



East Coast Fire Management Area Bushfire Risk Management Plan 2023

#### **Document Control**

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

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

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

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

- 1. It is applicable for 1 October 2023 to 30 September 2024
- 2. It is based on the 3-year risk assessment for the East Coast FMA. This risk assessment is considered relevant in light of the fire seasons since 2021
- 3. It is based on the BRMP for the East Coast FMA accepted on the 30 March 2021.
- 4. Within the Central North 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 East Coast Fire Management Area Committee and approved by the State Fire Management Council.

#### **Document endorsed by the East Coast Fire Management Area Committee**

Approved by the Chair

**East Coast FMAC** 

**Robert Elliott** 

**Approved by State Fire Management Council** 

**Ian Sauer** 

Chair

Date: 23 October 2023

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Fuel Reduction planned burn in Autumn of 2020, Dolphin Sands.

Photo courtesy of Bushfire Risk Unit, TFS.

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# **Glossary**

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

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

# **Acronyms**

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

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

# **Executive Summary**

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

The East Coast Fire Management Area (FMA) covers the whole of the local government areas of Tasman, Sorell and Glamorgan-Spring Bay. The East Coast FMA comprises an area of 393,000 hectares, along the east coast of Tasmania, from the Tasman Peninsula in the south to Bicheno in the north. The entire area has a total permanent population of around 22,000 people, with 70% of this population residing in the Sorell municipality. However, tourists increase the population dramatically, e.g. 300,000 visitors are recorded annually to the Freycinet Peninsula. Most of this visitation occurs during the summer when bushfire risk is highest.

In the Tasman and Glamorgan-Spring Bay Local Government Areas, the population is low and dispersed, which correlates with the major land uses, being agriculture, forestry and conservation. The landscape of the East Coast FMA includes an almost continuous band of dry eucalypt forest stretching almost the entire length of the FMA. This could see a major fire impact a large proportion of the FMA under serious fire weather conditions.

The majority of recorded fires have been caused by human actions, however lightning strikes are an increasing cause of unplanned fires. There have been three very large fires (>10,000 ha) in the East Coast FMA in the past 30 years, occurring at Waters Meeting, Kellevie and Forcett.

Tourism is a major part of the economy in the East Coast FMA and was rapidly increasing pre-COVID. Many tourism hotspots are associated with iconic natural landscapes and have single, bushfire-prone access routes which places large numbers of people at risk of bushfires. The increase in tourism has also resulted in increased infrastructure in bushfire-prone areas, which combine to place additional pressure on already stretched, predominantly volunteer-based initial fire response capabilities.

In 2020, the East Coast FMAC reviewed the results of computer modelling to identify that many of the towns and larger communities within the FMA are the highest risk of bushfire, including Coles Bay, Bicheno, Dolphin Sands, Triabunna, Orford, Dodges Ferry, Dunalley, Nubeena and Port Arthur. Subject matter experts advised that the risk profile for the East Coast FMA remain largely the same in 2023 as for 2020, due to the lack of any significant bushfires.

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

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

- Conducting strategic fuel reduction burns and other fuel reduction treatments around towns and larger communities at high risk of impact from bushfires. This work will be undertaken by the fire agencies, in collaboration with landowners.
- Conducting fuel reduction burns in strategic areas to minimise the likelihood of a fire run
  impacting communities. This work will be undertaken by the fire agencies, in collaboration with
  landowners.

- Developing Community Protection Plans and Bushfire Response Plans to support communities
  when a bushfire is threatening their area. These plans will be developed by the TFS Community
  Fire Safety Division in collaboration with local communities and stakeholders.
- Establishment or enhancement of Community Education initiatives, in order to enhance community preparedness and promote positive behaviour change. This work will be undertaken by the TFS Community Fire Safety Division in collaboration with local communities and stakeholders.
- Other prescribed activities specific to community needs.

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 East Coast 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</u> (SFMC 2020). The risk assessment considers bushfire impacts to the assets and values in the area, and uses the following matrix to calculate a risk rating:

CONSEQUENCE LEVEL									
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 <u>risk register (Appendix 1)</u> and the proposed treatments are listed in the <u>treatment plan (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.

## 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 East Coast 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 East Coast 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 <a href="here">here</a> (SFMC 2020).

# 2 Establishing the context

#### 2.1 Description of the East Coast Fire Management Area

The plan area covers approximately 393,000ha, including the entire local government areas of Tasman, Sorell and Glamorgan-Spring Bay (Map 1). The plan area follows the coastline from the Tasman Peninsula in the South to Bicheno in the North and extends inland approximately 35km at its widest point. Altitude varies from sea level along the coast to 742m above sea level at Moaners Tier, located just to the east of Tooms Lake. The major towns within the East Coast FMA include Nubeena, Dunalley, Dodges Ferry, Sorell, Orford, Triabunna, Swansea, Coles Bay and Bicheno.

Over half of the East Coast FMA consists of private property, with public land including PWS Reserves, and timber production areas making up the majority of the remaining area (Map 2).

Table 1 shows the composition of different land tenures within the East Coast FMA.

Table 1. Summary of the major tenure land managers in the East Coast FMA.

Land manager	% of FMA
Private property	54.9
NRE (including Parks and Wildlife and Crown Land Services)	34.2
Sustainable Timbers Tasmania	9.8
Other	1.1

#### 2.2 Fire environment

The East Coast FMA is dominated by dry eucalypt forest (57%) and agricultural areas (23%). Wet eucalypt forests (8.8%) exist on more productive soils in higher rainfall areas, which are predominantly located around the Tasman Peninsula and higher elevations of the Eastern Tiers. Highly flammable coastal complexes are common around Coles Bay, the Freycinet Peninsula and the Tasman Peninsula. The vegetation in the East Coast FMA can be categorised into 11 broad groups, shown in Map 6.

