

Tingha Plateau State Conservation Area

Type-1 Reserve Fire Management Strategy

(23/8/2012) ISBN 978 1 74359 594 7 OEH 2014/0291

1. Fire Management Principles

The Office of Environment and Heritage (OEH) manages about nine per cent of the land area of NSW. These areas have been reserved to conserve their natural and cultural values. These values include biodiversity, landscapes, Aboriginal sites, historic structures and recreational settings.

Under the *Rural Fires Act 1997*, the NPWS is a fire authority and is responsible for the management of fire on all lands under its control. This includes the detection and suppression of fires and the implementation of risk prevention programs to protect life and property from fires. The NPWS also assists with the suppression of fires on adjacent lands, as may be required under plans prepared under the *Rural Fires Act 1997*.

Cooperative arrangements are derived from the Bush Fire Coordinating Committee and implemented through local Bush Fire Management Committees. The other three agencies that participate in cooperative fire management across NSW are the Department of Primary Industries, the NSW Rural Fire Service and NSW Fire Brigades.

NPWS is an active member of the Northern Tablelands District Bush Fire Management Committee.

The management of fire is a critical component of land management across the NSW landscape. As both a fire authority and conservation agency, DEC plays an important role in protecting life and property and conserving natural and cultural heritage.

2. Fire Management Objectives

The primary objectives of fire management by the NPWS are to:

Protect life, property and community assets from the adverse impacts of fire;
Develop and implement cooperative and coordinated fire management arrangements with other fire authorities, reserve neighbours and the community;

Manage fire regimes within reserves to maintain and enhance biodiversity; protect Aboriginal sites known to exist within NSW and historic places and culturally significant features known to exist within reserves from damage by fire; and

Assist other fire agencies, land management authorities and landholders in developing fire management practices to conserve biodiversity and cultural heritage across the landscape.

The maintenance of biodiversity to avoid the extinction of natural species, populations and communities within the landscape underpins fire management activities within the NPWS.

The NSW National Parks and Wildlife Service OEH *Fire Management Manual, Living with Fire in NSW Parks and OEH Strategy for Managing Bushfires in National Parks and Reserves 2011-2012* details the policies and procedures for all fire management planning and fire operations on lands reserved under the *National Parks and Wildlife Act 1974* and any land managed by DEC on behalf of the Minister for the Environment.

This strategy is a Relevant Plan under Section 38(4) and Section 44(3) of the Rural Fires Act 1997.

3. The Fire Environment

3.1 Fire history

To date the recorded fire history suggests that large fires only rarely occur within the majority of the vegetation communities with the reserve. This would be consistent with other reserves with similar vegetation within the region. Major fires occurred in 2002 and 2007. There have been a number of small deliberately lit fires in the area around the reserve.

3.2 Topography

The Tingha plateau is generally flat to undulating with some dissections. The undulating plateau at 850 m has a steeper western and southern edge to 650 m. Creek lines and lower slopes very disturbed by mining and extensive gully erosion. Generally relief will have less of an impact on fires spread than that of prevailing weather conditions.

3.3 Vegetation

Vegetation is broadly typical of the western slopes of the northern tablelands plateau. A vegetation survey and report has been completed by Dr John T Hunter. Much of the vegetation fits within the description for Endangered Ecological Communities and therefore protected under the Threatened Species Conservation Act 1995 and or the Environment Protection and Biodiversity Conservation Act 1999. For full details see the Vegetation and Floristics of Tingha Plateau State Conservation Area Dr John T. Hunter June 2011.

Table 1: Suggested Fire Regimes for defined vegetation communities

Community	Suggested Fire Regimes
Orange Gum – Caley's Ironbark – Red Stringybark open forest of the southern Nandewar and New England Tablelands Bioregions	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.

McKie's Stringybark – Western New England Blackbutt – Rough-barked Apple open forest of the New England Tablelands Bioregion	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Blakely's Red Gum – Yellow Box grassy woodland of the New England Tablelands Bioregion	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Orange Gum – Caley's Ironbark – Red Stringybark open forest of the southern Nandewar and New England Tablelands Bioregions	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Western New England Blackbutt – Stringybark open forest of the Nandewar and New England Tablelands Bioregion	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Blakely's Red Gum – White Cypress Pine – Rough-barked Apple grassy open forest of drainage lines of the northern Nandewar and New England Tablelands Bioregions	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Sedgeland fens wetland of impeded drainage of the Nandewar and New England Tablelands Bioregions	Carex fens have no requirement for fire. No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Blakely's Red Gum – Stringybark – Rough-barked Apple open forest of the Nandewar and western New England Tablelands Bioregion	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.
Stringybark – Rough-barked Apple cypress pine shrubby open forest of the eastern Nandewar and western New England Tablelands Bioregions	No two fires within a 10 year period. Fires generally within a 20-50 yr period with a maximum of 100 yrs. Fires to be of greater intervals following high intensity fires i.e. not within a 25 yr period after a high intensity fire.

