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#### INTRODUCTION

Much of the Australian landscape has evolved with fire. Fire events are a certainty and necessary for the continued survival of fire dependent species and ecosystems. Indigenous Australians understood this relationship and effectively used fire to manage landscapes for multiple purposes.

Flammable environments create a challenge for public and private land managers to mitigate the risks of bushfires within the context of competing land management objectives.

In developed areas, the natural landscape - containing environmental or conservation assets - is fragmented and punctuated with communities and fire vulnerable assets such as homes, primary industries, businesses, significant infrastructure and social and economic networks essential to modern day functionality.

Previous management philosophies of eliminating fire from the environment proved unsuccessful as they resulted in fuel accumulation where consequential unplanned fires caused catastrophic damage to life and property and resulted in long term impacts on ecosystem health and biodiversity.

Today, land and fire managers proactively place prescribed fire into the landscape with the objective of

#### **PURPOSE**

The purpose of this position is to articulate nationally agreed principles for the development and implementation of prescribed burning policies and programs.

reducing the spread and severity of bushfires and improving the safe and effective control of bushfires (AFAC, 2015a).

Reduced bushfire impacts serve to protect communities, the built environment, ecosystems and biodiversity. Prescribed burning is placed in the landscape at a range of scales; from the local level to protect communities and infrastructure to a landscape level which provides risk reduction and broader ecological benefits (AFAC, 2014). Well planned and implemented prescribed burning is an essential, practical and cost effective tool for reducing risk to life, property and the environment (AFAC, 2015b).

For a detailed synopsis of the evidence of the extent and effectiveness of prescribed burning see "Overview of Prescribed Burning in Australasia, Report for National Burning Project — Sub-Project 1" (AFAC, 2015a).

AFAC Council endorsed this position in October 2016.
This position is scheduled for review in 2021.

#### DISCLAIMER

This document has been developed from consultation and research between Australasian Fire and Emergency Service Authorities Council Limited (AFAC), its members and stakeholders. It is intended to address matters relevant to fire, land management and emergency services across Australia, New Zealand and the Pacific Region.

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#### **POSITION**

AFAC and FFMG member agencies take the position that prescribed burning is an essential part of bushfire mitigation across the Australian landscape to reduce risk to communities and ecological health.

Each fire and land management agency has different legal, political, organisational, social, economic and environmental requirements, and responds in its own manner in providing its prescribed burning programs.

Under the National Burning Project, extensive consultation with agencies has drawn out and identified common approaches which are defined in the principles below. The context of each principle describes the understanding AFAC and FFMG member agencies have of the environment from which these principles are drawn.



#### PRINCIPLE:

### PROTECTION OF LIFE IS THE HIGHEST CONSIDERATION

**Context:** Prescribed burning is used in reducing the quantity, extent and connectivity of fuel hazards to assist in protection of life, property and community assets.

The protection of human life will be given priority over all other obligations in prescribed burning operations.

#### PRINCIPLE:

#### LANDSCAPE HEALTH IS LINKED TO FIRE AND FIRE MANAGEMENT

**Context:** Fire affects the environment as a single event and as multiple events (regimes) of differing fire intensities spread over temporal and spatial dimensions. Inappropriate fire and fire regimes pose a significant risk to ecosystem function, health and diversity.

Managing fire in the environment can help to create a mosaic of diverse fire regimes across the landscape. This aims to provide an improved range of habitats and ecosystems. Fire management also aids in the exclusion of fire from fire sensitive ecosystems by reducing adjacent fuel hazards. Maintenance of biodiversity can contribute significantly to the resilience of ecosystems in the face of bushfires and other threatening processes such as climate change and weed invasion.

Australia's *Biodiversity Conservation Strategy* (NRMMC, 2010) seeks to improve the use of ecological fire regimes to conserve biodiversity and protect the public.

#### PRINCIPLE:

### PRESCRIBED BURNING IS A RISK MANAGEMENT TOOL

Context: Bushfires will never be eliminated from the environment. Prescribed burning can help to reduce the risk and severity of impacts that these events have on life, property, community and the environment. Reduced fuel hazards assist the success of first attack efforts and reduce the intensity, extent and impacts of subsequent bushfires.

Prescribed burning is more effective where used alongside complementary risk reduction measures.

#### PRINCIPLE:

## ENGAGEMENT WITH COMMUNITY AND BUSINESS STAKEHOLDERS

Context: Community support for prescribed burning programs is essential to their success. Engagement is a two way model (e.g. IAP, 2016) whereby the intentions of agencies are communicated to stakeholders and concerns of stakeholders are identified and considered at all levels of prescribed burning planning and during the burn. In this way, the benefits to land managers and the broader community are optimised and any adverse impacts are minimised as far as practicable. Community engagement also serves to increase awareness of the benefits of prescribed burning for risk reduction and ecosystems.



#### PRINCIPLE:

#### PRESCRIBED BURNING IS DONE IN THE CONTEXT OF MEASURABLE OUTCOMES

Context: Objectives of individual prescribed burns should be clearly stated, preferably as measurable objectives. Clearly stated objectives facilitate the formation of suitable burn prescriptions, fire implementation tactics and allow evaluation of burn success for adaptive management purposes. Objectives of individual burns should be guided by and service strategic objectives. Strategic objectives include broad organisational level goals that are further detailed through performance measures that allow an organisation to monitor the success of burn programs.

