

Ecological Management of Fire

State-wide Policy Set

Prepared by the State Fire Management Council, March 2006

1. Background

The Tasmanian Regional Forest Agreement 1997 (RFA) includes a requirement that Tasmania commits to:

“Developing and implementing, within the first five years of this Agreement, state-wide policies across all tenures on fire management, nature based tourism and recreation management, cultural heritage management in Forest lands and Forest pest and disease management.” (Attachment 10, Clause 7)

The commitment is based on the recommendations of the Ecologically Sustainable Forest Management (ESFM) Expert Advisory Group (1997).

Attachment 13 to the Tasmanian RFA identified:

Environmental impacts of fire regimes and ecological management of fire;

as being a priority for research.

In using the term state-wide policy the ESFM Expert Advisory Group was clearly thinking in terms of State Policy under the *State Policies and Projects Act 1993*, but its final recommendation left open the option of using a different if similar process and instrument. In the RFA, the parties clearly and consciously chose not to proceed with the statutory State Policy option.

This paper is not a policy per se but is a description of the framework of policies that broadly address the ecological management of fire in forest plant communities. It also details the changes that have occurred since 1997 and demonstrates the extent to which they address the RFA commitment and the specific issues of concern to the ESFM Expert Advisory Group.

2. Objectives

The primary objective of this document is to provide a description of the state-wide policy framework for the ecological management of fire in forest plant communities in Tasmania across all tenures.

A further objective is to demonstrate the linkages between different components of the policy set and articulate the processes for their integration.

This document is intended to satisfy the requirements of Attachment 10, Clause 7 of the RFA as detailed above.

3. Policy Framework in 1996

The ESFM Expert Advisory Group found that the Inter-Agency Fire Management Protocol and other legislative and policy provisions constitute an adequate framework for ecologically sustainable forest management in relation to fire management. However, it found that across all land tenures, management of fire creates potential conflicts between statutory responsibilities for protecting life and property and the ecologically sustainable forest management objective of minimising adverse impacts of fire, or lack of it, on biodiversity and habitat for flora and fauna.

The ESFM Expert Advisory Group found that both the Parks and Wildlife Service and Forestry Tasmania recognise this dilemma, but they are hampered by lack of good scientific information on which to base fire management strategies. Forestry Tasmania has a strategy of using fire for reducing hazards to timber, life and property and for facilitating regeneration in wet forests while using input to plans by fauna and flora specialists. The Parks and Wildlife Service has a general strategy of minimising use of fire, although fire has been used in a few cases to manipulate habitat for fauna. In both cases, there is a need for synthesis of ecological information and the framing of a broad fire policy document that considers priorities for flora and fauna in spatial and temporal contexts and in relation to the different uses for fire and the positive and negative effects of fire on biodiversity.

The ESFM Expert Advisory Group further found that, as elsewhere in Australia, there is potential for fire management for protection of life and property to conflict with broader objectives for forest health. It is not considered surprising, therefore, that Forestry Tasmania and the Parks and Wildlife Service have quite different goals for fire management (see principle 2 in this chapter). The processes in Tasmania potentially allow these different goals to be planned for and met, but lack of information on both positive and negative environmental impacts of fire regimes hinders both agencies from developing optimal strategies with respect to ecologically sustainable forest management.

The ESFM Expert Advisory Group suggested that a statewide policy paper on the ecological management of fire should be developed. This paper should synthesise ecological information, consider priorities for flora and fauna in broad spatial contexts across all land tenures, take all forest values into account, and provide a strategic planning framework for fire management.

4. Current Policy Framework and Changes since 1997

The Parties on signing of the RFA, decided not to use the mechanism provided for in the *State Policies and Projects Act 1993* for development of a formal State Policy to address this issue. Experience with other State Policies led to a decision to review the form and place of State Policies. The State has instead used existing structures and programs to develop a highly effective strategic framework for delivering a whole of government approach to fire management in Tasmania. This is detailed in paragraph 4.2 below.

This framework is itself nested in a broader suite of high level strategic programs which assist in setting the long term direction and also ensuring community, industry, local government and State government involvement in its implementation. This overarching strategic framework is outlined in 4.1 below.

4.1 Cross Government Strategic Directions

Tasmania Together

Tasmania Together is a twenty year social, environmental and economic plan, prepared by the Tasmanian community and representing a vision of where the community wants Tasmania to head.

It contains 212 benchmarks to guide policy and budgets of state and local governments and of the wider community. Progress against the benchmarks is monitored by a statutory authority, the Tasmania Together Progress Board, which reports directly to Parliament.

