



Tamar Fire Management Area Bushfire Risk Management Plan 2024

Document Control

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Version Control

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1.0	12/2020	Robyn Allchin	Tasmania Fire Service Bushfire Risk Unit	Document previously available revised. Previous revisions pre- date document control.
1.1	09/2023	Stephen Summers	Tasmania Fire Service Bushfire Risk Unit	Updated Document Control including pre-amble. Treatment plan – Comments updated & Progress column added.
1.2	09/2024	Bernard Plumpton	Tasmania Fire Service Bushfire Risk Unit	Updated Document Control including pre-amble. Treatment plan – Comments updated & Progress column added.

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 2024.

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

- 1. It is applicable for 1 October 2024 to 30 September 2025
- 2. It is based on the 3-year risk assessment for the Tamar FMA. This risk assessment is considered relevant in light of the fire seasons since 2021
- 3. It is based on the BRMP for the Tamar FMA accepted on the 30 March 2021.
- 4. Within the Tamar FMA, it details changes to:
 - a. Fire history (major bushfire events)
 - b. the Treatment Plan
 - c. the Risk Register
 - d. usage of the area
 - e. new or changed asset values
- 5. It is endorsed by the Tamar Fire Management Area Committee and approved by the State Fire Management Council.

Document endorsed by the Tamar Fire Management Area Committee

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Approved by the Chair Sam Bouwman Tamar FMAC

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Approved by State Fire Management Council lan Sauer Chair

Date: 27 November 2024

Cover Page Photo Acknowledgement: *Planned burn, Lake Trevallyn 2021. Photo credit: Steve Summers.*

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Glossary

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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				
DPIPWE	Department of Primary Industries, Parks, Water and Environment				
FFDI	Forest Fire Danger Index				
FMA	Fire Management Area				
FMAC	Fire Management Area Committee				
LGA	Local Government Area				
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 DPIPWE (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 Tamar Fire Management Area plan for the next 12 months commencing on 1 October. 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 Tamar 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 <u>Bushfire Risk Management Planning Guidelines 2020</u>. 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	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 (<u>Appendix 1</u>) and the proposed treatments are listed in the treatment plan (<u>Appendix 2</u>). All maps are published on the internet on LISTmap, and hyperlinks to these can be found in the relevant locations in this plan.

The Tamar Fire Management Area (FMA) is located on the north coast of Tasmania and encompasses the city of Launceston, the Tamar River Estuary and the Northern Midlands plains. The FMA covers an area of 859 086 ha and is a mixture of lands with high conservation value and high agricultural value. The region is dominated by agricultural and pastoral activities, particularly meat and wool production, apples, berries and viticulture, with the Tamar Valley being one of Tasmania's leading wine producing areas. Tourism, manufacturing and mineral exploration are also important industries for the region.

An estimated population of 106,000 reside within the Fire Management Area with several major population centres including Launceston, Beaconsfield/Beauty Point, George Town, Hadspen, Legana, Longford, Perth and Westbury.

Fire is an integral component of the Australian landscape and has the potential to impact all aspects and values of the FMA. Historical records have indicated that fire ignitions have been predominately human based though dry lightning events has ignited fires within the FMA. Changing climatic conditions are predicted to lead to more extreme fire weather events increasing the fire risk to the communities and assets within the FMA.

Areas that the FMAC have considered to be a priority for treatment are the East and West ridges of the Tamar (either side of the Estuary).

Areas and assets that the FMAC have considered to be a priority for treatment in the FMA include:

- Bell Bay, Mount Pelion infrastructure.
- A number of production forest coups.
- Hydro Tasmania Critical Infrastructure.
- High value production forests.
- Hadspen, Travellers Rest, Prospect Vale, Blackstone Heights.
- Trevallyn, Riverside, Summerhill, and West Launceston.
- Finger Post Hill, Holloways Hill.
- Nunamara, Patersonia.
- Notley Hills South, Glengarry.
- Exeter, Lanena, Grindelwald, Rosevears, Millers Road, and
- Settlers Range, Beaconsfield, Beauty Point.

Treatment options to be undertaken in these areas includes the continuation of the fuel reduction programs by the Parks and Wildlife Service and the Tasmanian Fire Service and local government. Agencies will also collaborate on the development of strategic fire management plans for both the East and West Tamar regions to help identify priority areas for fuel reduction works. Community Protection Plans and Bushfire Response Plans will be developed for Beaconsfield and Exeter and the surrounding communities, whilst the Lake Leake Bushfire Response Plan will be reviewed and updated where appropriate.

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 <u>Tasmanian Vegetation Fire Management Policy</u> and because it is an instruction from SFMC, the <u>Bushfire Risk Management Planning Guidelines</u> (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 Tamar 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 Tamar 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 <u>here</u> (SFMC 2020).

2. Establishing the context

2.1 Description of the Tamar Fire Management Area

The Tamar Fire Management Area is situated in the north of Tasmania (Map 1). Located around the city of Launceston, the FMA encompasses the Tamar estuary and the Northern Midlands plains. The FMA covers an area of 859 086 ha. Central to the FMA is the Tamar Valley and Esk River (North and South) systems.

The Tamar Fire Management Area straddles the Midland Highway which is the primary road route to and from Hobart in the south. It also straddles the Bass Highway between Launceston and the north-west coast

Land tenure within the Tamar FMA is approximately 28% public land and 72% private/freehold land (Map 2).

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

(
Land manager	% of FMA
Private property	72
DPIPWE (including PWS and	16
Crown Land Services)	
Sustainable Timbers Tasmania	9
Hydro	<1

There are five local government areas wholly or partially included in the Tamar FMA including:

- George Town Council;
- West Tamar City Council;
- City of Launceston;
- Meander Valley Council; and
- Northern Midlands.

2.2 Fire environment

The fire environment is defined as the surrounding conditions, influences and modifying forces that determine wildfire behaviour. This typically includes weather, topography, vegetation and fire history. Fire behaviour is influenced by a variety of factors including wind speed, relative humidity, temperature, fuel moisture content, fuel arrangement and fuel load. These factors vary both temporally and spatially across the Fire Management Area.

Topographically, the FMA is composed of a mixture of coastal plains in the north, with rolling hills leading to inland plains in the south of the FMA. The edges of the defined FMA culminate in alpine areas such as the Central Plateau and the foothills of the Ben Lomond massif. The Tamar estuary leading to the city of Launceston is a dominant landscape element in the north of the FMA. The landscape within a large portion of the FMA has been highly modified for agriculture resulting in the dominant vegetation type consisting of non-native agricultural, urban and exotic vegetation. The second most common vegetation type within the FMA consists of highly flammable dry eucalypt forest and woodland. A breakdown of the vegetation type across the FMA is provided in table two below.

Vegetation Group	% in FMA
Dry eucalypt forest and woodland	38.6
Wet eucalypt forest and woodland	6.3
Rainforest and related scrub	0.6
Non-eucalypt forest and woodland	1.8
Saltmarsh and wetland	0.3
Scrub, heathland and coastal complexes	1.3
Highland treeless vegetation	0.9
Moorland, sedgeland and rushland	0.1
Native grassland	4.8
Modified Land	44
Other natural environments	1.5

Table 2. Summary of the Broad Vegetation Group as a percentage of the FMA.

Available records compiled by Tasmania Fire Service, Parks and Wildlife Service and Sustainable Timber Tasmania indicate that the major cause of the ignitions within the FMA are classed as unknown (42%). The next leading causes for fire ignition are listed as escaped (23%), planned burning (18%) and arson (16%).

Significant recent bushfire events within the FMA include Nunamara (Tasman Highway) in January 2016 (871 ha), Connorville Road in January 2016 (808 ha), Lefroy in March 2015 (1,060 ha), Back Creek Road November 2012 (3,327 ha), Asbestos Road, York Town January 2010 (2,905 ha) and Pipers Brook 2022 (1,600 ha).

Significant assets at risk from bushfire in the FMA include the Bell Bay critical infrastructure, the suburbs to the west and south west of Launceston and communities along the east and west Tamar. The FMA also contains significant hydroelectric power, horticultural, agricultural and forestry assets as well as a threatened population of *Tetratheca*.

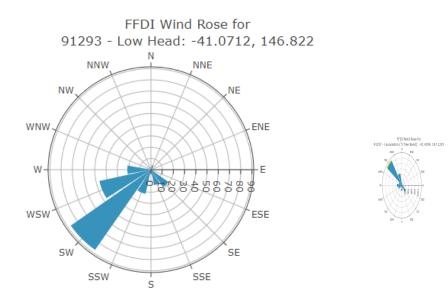
2.3 Climate and bushfire season

The climate of the Tamar FMA can be classified as temperate and is characterised by wet winters and low summer rainfall. Terrain, distance from the coast and the rain shadow of the Central Plateau has a strong influence on the pattern of rainfall across the region. Minimum and maximum temperatures are also cooler and warmer (respectively) with distance from the coast with inland areas experiencing higher daily temperatures in summer.

