 NCC considers ongoing communication utilising innovative and traditional methods is needed to maximise ongoing interaction between relevant agencies and the public to ensure that the latest science on fire and the environment is disseminated and discussed.
- 7.3 NCC leads and in partnership with relevant agencies promotes community engagement programs such as the Hotspots Fire Project that encourage private landowners and public land managers to manage fire to deliver positive outcomes for environmental and cultural values and adopt measures that take into account the wider community.
- 7.4 NCC advocates that both government and non-government organisations that deliver bushfire and environmental community engagement programs e.g. Bushcare should include information about the ecological impacts of bushfire and bushfire mitigation measures such as APZs, as well as the role of fire in the environment and the impact on communities.
- 7.5 NCC supports engagement programs that emphasise the responsibility of householders to undertake appropriate hazard management and preparedness activities on their properties and around their homes.

8. Cultural Burning

Vision: First Nations, Traditional Owners and Custodians are encouraged and supported to lead and undertake cultural burning for the health of people and Country.

8.1 Contemporary Cultural Burning

- 8.1.1 NCC recognises that First Nations peoples' traditional knowledge of the use of fire offers insights for managing the natural and cultural values of Country and that contemporary cultural burning should be included as an integral component of bushfire management.
- 8.1.2 NCC considers it is important that appropriate First Nations people with responsibility for Country are involved in leading, planning and applying fire based on their cultural knowledge and connections to the land.
- 8.1.3 NCC supports empowering Aboriginal women to be involved in cultural burning and encourages growth in their capacity to determine their participation in relevant activities, as well as that of children, families and Elders.
- 8.1.4 NCC understands the importance of being on Country and learning by observation and experience and the sharing of knowledge and practices.
- 8.1.5 NCC advocates that First Nations practitioners are provided opportunities to access good training and partnerships and the resources to implement and share good practices and techniques.
- 8.1.6 Conversely, NCC also believes it is important to embed cultural connections into contemporary resource management to ensure learning and capacity building for all involved is a two-way process.
- 8.1.7 NCC supports cultural burning where it has been identified as appropriate in Healthy Country Plans, seasonal calendars and other planning processes accepted by Aboriginal Custodians and which maintains or improves ecological values or progresses other management goals such as weed or vertebrate pest control.
- 8.1.8 NCC supports and will help facilitate First Nations people to undertake cultural burning where appropriate on Country for the healing and health of people and Country. Culturally acceptable fire management plans should form the basis of fire planning with a focus on identifying cultural values to inform fire implementation and restoration works.

8.2 Community Empowerment

- 8.2.1 Culturally integrated ecological fire management is encouraged to enable First Nations communities to practice culture, connect with Country and help to build knowledge of Country including through traditional fire related stories and experiences.
- 8.2.2 To enable First Nations communities to become more involved in contemporary fire management, NCC supports initiatives that encourage them to become equipped with the skills to be hands-on participants able to drive Cultural Burning practices and respond to bushfire events.

- 8.2.3 NCC believes innovative approaches are needed to enable community representatives to be provided opportunities to have the knowledge and confidence to share skills, experience and knowledge with both First Nations and other community members and be encouraged to engage with local BFMCs and participate in bushfire policy issues.
- 8.2.4 NCC supports the removal of administrative, regulatory, and operational barriers which prevent Aboriginal people from engaging in bushfire management planning and mitigation works including cultural burning.

9. Responsibilities, Regulations and Enforcement

Vision: NSW regulations and enforcement in place that provide adequate protection of the environment from the impacts of inappropriate bushfire mitigation and suppression operations, including the use of fire for hazard reduction and its use on private property. Community information programs are sufficiently effective to minimise incidents involving the illegal use of fire and arson.

