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Midlands Fire Management Area Bushfire Risk Management Plan 2023

Document Control

Document Summary Information

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1.1	09/2023	Jonathan Leaman	Tasmania Fire Service Bushfire Risk Unit	Updated Document Control including pre-amble. Fire history and treatment table updated with feedback from BRU, PWS and STT.

Under Section 20(1)(c) of the *Fire Service Act 1979* (the Act), each Fire Management Area Committee (FMAC) is required to submit to the State Fire Management Council (SFMC) on or before 30 September of each year, a fire protection plan for the next 12 months commencing on 1 October. Fire protection plans are developed under a Bushfire Risk Management Framework that includes the *Bushfire Risk Management Planning Guidelines 2020* (the guidelines) published by the SFMC. The guidelines provide for fire protection plans to be titled 'Bushfire Risk Management Plans' (BRMP), and provide direction on the structure, content, and development of these plans. The guidelines also provide for bushfire risk assessments to be conducted every three years, which inform the development of these plans.

The SFMC is created by S14(1) of the Act. A function of the SFMC expressly provided for in S15(2) is to consider BRMPs submitted under S20(1)(c) and either approve, approve subject to modifications, or reject such plans.

BRMPs for all ten Fire Management Areas (FMAs) in Tasmania were submitted to the SFMC on or before 30 September 2023.

This current document meets the requirement of Section 20(1)(c) where:

1. It is applicable for 1 October 2023 to 30 September 2024
2. It is based on the 3-year risk assessment for the Midlands FMA. This risk assessment is considered relevant in light of the fire seasons since 2021
3. It is based on the BRMP for the Midlands FMA accepted on the 30 March 2021.
4. Within the Midlands FMA, it details changes to:
    a. Fire history (major bushfire events)
    b. the Treatment Plan and Risk Register
    c. usage of the area
    d. new or changed asset values
5. It is endorsed by the Midlands Fire Management Area Committee and approved by the State Fire Management Council.

Document endorsed by the Midlands Fire Management Area Committee

Approved by the Chair
Ed Gwynne
Southern FMAC

Approved by State Fire Management Council
Ian Sauer
Chair

Date: 23 October 2023

Cover Page Photo Acknowledgement:
Fuel reduction planned burn, Heston Hill Bagdad, 2017, photo courtesy Bushfire Risk Unit TFS.

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Glossary

Asset	A term used to describe anything valued by the community that may be adversely impacted by bushfire. This may include houses, infrastructure, agriculture, production forests, industry, and environmental and heritage sites.
Asset Zone (AZ)	The geographic location of asset(s) and values of importance requiring bushfire exclusion.
Asset Protection Zone (APZ)	An area adjacent to or near Asset Zones, the primary management purpose of which is to protect human life, property and highly valued assets and values. Treatment can include intensive fuel reduction, manipulation of fuel moisture or response plans.
Bushfire	Unplanned vegetation fire. A generic term which includes grass fires, forest fires and scrub fires both with and without a suppression objective.
Bushfire hazard	The potential or expected behaviour of a bushfire burning under a particular set of conditions, i.e. the type, arrangement and quantity of fuel, the fuel moisture content, wind speed, topography, relative humidity, temperature and atmospheric stability.
Bushfire Risk Assessment Model (BRAM)	A computer-based modelling tool that uses a series of inputs to assess the risk of bushfire to a specific area. The BRAM has a capacity to produce a series of outputs. It was developed and is managed by Tasmanian Parks & Wildlife Service.
Bushfire risk management	A systematic process to coordinate, direct and control activities relating to bushfire risk with the aim of limiting the adverse effects of bushfire on the community.
Community Bushfire Protection Plan	A bushfire plan for community members that provides local, community-specific information to assist with bushfire preparation and survival. The focus of the Bushfire Protection Plan is on bushfire safety options, and the intent of the plan is to support the development of personal Bushfire Survival Plans.
Community Bushfire Response Plan	An Emergency Management Plan for emergency managers and responders. The Bushfire Response Plan aims to better protect communities and their assets during bushfire emergencies, through the identification of protection priorities and operational information.
Consequence	Impact(s) of an event on the five key areas: environment, economy, people, social setting and public administration.
Control	A measure that modifies risk. This may be an existing process, policy, device, practice or other action that acts to minimise negative risk or enhance positive opportunities.
Fire management zoning	Classification system for the areas to be managed. The zoning system indicates the primary purposes for fire management for an area of land.
Fuel break	A natural or manmade change in fuel characteristics which affects fire behaviour so that fires burning into them can be more readily controlled.
Hazard management area	The area between a building and the bushfire-prone vegetation that provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present that will significantly contribute to the spread of a bushfire.
Human Settlement Area	Term given for the dataset used to define where people live and work. The dataset was developed for the purpose of risk modelling and was created using a combination of building locations, cadastral information and ABS data. Includes seasonally populated areas and industrial areas.
Land Management Zone (LMZ)	An area that is managed to meet the objectives of the relevant land manager such as: Traditional Owner practices, biodiversity conservation, production forestry, farming or recreation. Management can include planned burning, experimental treatments, fire exclusion or no planned action.
Likelihood	Chance of something happening. It is used as a general description of probability and may be expressed qualitatively or quantitatively.
Risk register	A document usually presented in a tabular form which lists concisely the following information for each risk: the risk statement, source, hazard, impact area, prevention/preparedness controls, recovery/response controls, level of existing controls, likelihood level, risk level, confidence level and treatment strategy.
Risk treatment	Process of selection and implementation of controls to modify risk. The term 'risk treatment' is sometimes used for the controls themselves.

Strategic Fire Management Zone (SFMZ)	An area located close to or some distance away from assets (e.g. the urban–rural interface), the primary management purpose of which is to provide a mosaic of areas of reduced fuel in strategic locations to reduce the speed and intensity of bushfires, potential for spot-fire development, and size of bushfires. Treatment is by fuel reduction burning and other bushfire protection measures such as fire trails, water points, detection measures and response plans.
Treatable vegetation	Types of vegetation which are suitable for fuel reduction burning, for example, dry eucalypt forest, scrub, heathland and buttongrass.
Treatment plan	A document related to the risk register presented in a tabular form which lists concisely the following information for each risk: the agreed strategies to manage the risk (i.e. treatments), the responsible organisations, proposed completion date and comments.

Acronyms

BRMPG	Bushfire Risk Management Planning Guidelines
BRAM	Bushfire Risk Assessment Model
BRMP	Bushfire Risk Management Plan
FFDI	Forest Fire Danger Index
FMA	Fire Management Area
FMAC	Fire Management Area Committee
LGA	Local Government Area
NRE	Department of Natural Resources and Environment
PWS	Parks and Wildlife Service
SFMC	State Fire Management Council
STT	Sustainable Timber Tasmania
TFS	Tasmania Fire Service

Maps contained in this document may include data provided by NRE (Land Tasmania), Parks and Wildlife Service (Fire Management Section) and Tasmania Fire Service. These map products have been produced by the Tasmania Fire Service. While all efforts have been taken to ensure their accuracy, there may be errors and/or omissions in the data presented. Users of these products are advised to independently verify data for accuracy and completeness before use.

Executive Summary

This Bushfire Risk Management Plan identifies priorities for the treatment of bushfire risk in the Midlands Fire Management Area over the next three years. It was developed by the Fire Management Area Committee (FMAC) as required under sections 18 and 20 of the *Fire Service Act 1979*. This plan aims to coordinate and influence the treatment of bushfire risk in the Fire Management Area.

The plan is strategic level and does not include all details of bushfire risk treatments, but does identify which organisations or individuals are responsible for implementing them. The Midlands FMAC will prepare a written report twice yearly for the State Fire Management Council on the progress of implementation.

The plan was developed in line with the Bushfire Risk Management Planning Guidelines 2020. The risk assessment considers bushfire impacts to the assets and values in the area, and uses the following matrix to calculate a risk rating:

LIKELIHOOD	CONSEQUENCE LEVEL				
	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC
Almost Certain	MEDIUM	MEDIUM	HIGH	EXTREME	EXTREME
Likely	LOW	MEDIUM	HIGH	EXTREME	EXTREME
Unlikely	LOW	LOW	MEDIUM	HIGH	EXTREME
Rare	VERY LOW	LOW	MEDIUM	HIGH	HIGH
Very Rare	VERY LOW	VERY LOW	LOW	MEDIUM	HIGH
Extremely Rare	VERY LOW	VERY LOW	LOW	MEDIUM	HIGH

The results of the risk assessment are summarised in the risk register (Appendix 1) and the proposed treatments are listed in the treatment plan (Appendix 2). All maps are published on the internet on LISTmap, and hyperlinks to these can be found in the relevant locations in this plan.

The treatment plan (Appendix 1) lists the actions determined by the FMAC required to treat bushfire risk in the FMA.

The Midlands FMA is approximately 1,059,000 ha in size and covers two local government areas, being Central Highlands and Southern Midlands. Approximately 8,100 people live within the Midlands FMA, predominately around the south east corner, closest to the outer settlements of Hobart. The Midlands FMA also contains smaller isolated communities located in the Southern Midlands and Central Highlands.

Shack communities are present around a number of highland lakes, with the population in these communities being seasonally variable.

Within the Midlands FMA approximately 54.9% of land is private/freehold, 26.7% is PWS managed land, 11.6% is STT managed land and 6.8% is Crown Land.