The landscape of the East Coast FMA includes an almost continuous band of dry eucalypt forest stretching almost the entire length of the FMA. This could see a major fire run impacting a large proportion of the FMA under serious fire weather conditions.

The causes of fire, either through ignition by lightning or caused by human actions have not been well documented prior to 1990. Records show that the causes of ignition for the majority of fires were unknown, escaped recreational fires (e.g. campfires), arson and escapes from privately managed planned burns.

There have been a number of major bushfires in the East Coast FMA since 1994. Planned burning undertaken as part of the Fuel Reduction Program has occurred since 2014. Larger fires of both types are summarised in Table 2.

Table 2: East Coast FMA major bushfires since 1982, and large planned burns since 2014.

Fire Name	Area Burnt (ha)
Wildfires	
Mcneills Road, Swansea 2019	4880
Phipps Road, Runnymede 2016	2870
Inala Rd 2013	23400
Tasman Highway Bicheno 2013	4830
Douglas Apsley escaped FRB 2007/08	8900
Kellevie 2006	16000
Oakwood Hill 2003	4500
Thirty Acre Creek 1995	4000
Waters Meeting 1994	12400
Baldy Hill 1994	6900
Donkeys Track 1994	8327
Major Planned Burns Undertaken:	
Buckland Military Training Area, 2019-2023	5 burns combined 1743 ha
Station Creek, NW Orford 2018 and 2019	1160 and 435
Brown Mountain FRB 2018	434
Simpsons Hill, Orielton 2015	740
Apslawn Conservation Area 2015	445
Tin Mine, Coles Bay 2014	1280

The economy of the East Coast FMA is driven by agriculture/aquaculture and tourism, with the area seeing a major and rapid increase in tourist numbers over the past ten years. Many tourism hotspots are associated with iconic natural landscapes, e.g. Tasman Peninsula and Freycinet National Park, with tourist numbers massively increasing the population size during the warmer months of the year. This increase in population has resulted in an increase in development and infrastructure, which combine to place additional pressure on already stretched, predominantly volunteer-based initial fire response capabilities.

Many access routes to major tourist destinations are in bushfire-prone areas, with a single road in and out. This presents additional issues for community safety during both wildfires and planned burns, with road closures having potentially major impacts on the local economy.

Timeframes and locations available for fuel reduction burns in some parts of the East Coast FMA are restricted due to the potential impact on tourism. An expansion in the viticulture industry throughout the East Coast FMA also impacts the available timeframes for fuel reduction burns due to the potential for smoke to taint grapes prior to autumn harvest.

#### 2.3 Climate and bushfire season

For much of the year Tasmania's weather is dominated by westerly weather patterns. This results in moist air being forced over rugged mountains in western and central areas of Tasmania causing heavy rainfall in these areas as the air moves eastward. The result is relatively dry air reaching eastern parts of Tasmania. The exception to this is the East Coast Low that forms in the Tasman Sea and brings moist easterly winds, often causing heavy localised rainfall events. Rainfalls in excess of 100 mm in a 24-hour period occur on average once or twice per year. Within the East Coast FMA average annual rainfall varies from 593 mm at Swansea to 1148 mm at Palmers lookout on the Tasman Peninsula. The East Coast FMA can experience long, dry periods with the Soil Dryness Index (SDI) being above 100 mm for much of the year.

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

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

## 2.4 Population and community

The East Coast FMA has a low total population and low population densities across the area. The entire area has a total permanent population of around 24,300 people (Australian Bureau of Statistics – ABS, 2021), with 70% of this population residing in the Sorell municipality. The highest population densities occur around towns and in the southwest of the area, closest to the outer settlements of Hobart, with much of this population commuting to the greater Hobart area daily for work.

Many areas within the East Coast FMA experience a dramatic increase in visitation during the summer tourism period. As an example, the Freycinet Peninsula has annual visitor numbers of around 300,000 individuals, with most of this visitation occurring during the summer when bushfire risk is highest.

In the Tasman and Glamorgan-Spring Bay Local Government Areas, the population is low and dispersed, which correlates with the major land uses, particularly the large proportion of land used for agriculture, forestry and conservation. Major sources of employment include accommodation and food services, retail trade, agriculture/aquaculture and construction (NIEIR 2018). This is reflected in the >50% of unoccupied dwellings in the Glamorgan-Spring Bay and Tasman Local Government Areas (ABS, 2016), with these dwellings predominantly used for either short-term visitor accommodation or are family-owned shacks.

The main areas of population growth are focussed around Dodges Ferry and Sorell with many new residential housing developments occurring in these areas. In more regional areas, the population is aging and becoming more transient, which has impacted on the recruitment and retention of volunteer firefighters. There has also been an increase in community expectations of the responsibility of the fire service to protect people and dwellings from bushfires, with a decreased expectation of personal

responsibility. This places additional pressure on local brigades to respond to incidents across an increased population and infrastructure with fewer volunteers and no additional resources.

## 2.5 Community engagement

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

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

Since the inception of the TFS Fuel Reduction Program in 2014, Community Engagement has been undertaken in the East Coast FMA. This has included the Bushfire Ready Neighbourhoods program being run throughout the Tasman Peninsula and in Dolphin Sands from 2014-2016. Additional community engagement activities have been undertaken as requested by local volunteer fire brigades or the community. Several local volunteer brigades also actively undertake engagement work within their local communities.