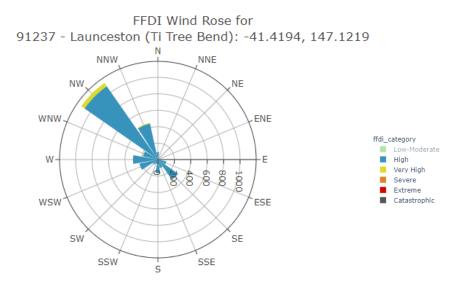
The more rugged highland areas can be subject to frequent snowfalls in spring. Winds are predominately westerly for the majority of the FMA. Winter is the wettest season due to the influence of passing cold frontal systems on the area. Across the Tamar FMA mean annual rainfall varies from 498mm/yr at Ross to 830mm/yr at Lake Leake. Other key locations include Cressy (610mm) Low head (677mm) and at Launceston – Ti Tree Bend (680mm).

Bushfires in Tasmania generally occur within the warmer and drier months of the year, typically from November to March, though fires can occur outside this period if conditions conducive to fire exist. The bushfire threat for the FMA increases in late December with January/ February generally being the driest and hottest months when bushfires are more difficult to control.

Forest Fire Danger Indices (FFDI) wind rose charts indicate that the dominate fire danger weather stream varies across the FMA. Along the coast more benign weather conditions are exhibited and are largely driven under a south westerly influence (see figure one at Low Head). Conversely inland, the higher fire danger weather comes from a north-westerly weather pattern (see figures two and three for Launceston – Ti Tree Bend and Ross (The Boulevards)).









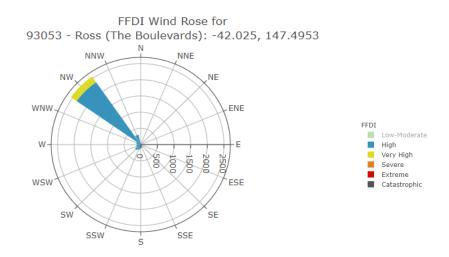


Figure 3: Wind Rose Plot of FFDI – Ross

As a measure of understanding challenging fire weather for regions, the annual return period of various FFDIs can be graphed using historical weather data. This information can be used to determine what a 'one in ten year' fire weather event would look like for that region. Along the northern coast (see figure four for Low Head) of the Tamar FMA this equates to a FFDI rating of 18 once every ten years, whilst historical data suggests it is higher inland with a 'one in ten-year event' producing a FFDI day of around 35, or a Very High fire danger day (see figure five for Launceston – Ti Tree Bend). In the midlands of Tasmania, at Ross, the analysis produced a FFDI of approximately 42 (figure six).

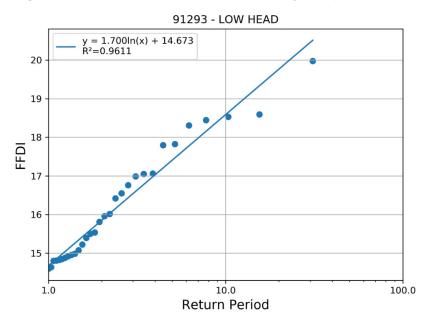


Figure 4: FFDI v Annual Exceedance Probability (AEP) - Low Head

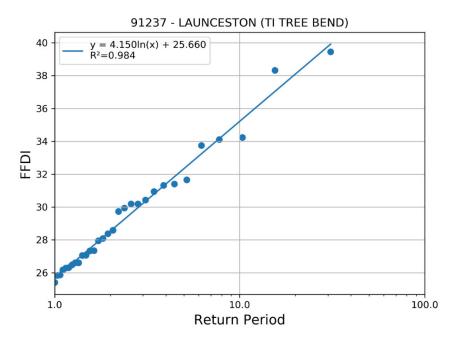
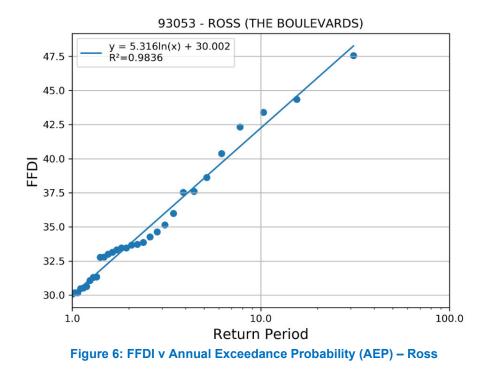


Figure 5: FFDI v Annual Exceedance Probability (AEP) – Launceston (Ti Tree Bend)



Planned burning is limited by weather prescriptions, the presence or otherwise of treatable fuels, appropriate boundaries and the availability of human resources to successfully conduct the ignition and suppression of the operation. Typically planned burning occurs in the Tamar FMA during both spring and autumn.

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.

2.4 **Population and community**

The Tamar Fire Management Area has an estimated residential population of 128,000 people.

The principal population centre is Launceston with an estimated population of 106,000 which has the largest urban population in Tasmania outside of Hobart. In addition, there are a number of population centres within the FMA including:

- Beaconsfield/Beauty Point (population 3727);
- George Town (population 4304);
- Hadspen (population 2063);
- Legana (population 6680);
- Longford (population 3053);
- Perth (population 2411); and
- Westbury (population 2104).

Launceston LGA has the youngest median population in the FMA at 38.5 years, whilst George Town has the oldest with a median age of 47.9 years. Rural living and smaller dispersed settlements represent another element of population dispersal within the area. This is especially evident along the Tamar Estuary. Farm properties and small rural living enclaves are common development types in the rural and regional areas. The FMA has been described as an area comprised of land with high environmental values or land with high agricultural value.

The FMA's economy is dominated by agricultural and pastoral activities, particularly meat and wool production, apples, berries and viticulture, with the Tamar Valley being one of Tasmania's leading wine producing areas. Tourism is also an important industry for the region. Launceston is the major retail centre for the FMA and the city is a major services hub for the state.

Significant built infrastructure assets in the region include:

- Bell Bay Industrial Precinct;
- Launceston Airport;
- Rail infrastructure;
- Bass and Midlands Highways;
- East Tamar Highway;
- TasWater and TasNetworks infrastructure;
- Telecommunications infrastructure (radio and telephone towers, TV transmitters etc); and
- Poatina Power Station.

2.5 Community engagement

The FMAC identifies the importance of ongoing community liaison and engagement with the Department of Primary Industries Parks Water and the Environment, Sustainable Timber Tasmania, and key stakeholders within the community, as being an integral component of bush fire management. Community engagement has and will continue to be centred on individual landowner engagement and immediate neighbours as part of planned burn development coordinated by the Bushfire Risk Unit, Parks and Wildlife and Sustainable Timbers Tasmania. Engagement activities undertaken in recent years and coordinated by BRU engagement officers and TFS community development officers have included:

- Bushfire Ready Information sessions providing context around previous and upcoming bushfire seasons;
- How TFS responds;
- Situational awareness (FDR and Alerts and Warnings);
- Community Protection Planning;
- Bushfire survival planning;
- Preparing individual landowner properties; and
- Introducing communities to the Disaster Reliance Education Tasmania resources in mid-December 2019.

The Bushfire Ready Neighbourhood Program undertook engagement activities in Liffey during round three of its program (2018-2020) and has identified Karoola/Turners Marsh as a community to work with for Round Four (2020-2022).

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).

- A stolen car is ignited in the bush on a day of FFDI 52 escapes and ignites a bushfire that spreads and impacts the town of Grindelwald resulting in destruction of numerous houses, community buildings and tourist accommodation.
- A lightning strike on Mt Direction ignites a wildfire and rapidly spreads on a day of very high fire danger (FDDI 48) impacting the East Tamar communities leading to loss of structures
- A bushfire ignites on a day of total fire ban (FFDI 52), on the side of Bowens road (Briggs regional reserve), and rapidly escalates moving towards Beaconsfield leading to loss of rural farmsteads, community infrastructure (hospital/ Nursing Home) and numerous houses.

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

Existing control measures for bushfire within the Tamar FMA include but are not limited to:

- 59 TFS Brigades totally or partly cover the FMA;
- PWS Crews based Trevallyan Field Centre;
- PWS Regional fire Crew, Prospect;
- STT crews, Perth;
- Disaster resilience education program;
- BRU, STT and PWS planned Burning programs;
- Launceston Council Burning program Minor reserves; and
- The Bushfire Ready Neighbourhood (BRN) program.