Throughout the Midlands FMA, the population is low and dispersed, which correlates with the major land uses, particularly the large proportion of land used for agriculture, forestry and conservation. The landscape includes very large, almost continuous bands of dry eucalypt forest. In January – March 2019, major fires impacted on large areas of the FMA and this is likely to occur again.

The majority of recorded fires have been caused by human actions, however lightning strikes are an increasing cause of unplanned fires. This is resulting from an increase in fire starts resulting from dry thunderstorms in the summer months, where long periods of below average rainfall has resulted in dry fuels. There have been four very large fires (>10,000 ha) in the Midlands FMA in the past 20 years, occurring at Broadmarsh (2003), Lake Repulse (2013), Gell River (2019) and Great Pine Tier (2019).

The Midlands FMAC has reviewed the results of computer modelling to identify the towns and larger communities within the FMA that are at higher bushfire risk, including: highland shack communities (Arthurs Lake, Wayatinah, Bradys Lake and Great Lake), Bagdad, Campania, Oatlands, Kempton and Fentonbury/Westerway.

In addition, natural values and production forests were also assessed for bushfire risk with consideration of vulnerability to bushfire and relative impact. These values have been prioritised according to risk rating, however are still being evaluated for treatment, further analysis or monitor and review.

Mitigation activities that have been recommended by the Midlands FMAC for reducing bushfire risk includes:

- Conducting fuel reduction burns and other fuel reduction treatments around communities at high risk of impact from bushfires. This work will be undertaken by the fire agencies, in collaboration with landowners.

- Conducting fuel reduction burns in strategic areas to minimise the likelihood of a fire run impacting communities. This work will be undertaken by the fire agencies, in collaboration with landowners.

- Developing Community Bushfire Protection Plans and Bushfire Response Plans to support communities when a bushfire is threatening their area. These plans will be developed by the TFS Community Fire Safety Division in collaboration with local communities and stakeholders.

- Establishment or enhancement of Community Education initiatives, in order to enhance community preparedness and promote positive behaviour change. This work will be undertaken by the TFS Community Safety Division in collaboration with local communities and stakeholders.

- Other prescribed activities specific to community needs.

1. Introduction

1.1 Background

It is a requirement of Section 20 of the *Fire Service Act 1979* that the Fire Management Area Committee (FMAC) prepare a fire protection plan for its Fire Management Area. This Bushfire Risk Management Plan (BRMP) fulfils that requirement. The BRMP is submitted to and approved by the State Fire Management Council (SFMC).

The *Fire Service Act 1979* requires that the fire protection plan is consistent with the State fire protection plan, the Tasmanian Vegetation Fire Management Policy, and because it is an instruction from SFMC, the Bushfire Risk Management Planning Guidelines (SFMC 2020).

The Bushfire Risk Management Planning Guidelines (BRMPG) explain the framework for bushfire risk management in Tasmania, the method for doing the risk assessment, and how to prepare the BRMP. There is very little explanation here in this plan on the rationale, principles and methods used; therefore, the BRMPG is an important supporting document for understanding this plan.

Under the terms of reference for the Midlands FMAC, the purposes of the committee are:
- Provide a forum for communication and collaboration between key stakeholders in the FMA
- Enable a holistic and consistent approach, incorporating local knowledge, to identify strategic priorities to reduce bushfire risk
- Coordinate efforts and facilitate resource sharing to implement the strategic risk reduction priorities
- Link the local community and the SFMC through 'ground-truthing' the bushfire risk assessment and mitigation strategies
- Through their advisory function, provide input into decisions and outcomes beyond the Fire Management Area

1.2 Purpose of this plan

The management of bushfire-related risk is a collective responsibility of the whole community, with contributions made by numerous individuals, landowners and organisations.

An overriding aim of this BRMP is to document a coordinated approach to the identification and treatment of bushfire risk in the Midlands Fire Management Area (FMA). Specific objectives include:
- Guide and coordinate bushfire risk management over a three-year period on all land within the FMA
- Provide a reference point for the prioritisation and justification of bushfire treatment actions, as well as supporting evidence for funding requests
- Facilitate the integration of bushfire risk management into the business processes of councils, organisations and land managers
- Facilitate cooperation and the coordination of treatment actions between stakeholders
- Clearly and concisely communicate bushfire risk to stakeholders and the community
- Provide a basis for monitoring and reporting of implementation of bushfire risk treatments in the FMA.

This BRMP is a strategic-level document that does not provide detail on treatment actions. Individual organisations and landowners, or collaborative groups, may have developed plans and processes for implementation of bushfire risk treatment; these can be considered to be linked to the strategic priorities identified here (SFMC 2020).

2.   Establishing the context

2.1   Description of the Midlands Fire Management Area

The Midlands FMA consists of an area of approximately 1,059,000 ha (Map 1). Major towns include Campania, Colebrook, Kempton, Oatlands, Bothwell, Hamilton and Ouse. It includes all of the Central Highlands and Southern Midland municipalities, including the Upper Derwent Valley, and varies in altitude from 35 m above sea level (asl) in the Jordan River valley near Pontville to 1449 m asl at Mt Olympus near Derwent Bridge.

Over half of the area consists of private property, predominantly located in the drier central and eastern parts. The wetter western portion of the area consists mainly of National Parks and Reserves, STT managed land, and Hydro managed land (Map 2). Table 1 shows the composition of different land tenures within the Midlands FMA.

Table 1. Summary of the major tenure land managers in the Midlands Fire Management Area (FMA).

Land manager	% of FMA
Private property	54.9
Parks and Wildlife Service reserves	26.7
Sustainable Timbers Tasmania	11.6
Crown land	6.8

2.2   Fire environment

The Midlands FMA consists of a wide range of vegetation types. The eastern and central parts have a dry climate and are predominantly occupied by agricultural land, dry eucalypt forest, woodland and grassland. These vegetation types are often associated with high flammability, and they also occur around the higher population areas of the Midlands FMA.

The western part of the Midlands FMA is high altitude and high rainfall, which suits wet forest types that grade to rainforest. Both of these vegetation types are associated with a lower flammability, however will burn readily if they are dry enough.

Moorlands are present on sites of low soil quality or poor drainage, often in close proximity to rainforest types. Alpine vegetation types are present on the higher sections of mountain ranges and plateaus. Many of these vegetation types, particularly rainforest and alpine vegetation are highly sensitive to loss and damage through fire. The vegetation in the Midlands FMA can be categorised into 11 broad groups, shown in Map 5.

The causes of fire ignitions (either naturally occurring or through human actions) were not well documented prior to 1990. Of the most recent fire records available for the Midlands FMA, the cause of ignition for the majority of fires was classed as unknown (37%), followed by arson (33%), then escapes from planned burns (13%) and accidental (10%).

There have been a number of major bushfires in the Midlands FMA in recent decades. Planned burning undertaken as part of the Fuel Reduction Program has occurred since 2014, although many planned burns have also been undertaken by private land owners in the Midlands FMA both before and since the inception of this program. There is also a general understanding that much of the Midlands FMA was included within Aboriginal cultural burning prior to the removal of Aboriginal peoples from the mainland Tasmania in the 1800s.

Larger wildfires and planned burns undertaken by the Fuel Reduction Program are summarised in Table 2.

Fire Name	Area Burnt (ha)
Dromedary 1982	11,000
Pine River 1982	13,600
Tungatinah 1, 1982	7,600
Broadmarsh/Bluff Road 2003	14,300
Wayatinah 2010	6,300
Poatina 2012	8,500
Meadowbank Road 2012	5,200
Lake Repulse 2013	10,200
Tasman Hwy, Runnymede 2014	1,760
Gell River 2019	35,000
Great Pine Tier 2019	51,000
Pelham Road, Pelham	2,114
Major planned burns undertaken:	
Lake King William 2015	1073
O'Connors Link FRB, Arthurs Lake 2015	437
Brandum Bay East and West, 2016	159
Coal River Sugarloaf, Campania 2016	492
Heston Hill, Bagdad 2017	397
Brown Mountain FRB, Runnymede 2018	435
Gravelly Ridge Central, Colebrook 2018	152
Coates Creek, Derwent Bridge 2020	178
King William Saddle, King William 2021	131

Table 2: Major fires in the Midlands FMA since 1982, and large planned burns since 2014.

Throughout the Midlands FMAC, increased fire behaviour is associated with strong north-westerly winds, which occur alongside low relative humidity and high temperatures. These weather conditions are often followed by a cold front, bringing strong westerly or south-westerly winds along with cooler temperatures.

At higher altitudes, a decrease in relative humidity can also occur throughout the day as lower humidity air descends. This can occur rapidly with no apparent change in weather conditions and result in increased fire behaviour.

Large fire runs are becoming more common in the Central Highlands area. This increase is associated with prolonged dry periods resulting in more fires to spread, combined with a low population density leading to slower detection of fires, and increased response times due to inaccessibility by firefighters.

Forestry and agriculture form a large part of the economy within the Midlands FMA, with the majority of land in the area being used for these purposes. Larger fires frequently impact extensively on timber production stands, agricultural and conservation land. Vineyards are an increasing agricultural crop in the Midlands, and these can also be impacted by bushfire, such as the impact of smoke taint on vineyards. Fire can also impact heavily on major infrastructure within the FMA, with extensive infrastructure associated with the storage of water, production and transmission of power from Hydro Tasmania.