There are a number of goals and benchmarks that relate directly and indirectly to ecologically sustainable fire management but the most directly relevant Tasmania Together goal is Goal 24:

“Ensure our natural resources are managed in a sustainable way now and for future generations.”

The relevant standards are as follows —

24.3 To reduce air and water pollution,

24.4 To develop and implement fire management regimes that are appropriate for protecting environmental, economic and social values,

With the indicators being:

24.3.1 Breaches of National Environment Protection Measure air standards

24.4.1 Number of hectares per annum burnt by unplanned fires (10 year moving average)

24.7.1 Proportion of measurement sites showing no increase in turbidity

The Targets for these indicators have been established as being:

24.3.1:

2005 Reduce annual breaches in Launceston to less than 25

2010 100% of monitored communities meet NEPM standards

- 2015 100% of monitored communities meet NEPM standards
- 2020 100% of monitored communities meet NEPM standards

24.4.1

- 2005: 25,000 ha
- 2010: 16,500 ha
- 2015: Maintain
- 2020: Maintain

The set of policies and strategies outlined in 4.2 below contain measures that will contribute toward attaining these goals.

Partnership Program

The Tasmanian Local Government Partnership Agreement Program is designed to provide better ways of serving Tasmanian communities, through a cooperative approach by the two levels of government.

A Partnership Agreement is a document that sets out actions and timeframes in which they will be undertaken to address key issues in an area. A Partnership Agreement sets out an agreed framework for action and is therefore able to deliver real outcomes for the community.

There are currently three types of Partnership Agreement:

- Bilateral — between the State Government and one Council;
- Regional — between the State Government and a self-identifying group of Councils; and
- Statewide — between the State Government and the Local Government Association of Tasmania, on behalf of each of the 29 Tasmanian Councils.

Partnership agreements provide an opportunity for formalising the implementation of ecologically based fire management programs, particularly those involving multiple tenures.

Statutory Framework

A range of key statutes, strategies, policies and agreements relating to the primary land-use in specific parts of the State have a marked influence on the development and implementation of fire management plans, programs and activities. These include:

- *Nature Conservation Act 2002,*
- *National Parks and Reserves Management Act 2002,*
- *Forest Practices Act 1985,*

- *Forestry Act 1920*,
- *Natural Resource Management Act 2002*,
- Tasmanian Regional Forest Agreement 1997,
- Tasmanian Wilderness World Heritage Area Management Plan 1999,
- Forest Practices Code 2000,
- Reserve Management Code of Practice 2002,
- The Inter-Agency Fire Management Protocol (current edition), and,
- relevant policy documents of the individual land management agencies and industry sectors.

Institutional Arrangements

The institutional framework for fire management comprises national and State coordination bodies and agency-level management programs.

At the national level, a degree of coordination is provided by the Australasian Fire Authorities Council (AFAC), the peak representative body for fire, emergency services and land management agencies in the Australasian region of which the Tasmania Fire Service and Forestry Tasmania are members.

In addition there is the Forest Fire Management Group, (FFMG) of which Forestry Tasmania and the Parks and Wildlife Service are members, and Research Working Group 6 (Fire Management) both of which report to the Forestry and Forest Products Committee convened under the auspices of the Primary Industries Ministerial Council.

At Statewide level integrated policy direction is provided by the State Fire Management Council (SFMC), established in 1995 under the provisions of the *Fire Service Act 1979*. The SFMC provides the opportunity for input from stakeholders into statewide policy development in relation to fire management and is the prime vehicle for inter-agency coordination. Membership of the SFMC includes the Local Government Association of Tasmania, Tasmanian Farmers' and Graziers' Association, the Forest Industries Association of Tasmania, together with the Tasmania Fire Service, Forestry Tasmania and Department of Tourism, Parks, Heritage and the Arts (Parks and Wildlife Service).

When necessary, guidance and coordination in firefighting is provided by the Multi-Agency Coordinating Group (MAC) consisting of representatives of FT, PWS and TFS. A framework of agreed procedures is set out in the current version of the inter-Agency Fire Management Protocol, first established in 1992 and updated as required.

At local level coordination of fire management planning activity is provided by the Fire Management Area (FMA) Committees, again established under the *Fire Service Act 1979* in 1995. FMA Committees are charged with responsibility for the preparation of fire protection plans and the provision of advice on fire management matters pertaining to the Fire Management area for which the Committee is responsible.

Policy Instruments

Policy instruments include the Forest Practices Code (2000), the Reserve Management Code of Practice (2002), management plans for land managed by both Forestry Tasmania and the Parks and Wildlife Service within the Department of Tourism, Parks, Heritage and the Arts (DTPHA), the Tasmanian Natural Resource Management Framework, the Inter Agency Fire Management Protocol and regional, district and reserve fire management plans.