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 <u>Tasmanian Emergency Risk Assessment Guidelines</u> and the <u>Bushfire Risk</u> <u>Management Planning Guidelines 2020</u> (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

High priority assets have been identified across a range of values and are outlined in the Risk Register (see <u>Appendix 1</u>).

Critical infrastructure and supporting network facilities for communication, power, water and transport corridors, have been identified for priority actioning to review bushfire risk, where practically possible.

High priority communities along the east and west Tamar will be assessed at a strategic level to identify opportunities for fuel treatments and fire infrastructure in the future. Further detailed analysis may follow should key stakeholders determine local mitigation plans be required for these townships. Bushfire Response and Community Protection Plans will be developed for some communities identified as being at high risk and currently lacking this level of planning (see <u>Appendix 2</u>).

STT and private forestry groups will work together to take action to protect high value production forests in the FMA and manage the risk that they contribute to the community.

Environmental values have been evaluated with consideration to vulnerability to bushfire and relative impact. These values will be targeted for treatment, further analysis or monitor and review, primarily by PWS for protection through the strategic application of fuel reduction planned burning, along with the adoption and implementation of strategic bushfire mitigation plans.

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 (<u>Appendix 2</u>).

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.

- Continuation of the PWS, TFS and City of Launceston fuel reduction burning program around priority communities;
- Forest Industry to collaborate to identify fuel reduction opportunities within native forest and strategic breaks that can be developed over operational rotations;
- Community Protection Plans and Bushfire Response Plans to be developed for Beaconsfield and surrounding communities;
- Community Protection Plans and Bushfire Response Plans to be developed for Exeter and the surrounding communities;
- Review of the Lake Leake Bushfire Response Plan will be reviewed and updated where appropriate;
- STT to review their Tactical Fire Management Plan annually; and
- Hydro Tasmania to implement their annual vegetation management program and work collaboratively with partner agencies to identify opportunities to undertake fuel reduction burning near their assets.

5.2 Bushfire management zones

For those assets and values where fuel management or other treatments are designated in the treatment plan (<u>Appendix 2</u>), bushfire management zones are used to delineate the treatment areas.

The names of zones and descriptors are provided in Appendix 3.

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.

Not all human settlement areas (HSAs), production forest assets and natural values are able to have a treatment applied to them. It is however considered that many will benefit from treatments applied to nearby assets. Notable decisions to not directly apply treatments and barriers to mitigating risk include:

- The decision not to actively note the treatments beyond priority two for natural values in this FMA;
- The decision to not apply a treatment to the human settlement areas of Campbell Town and Ross which were judged by the risk register to be at risk of multiple ignitions from grass fire. Although potential benefit could be gained by investing in community preparedness for these communities, these resources were deemed to be better applied to communities in which the bushfire risk cannot be addressed so readily by suppression should a fire start.
- Lack of funding for maintenance or establishment of Strategic Fire Trails, Fuel Management Buffer Zones or other mechanical mitigation activities located on private and public lands, in particular for local council and private landholders.
- Limitations on fire mitigation strategies within vegetation communities not suitable for planned burning activities.
- Shifting climatic conditions, which are shortening windows for planned burning.
- Community perception and understanding of 'treatable' and 'untreatable' vegetation, and awareness of vegetation that may or may not be suitable for planned burning within prescriptions.
- Lack of funding for enhanced protection of critical assets and supporting infrastructure.
- Lack of capacity of some of the community to adhere to abatement notices issued by local Council.
- Difficulty in resourcing of planned burning activities. Key land management agencies regularly compete for human and mechanical resources for planned burn activities.

5.4 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 <u>Fuel Reduction Program</u> that is funded, coordinated and implemented by the Tasmania Fire Service, Parks and Wildlife Service and Sustainable Timbers 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.

5.5 Strategic fire infrastructure

Strategic fire trails in the Tamar FMA are primarily under the ownership of the Parks and Wildlife Service and Sustainable Timber Tasmania and are listed or referred to in Appendix 4. These fire trails are designated because they are essential for fuel reduction and bushfire suppression; they should be regularly maintained to appropriate standards.

The main areas for fire trail locations in the Tamar FMA are:

- PWS tenure Narawntapu National Park and Trevallyn Nature Reserve
- STT tenure fire trails are too numerous to identify. However, STT have a rolling fire trail maintenance program, and this is identified in their Tactical Plan.

The Tasmanian government radio network (GRN) has been implemented across the Tamar Fire Management Area and provides a whole of government approach to emergency communications. Twenty tower sites associated with the GRN are present in the Tamar FMA.

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.

References

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TERAG (2017), *Tasmanian Emergency Risk Assessment Guidelines*. Department of Police, Fire and Emergency Management, Tasmania. Retrieved from http://www.ses.tas.gov.au/about/risk-management/terag/

SFMC (2020), *Bushfire Risk Management Planning Guidelines*, State Fire Management Council, Tasmania. Retrieved from <u>http://www.sfmc.tas.gov.au/document/bushfire-risk-management-planning-guidelines-2020.</u>

Appendices

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 effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC04 0	Critical Infrastructur e	Poatina	Major	Medium	Highest	Unlikely	High	13	Treatment	Northern Midlands
TAEC05 5	Critical Infrastructur e	Trevallyn	Major	High	Highest	Rare	High	16	Treatment	West Tamar
TASO00 1	Human Settlement Area	Mount Pelion, Bell Bay	Catastrophic	Medium	Highest	Unlikely	Extreme	6	Treatment	George Town
TAPE065	Human Settlement Area	Hadspen, Travellers Rest, Prospect Vale, Blackstone Heights	Major	Medium	Highest	Unlikely	High	12	Treatment	Meander Valley
TAPE099	Human Settlement Area	Hadspen, Travellers Rest, Prospect Vale, Blackstone Heights	Major	Medium	Highest	Unlikely	High	12	Treatment	Meander Valley
TAPE068	Human Settlement Area	Trevallyn, Riverside, Summerhill, West Launceston	Major	Medium	Highest	Unlikely	High	14	Treatment	West Tamar
TAPE018	Human Settlement Area	Finger Post Hill, Holloways Hill	Minor	Low	Highest	Likely	Medium	23	Treatment	Launcesto n
TAPE023	Human Settlement Area	Notley Hills South, Glengarry	Minor	Low	Highest	Likely	Medium	23	Treatment	West Tamar
TAPE057	Human Settlement Area	Nunamara, Patersonia	Minor	Low	Highest	Likely	Medium	23	Treatment	Launcesto n
TAPE097	Human Settlement Area	Bridgenorth, Foresters Hill, Legana	Moderate	Low	Highest	Unlikely	Medium	25	Treatment	West Tamar

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE016	Human Settlement Area	Exeter, Lanena, Grindelwald, Rosevears, Millers Road	Moderate	Low	Highest	Unlikely	Medium	25	Treatment	West Tamar
TAPE040	Human Settlement Area	Likemans Hill, Mount Direction, Rocky Forest, Swan Bay	Moderate	Medium	Highest	Unlikely	Medium	25	Treatment	Launcesto n
TAPE033	Human Settlement Area	Settlers Range, Beaconsfield, Beauty Point	Moderate	Low	Highest	Unlikely	Medium	25	Treatment	West Tamar
TAPE001	Human Settlement Area	Campbell Town, Ross	Moderate	Very Low	Highest	Unlikely	Medium	26	Monitor and Review	Northern Midlands
TAPE034	Human Settlement Area	Lake Leake, Rawlinna	Moderate	Very Low	Highest	Unlikely	Medium	26	Treatment	Northern Midlands
TAPE098	Human Settlement Area	Browns Hill, Lilydale	Moderate	Low	Highest	Unlikely	Medium	27	Treatment	Launcesto n
TAPE002	Human Settlement Area	Carrick	Moderate	Low	Highest	Unlikely	Medium	27	Monitor and Review	Meander Valley
TAPE010	Human Settlement Area	Deviot, Gravelly Beach, Robigana	Moderate	Very Low	Highest	Unlikely	Medium	27	Treatment	West Tamar
TAPE092	Human Settlement Area	Devon Hills, Breadalbane	Moderate	Medium	Highest	Unlikely	Medium	27	Monitor and Review	Northern Midlands
TAPE011	Human Settlement Area	Dilston	Moderate	Very Low	Highest	Unlikely	Medium	27	Treatment	Launcesto n
TAPE024	Human Settlement Area	Greens Beach	Moderate	Medium	Highest	Unlikely	Medium	27	Treatment	West Tamar
TAPE027	Human Settlement Area	Hillwood	Moderate	Low	Highest	Unlikely	Medium	27	Treatment	George Town
TAPE049	Human Settlement Area	Mowbray, Ravenswood	Moderate	Medium	Highest	Unlikely	Medium	27	Treatment	Launcesto n