Natural values in alpine areas, such as alpine conifers (e.g. pencil pines), are particularly susceptible to impacts from fires. These primarily occur within the Tasmanian Wilderness World Heritage Area, and remoteness can affect fire detection and accessibility for firefighters. Also within the Central Highlands areas, fires can heavily impact on hydroelectric power infrastructure and fisheries, by increasing turbidity and sedimentation in dams and rivers.

Many access routes to major tourist destinations pass through the Midlands FMA and are in bushfire-prone areas. Bushfires can result in road closure which impact on the local economy.

2.3   Climate and bushfire season

The Midlands FMA experiences extreme temperatures, with cold winters and hot summers. Locations within the Midlands FMA consistently record the states maximum and minimum temperatures. High risk fire weather can be expected in the Midlands FMA when dry winters and springs are followed by summers, resulting in very dry fuels. The strong north-westerly winds that often precede cold fronts in summer contain dry air from the interior of the Australian mainland, which results in very low humidity as this air stream descends from the Central Highlands. This combination of strong winds and low humidity creates the ideal weather conditions for major bushfires.

The mountain ranges in the western part of the area cause a very significant rain shadow effect, with areas in the eastern parts of the Midlands FMA often experiencing periods of prolonged dryness. This is clearly evident with the average annual rainfall ranging from 540 mm at Bothwell to 1518 mm at Lake St Clair (www.bom.gov.au/climate/data, accessed 25/11/2019).

Fire weather can be experienced in parts of the FMAC throughout the year, June/July possibly being the exceptions. Weather conditions suitable for prescribed burning can also occur throughout the year, depending on fuel moisture content and appropriate controls in place to extinguish the fire. However, typical conditions suitable for prescribed burning in the lower altitude areas occur from late winter to the end of spring, and throughout autumn. In higher altitude areas, conditions suitable for prescribed burning can also occur in the summer months.

Climate is changing in Tasmania and it is evident from bushfire climate indicators (Fox-Hughes et al. 2015) that we can expect destructive bushfires to become more frequent. Projections from climate change models adapted for Tasmania suggest increases in hot days and warm nights; increases in dry days and longer dry spells; more warm spells and heat waves; and more wet days but fewer cold spells and cold waves. The number of total fire ban days occurring due to severe fire weather each summer has also started to increase, with these also occurring earlier in the fire season (White, et al. 2010).

Change in climate over the past decade has also seen the occurrence of dry lightning strikes causing fire ignitions, as a combined result of dry thunderstorms and consistently dry fuel conditions. In addition, changes in climate have reduced the predictability of timeframes for fuel reduction activities and resulted in protracted fire seasons.

2.4   Population and community

The Midlands FMA has a low total population and low population densities across the area. It has a total permanent population of around 8,100 people (Australian Bureau of Statistics – ABS, 2016), which correlates with the major land uses, particularly the large proportion of land used for agriculture, forestry and conservation.

Agriculture is the dominant employment sector in the Midlands FMA, with 37% of people employed in this industry. Minor employment industries include education/training, construction, accommodation and food services, and electricity supply (NIEIR 2018).

Areas closest to the outer settlements of Hobart, including Mangalore, Bagdad, Broadmarsh and Campania, are increasing in population with a growing number of small acreage/lifestyle properties. Many shack communities are present through the highland lakes areas, with the populations of these communities being seasonally variable.

2.5 Community engagement

The Midlands FMAC aims to reduce the risk of the community from bushfires. This will be implemented by:

- FMAC members providing valuable local knowledge about bushfire risks and opportunities for fuel mitigation treatment;
- Working with communities to improve their resilience strategies through the delivery of the Bushfire Ready Neighbourhoods program and other community activities, in partnership with local fire brigades, community organisations and Councils;
- Engaging with industry organisations to improve outcomes of bushfires and planned burns:
  - the wine industry around the issue of smoke taint;
  - tourism operators/networks to improve visitor safety during bushfires and assist in developing plans to manage the impacts of bushfire;
  - TFGA to support farmers with bushfire management;
- Engaging with utility companies and local councils to improve bushfire safety of critical infrastructure.

Since the inception of the TFS Fuel Reduction Program in 2014, community engagement has been undertaken in the Midlands FMA. This has included the Bushfire Ready Neighbourhoods program being run in Bagdad, Campania and Westerway. Additional community engagement activities have been undertaken as requested by local volunteer fire brigades or the community. Attempts have been made to engage with shack communities and recreational groups (e.g. hunters and fishers), however these have been not been successful with limited community interest.

3. Identifying the risks

3.1 Bushfire and impact scenarios

To set the scene for this risk assessment, the bushfire scenarios under consideration are very large events, typically 10,000 to 20,000 hectares, occurring when fuel dryness and weather conditions combine to create one or more days of very significant fire weather. Analysis of climate data was used to determine standard weather events for the scenarios – described as having an Annual Exceedance Probability of approximately 10% (SFMC 2020).

- An abandoned camp fire on a day of FFDI 44 re-ignites and results in a bushfire that spreads and impacts the town of Miena resulting in destruction of numerous houses, community buildings and tourist accommodation.
- A vehicle fire on a day of FFDI 52 ignites a bushfire that spreads and destroys shacks and a large area of forestry plantation, resulting in sedimentation of a nearby hydroelectric dam.

3.2 Statewide controls

The following controls are currently in place across Tasmania to help manage bushfire-related risk:

- Legislative controls – including *Fire Service Act 1979* (e.g. Fire permit period, Total Fire Ban days, campfires), *National Parks and Reserves Management Act 2002* (e.g. fires and campfires), abatement notices
- TFS public education (e.g. Bushfire Ready Neighbourhoods, media campaigns)
- TFS planning – community protection planning (e.g. Community Response Plans)
- Fuel Reduction Program (TFS, PWS, STT) – funding and coordination of fuel reduction burning
- SFMC programs (e.g. Red Hot Tips training program for fuel reduction burning on private land)
- FMAC – performance monitoring and reporting on this BRMP
- Tasmania Police and TFS – statewide arson prevention programs
- Land subdivision and building standards (Bushfire-Prone Areas Code, Building Code of Australia)
- Suppression response preparedness – e.g. TFS local volunteer brigades, STT and PWS crews, forest company crews, fire towers, aircraft, pre-positioning of firefighting resources
- Weather forecasting (Bureau of Meteorology) and fire behaviour prediction (TFS, STT, PWS)

3.3 Fire Management Area controls

The following controls are in place, or being developed, to assist in the management of bushfires within the Midlands FMA:

- 20 volunteer fire brigades, plus crews from PWS and STT
- Fuel reduction burns undertaken by the Fuel Reduction Program have occurred around Campania and Bagdad
- Fuel breaks for asset protection are managed by land management agencies and landowners, including STT, PWS, private forestry companies and others
- PWS reserves closures on bad fire days
- Community engagement programs, including Bushfire Ready Neighbourhoods, community development opportunities, and support for bushfire recovery
- Preparedness planning – Community Protection Plans, Bushfire Response Plans
- PWS Fire Management Plans and Emergency Management Plans

4. Analysing and evaluating bushfire risk

4.1   Analysing bushfire risks

A standard risk assessment process was used to determine priorities for this Bushfire Risk Management Plan (BRMP) following the [Tasmanian Emergency Risk Assessment Guidelines](#) and the [Bushfire Risk Management Planning Guidelines 2020](#) (SFMC 2020), which in summary considers:

* Consequences – what values and assets are at risk given the standard bushfire scenario under consideration
* Existing controls – how effective the existing controls are at reducing the risk and how much they are used
* Likelihood – how the likelihood of the consequence occurring is quantified, based on weather, topography, fuels and ignition potential
* Confidence level – how certain we are about the evidence and data used
* Risk rating and priority score – calculated by the risk assessment tool (SFMC 2020)

All of the above are recorded in the risk register ([Appendix 1](#)).

4.2 Evaluating bushfire risks

The Midlands FMAC has reviewed the results of computer modelling to identify the following assets and values at highest risk of impact by bushfire. These areas are detailed further in [Appendix 1](#) and shown in [Map 3](#).

* Towns and larger communities within the FMA that are at risk of being heavily impacted by a bushfire. This may be because of their proximity to bushfire-prone vegetation, a single access road, or access roads being within bushfire-prone vegetation. These towns and communities include: Central Highlands shack communities (including those near Arthurs Lake, Bradys Lake and Great Lake), Wayatinah, Kempton, Bagdad, Fentonbury and Campania.
* Critical infrastructure for energy production, including those located in the Upper Derwent Valley.
* Production forest assets with a high value that have been clustered according to bushfire impact (identified through computer modelling).

5. Bushfire risk treatment

5.1 Treatment plan

The Fire Management Area Committee (FMAC) considered the costs, benefits, practicalities and environmental impacts of various control options for the highest priority risks. The risk treatments that were determined from these deliberations are recorded in the treatment plan (Appendix 2).

Individual landowners and organisations are usually responsible for implementing the treatments; these are indicated in the treatment plan. One exception is fuel reduction burning that is planned and conducted by the Fuel Reduction Program (TFS, PWS, STT) with the agreement of landowners.

