Fire Prevention Guidelines for Tasmania's private plantations

FOREST INDUSTRY
FIRE MANAGEMENT COMMITTEE

Version control

Version	Revision Author	Date	Changes
V1.0	Private Forests Tasmania	31 August 2021	First draft from industry committee
V2.0	Private Forests Tasmania	23 December 2021	Second draft of industry committee feedback
V2.1	Jim Wilson	4 April 2022	Refinement of small points in readiness for industry consultation
V2.2	Darryn Crook	30/05/2022	Refinement after operational review
V2.3	Darryn Crook	16/09/2025	Correction of grammar and terminology for final approval
V2.4	Darryn Crook, Jarrod Burns, Simon Cook	19/03/2026	Changes to terminology and other refinements. Removal of section 4.4

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1. Preamble

Bushfires are predicted to become more frequent and intense under a changing climate. Plantation managers will be required to devote more resources and effort to fire management than they have in the past. These guidelines have been developed by the **Tasmanian Forest Industry Fire Management Committee (FIFMC)** to serve as a voluntary guide to the design and management of their plantations to minimise the increased risk posed by bushfires to not only plantations, but other private and public assets and the broader community. These guidelines do not replace, override, or extend statutory requirements under the ***Forest Practices Act***, the ***Forest Practices Code***, or any other applicable legislation, permits, or regulatory instruments.

These guidelines have, with permission, adopted some of the measures already in use in the Green Triangle (Victoria/South Australia) which are published in the Forest Owner's Conference ***Plantation Fire Protection Guidelines***.

The Tasmanian FIFMC are the custodians of this guideline and will update it as necessary from time to time. It is anticipated that the guidelines are hosted via the website of **Private Forests Tasmania**.

2. Scope

These guidelines are intended to apply to private plantation growers in Tasmania who individually manage more than 500 hectares of plantation assets. Collectively these growers are referred to as Tasmania's private plantation managers. The guidelines are not intended to apply to the many thousands of Tasmanian farm foresters and small lot holders who are individually managing less than 500 hectares of plantation assets. The Guidelines also need not apply to plantations located on, state-owned Permanent Timber Production Zone land.

The guidelines cover the design and management of Tasmania's larger private plantations to minimise the risk of bushfires occurring or spreading through these plantations. They are therefore focussed on bushfire prevention rather than bushfire response. Tasmania has a well-developed bushfire response framework which applies across all land use types and land tenures and is coordinated by **Tasmania Fire Service** and the **State Fire Management Council**.

Private plantation managers retain responsibility for meeting all existing legal and regulatory obligations irrespective of whether they choose to adopt these guidelines, in whole or in part.

3. Plantation Design & Management

Any decision to establish plantations must consider fire management factors such as the type and fire history of local vegetation, the ability to provide access for fire control, the topography, slope and aspect as they relate to fire control and the degree of risk these pose to the plantation asset.

Private plantation managers often share common boundaries and share fire risk. Private plantation managers and state fire agencies should work together to reduce identified high fire risk areas. This may include maintaining adjoining fire breaks, shared access tracks or coordinated planned fuel reduction burns.

At the start of a new rotation a risk assessment should be undertaken considering the risk management framework looking at the social, environmental, economic and operational risks. The following design and management standards should be used for the selection of risk controls to minimise the fire risk and allow for effective control of a fire.

Any fire management operational activity undertaken will need to comply with any associated legal or compliance obligation including but not limited to, Local Government, Fire Services and Forest Practices Code and individual Forest Practices Plan commitments.

3.1 Firebreaks

A firebreak is an effectively fuel-reduced area, primarily managed to retard or prevent the spread of fire but also for the protection of personnel, the public and assets.

3.1.1. All plantations should have firebreaks. In locating firebreaks, consideration should be given to logical lines of defense from unplanned fire. These defendable lines can be internal road lines and tracks or be in the form of a perimeter firebreak where practical.

3.1.2. As a guide, firebreaks should be 4 metres wide (from the plantation edge), and on identified high risk plantation boundaries with ladder fuels, a 10m fuel modified zone within the plantation should be considered (e.g. pruning to a minimum of 2m high or similar).

3.1.3. Large plantations should be dissected into units, generally not exceeding 200ha and enclosed by a firebreak as described above.

3.1.4. Firebreaks shall be accessible to fire fighting vehicles and incorporate vehicular access.

3.1.5. Adjacent plantation land should maintain its own fire break and not rely on the firebreak created by an adjacent plantation manager. Where deemed necessary adjoining Forest Managers should collaborate and create strategic firebreaks in the landscape at these shared boundaries.