The East Coast FMAC noted particular concerns that bushfires in Tasmania are becoming bigger and less predictable, while volunteer resources to manage bushfires is decreasing in the East Coast FMA. Tasmania's reliance on shared resources with interstate fire agencies may also be problematic when large fires are occurring in multiple states at the same time. It was also noted that the local economy may take many years to recover after a large bushfire, with the economy dependent on tourism focussed on iconic wilderness features (e.g. Freycinet and Tasman Peninsulas), and with single access roads.

The East Coast FMAC also identified the need for a holistic approach to risk management, with the need to share identified risks with local government Emergency Management Committees.

# 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).

Some important examples for the East Coast FMA may include:

- A vehicle fire on a day of FFDI 44 ignites a bushfire that spreads and impacts the town of Orford, resulting in destruction of numerous houses, community buildings and tourist accommodation
- A lightning strike on a day of FFDI 52, following on from a several years of below average
  rainfall, ignites a bushfire that spreads quickly and cuts off the town of Coles Bay, resulting in
  loss of lives and the destruction of numerous houses, tourist accommodation. Loss of
  accommodation, critical infrastructure, and the aesthetic values of the landscape results in a
  long-term impact to tourism industry
- A fire on a day of FFDI 60 ignites a bushfire near Eaglehawk Neck, shutting down the only
  access road and causing major disruption of access and services for several days

#### 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)
- Private lands managed for nature conservation with a conservation covenant registered on the land title are permitted to have planned burns undertaken with authorisation from the Minister
- Suppression response preparedness e.g. TFS local volunteer brigades, STT and PWS crews, forest company crews, fire towers, aircraft, pre-positioning of firefighting resources
- Weather forecasting (Bureau of Meteorology) and fire behaviour prediction (TFS, STT, PWS)

#### 3.3 Fire Management Area controls

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

- 19 volunteer fire brigades, plus dedicated fire crews from PWS and STT
- Fuel reduction burns have occurred around Bicheno, Orford/Spring Beach, Nugent, Eaglehawk Neck, Nubeena
- Fuel breaks for asset protection are managed by land management agencies and landowners, including STT, PWS, private forestry companies and others
- PWS reserves closures on bad fire days
- Community engagement programs, including Bushfire Ready Neighbourhoods, and community development opportunities
- Preparedness planning Community Protection Plans, Bushfire Response Plans
- PWS Emergency Management Plans
- Department of Defence Bushfire Risk Management Plan, including a "Prepare, Act, Survive" Plan

# 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 Management Planning Guidelines</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

The East Coast FMAC has reviewed the results of computer modelling to identify assets and values at highest risk of bushfire. These areas are detailed further in <u>Appendix 1</u> and shown in <u>Map 3</u>. Priority assets and values include:

- Almost all towns and larger communities within the FMA are within bushfire prone areas and are at risk of being impacted by a bushfire. This degree of risk is influenced by their population size, proximity to bushfire-prone vegetation, single access roads, or access roads being within bushfire-prone vegetation. These towns and communities include Coles Bay, Bicheno, Dolphin Sands, Triabunna, Orford, Dodges Ferry, Dunalley, Nubeena and Port Arthur.
- Production forest assets with a high value that have been clustered according to bushfire impact (identified through computer modelling).

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

## 5 Bushfire risk treatment

### 5.1 Treatment plan

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

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

Treatments identified in this plan include:

- Fuel reduction burns around towns and larger communities and other assets in bushfire prone areas, e.g. Tasman Peninsula, Bicheno, Orford, Forestier Peninsula
- Mechanical mitigation works where fuel reduction burns may not be practicable, e.g. Port Arthur and Freycinet
- Community engagement activities to improve individual households understanding and response to bushfire emergencies, e.g. Bushfire Ready Neighbourhoods program at Dodges Ferry
- Preparation or updating of community bushfire protection and response plans to assist emergency services to better respond to bushfires, including Penna, Dodges Ferry and Swansea

## **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 <u>Appendix 3</u>.

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

#### 5.3 Implementing treatments

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

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

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

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

- Planned burns not being undertaken due to potential issues with:
  - Short weather windows for prescribed burning, due to less predictable weather, earlier fire season, shorter weather windows and potential impacts of smoke taint on vineyards
  - Landowner unwillingness to have their land burnt
  - o Issues with replacement costs of old rural fencing
  - High-levels of visitation/tourism at critical sites (e.g. Freycinet Peninsula, Tasman National Park) occurring during key burning windows reducing opportunities to undertake planned burning safely
  - Ongoing challenges in obtaining sufficient smoke units to progress burning in some air catchments during stable weather conditions
  - A lack of a process for prioritisation of burn units across fire agencies to assist in targeting high priority burns when available fire resources are limited
- Effectiveness of planned burning in some areas is limited (e.g. Dolphin Sands) due to highly flammable nature and fast return period of vegetation
- Limited resources available for initial suppression of fires, due to volunteer capacity
- Limited TFS resources available for requested community engagement
- Limited uptake and retention of community engagement programs, due to competing priorities/low interest levels of the community, and limited support from key community groups (e.g. local brigades)

In some priority areas, no fuel reduction treatments are identified in the treatment table. Reasons for this are primarily due to the surrounding fuels being untreatable. Examples of this are:

- surrounding fuels are wet forest and planned burning cannot be undertaken safely during weather windows (Port Arthur, Murdunna); or
- fuels are agricultural pastures that are not treatable (e.g. Swansea, Triabunna); or
- fuels are low as a result of recent fires (planned or unplanned) and fuel loads are currently insufficient to carry a planned burn (e.g. Dolphin Sands east)

In these cases, alternate treatments have been identified to address the risk, e.g. through community education programs or the preparation of community bushfire response plans.