Treatments that have been recommended by the Midlands FMAC for reducing bushfire risk include:

- Conducting fuel reduction burns and other fuel reduction treatments around towns and larger communities at high risk of impact from bushfires, where vegetation is suited to fuel reduction burning. This work will be undertaken by the fire agencies, in collaboration with landowners.
- Developing Community Protection Plans and Bushfire Response Plans to support communities when a bushfire is threatening their area. These plans will be developed by the TFS Community Fire Safety Division in collaboration with local communities and stakeholders.
- Establishment or enhancement of community education initiatives, such as Bushfire Ready Neighbourhoods, in order to enhance community preparedness and promote positive behaviour change. This work will be undertaken by the TFS Community Fire Safety Division in collaboration with local communities and stakeholders.
- Maintaining active fire preparedness for forestry and PWS natural assets, through patrols on high fire danger days, operation of fire spotting towers, and collaboration to share critical data and bushfire risk mitigation opportunities.

5.2 Bushfire management zones

For those assets and values where fuel management or other treatments are designated in the treatment plan (Appendix 2), bushfire management zones are used to delineate the treatment areas. The names of zones and descriptors are provided in Appendix 3.

Work is continuing to identify bushfire management zones within the Midlands FMA.

5.3 Implementing treatments

This Bushfire Risk Management Plan (BRMP) does not guarantee a source of funding for treatment actions, nor does it provide a process for seeking funding. The organisations and individuals that are responsible for delivering the bushfire risk treatments are responsible for developing further plans for implementation, as well as arranging resources and funding.

The BRMP is, however, intended to provide evidence and justification for where funding and resources are most appropriate to be committed by stakeholders to mitigate bushfire risk.

Many treatments identified in this plan will require environmental and cultural impact assessment. These assessments are the responsibility of the individual organisations and are not covered by this BRMP.

The following barriers have been identified with implementing several treatment types since the inception of the Fuel Reduction Program:

- Planned burns not being undertaken due to potential issues with:
  - Short weather windows for prescribed burning, due to less predictable weather, earlier fire season, shorter weather windows and potential impacts of smoke taint on vineyards and community health;
  - Difficulties co-ordinating private landowners to agree on fuel reduction burn conditions, resulting in burns not being able to go ahead;
  - Landowner unwillingness to have their land burnt, or absentee landowners who cannot be located to get approval to undertake planned burns;
  - Issues with replacement costs of old rural fencing;
  - Managing risks associated with infrastructure development;
- Limited resources available for initial suppression of fires, due to low volunteer firefighter numbers and availability;
- Limited TFS resources available for requested community engagement;
- Limited resources available to support and/or educate private landowners to conduct planned burns on their own land;
- Limited uptake and retention of community engagement programs, due to competing priorities/low interest levels of the community, and limited interest/support from key community groups (e.g. local brigades, community associations, etc).

5.4   Strategic fire infrastructure

Strategic fire infrastructure includes access roads, fire trails, tracks and water sources. Given the suitability of vegetation for fuel reduction burning or other forms of treatment, no strategic fire infrastructure has been identified for the Midlands FMA. This does not preclude strategic fire infrastructure being identified in the future.

5.5   Fuel reduction burning

The Strategic Fire Management Zones (SFMZ) delineate general areas for treatment by fuel reduction burning. Individual burn units are not identified in this BRMP but will need to be identified within the SFMZ by further planning from the organisations responsible for carrying out the fuel reduction burning.

There are many kinds of vegetation for which it is not appropriate or practical to conduct fuel reduction burning (SFMC 2020); these vegetation communities are described as 'untreatable' and indicated on Map 4. The broad vegetation communities within the FMA can be seen on Map 5.

The Fuel Reduction Program that is funded, coordinated and implemented by the Tasmania Fire Service, Parks and Wildlife Service and Sustainable Timber Tasmania is undertaken on behalf of and with the agreement of individual landowners or organisations (e.g. councils). The priorities of the Fuel Reduction Program are guided by the priorities identified in the treatment plans across all Fire Management Areas.

6. Monitoring and review

6.1 Review

This Bushfire Risk Management Plan (BRMP), including appendices and maps, will be subject to an annual minor review. The resulting revised Bushfire Risk Management Plan is submitted to the State Fire Management Council on or before 30 September for approval for the 1 October – 30 September period following that review.

Every three years a comprehensive review of the BRMP, involving a new risk assessment (that may include revised input methods) and consideration of the risk assessment and proposed treatments, will be undertaken, unless significant circumstances exist to warrant an earlier comprehensive review.

The review process will include examination of:

- changes to the Fire Management Area (FMA), organisational responsibilities or legislation
- changes to the bushfire risk in the area
- major bushfire events
- shortcomings in data that can be improved
- change of usage of the area
- new or changed asset values within the FMA.

Additional and changed data and values (both community and natural) identified by the review process will be supplied to the Bushfire Risk Unit (TFS) for inclusion in ongoing risk modelling being carried out at the state level.

6.2 Monitoring and reporting

Progress towards completion of the treatments proposed will be monitored and reviewed twice a year by the Fire Management Area Committee (FMAC); this will be documented in the Implementation Status Report which should address as a minimum:

- progress on implementation of treatments listed in the treatment plan, including
- planning outcomes including mitigation plans, community protection plans, community response plans
- implementation progress of community programs
- completed fuel reduction burns
- development and maintenance of Asset Protection Zones (APZ)
- development and maintenance of strategic fire infrastructure

At a statewide level, the State Fire Management Council will examine the impacts of the strategic burning program on risk management as part of the strategic fuel management program.

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Appendices

Appendix 1: Risk register

Notes at the end of the risk register provide explanation for the TERAG code, Asset description and Priority FMAC columns.