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE053	Human Settlement Area	Newstead, Waverley, St Leonards	Moderate	Low	Highest	Unlikely	Medium	27	Treatment	Launcesto n
TAPE032	Human Settlement Area	Prospect, Kings Meadows	Moderate	Medium	Highest	Unlikely	Medium	27	Treatment	Launcesto n
TAPE070	Human Settlement Area	Rocherlea	Moderate	Medium	Highest	Unlikely	Medium	27	Treatment	Launcesto n
TAPE066	Human Settlement Area	Youngtown, Relbia	Moderate	Medium	Highest	Unlikely	Medium	27	Treatment	Launcesto n
TAPE007	Human Settlement Area	Arrandale Road	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAPE019	Human Settlement Area	Baker Tier, Pipers River	Minor	Low	Highest	Unlikely	Low			George Town
TAPE045	Human Settlement Area	Bellingham	Moderate	Very Low	Highest	Rare	Medium		Treatment	George Town
TAPE046	Human Settlement Area	Ben Lomond	Insignificant	Low	Highest	Rare	Very Low			Northern Midlands
TAPE048	Human Settlement Area	Big Bay, Mount Edgecombe	Insignificant	Medium	Highest	Unlikely	Low			George Town
TAPE051	Human Settlement Area	Big Tamar Hill	Insignificant	Very Low	Highest	Unlikely	Low			West Tamar
TAPE062	Human Settlement Area	Bishopsbourne	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAPE067	Human Settlement Area	Blackwood Hill	Minor	Medium	Highest	Rare	Low			West Tamar
TAPE085	Human Settlement Area	Bracknell	Minor	Low	Highest	Unlikely	Low			Meander Valley

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE003	Human Settlement Area	Chimney Saddle	Insignificant	Very Low	Highest	Unlikely	Low			Launcesto n
TAPE004	Human Settlement Area	Clarence Point, Kelso	Moderate	Low	Highest	Rare	Medium			West Tamar
TAPE005	Human Settlement Area	Cocked Hat Hill	Insignificant	Medium	Highest	Rare	Very Low			Northern Midlands
TAPE008	Human Settlement Area	Cressy	Moderate	Medium	Highest	Rare	Medium			Northern Midlands
TAPE009	Human Settlement Area	Deddington	Minor	Low	Highest	Unlikely	Low			Northern Midlands
TAPE006	Human Settlement Area	Epping Forest, Conara	Minor	Medium	Highest	Unlikely	Low			Northern Midlands
TAPE014	Human Settlement Area	Evandale, Western Junction	Moderate	Low	Highest	Rare	Medium			Northern Midlands
TAPE015	Human Settlement Area	Everest Road	Minor	Very Low	Highest	Unlikely	Low			West Tamar
TAPE017	Human Settlement Area	Exton	Minor	Very Low	Highest	Rare	Low			Meander Valley
TAPE069	Human Settlement Area	Frankford, Blades Hill, Mcbains Road	Minor	Low	Highest	Unlikely	Low			West Tamar
TAPE020	Human Settlement Area	Gaunts Hill	Minor	Low	Highest	Rare	Low			Launcesto n
TAPE021	Human Settlement Area	George Town, Low Head	Moderate	Medium	Highest	Rare	Medium			George Town
TAPE025	Human Settlement Area	Hagley	Moderate	Very Low	Highest	Rare	Medium			Meander Valley

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE028	Human Settlement Area	Invermay	Insignificant	Very Low	Highest	Rare	Very Low			Launcesto n
TAPE029	Human Settlement Area	Karoola	Minor	Low	Highest	Rare	Low			Launcesto n
TAPE030	Human Settlement Area	Kayena	Moderate	Very Low	Highest	Rare	Medium			West Tamar
TAPE031	Human Settlement Area	Kerrisons Road	Insignificant	Very Low	Highest	Unlikely	Low			West Tamar
TAPE035	Human Settlement Area	Lalla	Minor	Medium	Highest	Rare	Low			Launcesto n
TAPE036	Human Settlement Area	Launceston	Insignificant	Low	Highest	Rare	Very Low			Launcesto n
TAPE037	Human Settlement Area	Lebrina	Minor	Very Low	Highest	Unlikely	Low			Launcesto n
TAPE038	Human Settlement Area	Lefroy	Minor	Medium	Highest	Unlikely	Low		Treatment	George Town
TAPE039	Human Settlement Area	Leighlands Road, Range Road	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAPE042	Human Settlement Area	Longford	Moderate	Low	Highest	Rare	Medium		Treatment	Northern Midlands
TAPE043	Human Settlement Area	Lulworth	Minor	Medium	Highest	Rare	Low			George Town
TAPE026	Human Settlement Area	Lyons Saddle, Halls Tier	Minor	Medium	Highest	Unlikely	Low			Launcesto n
TAPE013	Human Settlement Area	Mount Albany, Badger Head	Minor	Low	Highest	Unlikely	Low			West Tamar

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE047	Human Settlement Area	Mount Blackwood, Poatina	Minor	Medium	Highest	Unlikely	Low			Northern Midlands
TAPE044	Human Settlement Area	Mount Pelion, Bell Bay	Insignificant	Medium	Highest	Unlikely	Low			George Town
TAPE050	Human Settlement Area	Myrtle Bank	Insignificant	Medium	Highest	Unlikely	Low			Launcesto n
TAPE052	Human Settlement Area	Newnham	Moderate	Medium	Highest	Rare	Medium			Launcesto n
TAPE054	Human Settlement Area	Nile	Minor	Low	Highest	Rare	Low			Northern Midlands
TAPE055	Human Settlement Area	Norwood	Moderate	Very Low	Highest	Rare	Medium			Launcesto n
TAPE056	Human Settlement Area	Notley Hills	Minor	Very Low	Highest	Unlikely	Low			West Tamar
TAPE058	Human Settlement Area	Oakmount	Insignificant	Very Low	Highest	Rare	Very Low			Northern Midlands
TAPE059	Human Settlement Area	Paulys Hills	Insignificant	Very Low	Highest	Unlikely	Low			Meander Valley
TAPE060	Human Settlement Area	Pecks Hill	Insignificant	Low	Highest	Unlikely	Low			Launcesto n
TAPE061	Human Settlement Area	Perth	Moderate	Medium	Highest	Rare	Medium			Northern Midlands
TAPE063	Human Settlement Area	Pipers Brook	Insignificant	Very Low	Highest	Unlikely	Low			George Town
TAPE064	Human Settlement Area	Potato Hill	Minor	Low	Highest	Rare	Low			George Town

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE071	Human Settlement Area	Rosevale	Minor	Low	Highest	Rare	Low			Meander Valley
TAPE072	Human Settlement Area	Rossarden	Minor	Low	Highest	Unlikely	Low			Northern Midlands
TAPE073	Human Settlement Area	Rowella	Minor	Very Low	Highest	Rare	Low			West Tamar
TAPE074	Human Settlement Area	Rowleys Hill	Minor	Low	Highest	Rare	Low			Launcesto n
TAPE012	Human Settlement Area	Royal George, Avoca	Minor	Low	Highest	Unlikely	Low			Northern Midlands
TAPE075	Human Settlement Area	Selbourne	Insignificant	Very Low	Highest	Rare	Very Low			Meander Valley
TAPE076	Human Settlement Area	Sharp Peak	Minor	Low	Highest	Rare	Low			West Tamar
TAPE077	Human Settlement Area	She Oak Hill, Sidmouth	Minor	Very Low	Highest	Unlikely	Low			West Tamar
TAPE078	Human Settlement Area	Signal Lane	Minor	Very Low	Highest	Unlikely	Low			George Town
TAPE079	Human Settlement Area	South Launceston	Minor	Medium	Highest	Rare	Low			Launcesto n
TAPE041	Human Settlement Area	Spring Hill, Loira, Salisbury Hill	Minor	Very Low	Highest	Unlikely	Low			West Tamar
TAPE080	Human Settlement Area	Stony Head	Minor	Medium	Highest	Rare	Low			George Town
TAPE081	Human Settlement Area	Swan Point	Moderate	Low	Highest	Rare	Medium			West Tamar