## 5.4 Strategic fire infrastructure

Strategic fire infrastructure includes access roads, fire trails, tracks and water sources. No strategic fire infrastructure has been identified for this plan.

#### 5.5 Fuel reduction burning

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

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

The <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.

# 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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# **Appendix 1: Risk register**

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

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
ECSO010	Historic Heritage	Coal Mines Historic Site	Major	Medium	Highest	Unlikely	High	11	Further analysis	Tasman
ECSO005	Human Settlement Area	Diamond Hill, Douglas River, Bicheno	Major	Low	Highest	Unlikely	High	11	Treatment	Glamorgan- Spring Bay
ECSO007	Human Settlement Area	Spring Beach	Major	Low	Highest	Unlikely	High	11	Further analysis	Glamorgan- Spring Bay
ECSO002	Human Settlement Area	Yellow Sandbanks, Dolphin Sands	Major	Medium	Highest	Unlikely	High	11	Treatment	Glamorgan- Spring Bay
ECPE044	Human Settlement Area	Mount Stacey, Coles Bay, Muirs Place	Major	Medium	Highest	Unlikely	High	12	Further analysis	Glamorgan- Spring Bay
ECSO001	Human Settlement Area	Mount Stacey, Coles Bay, Muirs Place	Major	Medium	Highest	Unlikely	High	12	Treatment	Glamorgan- Spring Bay
ECSO006	Human Settlement Area	Allanbys Hill, Copping	Major	Low	Highest	Unlikely	High	13	Further analysis	Sorell
ECSO003	Human Settlement Area	Double Creek, Orford, Triabunna	Major	Low	Highest	Unlikely	High	13	Treatment	Glamorgan- Spring Bay
ECSO004	Human Settlement Area	Swansea, Kennedia Place, Webber Point	Major	Very Low	Highest	Unlikely	High	13	Treatment	Glamorgan- Spring Bay
ECPE002	Human Settlement Area	Carlton, Carlton River, Dodges Ferry	Major	Low	Highest	Unlikely	High	14	Treatment	Sorell

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TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
ECSO009	Human Settlement Area	Bream Creek	Major	Very Low	Highest	Rare	High	19	Further analysis	Sorell
ECSO008	Human Settlement Area	Tunbridge Hill	Major	Very Low	Highest	Rare	High	19	Further analysis	Sorell
ECPE026	Human Settlement Area	Billy Blue Hill, Nubeena	Moderate	Low	Highest	Unlikely	Medium	24	Treatment	Tasman
ECPE025	Human Settlement Area	Diamond Hill, Douglas River, Bicheno	Moderate	Low	Highest	Unlikely	Medium	24	Treatment	Glamorgan- Spring Bay
ECPE012	Human Settlement Area	Eaglehawk Neck, Murdunna, Pauls Hill	Moderate	Low	Highest	Unlikely	Medium	24	Treatment	Tasman
ECPE003	Human Settlement Area	Port Arthur, Oakwood Hill, Carnarvon Bay	Moderate	Low	Highest	Unlikely	Medium	24	Treatment	Tasman
ECPE036	Human Settlement Area	Spring Beach	Moderate	Low	Highest	Unlikely	Medium	24	Treatment	Glamorgan- Spring Bay
ECPE010	Human Settlement Area	Yellow Sandbanks, Dolphin Sands	Moderate	Medium	Highest	Unlikely	Medium	24	Treatment	Glamorgan- Spring Bay
ECPE006	Human Settlement Area	Mount Stacey, Coles Bay, Muirs Place	Moderate	Medium	Highest	Unlikely	Medium	25	Treatment	Glamorgan- Spring Bay
ECPE008	Human Settlement Area	Corn Hill, Little Hill, Pawleena, Sorell	Moderate	Very Low	Highest	Unlikely	Medium	26	Treatment	Sorell
ECPE011	Human Settlement Area	Double Creek, Orford, Triabunna	Moderate	Low	Highest	Unlikely	Medium	26	Treatment	Glamorgan- Spring Bay
ECPE023	Human Settlement Area	Midway Point, Penna	Moderate	Medium	Highest	Unlikely	Medium	26	Treatment	Sorell

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
ECPE019	Human Settlement Area	Swansea, Kennedia Place, Webber Point	Moderate	Very Low	Highest	Unlikely	Medium		Treatment	Glamorgan- Spring Bay
ECPE001	Human Settlement Area	Forcett, Bullock Hill	Moderate	Low	Highest	Unlikely	Medium	27	Monitor and review	Sorell
ECPE020	Human Settlement Area	Lewisham	Moderate	Very Low	Highest	Unlikely	Medium	27	Treatment	Sorell
ECPE037	Human Settlement Area	Dunalley, Boomer Bay	Moderate	Medium	Highest	Unlikely	Medium	29	Treatment	Sorell
ECPE028	Human Settlement Area	Primrose Sands	Moderate	Low	Highest	Unlikely	Medium	29	Monitor and review	Sorell
ECPE038	Human Settlement Area	Taranna	Moderate	Low	Highest	Unlikely	Medium	29	Monitor and review	Tasman
ECPE042	Human Settlement Area	White Beach	Moderate	Low	Highest	Unlikely	Medium	29	Treatment	Tasman
ECPE034	Human Settlement Area	Allanbys Hill, Copping	Minor	Low	Highest	Unlikely	Low			Sorell
ECPE005	Human Settlement Area	Ardross Hill, Buckland	Minor	Very Low	Highest	Unlikely	Low			Glamorgan- Spring Bay
ECPE043	Human Settlement Area	Bream Creek	Minor	Very Low	Highest	Rare	Low			Sorell
ECPE004	Human Settlement Area	Cashs Lookout	Minor	Very Low	Highest	Unlikely	Low			Tasman
ECPE007	Human Settlement Area	Connellys Bay	Minor	Low	Highest	Rare	Low			Sorell