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEC042	Critical Infrastructure	Wayatinah	Major	Medium	Highest	Unlikely	High	10	Treatment	Central Highlands
MIEC009	Critical Infrastructure	Lake Echo	Major	Medium	Highest	Unlikely	High	11	Treatment	Central Highlands
MIEC022	Critical Infrastructure	Liapootah	Major	Medium	Highest	Unlikely	High	12	Treatment	Central Highlands
MIEC033	Critical Infrastructure	Tarraleah	Major	Medium	Highest	Unlikely	High	12	Treatment	Central Highlands
MISO001	Critical Infrastructure	Tarraleah	Major	Medium	Highest	Unlikely	High	12	Further analysis	Central Highlands
MIEC037	Critical Infrastructure	Tungatinah	Major	Medium	Highest	Unlikely	High	13	Treatment	Central Highlands
MIEC041	Critical Infrastructure	Catagunya	Major	High	Highest	Rare	High	16		Central Highlands
MIEC024	Critical Infrastructure	Meadowbank	Major	High	Highest	Rare	High	16		Central Highlands
MIEC028	Critical Infrastructure	Butlers Gorge	Major	Medium	Highest	Rare	High	17		Central Highlands
MIEC039	Critical Infrastructure	Waddamana	Minor	Medium	Highest	Rare	Low	18		Central Highlands
MISO002	Critical Infrastructure	Waddamana	Major	Medium	Highest	Rare	High	19		Central Highlands
MIEC036	Critical Infrastructure	Tods Corner / Arthurs	Moderate	Medium	Highest	Unlikely	Medium	26		Central Highlands
MIEC049	Critical Infrastructure	Cluny	Major	High	Highest	Very Rare	Medium	30		Central Highlands
MIEC029	Critical Infrastructure	Repulse	Major	High	Highest	Very Rare	Medium	31		Central Highlands
MIPE030	Human Settlement Area	Nive Hill, Wayatinah	Minor	Very Low	Highest	Likely	Medium	23	Treatment	Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIPE007	Human Settlement Area	Arthurs Lake	Moderate	Low	Highest	Unlikely	Medium	24	Treatment	Central Highlands
MIPE013	Human Settlement Area	Fentonbury, Westerway	Moderate	Low	Highest	Unlikely	Medium	25	Treatment	Central Highlands
MIPE041	Human Settlement Area	Bradys Lake	Moderate	Low	Highest	Unlikely	Medium	26	Treatment	Central Highlands
MIPE027	Human Settlement Area	Morass Bay, Wilburville	Moderate	Very Low	Highest	Unlikely	Medium	26	Treatment	Central Highlands
MIPE044	Human Settlement Area	Campania, Brains Hill	Moderate	Medium	Highest	Unlikely	Medium	27	Treatment	Southern Midlands
MIPE031	Human Settlement Area	Parattah, Oatlands	Moderate	Very Low	Highest	Unlikely	Medium	27	Treatment	Southern Midlands
MIPE045	Human Settlement Area	Central Plateau, Brandum, Elephant Rock, Reynolds Neck	Moderate	Low	Highest	Unlikely	Medium	28	Treatment	Central Highlands
MIPE014	Human Settlement Area	Bagdad	Moderate	Low	Highest	Unlikely	Medium	29	Treatment	Southern Midlands
MIPE038	Human Settlement Area	Bothwell	Moderate	Medium	Highest	Unlikely	Medium	29	Monitor and review	Central Highlands
MIPE011	Human Settlement Area	Kempton, Dysart	Moderate	Very Low	Highest	Unlikely	Medium	29	Monitor and review	Southern Midlands
MIPE029	Human Settlement Area	Big Tom	Minor	Low	Highest	Unlikely	Low			Southern Midlands
MIPE047	Human Settlement Area	Bronte Park	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIPE002	Human Settlement Area	Butlers Gorge	Insignificant	Very Low	Highest	Rare	Very Low			Central Highlands
MIPE003	Human Settlement Area	Coal River Sugarloaf	Minor	Medium	Highest	Unlikely	Low			Southern Midlands
MIPE004	Human Settlement Area	Cockatoo Hill	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIPE005	Human Settlement Area	Colebrook	Minor	Low	Highest	Rare	Low			Southern Midlands
MIPE006	Human Settlement Area	Cramps Bay	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIPE012	Human Settlement Area	Ellendale, Slashers Sugarloaf	Minor	Medium	Highest	Unlikely	Low			Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIPE019	Human Settlement Area	Huntingdon Tier	Minor	Low	Highest	Unlikely	Low			Southern Midlands
MIPE020	Human Settlement Area	Interlaken, Lagoon Tier	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE046	Human Settlement Area	Jemmys Back, Alma Pass	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE021	Human Settlement Area	Jericho	Insignificant	Low	Highest	Rare	Very Low			Southern Midlands
MIPE009	Human Settlement Area	Lake St Clair, Derwent Bridge	Minor	Medium	Highest	Unlikely	Low			Central Highlands
MIPE022	Human Settlement Area	Liawenee, Murderers Hill	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE023	Human Settlement Area	Little Pine Lagoon	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE001	Human Settlement Area	London Lakes, Burstgall Hill	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE024	Human Settlement Area	Lower Farm Road	Minor	Medium	Highest	Rare	Low			Central Highlands
MIPE026	Human Settlement Area	Melton Mowbray	Minor	Medium	Highest	Unlikely	Low			Southern Midlands
MIPE010	Human Settlement Area	Merriworth Hill, Doggies Gully	Minor	Low	Highest	Unlikely	Low			Southern Midlands
MIPE025	Human Settlement Area	Miena, Mackersey Head	Moderate	Very Low	Highest	Rare	Medium			Central Highlands
MIPE028	Human Settlement Area	Mount Seymour	Insignificant	Very Low	Highest	Unlikely	Low			Southern Midlands
MIPE032	Human Settlement Area	Old Mans Head	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE018	Human Settlement Area	Old Mans Hill, Hamilton	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE033	Human Settlement Area	Ouse	Minor	Medium	Highest	Unlikely	Low			Central Highlands
MIPE016	Human Settlement Area	Owens Hill, Green Valley	Minor	Low	Highest	Unlikely	Low			Southern Midlands
MIPE034	Human Settlement Area	Rhyndaston	Minor	Low	Highest	Unlikely	Low			Southern Midlands
MIPE017	Human Settlement Area	Rosegarland, Gretna	Minor	Low	Highest	Unlikely	Low			Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIPE035	Human Settlement Area	Runnymede	Minor	Low	Highest	Unlikely	Low			Southern Midlands
MIPE036	Human Settlement Area	Scrubby Hill	Insignificant	Low	Highest	Unlikely	Low			Central Highlands
MIPE037	Human Settlement Area	Shannon	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIPE008	Human Settlement Area	Spillway Bay, Dee	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIPE039	Human Settlement Area	Tarraleah	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE040	Human Settlement Area	Terrys Hill	Minor	Medium	Highest	Rare	Low			Southern Midlands
MIPE015	Human Settlement Area	Tods Corner Road, Gin Point	Minor	Low	Highest	Unlikely	Low			Central Highlands
MIPE042	Human Settlement Area	Tunbridge	Minor	Very Low	Highest	Unlikely	Low			Southern Midlands
MIPE043	Human Settlement Area	Tunnack	Minor	Low	Highest	Rare	Low			Southern Midlands
MIEN011	Natural Value	Giant, Sphagnum, TWWHA	Catastrophic	Low	Highest	Likely	Extreme	2		Central Highlands
MIEN050	Natural Value	Remnant rainforest, Sphagnum	Major	Low	Highest	Likely	Extreme	2		Central Highlands
MIEN056	Natural Value	Sphagnum	Major	Low	Highest	Likely	Extreme	2		Central Highlands
MIEN003	Natural Value	Castiarina, Central, Coniferous, cushion, Highland, Nothofagus, Oreixenica, Palaeo, Sphagnum	Catastrophic	Very Low	Highest	Unlikely	Extreme	5		Central Highlands
MIEN023	Natural Value	Central, Coniferous, cushion, Highland, Nothofagus, Palaeo, Pherosphaera, Regenerating, Sphagnum	Catastrophic	Very Low	Highest	Unlikely	Extreme	5		Central Highlands
MIEN012	Natural Value	Giant, Notelaea, Sphagnum, TWWHA	Catastrophic	Low	Highest	Unlikely	Extreme	5		Central Highlands
MIEN018	Natural Value	Castiarina, Eucalyptus, Highland, Oreixenica	Major	Very Low	Highest	Unlikely	High	11		Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEN039	Natural Value	Oreixenica, Sphagnum	Major	Very Low	Highest	Unlikely	High	11		Central Highlands
MIEN044	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	11		Central Highlands
MIEN054	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	11		Central Highlands
MIEN021	Natural Value	Eucalyptus, Oreixenica	Major	Very Low	Highest	Unlikely	High	12		Central Highlands
MIEN060	Natural Value	Castiarina	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN017	Natural Value	Castiarina, Coniferous, cushion, Notelaea, Oreixenica, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN016	Natural Value	Castiarina, Eucalyptus, Highland, Oreixenica, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN013	Natural Value	Coniferous, cushion, Giant, Highland, Pherosphaera, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN015	Natural Value	Coniferous, cushion, Highland, Nothofagus, Oreixenica, Pherosphaera, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN005	Natural Value	Coniferous, cushion, Highland, Nothofagus, Palaeo, Pherosphaera, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN008	Natural Value	Coniferous, Highland, Nothofagus	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN007	Natural Value	Coniferous, Pherosphaera, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN019	Natural Value	Highland, Sphagnum, TWWHA	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN037	Natural Value	Nothofagus, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEN038	Natural Value	Pherosphaera, Sphagnum	Major	Very Low	Highest	Unlikely	High	13		Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEN014	Natural Value	Coniferous, cushion, Highland, Nothofagus, Palaeo, Pherosphaera, Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN026	Natural Value	Coniferous, Highland	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN009	Natural Value	Coniferous, Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN020	Natural Value	Eucalyptus, Oreixenica	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN034	Natural Value	Nothofagus	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN033	Natural Value	Nothofagus, Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN046	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN049	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN058	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN059	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	15		Central Highlands
MIEN004	Natural Value	Castiarina, Coniferous, cushion, Oreixenica	Major	Very Low	Highest	Unlikely	High	16		Central Highlands
MIEN002	Natural Value	Coniferous, cushion, Highland, Sphagnum	Major	Very Low	Highest	Unlikely	High	16		Central Highlands
MIEN022	Natural Value	Coniferous, cushion, Sphagnum	Major	Very Low	Highest	Unlikely	High	16		Central Highlands
MIEN045	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	16		Central Highlands
MIEN053	Natural Value	Sphagnum	Major	Very Low	Highest	Unlikely	High	16		Central Highlands
MIEN001	Natural Value	Coniferous, cushion, Sphagnum	Major	Very Low	Highest	Rare	High	17		Central Highlands
MIEN042	Natural Value	Coniferous, Sphagnum	Major	Very Low	Highest	Rare	High	17		Central Highlands
MIEN025	Natural Value	cushion, Highland, Sphagnum	Major	Very Low	Highest	Rare	High	17		Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEN052	Natural Value	Pherosphaera	Major	Very Low	Highest	Rare	High	17		Central Highlands
MIEN006	Natural Value	Coniferous	Major	Very Low	Highest	Rare	High	19		Central Highlands
MIEN024	Natural Value	cushion	Major	Very Low	Highest	Rare	High	19		Central Highlands
MIEN051	Natural Value	Pherosphaera	Major	Very Low	Highest	Rare	High	19		Central Highlands
MIEN048	Natural Value	Sphagnum	Major	Very Low	Highest	Rare	High	20		Central Highlands
MIEN055	Natural Value	Sphagnum	Major	Very Low	Highest	Rare	High	20		Central Highlands
MIEN057	Natural Value	Sphagnum	Major	Very Low	Highest	Rare	High	20		Central Highlands
MIEN027	Natural Value	Oreixenica	Moderate	Very Low	Highest	Likely	High	23		Southern Midlands
MIEN028	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	24		Southern Midlands
MIEN029	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEN030	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	26		Southern Midlands
MIEN031	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEN032	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEN035	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEN036	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEN041	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	29		Central Highlands
MIEN010	Natural Value	Coniferous	Major	Very Low	Highest	Very Rare	Medium	32		Central Highlands
MIEN043	Natural Value	Sphagnum	Major	Very Low	Highest	Very Rare	Medium	32		Central Highlands
MIEN047	Natural Value	Sphagnum	Major	Very Low	Highest	Very Rare	Medium	32		Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEN040	Natural Value	Oreixenica	Moderate	Very Low	Highest	Rare	Medium			Central Highlands
MIEC001	Production Forest	Cluster of various coupes & plantations	Catastrophic	Medium	Highest	Unlikely	Extreme	2		Central Highlands
MIEC007	Production Forest	Cluster of various coupes & plantations	Major	Low	Highest	Likely	Extreme	2		Central Highlands
MIEC003	Production Forest	Cluster of various coupes & plantations	Major	Low	Highest	Likely	Extreme	2		Central Highlands
MIEC005	Production Forest	Cluster of various coupes & plantations	Major	Low	Highest	Likely	Extreme	2		Central Highlands
MIEC017	Production Forest	Cluster of various coupes & plantations	Major	Low	Highest	Likely	Extreme	2		Central Highlands
MIEC010	Production Forest	Cluster of various coupes & plantations	Catastrophic	Medium	Highest	Unlikely	Extreme	4		Central Highlands
MIEC013	Production Forest	Cluster of various coupes & plantations	Major	Medium	Highest	Unlikely	High	10		Central Highlands
MIEC006	Production Forest	Cluster of various coupes & plantations	Major	Medium	Highest	Unlikely	High	10		Southern Midlands
MIEC008	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	11		Central Highlands
MIEC019	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	11		Central Highlands
MIEC004	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	11		Southern Midlands
MIEC011	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	11		Southern Midlands
MIEC038	Production Forest	Cluster of various coupes & plantations	Major	Low	Highest	Unlikely	High	11		Central Highlands
MIEC030	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	11		Central Highlands
MIEC016	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	12		Central Highlands
MIEC043	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	12		Southern Midlands
MIEC002	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	12		Central Highlands
MIEC023	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	12		Central Highlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEC015	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEC020	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEC014	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	13		Central Highlands
MIEC018	Production Forest	Cluster of various coupes & plantations	Major	Very Low	Highest	Unlikely	High	13		Southern Midlands
MIEC047	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Likely	High	23		Central Highlands
MIEC035	Production Forest	Cluster of various coupes & plantations	Minor	Very Low	Highest	Likely	Medium	23		Central Highlands
MIEC031	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	24		Central Highlands
MIEC012	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		Central Highlands
MIEC032	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		Central Highlands
MIEC034	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEC040	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	26		Southern Midlands
MIEC025	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	26		Central Highlands
MIEC046	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Unlikely	Medium	28		Central Highlands
MIEC051	Production Forest	Cluster of various coupes & plantations	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIEC048	Production Forest	Cluster of various coupes & plantations	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIEC050	Production Forest	Cluster of various coupes & plantations	Minor	Very Low	Highest	Unlikely	Low			Central Highlands
MIEC026	Production Forest	Cluster of various coupes & plantations	Insignificant	Very Low	Highest	Unlikely	Low			Central Highlands
MIEC044	Production Forest	Cluster of various coupes & plantations	Insignificant	Very Low	Highest	Rare	Very Low			Southern Midlands
MIEC027	Production Forest	Cluster of various coupes & plantations	Minor	Very Low	Highest	Unlikely	Low			Southern Midlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
MIEC045	Production Forest	Cluster of various coupes & plantations	Minor	Very Low	Highest	Unlikely	Low			Southern Midlands
MIEC021	Production Forest	Cluster of various coupes & plantations	Moderate	Very Low	Highest	Rare	Medium			Central Highlands