4.2 Integrated Fire Management

The integration of programs, initiatives and practices to achieve sustainable ecological management of fire across all tenures in the State is being progressively achieved through a variety of mechanisms.

Cross — Tenure Integration

The SFMC provides the vehicle for stakeholder cooperation and coordination on fire management matters across all land tenures in Tasmania. The SFMC will continue to monitor mechanisms for coordination of fire management programs on all land tenures and to recommend appropriate measures to improve integration.

The Reserve Management Code of Practice (2002) also provides an important mechanism to improve fire management across tenures in Tasmania.

The Code applies to reserved land managed by both the Parks and Wildlife Service and Forestry Tasmania. Local government and conservation management trusts that manage the balance of reserves declared under the *Nature Conservation Act 2002* may also be required to adhere to the provisions of the Code. Landowners managing private reserves under agreement with the Department of Primary Industries, Water and Energy (DPIWE) may also be required to use the Code.

Research

The EFSM Expert Advisory Group observed that: *“Outcomes with respect to ecologically sustainable forest management are unlikely to be improved without greater strategic research into the impacts of fire on biodiversity and development of reliable predictive models of fire behaviour”*

The Tasmanian Government is a foundation contributor to the Bushfire Cooperative Research Centre (CRC) and provides a member of the CRC Board of Management (at present the Chief Officer TFS). The Tasmanian Government’s contribution to the CRC is provided through its agencies in both cash and kind. In addition the University of Tasmania joined the CRC in 2005.

Also at a national level, Research Working Group 6 [Management], (RWG6), established by the Primary Industries Ministerial Council under the Forestry and Forest Products Committees, is charged with reviewing the present state of knowledge and any new or emerging research needs in relation to forest fire management at the national level. Tasmania has one representative on RWG 6 from the PWS and meets formally at least once every two years.

At state level the Warra Long Term Ecological Research (LTER) site has been established to facilitate the understanding of ecological processes of Tasmania’s wet

(*Eucalyptus obliqua*) forests. These forests are part of the southern cool temperate wet forest biome. The programs foster multi disciplinary research within a long-term framework. The site contains both working forests and conservation reserves. Appropriate management prescriptions and practices prevail in different parts of the site.

The main aims include:

- To assess and monitor biodiversity and geodiversity.
- To determine the long term effects of different forest management regimes on natural diversity and ecological processes and thus assess their sustainability.
- To provide an integrated multi-disciplinary focus which complements research programs elsewhere in Tasmania.

The site is managed by a cooperative which includes Forestry Tasmania, the Parks and Wildlife Service, the Forests and Forest Industry Council, the Bureau of Rural Sciences, the University of Tasmania, the CSIRO and the Cooperative Research Centre for Forestry. Data are managed and curated by the individual research agencies, with common data sets on vegetation and biodiversity, climate, soil, water and geology, being held by Forestry Tasmania and the Parks and Wildlife Service.

In addition, the Tasmanian Fire Research Fund, to which FT, PWS and TFS contribute equally, has been established to provide small grants to encourage and support research into all aspects of fire management, with particular emphasis on topics of primarily Tasmanian application.

Finally, both Forestry Tasmania and the Parks and Wildlife Service, individually and in association with the Nature Conservation Branch of DPIWE, and with the University of Tasmania maintain an ongoing program of research into fire management practices and effects with a view to continuous improvement of operational fire management programs.

Stakeholders

At a national level stakeholders are formally involved in the ecological management of fire through participation in AFAC and FFMG, and by supporting and through participation in the Bushfire CRC. At the State level input is provided through participation in the State Fire Management Council and in Fire Management Area Committees. The importance of involving landowners and managers, industry, community groups and other stakeholders in the development and implementation of management programs has been recognised, and stakeholder involvement will continue to be an important element of future policy development and fire management activities.

5. Future Developments in Ecological Management of Fire

Key areas of concern identified by the EFSM Expert Advisory Group will continue to be progressively addressed through the forums, programs and initiatives outlined above. Their report, as noted above, found that notwithstanding the valuable role of

previous research much remained to be done, with one of the of the most important areas being “a strategic and substantive program of research on fire management”

The EFSM Expert Advisory Group also recommended that “the agencies that are party to the Inter-Agency Fire Management Protocol prepare and implement a strategic and increased program of fire management research.”

Both of these recommendations are being pursued through the State governments’ participation in and support for the Bushfire CRC, through the support provided for fire research by the Tasmanian Fire Research Fund and through research undertaken by agencies, either individually or in cooperation.

The SFMC will continue to monitor progress and coordinate cross-agency programs and initiatives.