Black Cypress Pine – Orange Gum heath shrubland or woodland on granite outcrops of the New England Tablelands Bioregion / Heathy shrubland on granite substrates in the Howell are of the New England Tablelands Bioregion	No requirement for management burns. No two fires within a 20 yr period. Fires between 20 yrs to indefinite. Some areas maintained with high fire intervals
--	--

3.5 Built assets vulnerable to fire

The reserve is broadly broken into three sections although the vegetation landscape is more contiguous. Adjacent to the western portion of the reserve isolated rural properties occur along the Old Bundarra Road. There is also a small section of the reserve to the south east of the Gilgai community with isolated rural properties along the Gilgai Reservoir Road (AKA Ponds Road). The largest section of the reserve (eastern portion) borders the rural communities of Stannifer and Old Mill. The communities of Gilgai, Old Mill and Stannifer have village protection strategies either in place or in preparation.

3.6 Natural assets vulnerable to fire

As well as the previously mentioned EEC's, two species of plants are of state significance and found listed on the TSC Act, namely *Eucalyptus mckieana* and *Homoranthus prolixus* another five species are considered to be of Vegetation of Tingha Plateau SCA general rarity and significant; *Acacia granitica*, *Bothriochloa biloba*, *Callistemon pungens*, *Goodenia macbarroni* and *Zieria odorifera*.

A survey of faunal species is still to be completed.

3.7 Cultural Heritage values vulnerable to fire

No cultural sites have been recorded to date within the reserve to date.

3.8 Bushfire risk

The Northern Tablelands Bush Fire Risk Management Plan, classifies the reserve as providing a high to very high bushfire risk.

3.8 Bushfire zoning

The 'NPWS Fire Management manual' (2012) uses a system of bushfire management zones for bushfire management in NPWS reserves. These zones are compatible with the system adopted by the Bushfire Coordinating Committee for use in District Bushfire Management Committee (DBFMC) bushfire risk management plans.

The approach divides reserves into fire management zones. These zones are management areas where specified fire management operational objectives, strategies and performance indicators have been developed to militate against the threat of a wildfire.

NPWS has assessed the reserve for fire management planning purposes and has zoned the areas of the reserve as Asset Protection Zones, Strategic Management Zone (SFAZ) & Land Management Zone (LMZ).

APZ's:

The primary fire management objectives for this zone, is to provide an area of low fuel hazard in order to assist in the protection of life and property from bushfires that may occur within the reserve. The finalizing of these may be impacted by the village protection strategies, however they will in close proximity of threatened assets and generally maintained using mechanical methods of hazard reduction.

SFAZ's:

The primary fire management objectives for this zone, is to provide strategic areas of fire protection advantage which will reduce the speed and intensity of bushfires, and reduce the potential for spot fire development. They may also be implemented in order to aid containment of bushfires to existing management boundaries.

Generally these SFAZ's have been proposed to be implement in association with asset protection zones around isolated rural communities. Finalization of these zones boundaries will also be dependant on the proposals to be implemented from the village protection strategy.

LMZ's;

The primary fire management objectives for this zone are to prevent the extinction of all species that are known to occur naturally within the reserve, and to protect culturally significant sites. The majority of the reserve has been designated as a LMZ because it is not adjacent to built assets which would be exposed to a high level of bushfire risk, and does not have a long history of bushfire ignitions or known areas of high bushfire potential.

The LMZ does not require intensive management and focuses on those actions appropriate to conserve biodiversity and cultural heritage including exclusion of fire from the reserve.

Current Situation	Desired Outcomes	Strategies	Priority
Fire management zones have yet to be finalized or management action implemented	Zones managed in accordance with guidelines in the fire management manual	Participate in village protection strategy discussion and finalize zone boundaries in consultation with adjoining land owners.	High
The trail network is non-strategic and confusing for fire fighters who may need to access the reserve	Strategic fire trail network, rationalized, maintained to appropriate standards as per BFCC guidelines and sign posted. Duplicated trails closed.	Work with stakeholders to rationalize the trail network, close duplicated and non-strategic trails. Develop a maintenance schedule for trails according to their strategic importance.	
Neighbor Relations	Tenure blind approach to fire management zoning and works.	Through the Northern Tablelands Bushfire Management Committee and contact with neighbouring land managers develop a fire zoning implementation based on effective fuel management that is blind to tenure and then implement the zoning management across those areas.	

Legend for priorities

High priority activities are those imperatives to achievement of the objectives and desired outcomes. They must be undertaken in the near future to avoid significant deterioration in natural, cultural or management resources.

Medium priority activities are those that are necessary to achieve the objectives and desired outcomes but are not urgent.

Low priority activities are desirable to achieve management objectives and desired outcomes but can wait until resources become available.