Notes

TERAG Code

First and second characters identify the FMAC: CN = Central North; EC = East Coast; FL = Flinders; HO = Hobart; KI = King Island; MI = Midlands; NE = North East; SO = Southern; TA = Tamar; WC = West Coast.

Third and fourth characters identify the Impact Area: EC = Economy; EN = Environment; PE = People; PU = Public Administration; SO = Social setting (exception – all Human Settlement Areas are coded PE for Economy).

A unique identifier is provided by the final three digits.

Asset Description (Risk Statement)

Natural value description is a list of the first word of each mapped natural value included in the cluster, in other words, a shorthand summary. The following table provides a key, although reference to the bushfire biodiversity consequence layer in the LISTmap Common Operating Platform is required to distinguish duplicate descriptors (e.g. Eucalyptus = *Eucalyptus morrisbyi* or *Eucalyptus gunnii* ssp *divaricata*).

Descriptor	Mapping unit name
Acanthornis	*Acanthornis magna greeniana* King Island scrub tit
Allanaspides	*Allanaspides hickmani* Hickman's pygmy mountain shrimp in Buttongrass moorland
Antipodia	*Antipodia chaostola* Chaostola skipper butterfly
Austrochloritis	*Austrochloritis victoriae* southern hairy red snail and Lavinia threatened species complex
Bryobatrachus	*Bryobatrachus nimbus* moss froglet
Castiarina	*Castiarina insculpta* Miena jewel Beetle
Central	Central Plateau unburnt ecosystem
Central	Central Plateau recovering ecosystem
Cloud	Cloud forest refugia
Coniferous	Coniferous rainforest
cushion	cushion moorland
Discocharopa	*Discocharopa vigens* ammonite Pinwheel Snail
Engaeus	*Engaeus martiniger* Furneaux Burrowing Crayfish
Eucalyptus	*Eucalyptus morrisbyi* Morrisbys gum
Eucalyptus	*Eucalyptus gunnii* ssp *divaricata* Miena cider gum
Giant	Giant Trees over 90
Giant	Giant Trees under 90
Highland	Highland coniferous heath
Hoplogonus	*Hoplogonus bornemisszai* Bornemisszas Stag Beetle
King	King Island *Eucalyptus globulus* King Island blue gum
Lissotes	*Lissotes latidens* Broad toothed stag beetle
Lomatia	*Lomatia tasmanica* King's lomatia
Neophema	*Neophema chrysogaster* orange bellied parrot
Nothofagus	*Nothofagus gunnii* deciduous beech
Palaeo	Palaeo endemic species catastrophic
Palaeo	Palaeo endemic species major
Phebalium	*Phebalium daviesii* Davies wax flower
Pherosphaera	*Pherosphaera hookeriana* drooping pine
Pneumatopteris	*Pneumatopteris pennigera* lime fern
Regenerating	Regenerating rainforest large patches
Remnant	Remnant rainforest
Sphagnum	Sphagnum
Tetratheca	*Tetratheca gunnii* shy pinkbells
TWWHA	TWWHA Very Tall Forest over 70 refugia
Melaleuca	*Melaleuca ericifolia* swamp forest
Notelaea	*Notelaea Pomaderris Beyeria* forest
Oreisplanus	*Oreisplanus munionga larana* Marrawah skipper butterfly
Oreixenica	*Oreixenica ptunarra* ptunarra brown butterfly
Palaeo	Palaeo endemic species moderate
Tasmanian	Tasmanian devil facilities
TWWHA	TWWHA Very Tall Forest over 70

Priority FMAC

The priority FMAC column has been calculated based on risk ratings and likelihood calculated across the entire state for all assets and values considered together. Therefore some numbers may be missing and it is the rank order that is relevant.

Appendix 2: Treatment plan

Notes at the end of the risk register provide explanation for the TERAG code, Asset description and Priority FMAC columns.

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
MIEC001	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	13	Ignition management	Industry FIFMC Fire Prevention at forest Operations procedure implemented at start of fire season until the end of the fire season (1st Oct -at least 30th April). Contractors closely monitor fire weather and shut down when weathers conditions deteriorate.		FIFMC	ongoing		
MIEC001	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	14	Preparedness	Fire tower Bradys		STT	ongoing		
MIEC001	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	15	Preparedness	Patrols on high fire danger days		STT, SFM	ongoing		
MIEC001	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	16	Fuel reduction	Forest Industry to collaborate to identify fuel reduction opportunities within native forest / plantations and strategic breaks that		STT, RFF, SFM, Forico	31/12/2021		

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
					can be developed over operational rotations					
MIEC007	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	13	Ignition management	Industry FIFMC Fire Prevention at forest Operations procedure implemented at start of fire season until the end of the fire season (1st Oct -at least 30th April). Contractors closely monitor fire weather and shut down when weathers conditions deteriorate.		FIFMC	ongoing		
MIEC007	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	14	Preparedness	Fire tower Bradys		STT	ongoing		
MIEC007	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	15	Preparedness	Patrols on high fire danger days		STT	ongoing		
MIEC007	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	16	Insurance	Insurance		RFF	ongoing		
MIEC007	A cluster of priority forest assets in the Clarence Plains	2	17	Fuel reduction	Forest Industry to collaborate to identify fuel reduction opportunities within native forest /		STT, RFF, SFM, Forico	31/12/2021		

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
	area of the Upper Derwent Valley				plantations and strategic breaks that can be developed over operational rotations					
MIEC010	A cluster of priority forest assets in the Florentine/Repulse area of the Upper Derwent Valley	2	18	Preparedness	Sharing of water point monitoring app & data, e.g. to COP		STT			
MIEC010	A cluster of priority forest assets in the Florentine/Repulse area of the Upper Derwent Valley	2	13	Ignition management	Industry FIFMC Fire Prevention at forest Operations procedure implemented at start of fire season until the end of the fire season (1st Oct -at least 30th April). Contractors closely monitor fire weather and shut down when weathers conditions deteriorate.		FIFMC	ongoing		
MIEC010	A cluster of priority forest assets in the Florentine/Repulse area of the Upper Derwent Valley	2	14	Preparedness	Fire tower Bradys (northern end only)		STT	ongoing		
MIEC010	A cluster of priority forest assets in the Florentine/Repulse area of the Upper Derwent Valley	2	15	Preparedness	Patrols on high fire danger days		STT, SFM	ongoing		
MIEC010	A cluster of priority forest assets in the	2	16	Insurance	Insurance		RFF, SFM	ongoing		

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
	Florentine/Repulse area of the Upper Derwent Valley									
MIEC017	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	13	Ignition management	Industry FIFMC Fire Prevention at forest Operations procedure implemented at start of fire season until the end of the fire season (1st Oct -at least 30th April). Contractors closely monitor fire weather and shut down when weathers conditions deteriorate.		FIFMC	ongoing		
MIEC017	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	14	Preparedness	Fire tower Bradys		STT	ongoing		
MIEC017	A cluster of priority forest assets in the Clarence Plains area of the Upper Derwent Valley	2	15	Preparedness	Patrols on high fire danger days		STT	ongoing		
MIEC042	Wayatinah	10	1	Fuel reduction	Hydro Tas Vegetation Management Plan	APZ	Hydro Tas	ongoing	Annual works program - compliance reportable to Hydro Board	BMP scheduled to be developed 2024
MIEC009	Lake Echo	11	1	Fuel reduction	Hydro Tas Vegetation Management Plan	APZ	Hydro Tas	ongoing	Annual works program - compliance reportable to Hydro Board	BMP completed and works commenced 2023