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE083	Human Settlement Area	Tam O'Shanter Bay	Moderate	Medium	Highest	Rare	Medium		Treatment	George Town
TAPE084	Human Settlement Area	The Lump	Insignificant	Very Low	Highest	Rare	Very Low			Northern Midlands
TAPE086	Human Settlement Area	Tooms Lake	Minor	Low	Highest	Unlikely	Low			Northern Midlands
TAPE087	Human Settlement Area	Turners Marsh	Minor	Medium	Highest	Unlikely	Low			Launcesto n
TAPE088	Human Settlement Area	Underwood	Minor	Low	Highest	Unlikely	Low			Launcesto n
TAPE089	Human Settlement Area	Upper Blessington	Insignificant	Very Low	Highest	Unlikely	Low			Launcesto n
TAPE022	Human Settlement Area	Valley Road, Stringybark Hill, Winkleigh, Glendale Road	Minor	Low	Highest	Unlikely	Low			West Tamar
TAPE090	Human Settlement Area	Westbury	Moderate	Low	Highest	Rare	Medium			Meander Valley
TAPE091	Human Settlement Area	Weymouth	Moderate	Medium	Highest	Rare	Medium			George Town
TAPE082	Human Settlement Area	White Hills, Talisker Hill	Minor	Very Low	Highest	Rare	Low			Launcesto n
TAPE093	Human Settlement Area	Whitemore	Minor	Very Low	Highest	Rare	Low			Meander Valley
TAPE094	Human Settlement Area	Windermere	Moderate	Very Low	Highest	Rare	Medium			Launcesto n
TAPE095	Human Settlement Area	Woodlawn Road	Insignificant	Medium	Highest	Rare	Very Low			Launcesto n

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAPE096	Human Settlement Area	Woolmers Lane	Insignificant	Low	Highest	Rare	Very Low			Northern Midlands
TAEN00 2	Natural Value	Tetratheca	Major	Very Low	Highest	Likely	Extreme	1	Treatment	West Tamar
TAEN00 3	Natural Value	cushion, Sphagnum	Major	Very Low	Highest	Likely	Extreme	2	Monitor and Review	Northern Midlands
TAEN00 4	Natural Value	cushion	Major	Very Low	Highest	Unlikely	High	11		Northern Midlands
TAEN02 5	Natural Value	Notelaea, Regenerating, Sphagnum	Major	Medium	Highest	Unlikely	High	11		Launcesto n
TAEN00 5	Natural Value	cushion	Major	Very Low	Highest	Unlikely	High	15		Northern Midlands
TAEN00 7	Natural Value	Melaleuca	Moderate	Very Low	Highest	Likely	High	23		George Town
TAEN01 5	Natural Value	Melaleuca	Moderate	Very Low	Highest	Likely	High	23		George Town
TAEN01 7	Natural Value	Melaleuca	Moderate	Very Low	Highest	Likely	High	23		Launcesto n
TAEN00 1	Natural Value	Notelaea	Moderate	Very Low	Highest	Likely	High	23		Launcesto n
TAEN03 2	Natural Value	Notelaea	Moderate	Very Low	Highest	Likely	High	23		Launcesto n
TAEN02 8	Natural Value	Oreixenica	Moderate	Very Low	Highest	Likely	High	23		Northern Midlands
TAEN03 1	Natural Value	Tasmanian	Moderate	Very Low	Highest	Unlikely	Medium	24		Meander Valley
TAEN00 6	Natural Value	Antipodia	Moderate	Very Low	Highest	Unlikely	Medium	25		Northern Midlands
TAEN01 3	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEN01 4	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEN01 9	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEN02 0	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEN02 3	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	25		Launcesto

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEN02 6	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	25		Northern Midlands
TAEN01 1	Natural Value	Melaleuca, Tasmanian	Moderate	Very Low	Highest	Unlikely	Medium	26		George Town
TAEN00 9	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	27		George Town
TAEN01 6	Natural Value	Melaleuca	Moderate	Very Low	Highest	Unlikely	Medium	27		George Town
TAEN02 7	Natural Value	Oreixenica	Moderate	Very Low	Highest	Unlikely	Medium	29		Northern Midlands
TAEN00 8	Natural Value	Melaleuca	Moderate	Very Low	Highest	Rare	Medium			George Town
TAEN01 0	Natural Value	Melaleuca	Moderate	Very Low	Highest	Very Rare	Low			George Town
TAEN01 2	Natural Value	Melaleuca	Moderate	Very Low	Highest	Rare	Medium			West Tamar
TAEN01 8	Natural Value	Melaleuca	Moderate	Very Low	Highest	Rare	Medium			George Town
TAEN02 1	Natural Value	Melaleuca	Moderate	Very Low	Highest	Rare	Medium			George Town
TAEN02 2	Natural Value	Melaleuca	Moderate	Very Low	Highest	Very Rare	Low			George Town
TAEN02 4	Natural Value	Melaleuca	Moderate	Very Low	Highest	Very Rare	Low			George Town
TAEN03 3	Natural Value	Notelaea	Moderate	Very Low	Highest	Rare	Medium			Launcesto n
TAEN02 9	Natural Value	Tasmanian	Moderate	Very Low	Highest	Rare	Medium			Northern Midlands
TAEN03 0	Natural Value	Tasmanian	Moderate	Very Low	Highest	Rare	Medium			Launcesto n
TAPE100	Other	Hollybank recreational area	Moderate	Low	Highest	Likely	High	22	Treatment	Launcesto n
TAEC00 2	Production Forest	A cluster of various coupes and plantations	Catastrophic	Medium	Highest	Unlikely	Extreme	1	Treatment	Launcesto n
TAEC02 8	Production Forest	A cluster of various coupes and plantations	Catastrophic	Medium	Highest	Unlikely	Extreme	1		Launcesto n
TAEC00 9	Production Forest	A cluster of various coupes and plantations	Catastrophic	Medium	Highest	Unlikely	Extreme	3		Launcesto n
TAEC02 7	Production Forest	A cluster of various coupes and plantations	Catastrophic	Medium	Highest	Unlikely	Extreme	4		Northern Midlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC00 8	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	9		Launcesto n
TAEC01 4	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	9		West Tamar
TAEC05 1	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	9		West Tamar
TAEC05 8	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	9		Launcesto n
TAEC00 3	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	10		Meander Valley
TAEC00 5	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	10		George Town
TAEC01 1	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	10		Meander Valley
TAEC02 3	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	10		Launcesto n
TAEC02 5	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	10		Launcesto n
TAEC03 3	Production Forest	A cluster of various coupes and plantations	Major	Medium	Highest	Unlikely	High	10		George Town
TAEC01 9	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	11		Launcesto n
TAEC02 0	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	11		Northern Midlands
TAEC05 7	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	11		Northern Midlands
TAEC00 1	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	12		George Town
TAEC00 6	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	12		Northern Midlands
TAEC01 6	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	12		Northern Midlands
TAEC03	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	12		Northern Midlands
TAEC03 2	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	12		Northern Midlands
TAEC00	Production Forest	A cluster of various coupes and plantations	Major	Very Low	Highest	Unlikely	High	13		Meander Vallev
TAEC02	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Likely	High	22		George Town

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC02 9	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Likely	High	22		Launcesto n
TAEC00 4	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Likely	Medium	23		Northern Midlands
TAEC03 4	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Likely	Medium	23		Northern Midlands
TAEC04 1	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Likely	Medium	23		Northern Midlands
TAEC04 8	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Likely	High	23		West Tamar
TAEC06 9	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Likely	Medium	23		Northern Midlands
TAEC01 5	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	24		Meander Valley
TAEC04 5	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	24		Launcesto n
TAEC01 3	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		Northern Midlands
TAEC03 6	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEC04 2	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		West Tamar
TAEC05 0	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEC07 5	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		George Town
TAEC10 3	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	25		Launcesto n
TAEC02 2	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	26		Meander Valley
TAEC06 5	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	26		Northern Midlands
TAEC10 9	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	26		Launcesto n
TAEC02 4	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	27		Meander Valley
TAEC05	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	27		Launcesto
TAEC06 3	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	27		Meander Valley

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC07 7	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	27		Northern Midlands
TAEC05	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	28		Northern Midlands
TAEC07 3	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Unlikely	Medium	28		Northern Midlands
TAEC01 0	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC01 2	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC01 7	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC01 8	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Launcesto n
TAEC02 6	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC03 0	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Meander Valley
TAEC03 5	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Launcesto n
TAEC03 7	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC03 8	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC03 9	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Launcesto n
TAEC04 3	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC04 4	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC04 6	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Unlikely	Low			George Town
TAEC04 7	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC04 9	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Rare	Medium			Northern Midlands
TAEC05 3	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Rare	Medium			Meander Valley
TAEC05 6	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Meander Valley