- 9.1 NCC supports regulations and enforcement that provide adequate protection of the environment from the impacts of inappropriate bushfire mitigation and suppression operations, use of fire for hazard reduction, and use of fire on private property.
- 9.2 NCC advocates that arson and the careless use of fire be addressed by a whole of government public education campaign on the liabilities for people illegally lighting fires.
- 9.3 NCC supports the funding of fire authorities and law enforcement agencies to enable investigations and prosecutions into the illegal lighting or use of fire to be appropriately pursued.
- 9.4 NCC strongly advocates that all public land management authorities should have a high regard for biodiversity and the principles of ecological sustainability when preparing bushfire risk management policies and plans. All bushfire management plans should be prepared in consultation with affected communities.
- 9.5 NCC supports priority being allocated to risk management works in close proximity to high-risk communities and considers private property owners should be encouraged to mitigate the risk through responsible building design and upgrades and appropriate risk management.
- 9.6 NCC considers all bushfire hazard reduction proposals and activities undertaken by public and private agencies or individuals should ensure they do not create or transfer risk to other life, property or environmental assets.

10. During and Post Fire Bushfire Operations

Vision: Firefighting authorities incorporate protocols across all operational levels (including contractors) that embed world's best practice and a high level of duty towards ensuring all phases of operations effectively consider environmental impacts and prevent acts of negligence. As part of this, the assessment and restoration of environmental damage needs to become accepted as a normal and necessary part of all post bush fire operations.

10.1. Use of Aircraft during Bushfires

- 10.1.1 NCC supports and encourages the use of both crewed aircraft and remotely controlled aircraft (drones) to aid initial attack and response to bushfire events to try and minimise the overall firefighting effort.
- 10.1.2 NCC supports the use of aircraft for mapping and surveillance of bushfires and encourages their increased use for the early detection, assessment and response to bushfires, particularly in remote areas.
- 10.1.3 NCC recommends research into the use of aerial incendiaries, with a number of unresolved issues apparent, such as the potential impact on faunal movement and escape from fire fronts, the effects of unseasonably high intensity fire behaviour, and the reduced capacity to readily identify fire sensitive areas and the impact of aerial incendiaries on them.
- 10.1.4 NCC recognises other associated issues with the use of aircraft in fire suppression, including the potential for water bombing to cause localised washouts, the dispersal of pollutants when using large static water sources with retardant and/or contaminated equipment, and the implications in using salt water for fire suppression.

10.2 Fire Retardants

- 10.2.1 NCC has concerns about known toxins within fire retardants that affect aquatic organisms and systems (Buscemi et al, 2007; Seymour and Collett, 2009; Chen et al., 2012; Dietrich et al, 2013), as well as the effects on terrestrial and aquatic organisms and systems from adding nutrients to low nutrient natural systems. NCC supports further research into the effects of retardants on terrestrial organisms and measurement of the level of additional nutrients in retardants on natural soil and water systems, as well as long-term impacts such as bioaccumulation within the food chain. Further research on the efficacy of retardants in dry sclerophyll forest fuels to lay fire breaks should also be carried out, as opposed to direct attack using water and/or foam/gels.
- 10.2.2 NCC recommends scientifically based operational guidelines be prepared for retardant use to minimise adverse environmental impact and ensure firefighter safety.

10.3 Ecological Implications in Emergency Responses

- 10.3.1 NCC considers it important that local operational plans within a BFMC area include all ecological and cultural values which are available and mapped to ensure Incident Management Teams (IMTs) are able to take them into account when implementing approved procedures during fire operations.
- 10.3.2 While recognising the value of strategic backburning under certain circumstances, NCC advocates that large scale backburns for the purpose of property protection should be performed on the basis of contingencies set out in a plan of operations endorsed by the local BFMC.
- 10.3.3 NCC recommends that briefings regarding the implementation of backburns for on-ground decision makers should include all relevant information, including maps, on the ecological values that occur and potential impacts to them.
- 10.3.4 In planning backburn operations, NCC advocates that ignition patterns to be used should consider faunal movement and safe escape routes.
- 10.3.5 NCC considers any planned hazard reduction works brought forward to take advantage of resources available due to bushfire suppression operations, should only be undertaken where it can be demonstrated that adequate unburnt habitat remains in the affected areas as refuges for displaced fauna.