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
MIEC022	Liapootah	12	1	Fuel reduction	Hydro Tas Vegetation Management Plan	APZ	Hydro Tas	ongoing	Annual works program - compliance reportable to Hydro Board	BMP scheduled to be developed 2024
MIEC033	Tarraleah	12	1	Fuel reduction	Hydro Tas Vegetation Management Plan	APZ	Hydro Tas	ongoing	Annual works program - compliance reportable to Hydro Board	BMP scheduled to be developed 2025
MIEC037	Tungatinah	13	1	Fuel reduction	Hydro Tas Vegetation Management Plan	APZ	Hydro Tas	ongoing	Annual works program - compliance reportable to Hydro Board	BMP scheduled to be developed 2025
MIPE030	Nive Hill, Wayatinah	23	1	Fuel reduction	Hydro Tas Vegetation Management Plan	APZ	Hydro Tas	1/10/2023	As per treatment for Liapootah critical infrastructure	As per treatment for Liapootah critical infrastructure
MIPE030	Nive Hill, Wayatinah	23	2	Community safety	Maintain Community Protection and Response plan	APZ	TFS	1/10/2021		
MIPE007	Arthurs Lake	24	3	Community safety	Consider Community Protection and Response Plan	APZ	TFS	1/10/2023		Complete Arthurs Lake Area (2021)
MIPE013	Fentonbury, Westerway	25	4	Community safety	Update Community Protection and Response plans	APZ	TFS	1/10/2023		Behind
MIPE013	Fentonbury, Westerway	25	5	Fuel reduction	PWS Southern Region Fire Management Plan	SZ	PWS	1/10/2023	Majority of tenure is Freehold, conservation covenant and Permanent Production.	
MIPE027	Morass Bay, Wilburville	26	3	Community safety	Consider Community Protection and Response Plan	APZ	TFS	1/10/2023		Complete Arthurs Lake Area (2021)

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
MIPE041	Bradys Lake	26	6	Community safety	Consider Community Protection and Response Plan	APZ	TFS	1/10/2023		Behind
MIPE031	Parattah, Oatlands	27	7	Community safety	Consider Community Protection and Response Plan	APZ	TFS	1/10/2023		Complete Oatlands Area (2021)
MIPE044	Campania, Brains Hill	27	8	Community safety	Update Community Protection and Response plans	APZ	TFS	1/10/2023		Complete Campania - Native Corners (2022)
MIPE045	Central Plateau, Brandum, Elephant Rock, Reynolds Neck	28	9	Community safety	Consider Community Protection and Response Plan	APZ	TFS	1/10/2023		Behind
MIPE045	Central Plateau, Brandum, Elephant Rock, Reynolds Neck	28	10	Behavioural change initiatives	Implement Bushfire Ready Neighbourhoods Program Round 4 (2020-2022) at Miena (and surrounds if resources available)	AZ	TFS	1/12/2022	Some community engagement has been undertaking regarding the Great Lakes Water Tank Project	
MIPE045	Central Plateau, Brandum, Elephant Rock, Reynolds Neck	28	19	Fuel reduction	PWS North West Region Fire Management Plan	SZ	PWS	1/10/2023		
MIPE011	Kempton, Dysart	29	11	Community safety	Update Community Protection and Response Plan	APZ	TFS	1/10/2023		Behind
MIPE014	Bagdad	29	12	Fuel reduction	Develop Greater Bagdad Area Strategic Mitigation Plan	APZ	TFS	30/06/2022		Behind
MIPE014	Bagdad	29	19	Community safety	Update Community Protection and Response Plan	APZ	TFS	1/10/2023		Complete Bagdad Area (2021)

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
MIPE014	Bagdad	29	5	Fuel reduction	PWS Southern Region Fire Management Plan	SZ	PWS	1/10/2023	Majority of tenure is freehold and conservation covenant. Under-represented PWS Con Reserve don't appear to support trail network that allows independent fuel reduction activities from the adjacent tenures to be performed."	
MIPE009	Derwent Bridge	0	20	Fuel reduction	Continue with the implementation of planned burns in this area	SFMZ	TFS	Ongoing	Derwent Bridge was identified as high priority area outside of the original risk assessment. Planned burn program scheduled by TFS & PWS in surrounding treatable vegetation.	On-Track Continuing to explore various fuel reduction burns in the area. Some already burnt with more scheduled.
MIPE009	Derwent Bridge	0	21	Community safety	Update Community Protection and Response Plan	APZ	TFS	1/10/2023		Complete Derwent Bridge Area (2023)

Appendix 3: Bushfire Management Zones

Zone	Primary purpose	General location	Risk treatments
Asset Zone (AZ)	To identify assets and values requiring bushfire exclusion.	The physical boundary of the asset.	Building design elements such as: fire-resistant materials, ember proofing, sprinklers, water storage etc. Response plans.
Asset Protection Zone (APZ)	To protect human life, property and highly valued assets and values.	Adjacent to Asset Zones or elements in the landscape that can be used to this effect. Width determined by characteristics of the asset and the bushfire hazard (effective slope, vegetation type). This zone may encompass multiple land tenures.	Intensive bushfire fuel treatment around specific assets and the urban–rural interface to provide a fuel reduced buffer. May include both burning and mechanical fuel reduction. Includes Hazard Management Areas. Manipulation of fuel moisture (e.g. sprinklers), response plans.
Strategic Fire Management Zone (SFMZ)	To provide areas of reduced fuel in strategic locations, to reduce the: • speed and intensity of bushfires • potential for spot-fire development • size of bushfires. To aid containment of bushfires.	Located close to or some distance away from assets (e.g. the urban–rural interface). Identified fire paths inform the location and delineation of the zone.	Fuel reduction burning, including broad-scale fuel treatment. Management should aim to achieve mosaic fuel reduction patterns. Fire intervals and intensity generally do not exceed ecological thresholds. Other bushfire protection measures to assist bushfire control: fire trails, water points, detection measures, response plans.
Land Management Zone (LMZ)	To meet the objectives of the relevant land manager such as: Traditional Owner practices, biodiversity conservation, production forestry, farming, research or recreation.	Any bushland areas outside the above zones.	Various, but can include planned burning, experimental treatments, fire exclusion or no planned action.

Appendix 4: Current implementation plans

Plan owner	Plan title	Year	Treatment number
TFS	Campania – Native Corners Area: Community Bushfire Protection Plan and Bushfire Response Plan	2022	8
TFS	Colebrook Area: Community Bushfire Protection Plan and Bushfire Response Plan	2017	
TFS	Bagdad Area: Community Bushfire Protection Plan and Bushfire Response Plan	2021	19
TFS	Greater Bagdad Area: Community Bushfire Protection Plan and Bushfire Response Plan	2022	11
TFS	Kempton – Melton Mowbray Area: Community Bushfire Protection Plan and Bushfire Response Plan	2013	11
TFS	Bothwell: Community Bushfire Protection Plan	2020	
TFS	Fentonbury: Community Bushfire Protection Plan and Bushfire Response Plan	2013	4
TFS	Westerway: Community Bushfire Protection Plan and Bushfire Response Plan	2013	4
TFS	Ouse Area: Community Bushfire Protection Plan and Bushfire Response Plan	2014	
TFS	Wayatinah: Community Bushfire Protection Plan and Bushfire Response Plan	2017	2
TFS	Derwent Bridge: Community Bushfire Protection Plan and Bushfire Response Plan	2023	
TFS	Derwent Bridge: TFS Bushfire Mitigation Plan	2016	
TFS	Miena: Community Bushfire Protection Plan	2020	
TFS	Miena: Bushfire Ready Neighbourhoods Program (Round 4) 2020-2022	2020	10
PWS	PWS Southern Region Strategic Fire Management Plan	2018	5
PWS	PWS North West Region Strategic Fire Management Plan	2018	19
Hydro Tas	Hydro Tas Vegetation Management Plan	2019	1

Explanation of Plans:

Community Bushfire Response Plan: The purpose of a Bushfire Response Plan is for emergency managers to better protect communities and their assets during bushfire emergencies.

Community Bushfire Protection Plan: The purpose of a Community Bushfire Protection Plan is for community members to be provided with local information to assist with bushfire preparation and survival.

Community Bushfire Mitigation Plan: The purpose of a TFS Bushfire Mitigation Plan is to provide guidance regarding bushfire fuel management; to increase community bushfire safety and provide protection to important community assets.

Maps

All maps are published on LISTmap; Maps 3 and 4 are not published in the BRMP because they include too much detail to be seen on an A4 map.

To view a map in LISTmap, follow these instructions:

1. Click on the hyperlink, for example:

    https://maps.thelist.tas.gov.au/listmap/app/list/map?bookmarkId=396507

2. To view the legend, click on the Layers tab on the right side of the map window. The layers in the map each have a legend which can be viewed by clicking on the arrow at the left of the item in the Layers window.