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC05 9	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC06 0	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Rare	Very Low			Northern Midlands
TAEC06 1	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			George Town
TAEC06 2	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Meander Valley
TAEC06 4	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Launcesto n
TAEC06 6	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Launcesto n
TAEC06 7	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC06 8	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC07 0	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC07 1	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			George Town
TAEC07 2	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Launcesto n
TAEC07 4	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Meander Valley
TAEC07 6	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Launcesto n
TAEC07 8	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC07 9	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC08 0	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Meander Valley
TAEC08 1	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC08 2	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Meander Valley
TAEC08 3	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC08 4	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC08 5	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Launcesto n
TAEC08 6	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Rare	Very Low			Meander Valley
TAEC08 7	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC08 8	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC08 9	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC09 0	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC09	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			George Town
TAEC09 2	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Rare	Medium			Northern Midlands
TAEC09 3	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Rare	Very Low			Northern Midlands
TAEC09 4	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC09 5	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC09 6	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Rare	Very Low			Northern Midlands
TAEC09 7	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Very Rare	Low			Meander Valley
TAEC09 8	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC09 9	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Unlikely	Low			Northern Midlands
TAEC10 0	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Rare	Very Low			Northern Midlands
TAEC10	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC10 2	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Northern Midlands
TAEC10	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Meander Valley
TAEC10 5	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Very Rare	Very Low			Northern Midlands

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectivenes s	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
TAEC10 6	Production Forest	A cluster of various coupes and plantations	Moderate	Very Low	Highest	Rare	Medium			Northern Midlands
TAEC10 7	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Rare	Very Low			George Town
TAEC10 8	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands
TAEC11 0	Production Forest	A cluster of various coupes and plantations	Minor	Very Low	Highest	Rare	Low			Meander Valley
TAEC11 1	Production Forest	A cluster of various coupes and plantations	Insignificant	Very Low	Highest	Very Rare	Very Low			Northern Midlands

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 Iomatia
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 de	escription and Priority F	MAC columns.
	1 1	- ,		-

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
TAEC002	A cluster of various coupes and plantations	1	1	Preparedness	Next 12 months will have a full tactical plan review to ID treatable fuels and any strategic breaks of fuel treatment.		STT	31/12/2021		
TAEC002	A cluster of various coupes and plantations	1	2	lgnition 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.		STT, Timberlands, RFF, Forico, PF Olsen	ongoing		ongoing
TAEC002	A cluster of various coupes and plantations	1	3	Preparedness	Ongoing roads/fire trail/water point maintenance program		STT, RFF		Annual program	omgoing
TAEC002	A cluster of various coupes and plantations	1	4	Preparedness	Forest Industry to collaborate to identify fuel reduction opportunities within native forest and strategic breaks that can be developed over operational rotations		RFF, Forico	31/12/2021		
TAEC002	A cluster of various coupes and plantations	1	5	Preparedness	Forest Industry MOU with the TFS to manage bushfires on private land.		Timberlands, RFF, Forico, PF Olsen			
TAEC002	A cluster of various coupes and plantations	1	6	Preparedness	Fire Action Plans for the response to fires on the forest area		RFF, Forico			

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
TAEC002	A cluster of various coupes and plantations	1	7	Fuel reduction	Undertake a risk-based approach at time of operations for the treatment of fuel loads post-harvest operations (plantation/native).		RFF, Forico			
TAEC002	A cluster of various coupes and plantations	1	8	Preparedness	Undertake a risk-based approach to review fire preparedness on properties at greater risk of fire (valuable assets in low/mod annual rainfall zones)		Forico			
TAEC002	A cluster of various coupes and plantations	1	9	Insurance	plantation tree crop insured		RFF			
TAEN002	Tetratheca	1	10	Preparedness	Fuel treatment identification works		PWS	ongoing	Identify fuel treatment options in surrounding reserve	ongoing
TASO001	Mount Pelion, Bell Bay	6	11	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE065	Hadspen, Travellers Rest, Prospect Vale, Blackstone Heights	12	12	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	Completed		Completed and endorsed Nov 2022
TAPE065	Hadspen, Travellers Rest, Prospect Vale, Blackstone Heights	12	13	Fuel reduction	Continue TFS planned burn program		TFS	ongoing	Burns are planned around Blackstone Heights and Travellers Rest in line with Travellers Rest Mitigation Plan	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
TAPE065	Hadspen, Travellers Rest, Prospect Vale, Blackstone Heights	12	14	Preparedness	Implement Blackstone Heights and Prospect and Hadspen Bushfire Response Plans (2012) as required		TFS	Ongoing	Responses plan requires updating	Deferred - resourcing
TAEC040	Poatina	13	15	Fuel reduction	Continue to implement annual Hydro vegetation management strategy		Hydro Tas	ongoing	Annual works program - Vegetation Management plan	ongoing
TAEC040	Poatina	13	16	Fuel reduction	Investigate further opportunities to undertake planned burning around asset		Hydro Tas, TFS, PWS	ongoing	As per Hydro BMP	BMP Completed
TAPE068	Trevallyn, Riverside, Summerhill, West Launceston	14	17	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	Completed		Completed and endorsed Nov 2022
TAPE068	Trevallyn, Riverside, Summerhill, West Launceston	14	18	Fuel reduction	Continue City of Launceston planned burn program		City of Launceston	ongoing	As outlined in the Bushfire Management Strategy for Council Owned and Managed Land 2015-2025	ongoing
TAPE068	Trevallyn, Riverside, Summerhill, West Launceston	14	19	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	As per Trevallyn Fire Management Plan	ongoing
TAPE068	Trevallyn, Riverside, Summerhill, West Launceston	14	20	Preparedness	Maintenance of fire trail network in Trevallyn State Recreation Area		PWS	ongoing	As per Trevallyn Fire Management Plan	ongoing
TAEC055	Trevallyn	16	21	Fuel reduction	Continue to implement annual Hydro vegetation management strategy		Hydro Tas	ongoing	Annual works program	BMP not developed at the stage
TAEC055	Trevallyn	16	22	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	As per Trevallyn Fire Management Plan	ongoing
TAPE100	Hollybank recreational area	22	23	Preparedness	STT Tactical Fire Management Plan		STT	ongoing	reviewed annually	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
TAPE100	Hollybank recreational area	22	24	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE018	Finger Post Hill, Holloways Hill	23	25	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE018	Finger Post Hill, Holloways Hill	23	26	Fuel reduction	Continue TFS planned burn program		TFS	ongoing	Planned burns proposed for the NW of township	ongoing
TAPE018	Finger Post Hill, Holloways Hill	23	27	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Burn planned in Bouchers Hill	ongoing
TAPE023	Notley Hills South, Glengarry	23	28	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	Completed		Completed and endorsed - Nov 2022
TAPE057	Nunamara, Patersonia	23	29	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS, PWS, STT, Forico	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE057	Nunamara, Patersonia	23	30	Preparedness	STT Tactical Fire Management Plan		STT	ongoing	reviewed annually	ongoing
TAPE057	Nunamara, Patersonia	23	31	Preparedness	Review Tactical Plan to identify treatable fuels for fuel management and opportunities to create strategic fire breaks		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
TAPE057	Nunamara, Patersonia	23	32	Preparedness	Ongoing fire break, fire track and road maintenance on nearby forico land;		Forico			
TAPE057	Nunamara, Patersonia	23	33	Preparedness	Forico response activities including reconnaissance flights post thunderstorm events, and implementation of Forico Fire Action plan		Forico			
TAPE097	Bridgenorth, Foresters Hill, Legana	25	34	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	completed		Completed and endorsed - Nov 2022
TAPE097	Bridgenorth, Foresters Hill, Legana	25	35	Fuel reduction	Continue TFS planned burn program		TFS	ongoing	Planned burns proposed for the north of Bridgenorth and south-west of Legana	Ongoing BRU program
TAPE016	Exeter, Lanena, Grindelwald, Rosevears, Millers Road	25	36	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	Completed	Local mitigation plan to follow if strategic assessment deems it necessary	Completed and endorsed -Nov 2022
TAPE016	Exeter, Lanena, Grindelwald, Rosevears, Millers Road	25	37	Fuel reduction	Continue TFS planned burn program		TFS	ongoing	BRU burning program	
TAPE016	Exeter, Lanena, Grindelwald, Rosevears, Millers Road	25	38	Community safety	Develop Community Protection Plan for Exeter		TFS	ongoing		Work to be completed – resourcing not available
TAPE016	Exeter, Lanena, Grindelwald, Rosevears, Millers Road	25	39	Preparedness	Develop Bushfire Response Plan for Exeter		TFS	ongoing		Work to be completed – resourcing not available