TERAG	Asset	Asset description (risk	Consequence	Controls	Confidence	Combined	Risk level	Priority	Treatment	LGA
code	category	statement)	D.A.iman	effectiveness	I II ale a at	likelihood	Law	FMAC	options	Clavesavas
ECPE035	Human Settlement Area	Corner Hill, Boltons Shoal	Minor	Very Low	Highest	Unlikely	Low			Glamorgan- Spring Bay
ECPE009	Human Settlement Area	Cranbrook, Freestone Hill	Minor	Very Low	Highest	Unlikely	Low			Glamorgan- Spring Bay
ECPE013	Human Settlement Area	Flat Top Hill, Orielton	Minor	Low	Highest	Unlikely	Low			Sorell
ECPE014	Human Settlement Area	Freycinet	Minor	Medium	Highest	Very Rare	Very Low			Glamorgan- Spring Bay
ECPE016	Human Settlement Area	Gwandalan	Minor	Very Low	Highest	Rare	Low			Tasman
ECPE017	Human Settlement Area	Heathy Hill	Minor	Very Low	Highest	Rare	Low			Tasman
ECPE015	Human Settlement Area	Koonya, Grooms Hill	Minor	Low	Highest	Unlikely	Low			Tasman
ECPE021	Human Settlement Area	Little Chinaman Bay	Minor	Very Low	Highest	Rare	Low			Tasman
ECPE018	Human Settlement Area	Marion Bay, Kellevie	Minor	Very Low	Highest	Unlikely	Low			Sorell
ECPE024	Human Settlement Area	Mount Peter	Minor	Very Low	Highest	Unlikely	Low			Glamorgan- Spring Bay
ECPE022	Human Settlement Area	Pontypool, Little Swanport	Minor	Low	Highest	Unlikely	Low			Glamorgan- Spring Bay
ECPE027	Human Settlement Area	Premaydena	Minor	Low	Highest	Rare	Low			Tasman

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
ECPE029	Human Settlement Area	Rheban	Minor	Very Low	Highest	Rare	Low		·	Glamorgan- Spring Bay
ECPE030	Human Settlement Area	River and Rocks Road	Minor	Very Low	Highest	Rare	Low			Glamorgan- Spring Bay
ECPE033	Human Settlement Area	Sappho Spit, Windlass Bay	Insignificant	Very Low	Highest	Unlikely	Low			Glamorgan- Spring Bay
ECPE032	Human Settlement Area	Sloping Main, Saltwater River	Minor	Very Low	Highest	Unlikely	Low			Tasman
ECPE039	Human Settlement Area	Taylors Hill	Insignificant	Low	Highest	Unlikely	Low			Sorell
ECPE040	Human Settlement Area	Tunbridge Hill	Minor	Very Low	Highest	Rare	Low			Sorell
ECPE041	Human Settlement Area	Wattle Hill	Insignificant	Low	Highest	Rare	Very Low			Sorell
ECPE031	Human Settlement Area	Yellow Sandbanks Road, Nine Mile Beach	Minor	Low	Highest	Rare	Low			Glamorgan- Spring Bay
ECEN003	Natural Value	Antipodia, Notelaea, Oreixenica, Regenerating, Remnant rainforest	Major	Very Low	Highest	Likely	Extreme	2		Glamorgan- Spring Bay
ECEN002	Natural Value	Cloud, Remnant rainforest	Major	Medium	Highest	Unlikely	High	10		Tasman
ECEN006	Natural Value	Lissotes, Remnant rainforest, Sphagnum	Major	Medium	Highest	Unlikely	High	10		Sorell
ECEN008	Natural Value	Remnant rainforest	Major	Medium	Highest	Unlikely	High	10		Tasman
ECEN011	Natural Value	Remnant rainforest	Major	Medium	Highest	Unlikely	High	10		Tasman
ECEN005	Natural Value	Antipodia, Melaleuca, Regenerating, Remnant rainforest	Major	Low	Highest	Unlikely	High	11		Glamorgan- Spring Bay
ECEN007	Natural Value	Oreixenica, Regenerating, Remnant rainforest	Major	Very Low	Highest	Unlikely	High	12	Treatment	Glamorgan- Spring Bay