3.1.6. Adjacent land, which may include that of another landholder, and which is maintained in an effectively fuel reduced or bared condition, may form part of a perimeter firebreak.

3.1.7. A public road or easement may be considered part of the firebreak infrastructure provided the road / easement is maintained to the same standard of a firebreak.

3.1.8. Firebreak locations should be recorded in a Geographic Information System and provided, as required, to **Department of Natural Resources and Environment Tasmania** (NRE Tas) for publication on **LIST** Map's emergency services data layers.

3.1.9. Maintenance of firebreaks should ensure the above design standards continue to be met.

A firebreak differs from an access track or fire trail. A firebreak involves the targeted removal or modification of a strip of vegetation to create a buffer with very low fuel loads that will control or contain a fire that reaches it. This is opposed to an access track or fire trail that will provide direct access for fire fighting vehicles, equipment and personnel.

3.2 Vehicular access tracks

An internal access track or class 4 road (track) should provide ready access for ground firefighting crews, acknowledging that access restrictions for the public, such as locked gates may be in place.

3.2.1 All tracks shall, where possible be a minimum of 4 metres wide with suitable passing points and turnarounds formed and maintained.

3.2.2 The layout of tracks shall, if possible, be aligned to provide straight through access at junctions.

3.2.3 The track network should be adequately connected to perimeter firebreaks where perimeter firebreaks are maintained.

3.2.4 Dead-end tracks should be avoided, but if not practicable, they must have a turnaround provided.

3.2.5 Track locations should be recorded in a Geographic Information System and provided, as required, to NRE Tas for publication on LIST map's emergency management data layers.

3.2.6 Maintenance of the track network should ensure the above design standards continue to be met and track pavements are maintained to a mineral soil condition, clear of vegetation and other hazards and trafficable to four-wheel drive vehicle standard.

3.3 Water point establishment

Water supply points such as rivers, creeks, dams, tanks, hydrants should be located and/or constructed at strategic sites to enable quick and safe access for firefighting vehicles and pumps.

3.3.1 Water points should be established where practical to do so. All water points are to be sign posted, and vehicle access improved with each rotation. If a water source is not practical within the plantation area, then the forest manager should identify the most suitable alternate water sources nearby to the plantation.

3.3.2 Pump access must be no more than 3 metres above or 2 metres away from the water and be in an area large enough for fire fighting vehicles to manoeuvre.

3.3.3 Water points for helicopter bucket or water bombing operations should be of adequate depth and be clear of debris.

3.3.4 Water points should be recorded in a Geographic Information System and provided, as required, to NRE Tas for publication on LIST map's emergency management data layers. Water points to be recorded as either suitable for helicopter or tanker categories accessible (i.e.: C6 only, or C1 - C5 accessible).

3.3.5 Maintenance of water points should ensure the above design standards continue to be met.

3.4 Setbacks from habitable buildings

Habitable buildings are buildings used as a dwelling or workplace (Building Classes 1-9 in the Building Code of Australia). Setbacks are required to create a separation distance (hazard management area) between the building and the forest which will also provide access to a fire front for firefighting purposes.

3.4.1 All greenfield plantings shall, where possible, have a minimum 50m setback from habitable dwellings that are in place at the time of the first established rotation.

Note: A greenfield planting is the establishment of a plantation on land that was previously not in forest cover, likely agricultural land.

3.4.2 On existing plantations, for dwellings established after the initial plantation establishment or if a 50m setback is not possible, then the setback is to be equal to, or greater than the setback distances required for Bushfire Attack Level (BAL 19) in Table 2.4.4 of *Australian Standard AS3959–2009*

Construction of buildings in bushfire-prone areas. These distances, for various land slopes, are provided in the following table:

Effective slope of the land under the plantation forest	Minimum setback distance (m)
Upslopes and flat land	23
Downslope >0 - 5 degrees	27
Downslope >5 - 10 degrees	34
Downslope >10 - 15 degrees	41
Downslope >15 - 20 degrees	51

Note: Upslope and downslope is the location of the plantation in relation to the building.

3.4.3 The hazard management area is to be maintained to ensure the above standards are met and kept to a minimal fuel condition containing no other hazards which will significantly contribute to the spread of an unplanned fire.