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
TAPE016	Exeter, Lanena, Grindelwald, Rosevears, Millers Road	25	40	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Plan burn scheduled for Native Point	
									Burn program against wrong asset, consider TAPE094- Windmere	
TAPE040	Likemans Hill, Mount Direction, Rocky Forest, Swan Bay	25	41	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE033	Settlers Range, Beaconsfield, Beauty Point	25	42	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	Completed	Completed and endorsed Nov 2022	Completed and endorsed Nov 2022
TAPE033	Settlers Range, Beaconsfield, Beauty Point	25	43	Fuel reduction	Continue TFS planned burn program		TFS	ongoing	Planned burns proposed for the south- west of Beaconsfield	
TAPE033	Settlers Range, Beaconsfield, Beauty Point	25	44	Fuel reduction	Maintain existing fuel breaks around Beaconsfield		Crown Land Services, TFS	ongoing	TFS to assess the standards of fuel breaks in place.	
TAPE033	Settlers Range, Beaconsfield, Beauty Point	25	45	Preparedness	Develop Bushfire Response Plan for Beaconsfield and surrounds		TFS	Completed		Completed Sep 2021
TAPE033	Settlers Range, Beaconsfield, Beauty Point	25	46	Preparedness	Develop Community Protection plan for Beaconsfield and surrounds		TFS	Completed		Completed Sep 2021
TAPE034	Lake Leake, Rawlinna	26	47	Preparedness	Review Bushfire Response Plan for Lake Leake area		TFS	completed		Completed Sep 2022
TAPE098	Browns Hill, Lilydale	27	48	Fuel reduction	Continue City of Launceston planned burn program		City of Launceston	ongoing	As outlined in the Bushfire Management	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
									Strategy for Council Owned and Managed Land 2015-2025	
TAPE098	Browns Hill, Lilydale	27	49	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE010	Deviot, Gravelly Beach, Robigana	27	50	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	completed		Completed and endorsed Nov 2022
TAPE011	Dilston	27	51	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed.
TAPE024	Greens Beach	27	52	Fuel reduction	Develop Strategic Fire Mitigation Plan - West Tamar		TFS	completed		Completed and endorsed
TAPE024	Greens Beach	27	53	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Burns planned in Narawntapu National Park	ongoing
TAPE027	Hillwood	27	54	Fuel reduction	Develop Strategic Fire Mitigation Plan - East Tamar		TFS	ongoing		Draft Strategy being developed – not finalised or endorsed resourcing issues
TAPE049	Mowbray, Ravenswood	27	55	Fuel reduction	Continue City of Launceston planned burn program		City of Launceston	ongoing	As outlined in the Bushfire Management Strategy for	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
									Council Owned and Managed Land 2015-2025	
TAPE032	Prospect, Kings Meadows	27	57	Fuel reduction	Continue City of Launceston planned burn program		City of Launceston	ongoing	As outlined in the Bushfire Management Strategy for Council Owned and Managed Land 2015-2025	ongoing
TAPE032	Prospect, Kings Meadows	27	58	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Planned burns proposed for Kate Reed Reserve	ongoing
TAPE070	Rocherlea	27	59	Fuel reduction	Continue City of Launceston planned burn program		City of Launceston	ongoing	As outlined in the Bushfire Management Strategy for Council Owned and Managed Land 2015-2025	ongoing
TAPE066	Youngtown, Relbia	27	60	Fuel reduction	Continue City of Launceston planned burn program		City of Launceston	ongoing	As outlined in the Bushfire Management Strategy for Council Owned and Managed Land 2015-2025	ongoing
TAPE045	Bellingham		61	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Continue planned burn program in surrounding reserves	ongoing
TAPE038	Lefroy		62	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Continue planned burn program in surrounding reserves	ongoing
TAPE043	Lulworth		63	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Continue planned burn program in	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
									surrounding reserves	
TAPE083	Tam O'Shanter Bay		64	Fuel reduction	Continue PWS planned burn program		PWS	ongoing	Continue planned burn program in surrounding reserves	
TAPE048	Tamar Power station			Fuel reduction	Continue with Vegetation management program	APZ	Hydro Tas	ongoing	TAPE048 - Human settlement area assessment not based on infrastructure presesnt	Ongoing annual vegetation management plan
TAPE048	Tamar Power station			Fuel reduction	Investigate further opportunities to undertake planned burning around asset	SFMZ	Hydro Tas, TFS, PWS	ongoing		BMP for area Completed

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 urbanrural 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 3: Bushfire Management Zones

Appendix 4: Strategic fire infrastructure

Strategic fire trails in the Tamar FMA are listed in Table 3. These fire trails are designated because they are essential for fuel reduction and bushfire suppression; they should be regularly maintained to appropriate standards.

Fire trail name	Location description	Responsible organisation	Standard	Strategic purpose
Workshop Fire Trail	Trevallyn Recreation Reserve	PWS	Class 5	
Reedy Gully North Fire Trail	Trevallyn Recreation Reserve	PWS	Class 5	
Reedy Gully South Fire Trail	Trevallyn Recreation Reserve	PWS	Class 5	
Archery Range Fire Trail	Trevallyn Recreation Reserve	PWS	Class 5	
Heartbreak Hill Fire Trail	Trevallyn Recreation Reserve	PWS	Class 5	
Archery Fuel Break	Trevallyn Recreation Reserve	PWS	Fire Break – Machine Managed	
New World Avenue Fuel Break	Trevallyn Recreation Reserve	PWS	Fire Break – Machine Managed	
Powerline Track Fire Trail	Trevallyn Recreation Reserve	Hydro	Class 3	
NARNP5026FT Fire Trail (Wentworth Hill FT)	Narawntapu NP	PWS	Class 5	

Table 3. Strategic fire trails

Plan owner	Plan title	Year	Treatment numbers
TFS	Avoca Community Bushfire Protection Plan	2016	
TFS	Bellingham Community Bushfire Response Plan	2018	
TFS	Bellingham Community Bushfire Protection Plan	2018	
TFS	Blackstone Heights Community Bushfire Response Plan	2012	14 (TAPE065)
TFS	Blackstone Heights Community Bushfire Protection Plan	2012	
TFS	Conara Community Bushfire Protection Plan	2015	
TFS	Golden Valley Community Bushfire Response Plan	2016	
TFS	Golden Valley Community Bushfire Protection Plan	2016	
TFS	Greens Beach Community Bushfire Protection Plan	2018	
TFS	Hadspen Community Bushfire Response Plan	2012	
TFS	Hadspen Community Bushfire Protection Plan	2012	
TFS	Jackeys Marsh Area Community Bushfire Response Plan	2017	
TFS	Jackeys Marsh Community Bushfire Protection Plan	2014	
TFS	Lake Leake Community Bushfire Response Plan	2022	47 (TAPE034)
TFS	Lake Leake Community Bushfire Protection Plan	2022	
TFS	Launceston (Northern Suburbs) Mitigation Plan	2015	
TFS	Lilydale Area Community Bushfire Response Plan	2013	
TFS	Lilydale Community Bushfire Protection Plan	2012	
TFS	Nunamara Community Bushfire Response Plan	2017	
TFS	Nunamara Community Bushfire Protection Plan	2017	
TFS	Prospect Community Bushfire Response Plan	2012	14 (TAPE065)
TFS	Prospect Community Bushfire Protection Plan	2012	
TFS	Ravenswood Community Bushfire Protection Plan	2015	
TFS	Rocherlea Community Bushfire Protection Plan	2015	
TFS	Royal George Community Bushfire Protection Plan	2016	
TFS	Travellers Rest Mitigation Plan	2014	12 (TAPE065)
TFS	Turners Marsh Community Bushfire Response Plan	2013	
TFS	Turners Marsh Community Bushfire Protection Plan	2013	
TFS	Weymouth Community Bushfire Response Plan	2012	
TFS	Weymouth Community Bushfire Protection Plan	2013	
PWS	Northern region Strategic fire plan	2009	
PWS	PWS Fire Action Plan	2019-20	
PWS	Beechford fire management plan	2012	
PWS	Trevallyn Fire management strategy	2011-2016	19, 20 (TAPE068)
PWS	Kate reed fire management strategy	2011	
City of	Cataract Gorge fire strategy	2016-2026	
Launceston			

Appendix 5: Current implementation plans

City of Launceston	Bush fire Management strategy for council owned and managed lands	2015-2025	18 (TAPE068) 48 (TAPE098) 55 (TAPE049) 57 (TAPE032) 60 (TAPE066)
City of Launceston	Carr Villa Flora Reserve and Memorial Park Fire Management Plan	2017-2027	
City of Launceston	Distillery Creek Gorge and Waverley lake Fire Management Plan	2017-2027	
City of Launceston	Havelock Street Reserve Fire management plan	2017-2027	
City of Launceston	Lilydale Area Reserves Fire Management Plan (including Merthyr Park & Lilydale Falls Reserve)	2017-2027	
City of Launceston	Punchbowl Reserve Fire management plan	2016-2026	
City of Launceston	Ravenswood area reserves fire management plan (Incorp Vermont Road and Ravenswood Bushland Reserves)	2017-2027	
City of Launceston	Russell Plains Fire Management Plan	2016-2026	
City of Launceston	Tasman Bushland Highway Fire Management plan	2017-2027	
City of Launceston	Youngtown Regional Park Fire management plan	2017-2027	