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
ECEN001	Natural Value	Cloud, Lissotes, Tasmanian	Major	Very Low	Highest	Unlikely	High	13		Glamorgan- Spring Bay
ECEN009	Natural Value	Remnant rainforest	Major	Very Low	Highest	Unlikely	High	13		Tasman
ECEN010	Natural Value	Remnant rainforest	Major	Very Low	Highest	Unlikely	High	15		Tasman
ECEN004	Natural Value	Antipodia, Tasmanian	Moderate	Very Low	Highest	Unlikely	Medium	25		Glamorgan- Spring Bay
ECPE045	Other	Marion Bay Falls Festival site	Catastrophic	Medium	Highest	Unlikely	Extreme	4	Further analysis	Sorell
ECEC004	Production Forest	PB_esr_4t, PB_esr_5t, PC_rad_5t, SW_esr, SW_esr_s, TO023D	Major	Low	Highest	Likely	Extreme	2		Glamorgan- Spring Bay
ECEC005	Production Forest	HI01, HI01C, HI01L, HI02, HI02A, HI02B, HI02D, HI02E, HI02M, KY001B, KY001C, KY001E, KY001G, KY001H, KY002A, KY005E, KY005Z, KY008B, PB_esr_2, PB_esr_3, PB_esr_4t, PB_esr_5t, PC_esr_5t, PC_esr_6s, PC_rad_1s, PC_rad_2, PC_rad_5t, Struncated text	Major	Medium	Highest	Unlikely	High	10		Tasman
ECEC009	Production Forest	FT001A, FT002E, FT008E, FT008I, FT008K, FT008N, FT008V, FT012B, FT013D, FT013I, FT015K, PB_esr_3, PB_esr_4t, PB_esr_5t, PC_esr_6s, PC_rad_4, SW_esr	Major	Very Low	Highest	Unlikely	High	11		Tasman
ECEC001	Production Forest	MM025C, PB_esr_3, PB_esr_4t, PB_esr_5t, PC_rad_4, PC_rad_5t, PC_rad_6s, SW_esr	Major	Very Low	Highest	Unlikely	High	11		Sorell
ECEC006	Production Forest	MM06, PB_esr_3, PB_esr_4t, PB_esr_5t, PC_rad_4, PC_rad_5t	Major	Very Low	Highest	Unlikely	High	11		Sorell
ECEC002	Production Forest	PB_esr_2, PB_esr_3, PB_esr_4t, PC_esr_3, PC_esr_6s, SW_esr, SW_esr_s, SW074D, SW102C, SW105E, SW110B, SW117A, SW117B,	Major	Very Low	Highest	Unlikely	High	12	Treatment	Glamorgan- Spring Bay

TERAG code	Asset category	Asset description (risk statement)	Consequence	Controls effectiveness	Confidence	Combined likelihood	Risk level	Priority FMAC	Treatment options	LGA
		SW124A, SW125G, SW126H, SW126I, SW126X, SW128G								
ECEC008	Production Forest	PB_esr_3, PB_esr_4t, PB_esr_5t	Major	Very Low	Highest	Unlikely	High	12	Treatment	Tasman
ECEC003	Production Forest	PB_esr_3, PB_esr_4t, PB_esr_5t, PC_rad_5t, PC_rad_6s, SW_esr, SW_esr_s, WT010B, WT044A	Major	Very Low	Highest	Unlikely	High	12	Treatment	Glamorgan- Spring Bay
ECEC010	Production Forest	SW_esr	Minor	Very Low	Highest	Likely	Medium	23		Glamorgan- Spring Bay
ECEC013	Production Forest	PB_esr_4t, SW_esr	Moderate	Very Low	Highest	Unlikely	Medium	24		Glamorgan- Spring Bay
ECEC015	Production Forest	PB_esr_3	Moderate	Very Low	Highest	Unlikely	Medium	25		Sorell
ECEC007	Production Forest	PB_esr_3, PC_rad_4	Minor	Very Low	Highest	Unlikely	Low			Sorell
ECEC014	Production Forest	PC_rad_4	Minor	Very Low	Highest	Unlikely	Low			Sorell
ECEC011	Production Forest	PC_rad_5t	Minor	Very Low	Highest	Unlikely	Low			Tasman
ECEC012	Production Forest	PC_rad_5t	Minor	Very Low	Highest	Rare	Low			Sorell

#### **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 description and Priority FMAC columns.

TERAG code	Asset description (risk statement)	Priority FMAC	Treatment number	Treatment category	Treatment action detail	Bushfire management zone	Responsible organisation	Completion date proposed	Comment	Progress
ECEC004	A cluster of priority forest assets in the Tooms Lake area	2	1	Fuel reduction	Strategic fire break program		STT			Ongoing
ECEC004	A cluster of priority forest assets in the Tooms Lake area	2	2	Preparedness	Fire tower Snow Hill		STT	ongoing		Fire tower continues to be manned
ECEC004	A cluster of priority forest assets in the Tooms Lake area	2	3	Fuel reduction	Strategic fuel reduction burning		STT, PWS			Ongoing. PWS burn units have been prepared. Difficulties implementing burns due to hunting permits and threatened species prescriptions.
ECEC004	A cluster of priority forest assets in the Tooms Lake area	2	4	Preparedness	Sharing of water point monitoring app & data, e.g. to COP		STT			
ECEC004	A cluster of priority forest assets in the Tooms Lake area	2	5	Ignition management	Industry FIFMC Fire Prevention at forest Operations procedure implemented at start of fire season until the end of the fire season (1st Oct -at least 30th April). Contractors closely monitor fire weather, and shut down when weathers conditions deteriote.		FIFMC	ongoing		
ECPE045	Marion Bay Falls Festival site	4	6	Community safety	Work with land manager to determine risk after controls are applied and implement mitigatation strategies if required	APZ	TFS	31/12/2023		Falls Festival permanently cancelled in 2021. This TERAG Code and Treatment has been revoked
ECSO010	Coal Mines Historic Site	11	11	Preparedness	Work with land manager to determine risk after controls are applied, and consequence		TFS	31/12/2023		Complete. Risk to historic heritage is low; grounds around heritage features are