3.5 Setbacks from powerline easements

Setbacks are required to create a separation distance between powerlines and the forest. Bushfire will damage powerlines, but powerlines can also be a cause of fire when trees or machinery contact powerlines or damage infrastructure causing lines to contact the ground. Higher voltage lines require larger setbacks than lower voltage lines.

Powerline easement can be considered for inclusion as firebreaks if maintained as a modified fuel zone.

3.5.1 All plantings shall have the following minimum setbacks:

- 220KV transmission lines – 30m either side of easement centreline.
- 110KV transmission lines – 25m either side of easement centreline.
- All other powerlines - 10m either side of easement centreline.

3.5.2 Powerline setback areas should be recorded in a Geographic Information System and provided, as required, to NRE Tas for publication on LIST map's emergency management data layers.

4. Planned burning

4.1 Principles

4.1.1 Planned burns by plantation managers may be undertaken for the following purposes:

- fuel reduction on adjacent native vegetation to reduce the fire hazard to plantations and other assets,
- maintain natural vegetation patterns and ecological habitats on adjacent native vegetation,
- reduce residue on plantation areas to optimise plantable area, decrease fuel loads, minimise potential for arson, improve access and visibility for other plantation operations (e.g. browsing animal control).

4.1.2 Planned burns should be part of a broader landscape scale approach to fire management and plantation managers should coordinate their burning activities with other land managers to maximise efficiency, effectiveness, and safety.

4.1.3 Decisions on whether to conduct planned burns, and where and when, will be informed by a risk management framework that considers social, environmental, economic, and operational risks.

4.1.4 Burning can impact a wide range of stakeholders in different ways and stakeholder engagement will be a key component of the burn planning process.

4.1.5 Burns will be conducted in accordance with approved burn plans and personnel who develop plans and who conduct burns should be competent persons trained and qualified to the relevant industry standards.

4.1.6 All necessary permits and approvals will be obtained, and notifications made, before any burning is conducted.

4.1.7 All burns will be monitored, and once complete, reviewed and assessed to ensure continuous improvement in planned burn activities.

4.2 Risk management

4.2.1 Burn planning is to engage a risk management framework to identify and evaluate the social, environmental, economic and operational risks.

4.2.2 For **social risks**, at a minimum consideration should be given to the proximity to neighbours and population centres, proximity of vulnerable groups or facilities (e.g. hospitals and aged care), proximity to major roads

and traffic volumes at the time of the burn, proximity to tourist attractions or community events, proximity to viticulture and other agricultural assets and the presence of cultural or indigenous heritage assets or sites.

4.2.3 For **environmental risks**, at a minimum consideration should be given to the presence of threatened species and/or their habitat, proximity to threatened vegetation communities, the presence of waterways and drinking water catchments, the proximity to reserved land, the potential for the spread of weeds, pests and diseases and the extent of carbon emissions likely to be generated by the burn.

4.2.4 For **smoke risks**, the **Coordinated Smoke Management System** (CSMS) is designed to minimise the risk of high concentrations of smoke within individual air sheds on any given day using the Bureau of Meteorology's smoke dispersion and plume models and daily inputs from planned burners. The CSMS is encouraged to be used by all plantation managers undertaking planned burning activity.

4.2.5 For **economic risks**, at a minimum consideration should be given to the proximity and value of built assets and property, the costs associated with resourcing the burn, the costs of mitigation actions and the potential future costs of not burning.

4.2.6 For **operational risks**, at a minimum consideration should be given to predicted fire behaviour, weather patterns, flame and smoke, burn crew competencies, experience and skills, availability of equipment and condition, work site safety e.g., hazardous trees, escape routes and safe zones, unexpected visitors to the burn area.

4.2.7 Identified risks will require mitigation strategies and contingencies be designed and stepped out in the burn plan.

4.3 Stakeholder management

4.3.1 Effective stakeholder management and engagement will be a key component in the success of any burn. External stakeholders could provide information or insights relevant to managing and controlling risks.

4.3.2 Burn planning should identify all stakeholders and their issues. If there are significant number of stakeholder issues identified, then a specific stakeholder engagement plan may be required.

4.4 Notifications and approvals

4.4.1 A permit may be required from NRE Tas if the burn impacts a reserved area or threatened species. This is to be identified early in the burn planning stage and applications made well in advance of the burn.

4.4.2 Planned burns will require a permit issued by the relevant agency – Tasmanian Fire Service (TFS) or Sustainable Timber Tasmania (STT) if conducted during a declared Fire Permit Period for the relevant local government area. No permit is required outside these periods.