10.4 Professional Action and Responsibility

- 10.4.1 NCC supports an open and transparent debriefing process that involves all representatives on a BFMC in order to achieve better operational fire management and ultimately ecologically sustainable outcomes for the local area.
- 10.4.2 NCC believes that operational debriefs for fires declared under Section 44 of the *Rural Fires Act 1997* should result in reports that have included feedback from the community, agencies and the Incident Management Team.
- 10.4.3 NCC supports the inclusion of a public debriefing process where a demand exists from the community, with ecological concerns open for discussion and appropriate experts invited to be present.
- 10.4.4 In acknowledging that volunteer and career firefighters ought not be expected to risk personal safety over threat to property or environmental loss, NCC supports education initiatives by agencies that are aimed at increasing environmental awareness for firefighters and ultimately the ecological sustainability of firefighting agencies.
- 10.4.5 NCC supports the inclusion of information about local environmentally and culturally significant sites, the constraints relating to them and means to reduce impacts in fireground briefings for firefighters.

10.5 Operations and Environmental Best Practice

- 10.5.1 NCC supports and champions operational firefighting that uses ecologically sound practices.
- 10.5.2 With the removal of tree hollows listed as a key threatening process, NCC urges the retainment of trees with hollows that are not deemed to be unsafe to the general public. Where possible, the removal of fallen leaves, bark and other litter and wetting down around large hollow-bearing trees and trees of significance should be accepted as standard practice for all fire operations and included in all training materials and courses.
- 10.5.3 NCC urges the issuing of chainsaw accreditations within volunteer fire brigades to be accompanied with training on the habitat values associated with tree hollows.
- 10.5.4 NCC recognises a need for operational procedures and awareness in firefighter training in order to avoid cross contamination of aquatic weeds when drafting from open water sources such as dams and creeks. Training should also include the incorporation of practices that ensure firefighting operations minimise the spread and contamination by terrestrial weeds and invasive species.
- 10.5.5 NCC will support any local operational initiatives that have been developed that could have state-wide benefit for ecological sustainability in fire suppression and fire management.
- 10.5.6 Cultural heritage sites that are present within an area of bushfire operations should be clearly identified to firefighters to mitigate the risk of damage.
- 10.5.7 NCC only supports the opening and construction of new emergency fire trails and fire breaks when it is done by accredited contractors to ensure the best available construction standards are used, consistent with minimising adverse environmental impact. Emergency fire trail construction should also involve direct supervision from a person responsible for upholding legislative requirements to protect the environment.
- 10.5.8 Construction of helipads for access by remote aerial teams should be strategically placed to avoid unnecessary clearing of vegetation.
- 10.5.9 Sensitive areas including environmental assets and heritage areas should be given special consideration to ensure that suppression activities cause minimal environmental impacts.

10.6 Pre and Post Fire Management and Restoration

- 10.6.1 NCC urges all firefighting agencies and land management agencies to develop guidelines for pre- and post-fire restoration and rehabilitation standards.
- 10.6.2 NCC advocates for BFRMPs to adopt assessment and rehabilitation guidelines to remedy environmental damage that occurs on both public and private lands. These guidelines need to be fully integrated as a

necessary component of all post bushfire operations, with post-fire restoration works standardised by a clear set of criteria and monitoring requirements.

- 10.6.3 NCC considers the standard of pre- and post-fire restoration works needs to be defined by an agreed set of criteria and monitored for efficacy for a period of at least 2 years post-fire. Pre- and post-fire works can include activities such as pre and post fire introduced species management e.g. weeds and feral animals, any proposed revegetation works, stormwater remediation and erosion control measures.
- 10.6.4 NCC believes that post-fire management and rehabilitation works required because of firefighting operations should be funded through Natural Disaster Relief and Recovery Arrangements, through Section 44 (*Rural Fires Act 1997*) funding and other associated State and Commonwealth funding sources.
- 10.6.5 NCC advocates that for all bushfires, the rehabilitation of trails and control lines constructed on private lands at the direction of IMTs should be included as a cost of fire suppression, with funding provided by State funding sources and its expenditure overseen by a person with responsibility for upholding legislative environmental protection requirements.
- 10.6.6 Fire suppression agencies responsible for construction of trails and control lines on private land need to closely liaise with landowners post-fire to ensure appropriate rehabilitation is undertaken.
- 10.6.7 To advantage fauna movement and the recruitment of flora and fauna post-fire, NCC advocates that if supported by professional local ecological advice and it is practicable, the intensity of fires should be manipulated based upon sound knowledge of the existing and predicted state of the ecological systems as well as reduction of the risk to life and property.
- 10.6.8 NCC urges bushfire authorities and land management agencies to prepare in consultation with wildlife rescue organisations, a code of practice that establishes 'Wildlife Assessment Teams' similar to those in Victoria, that is able to deal with post-fire management of injured wildlife, the removal of feral animals, and the provision of food and shelter for affected wildlife.