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
										managed in low fuel state.
ECSO010	Coal Mines Historic Site	11	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS		Including FRBs, mechanical treatment	PWS burn plans approved, burns scheduled for 2024
ECSO005	Diamond Hill, Douglas River, Bicheno	11	7	Fuel reduction	Develop Bicheno Strategic Mitigation Plan	SFMZ	TFS	31/12/2023		SFMP has been drafted, being finalised in 2024.
ECSO005	Diamond Hill, Douglas River, Bicheno	11	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS			Planned burns being undertaken by FRP stakeholders
ECSO007	Spring Beach	11	10	Fuel reduction	Develop Orford/Spring Beach/Triabunna Strategic Mitigation Plan		TFS	31/12/2023		Behind schedule. Will be completed in 2024.
ECSO002	Yellow Sandbanks, Dolphin Sands	11	9	Community safety	Develop Dolphin Sands Strategic Mitigation Plan	APZ	GSBC	31/12/2023	Mechanical treatment along roadsides	Behind schedule. Will be completed in 2024
ECSO001	Mount Stacey, Coles Bay, Muirs Place	12	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS	ongoing	Including FRBs, mechanical treatment	Planned burns and mechanical mitigation being implemented.
ECPE044	Mount Stacey, Coles Bay, Muirs Place	12	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS	ongoing	Including FRBs, mechanical treatment	Planned burns and mechanical mitigation being implemented.
ECSO006	Allanbys Hill, Copping	13	13		Further analysis: Greater Wielangta area identified as asset in workshop. These communities are likely too small to sustain a Major consequence. Follow-up with District Officer for further analysis.		TFS	31/12/2023		Complete. Further analysis identified Greater Wielangta area as source of risk, not asset. This asset to be removed from plan.
ECSO003	Double Creek, Orford, Triabunna	13	10	Fuel reduction	Develop Orford/Spring Beach/Triabunna Strategic Mitigation Plan	SFMZ	TFS	31/12/2023		Behind schedule. Will be completed in 2024.
ECSO004	Swansea, Kennedia Place, Webber Point	13	12	Community safety	Consider updating Community Bushfire Protection and Response Plans	AZ	TFS	31/12/2023		Not completed. Risk deemed low due to reduced fuels post-fire. Reassess in 2025.
ECPE002	Carlton, Carlton River, Dodges Ferry	14	14	Behavioural change initiatives	Implement Bushfire Ready Neighbourhoods Program Round 4 (2020-2022) at Dodges Ferry (and	AZ	TFS	1/12/2022	Dodges Ferry and surrounds	Completed.

Bushfire Risk Management Plan – East Coast

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
					surrounds if resources available)					
ECPE002	Carlton, Carlton River, Dodges Ferry	14	15	Community safety	Maintain Community Bushfire Protection and Response Plans	AZ	TFS	31/12/2023		Complete. Primrose Sands Area (including Carlton River) CPP developed 2023.
ECSO009	Bream Creek	19	13		Further analysis: Greater Wielangta area identified as asset in workshop. These communities are likely too small to sustain a Major consequence. Follow-up with District Officer for further analysis.		TFS	31/12/2023		Complete. Further analysis identified Greater Wielangta area as source of risk, not asset. This asset to be removed from plan.
ECSO008	Tunbridge Hill	19	13		Further analysis: Greater Wielangta area identified as asset in workshop. These communities are likely too small to sustain a Major consequence. Follow-up with District Officer for further analysis.		TFS	31/12/2023		Complete. Further analysis identified Greater Wielangta area as source of risk, not asset. This asset to be removed from plan.
ECPE026	Billy Blue Hill, Nubeena	24	16	Fuel reduction	Develop Tasman Peninsula Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, working with local brigades	Behind schedule. Will complete 2024. FRB completed 2023 at Nubeena (Badger Creek FRB).
ECPE025	Diamond Hill, Douglas River, Bicheno	24	17	Fuel reduction	Develop Bicheno Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, mechanical treatment, fire trail maintenance	SFMP has been drafted, being finalised in 2024.
ECPE025	Diamond Hill, Douglas River, Bicheno	24	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS	ongoing		Being implemented
ECPE012	Eaglehawk Neck, Murdunna, Pauls Hill	24	18	Fuel reduction	Develop Forestier Peninsula Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, mechanical treatment	SFMP completed 2023.
ECPE012	Eaglehawk Neck, Murdunna, Pauls Hill	24	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS	ongoing		9 x PWS burn plans approved.