#### PRINCIPLE:

## INFORMED KNOWLEDGE OF FIRE IN THE LANDSCAPE

Context: Our knowledge of fire, including fire behaviour, ecological responses to fire and the measurement of risk reduction from prescribed burning, can all be informed by sharing research and experience. Informed knowledge comes from research outputs from academic institutions, effective measurement, monitoring and evaluation of the operational programs undertaken by agencies, and from across the community including the knowledge of Traditional Owners. Applied knowledge will allow communities and managers to respect fire as a tool as well as a hazard. Knowledge can always be enhanced, so fire managers must engage in an adaptive management process to ensure improvements can be made across all processes and activities in a continual improvement framework.

#### PRINCIPLE:

#### **CAPABILITY DEVELOPMENT**

Context: Whilst the theory of fire behaviour and fire ecology can be taught in a formal setting, the skill of placing prescribed fire in the landscape to meet stated objectives requires practical experience that can only be gained under variable operational conditions. Experienced practitioners are a highly valued commodity. The knowledge of experienced practitioners should be captured through targeted development, mentoring and training programs to increase agencies' human capital and to feed into agencies' continuous improvement.

#### PRINCIPLE:

#### TRADITIONAL OWNER USE OF FIRE IN THE LANDSCAPE IS ACKNOWLEDGED

**Context:** Fire is culturally significant to Indigenous Australians. The use of fire by many Indigenous Australians to shape the landscape is widely acknowledged. Where Traditional Owners have not been able to continue these practices the depth of spiritual and cultural knowledge and connection to the land is maintained through stories and memories. Integration of this retained knowledge into current agency practices should be actively supported and promoted. Where knowledge gaps exist, agencies should work with Traditional Owners to build that knowledge, and, where appropriate, revive practices.

#### PRINCIPLE:

## AN INTEGRATED APPROACH IS REQUIRED ACROSS LAND TENURES

Context: An integrated and cooperative approach across all tenures is the best way to minimise bushfire risk to lives, property and the environment. Responsibility for risk reduction should be shared between all landholders (including land management agencies) and achieved by risk treatment within the boundaries of their own property and cooperatively with neighbours to increase these benefits across their shared landscape. Education on risk reduction is required in some cases to increase the understanding of the benefits of prescribed burning.

#### PRINCIPLE:

# PRESCRIBED BURNING IS CARRIED OUT UNDER LEGISLATIVE, POLICY AND PLANNING REQUIREMENTS

Context: Agencies that carry out prescribed burning are required to comply with Commonwealth and relevant respective state or territory legislation that address facets of land management, environmental protection, and indigenous cultural heritage, among other requirements.



#### **SCOPE**





There are a number of national documents that outline principles (FFMG, 2007; Ellis *et al.*, 2004) and strategies (FFMG, 2014; NRMCC, 2010) for fire and land management with respect to landscape and biodiversity factors, and within a broader bushfire mitigation and risk reduction framework.

This National Position on Prescribed Burning considers these and is consistent with:

- 1. Strategies in the National Strategy for Disaster Resilience (COAG, 2011):
  - 3.1 Leading change and coordinating effort
  - 3.2 Understanding risk
  - 3.3 Communicating with and educating people about risks.
- 2. Strategic objectives in the National Bushfire Management Policy Statement for Forests and Rangelands (FFMG, 2014):
  - A Effectively managing the land with fire
  - B Involved and capable communities
  - C Strong land, fire and emergency partnerships and capability
  - D Actively and adaptively managing risk.

#### 3. This position also addresses Recommendation 14.1 of the National Inquiry on Bushfire Mitigation and Management:

"The inquiry recommends that the Council of Australian Governments adopt a statement of national principles as the framework for the future direction of bushfire mitigation and management in Australia" (Ellis et al., 2004).

The National Burning Project, an initiative of AFAC and Forest Fire Management Group, funded by the Commonwealth Government, has brought the AFAC member agencies and other stakeholders together to develop Best Practice Guidelines (AFAC 2014, 2016a, 2017), Risk Management Frameworks (AFAC 2015b, 2015c, 2016b, 2016c) and to work collaboratively on decision support tools and training materials. The extensive and collaborative work undertaken pursuant to the National Burning Project has produced a body of work which has been used in conjunction with embedded scientific research and knowledge gained through operations to inform the development of this national position.

#### **DEFINITIONS**

Prescribed burning is defined as:

"The controlled application of fire under specified environmental conditions to a predetermined area and at the time, intensity, and rate of spread required to attain planned resource management objectives" (AFAC, 2012a).

Planned burning has the same definition and the terms are used interchangeably.



#### SUPPORTING DOCUMENTATION

**AFAC, 2012a**, *Bushfire Glossary*, Australasian Fire and Emergency Service Authorities Council, Melbourne

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AFAC, 2015b, Risk Management and Review Framework for Prescribed Burning Risks Associated with Fuel Hazards, Report for National Burning Project – Sub-Project 3, Australasian Fire and Emergency Service Authorities Council, Melbourne

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