3. To zoom in or out of the map, click on the Tools tab on the left side of the map window, then click on Map Tools – a tool bar will appear with zoom in and out icons. If using a mouse with a wheel, zoom in and out by rolling the wheel.

4. Move around on the screen by clicking on the screen, holding the button, and dragging.

5. To find out more information on a map item or location, click on the map once and an 'Identify Results' box will appear with details on all layers for that point. Click on the arrows at the left side of this list to view more information.

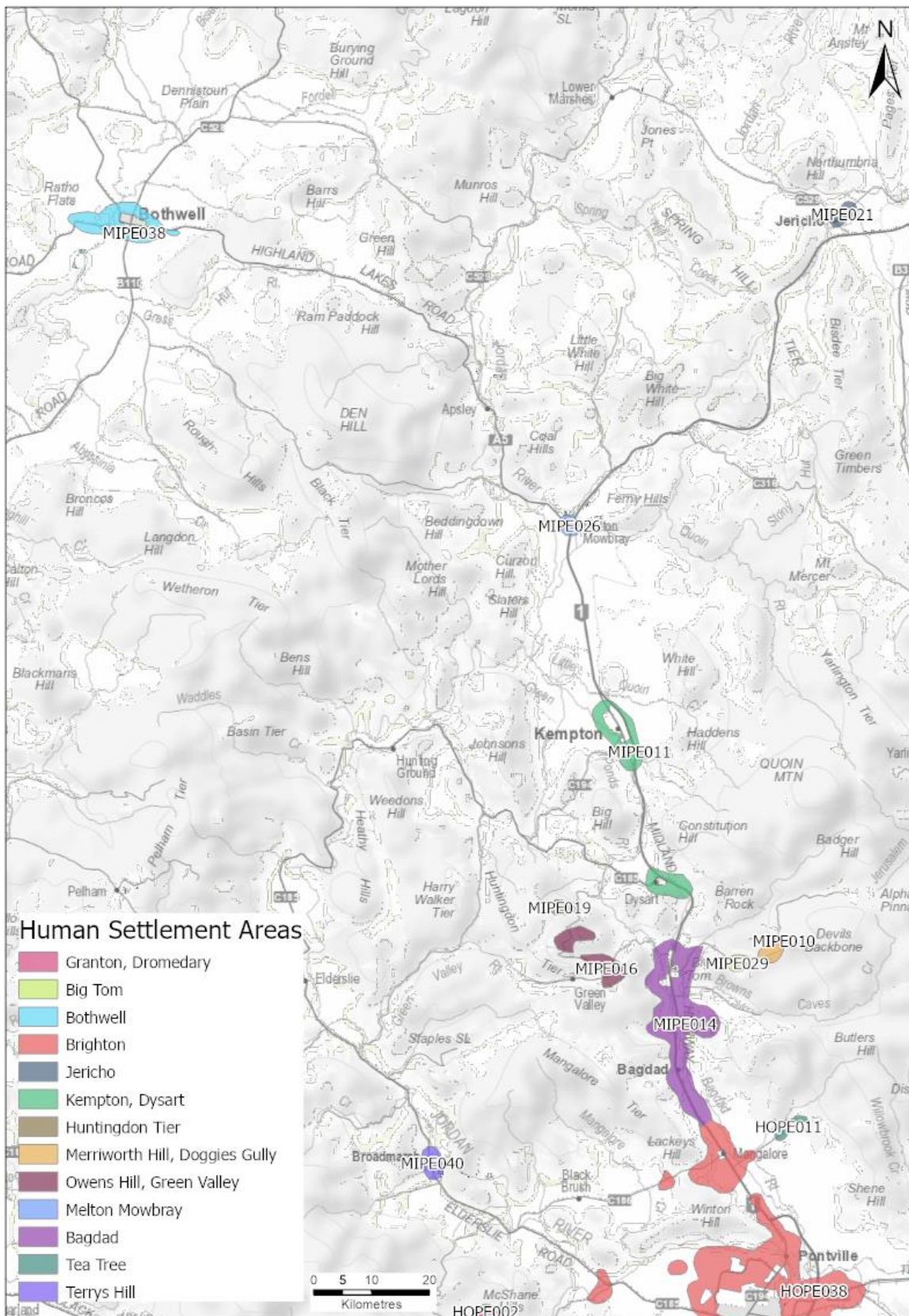## Map 1: Midlands Fire Management Area location

Map 2: Tenure summary map for Midlands Fire Management Area

Legend

Fire Management Area

☐ Midlands (1,059,026 ha)

Land Tenure

| 6.8% | 54.9% | 26.7% | 11.7% |
| Crown | Private | PWS | STT |

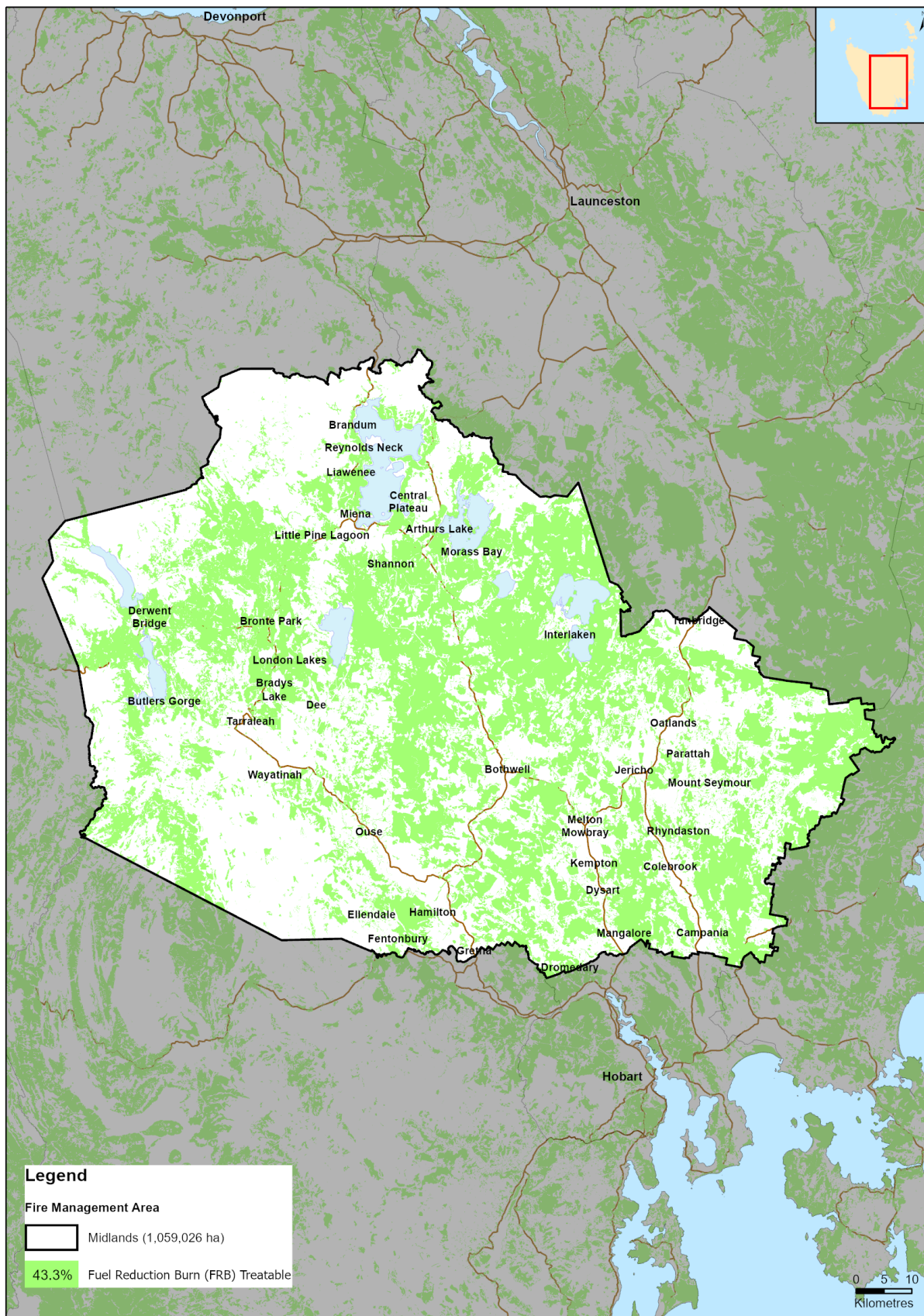# Map 3: Assets and values from the risk register for Midlands Fire Management Area

An example of the assets and values from the risk register in the Midlands FMA. The full map covering the entire FMA is published on LISTmap – click here to go to this link

Map 4: Fuel treatability for Midlands Fire Management Area

Legend

Fire Management Area

Midlands (1,059,026 ha)

43.3% Fuel Reduction Burn (FRB) Treatable

Map 5: Vegetation for Midlands Fire Management Area

Legend

Fire Management Area

☐ Midlands (1,059,026 ha)

TASVEG 4.0 - Broad Vegetation Communities

35.8%	Dry eucalypt forest and woodland
12.6%	Wet eucalypt forest and woodland
2.1%	Rainforest and related scrub
0.9%	Non eucalypt forest and woodland
1.1%	Saltmarsh and wetland
1.2%	Scrub, heathland and coastal complexes
6.7%	Highland and treeless vegetation
3.9%	Moorland, sedgeland and rushland
5.1%	Native grassland
25.4%	Modified land
5.1%	Other natural environments