10.7 Monitoring, Reporting and Review

- 10.7.1 NCC considers that following all fires on public lands, including hazard reduction burns, a standard set of criteria should be used by all agencies to monitor, evaluate and report on the impacts of the fire and recommend improvements, with outcomes made publicly available.
- 10.7.2 NCC considers the current application for pre- and post fire on-ground monitoring is inadequate. To ensure environmental damage is not occurring, a commitment to monitoring plans that includes adaptive management principles is required by all relevant agencies and reporting of that monitoring should be tabled to the relevant BFMC.

11. Bushfire Management and Protected Areas

Vision: Bushfire management in protected areas (such as national parks estate and wilderness) adheres to the principles of the *National Parks and Wildlife Act 1974* by minimising biophysical impacts and by ensuring the integrity of these areas is maintained and restored, including natural and cultural values, natural processes and biodiversity. Fire management planning is founded on peer reviewed science and undertaken with the benefits to ecological factors a high priority.

11.1 Fire Management Principles for Protected Areas

- 11.1.1 NCC asserts that fire management must be evidence-based but flexible and adaptive, recognising that knowledge is evolving and an ecological risk management approach may be necessary where knowledge is incomplete.
- 11.1.2 The principal performance criterion for fire management in protected areas is the maintenance of the majority of each native vegetation community within its scientifically determined desirable limits of fire regime, including frequency, intensity, timing and variability.
- 11.1.3 The integrity of old growth forests, rainforests and other fire sensitive vegetation is of highest priority and requires protection from an increased risk of intense bushfire arising from inappropriate fire regimes and climate change.
- 11.1.4 To ensure rapid detection of fires in protected areas, regular aerial surveillance is required during bushfire danger periods and particularly on days of extreme and catastrophic fire danger to enable rapid and more effective response to outbreaks of fire.

11.2 Fire Mitigation in Protected Areas

- 11.2.1 Planned fires should be undertaken for ecological reasons only. Mitigation works undertaken to protect human assets should not occur within protected areas.
- 11.2.2 Planned fire should be subject to extensive and detailed environmental assessment that prioritises ecological considerations. Assessment must consider the special management factors applicable to protected areas.
- 11.2.3 Naturally occurring bushfires should be monitored (rather than suppressed) when the likely area to be burned, its intensity and timing falls within ecologically determined limits, the risk to human life and property is manageable and suppression may cause more impact than the fire.
- 11.2.4 Ignition Management Zones should not be identified within protected areas and water supply catchment areas.

11.3 Fire Suppression in Protected Areas

- 11.3.1 NCC supports increased investment in the development of expert fire strategists and pre-planned low impact fire control strategies aimed at maintaining natural processes and biodiversity in the long term for large and remote bushland areas.
- 11.3.2 Where suppression is considered necessary in protected areas, rapid attack and close containment should be the preferred suppression response and resources, capability and response times should be adequate to maximise the success rate for such responses.
- 11.3.3 When initial suppression efforts fail, ongoing 'campaign' fire suppression strategies should have as prime objectives the protection of natural values and the minimisation of environmental impacts, and strategies should be evidence-based on a detailed understanding of the ecology, history and behaviour of fire in the landscape.
- 11.3.4 In campaign fires that affect protected areas, the knowledge, skills and resourcing must be adequate to support precise, low-impact strategies in preference to strategies that may be higher impact and less precise.
- 11.3.5 NCC supports the engagement of a team of recovery specialists, engaged under s.44 arrangements to prepare an Incident Rehabilitation Plan aimed at identifying and planning the recovery of damaged environmental and other values. It is proposed that the plan be endorsed by the Planning Officer, approved by the Incident Controller and implemented under the s.44 incident and funding arrangements.