Maps

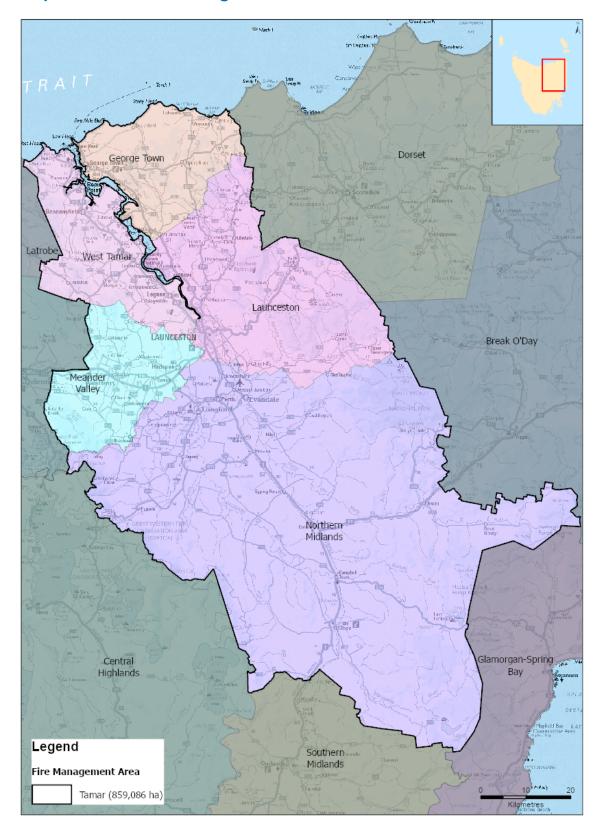
All maps are published on LISTmap; Maps 3, 4 and 5 are not published in the BRMP because they include too much detail to be seen on an A4 map.

To view a map in LISTmap, follow these instructions:

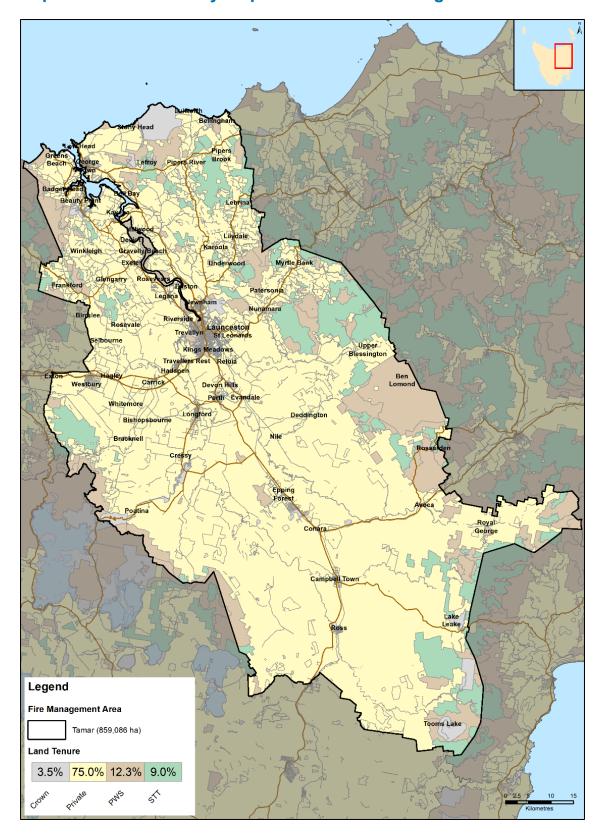
1. Click on the hyperlink, for example:

https://maps.thelist.tas.gov.au/listmap/app/list/map?bookmarkId=605824

- 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.



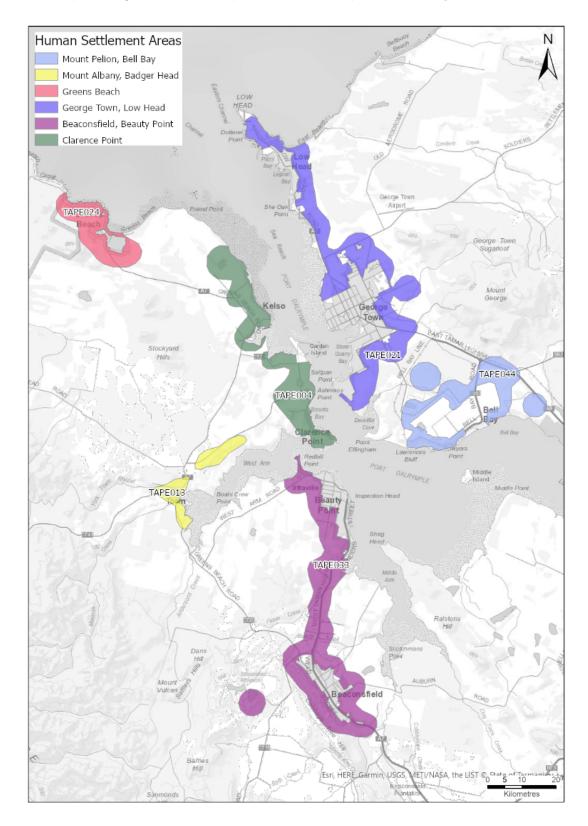


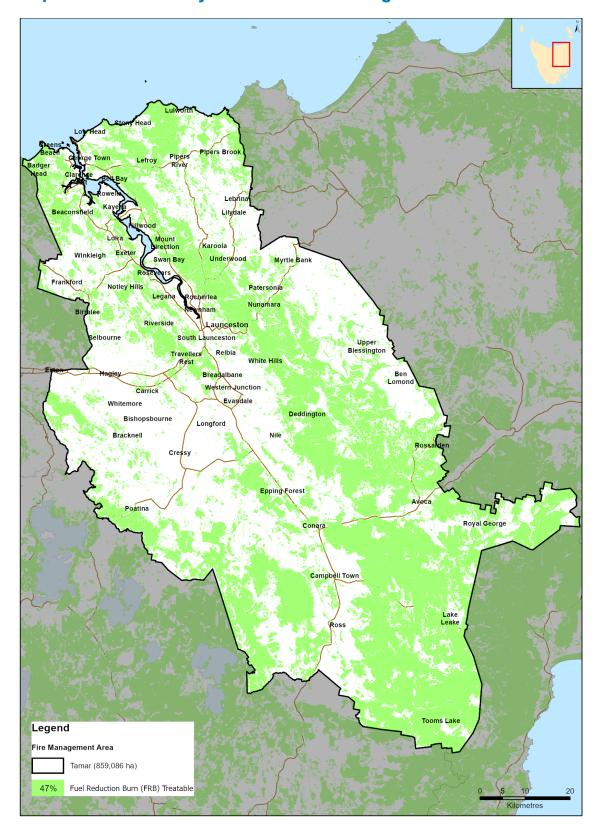




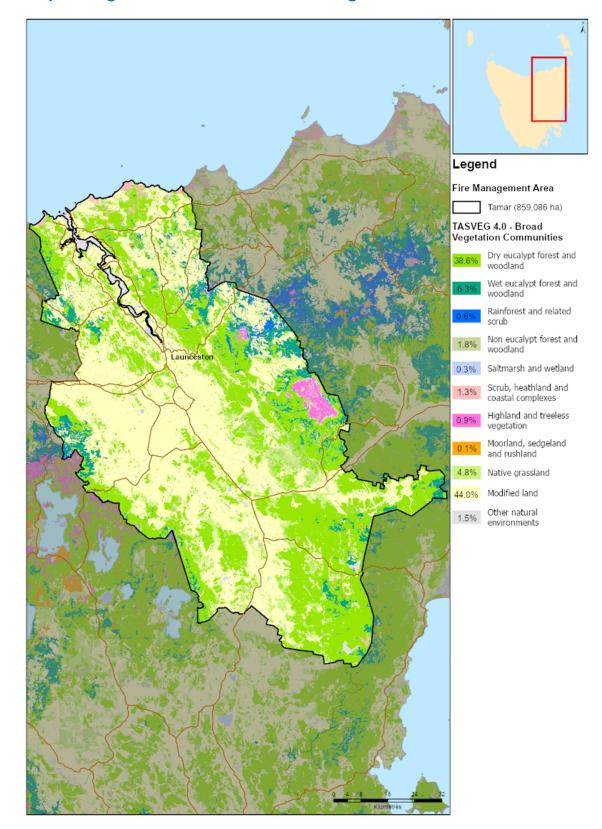
Map 3: Assets and values from the risk register for Tamar Fire Management Area

An example of the assets and values from the risk register in the northern Tamar *area of the* Tamar FMA. The full map covering the entire FMA is published on LISTmap – <u>click here to go to this link.</u>









Map 5: Vegetation for Tamar Fire Management Area