4.4.3 Planned burns should be lodged with the TFS to facilitate communication of the planned event through the 'What's Burning Now' website portal.

4.4.4 TFS should also be notified the day and time the burn is intended to be lit (Email Firecomm@fire.tas.gov.au or Tel. **1800 000 699**).

4.4.5 Notify interested and affected stakeholders as required by the burn plan and advise of what impact avoidance or reduction measures they should take and when they need to take them.

4.4.6 Seek the appropriate CSMS smoke allocation if specified in the burn plan.

4.4.7 If greater than expected surface ponding of smoke occurs, or if escapes occur during the burn, issue additional notifications as appropriate.

4.5 Mop up / follow up audits

4.5.1 On the days immediately following the burn, return to the site to monitor hotspots, conduct mop up and patrol until fire is declared extinguished and treat residual safety risks.

4.5.2 Evaluate burn results against objectives to determine if any follow-up works are necessary, and to form part of continuous improvement process – implement post-burn assessment, evaluation and reporting.

4.5.3 Systems should be in place to ensure the learnings from the burn are appropriately databased to ensure they are incorporated into future planned burns.

4.5.4 Fire Management Area Committees should be advised of burn location / outcome, so that BRAM threat can be adjusted.

5. Fire prevention

5.1. Fire prevention at forest operations

5.1.1. All forest operations are to comply with the ***Fire Prevention at Forest Operations Procedure*** published by the Tasmanian Forest Industry Fire Management Committee (FIFMC).

5.2. MoU with Tasmanian Fire Service

5.2.1. The FIFMC and the Tasmanian Fire Service have established a Memorandum of Understanding that outlines the broad working arrangements between these organisations in the event of bushfires on or within proximity to any FIFMC Land.

5.2.2. The MoU does not apply to planned burns unless a planned burn escapes and develops into a bushfire.

5.2.3. For the purposes of bushfire fighting operations, FIFMC Land is the responsibility of TFS, but FIFMC Forest managers will assist with fires on FIFMC Land.

5.2.4. The most able firefighting crew will respond immediately to a reported fire as a priority, on or within proximity to any FIFMC Land.

5.2.5. Full details of the MoU are available from the FIFMC.

6. Information Management

6.1. GIS data to emergency services

6.1.1. On an annual basis in August spatial data to support the emergency services common operating platform, Tasmania's Fuel Hazard dataset and associated bushfire risk modelling is to be provided to the Tas Emergency Services GIS Unit Senior Spatial Analyst supplying the following information.

6.1.2. Relevant infrastructure spatial data should be provided upon request to the Tas Emergency Services GIS Unit Senior Spatial Analyst for uploading to emergency services common operating platform. The types of relevant data can be found in sections 3.1, 3.2, 3.3 & 3.5 of these guidelines.

GEODATABSE FIELD NAME	DESCRIPTION
FUEL_TYPE	The type of forest, e.g.: Plantation Softwood, Plantation Hardwood, Native Vegetation or Other
FUEL_CLASSIFICATION_CODE	The fuel classification codes, e.g.: PC-rad_3 (See 'Ready Reckoner 2025.docx')
FUEL_CLASSIFICATION_DESC	The description for the above code, e.g.: Softwood 8-13 years (See 'Ready Reckoner 2025.docx')
VALUE_PER_HA	Dollar value per hectare, e.g.: 6000
ENVIRONMENTAL_CON_VALUE	The environmental consequence value, e.g.: Insignificant, Minor, Moderate, Major or Catastrophic
COUPE_ID	The unique identifier for the coupe, e.g.: PA146D
FMAC_RISK_GROUP	A risk value determined by FMAC at a later stage
TOTAL_VALUE	The total dollar value for the area based on the dollars per hectare value above
JOINT_VENT	Is it joint venture, e.g.: Y/N
AUTHORITY	Authority/manager of the asset, e.g.: STT, Forico …
MOBILE_PH	Contact mobile phone number (no spaces or special characters)
LAND_PH	Contact land phone number (no spaces or special characters)
EMAIL	Contact email address
PAGER	Contact pager number
AUTH_ID	Identifier originating from authority's dataset
PRODUCTION	Production or non-production forest, e.g.: Y/N
SUPPLIED_BY	Who supplied the data to help distinguish between asset owner or authority
ASSET_OWNER	The owner of the asset which may be different to the Authority/Manager
IN_THE_PTPZ	Is it in the PTPZ for TFS fire notification reasons, e.g.: Y/N