11.4 Physical Intrusions in Protected Areas

- 11.4.1 Existing constructed containment lines should only be used for backburning when they have been identified by the relevant BFMCS for such use in an approved Plan of Operations or Fire Access and Fire Trail Plan, with these lines properly constructed and maintained to minimise damage to natural and cultural values.
- 11.4.2 Fire suppression strategies in protected areas that may cause significant fragmentation and environmental impact, such as any construction of new containment lines or large-scale backburning, are to be avoided, with any use of such activities determined as part of the bushfire risk management planning process.
- 11.4.3 During bushfire emergencies, the installation of containment lines by bulldozers and other heavy machinery is to be avoided unless it is in an area that has been identified and mapped in an approved Plan of Operations as a necessary suppression strategy.
- 11.4.4 To minimise fragmentation within protected areas, any new containment lines constructed or upgraded during fire suppression operations are to be immediately closed and environmentally restored.
- 11.4.5 Any existing fire observation towers and accompanying access tracks which are located in wilderness areas should be removed and replaced with other effective detection methods that do not impact upon wilderness values.

12. Glossary

AIS: Assets of Intergenerational Significance

APZ: Asset Protection Zone

BFEAC: Bush Fire Environmental Assessment Code for New South Wales;
[CMR1493-Bush-Fire-Environmental-Assessment-Code.pdf \(nsw.gov.au\)](https://www.nsw.gov.au/land-use-planning-and-design/assessing-projects/bush-fire-environmental-assessment-code)

BFMC: Bushfire Management Committee; the local and district level committee for the coordination of bushfire management at the local level.

BFRMP: Bushfire Risk Management Plan

DPIE: Department of Planning, Industry and Environment;
<http://www.dpie.nsw.gov.au>

FAFT Plan: Fire Access and Fire Trail Plan

IMT: Incident Management Teams; usually interagency control teams for a fire incident.

IMZ: Ignition Management Zone

LEP: Local Environmental Plan

NCC: The Nature Conservation Council of N.S.W.; <http://www.nature.org.au/>

PBP 2019: Planning for Bushfire Protection 2019;
https://www.rfs.nsw.gov.au/_data/assets/pdf_file/0005/174272/Planning-for-Bush-Fire-Protection-2019.pdf

Precautionary Principle: One of the principles utilised to achieve ecologically sustainable development as described in section 6 (2) of the [*Protection of the Environment Administration Act 1991*](#). In the absence of full scientific certainty, application of the precautionary principle includes careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment.

Protected areas: refers to areas reserved under the *National Parks and Wildlife Act 1974*, declared wilderness under the *Wilderness Act 1987* or areas subject to conservation agreements under the *Biodiversity Conservation Act 2016*.

RAFT: Remote Area Firefighting Team; a group of trained firefighters that can attend fires in remote locations, usually involved with light aircraft for access.

RART: Rapid Aerial Response Team; The RART program involves the pre-emptive activation of helicopter(s) with Remote Area Fire Fighting Teams (RAFT) to control remote small fires before they develop into larger fires.

RFS: Rural Fire Service of NSW; <https://www.rfs.nsw.gov.au/>

RFSAC: Rural Fire Service Advisory Council

Section 44: Commissioner's responsibility; in short, under section 44 of the *Rural Fires Act 1997* a fire that the RFS Commissioner has taken control of, usually associated with an increase in emergency funding for fire suppression.

TEC: Threatened Ecological Community

VBRC: Victorian Bushfires Royal Commission 2009

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Legislation Cited

The following were the relevant instruments referred to in this policy when it was finalised on 12th October 2022. The list may change as legislation is reviewed and amended.

Biodiversity Conservation Act NSW 2016

Environmental Planning and Assessment Act 1979

National Parks and Wildlife Act NSW 1974

Rural Fires Act NSW 1997

Wilderness Act NSW 1987