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
ECPE003	Port Arthur, Oakwood Hill, Carnarvon Bay	24	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS	ongoing	Including FRBs, mechanical treatment	Multiple burn plans approved. Difficulties implementing burns due to threatened species prescriptions.
ECPE003	Port Arthur, Oakwood Hill, Carnarvon Bay	24	16	Fuel reduction	Develop Tasman Peninsula Strategic Mitigation Plan	SFMZ	TFS	31/12/2023		Behind schedule. Will be completed in 2024.
ECPE036	Spring Beach	24	10	Fuel reduction	Develop Orford/Spring Beach/Triabunna Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, mechanical treatment, fire trail maintenance	Behind schedule. Will be completed in 2024. Several FRBs completed between 2020 and 2023 by PWS, TFS and ADF
ECPE010	Yellow Sandbanks, Dolphin Sands	24	9	Fuel reduction	Continue Dolphin Sands burn program	SFMZ	TFS	31/12/2023		Completed. Fuels unlikely to be available for burning again until 2027
ECPE010	Yellow Sandbanks, Dolphin Sands	24	19	Fuel reduction	Develop Dolphin Sands Strategic Mitigation Plan	APZ	GSBC	31/12/2023	Mechanical treatment along roadsides	Behind schedule. Will be completed in 2025.
ECPE006	Mount Stacey, Coles Bay, Muirs Place	25	8	Fuel reduction	Implement PWS strategic fire management plan	SFMZ	PWS	ongoing	Including FRBs, mechanical treatment	Being implemented. FRBs completed between 2020 and 2023.
ECPE006	Mount Stacey, Coles Bay, Muirs Place	25	21	Community safety	Consider updating Community Bushfire Protection and Response Plan	AZ	TFS	31/12/2023		Completed. CPP and CRP updated 2021.
ECPE008	Corn Hill, Little Hill, Pawleena, Sorell	26	20	Community safety	Develop Community Bushfire Protection and Response Plan	AZ	TFS	31/12/2023		Not completed. Risk identified as low due to fuel types surrounding community and large areas without bushfire fuels.
ECPE011	Double Creek, Orford, Triabunna	26	10	Fuel reduction	Develop Orford/Spring Beach/Triabunna Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, mechanical treatment, fire trail maintenance	Behind schedule. Will be completed in 2024. Several FRBs completed between 2020 and 2023 by PWS, TFS and ADF

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
ECPE023	Midway Point, Penna	26	21	Community safety	Develop Community Bushfire Protection and Response Plan	AZ	TFS	31/12/2023		Not completed. Risk identified as low due to fuel types surrounding community and large areas without bushfire fuels.
ECPE019	Swansea, Kennedia Place, Webber Point	26	22	Community safety	Consider updating Community Bushfire Protection and Response Plans	AZ	TFS	31/12/2023		Not completed. Risk deemed low due to reduced fuels post-fire. Reassess in 2025.
ECPE001	Forcett, Bullock Hill	27	14	Behavioural change initiatives	Implement Bushfire Ready Neighbourhoods Program Round 4 (2020-2022) at Dodges Ferry (and surrounds if resources available)	AZ	TFS	1/12/2022		Completed.
ECPE020	Lewisham	27	14	Behavioural change initiatives	Implement Bushfire Ready Neighbourhoods Program Round 4 (2020-2022) at Dodges Ferry (and surrounds if resources available)	AZ	TFS	1/12/2022		Completed.
ECPE037	Dunalley, Boomer Bay	29	18	Fuel reduction	Develop Forestier Peninsula Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, mechanical treatment. Support local brigades to undertake burns.	SFMP completed 2023.
ECPE038	Taranna	29	16	Fuel reduction	Develop Tasman Peninsula Strategic Mitigation Plan	SFMZ	TFS	31/12/2023	Including FRBs, mechanical treatment, fire trail maintenance	Behind schedule. Will be completed in 2024.
ECPE042	White Beach	29	16	Fuel reduction	Develop Tasman Peninsula Strategic Mitigation Plan	SFMZ	TFS	31/12/2023		Behind schedule. Will be completed in 2024.

# **Appendix 3: Bushfire Management Zones**

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

## **Appendix 4: Current implementation plans**

Plan Owner	Plan Title	Year	Treatment Number
TFS	Coles Bay: Community Bushfire Protection Plan and Bushfire Response Plan	2021	
PWS	Freycinet National Park Emergency Response Plan	2011	
TFS	Bicheno: TFS Bushfire Mitigation Plan	2013	
TFS	Bicheno: Community Bushfire Protection Plan and Bushfire Response Plan	2013	
TFS	Swansea: Community Bushfire Protection Plan and Bushfire Response Plan	2013	12
TFS	Cranbrook: Community Bushfire Protection Plan and Bushfire Response Plan	2013	
TFS	Dolphin Sands: Community Bushfire Protection Plan and Bushfire Response Plan	2016	
TFS	Orford Area (including Triabunna): Community Bushfire Protection Plan and Bushfire Response Plan	2013	
TFS	Orford: Bushfire Ready Neighbourhoods Program (Round 4) 2020-2022	2020	14
Department of Defence	Buckland Military Training Area Bushfire Management Plan	2020	10
TFS	Buckland: Community Bushfire Protection Plan	2020	
TFS	Copping: Community Bushfire Protection Plan and Bushfire Response Plan	2015	
TFS	Taranna: Community Bushfire Protection Plan and Bushfire Response Plan	2022	
TFS	Koonya: Community Bushfire Protection Plan	2020	
TFS	Nubeena: Community Bushfire Protection Plan and Bushfire Response Plan	2023	
TFS	Port Arthur: Community Bushfire Protection Plan and Bushfire Response Plan	2014	
TFS	Eaglehawk Neck/Doo Town: Community Bushfire Protection Plan and Bushfire Response Plan	2022	
PWS	Tasman National Park Emergency Response Plan	2018	8
PWS	PWS Southern Region Strategic Fire Management Plan	2011	8
TFS	Dodges Ferry: Community Bushfire Protection Plan and Bushfire Response Plan	2018	
TFS	Dodges Ferry: Bushfire Ready Neighbourhoods Program (Round 4) 2020- 2022	2020	14
TFS	Dunalley/Boomer Bay: Community Bushfire Protection Plan and Bushfire Response Plan	2018	
TFS	Murdunna/Sommers Bay: Community Bushfire Protection Plan and Bushfire Response Plan	2022	

#### **Explanation of Plans:**

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

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

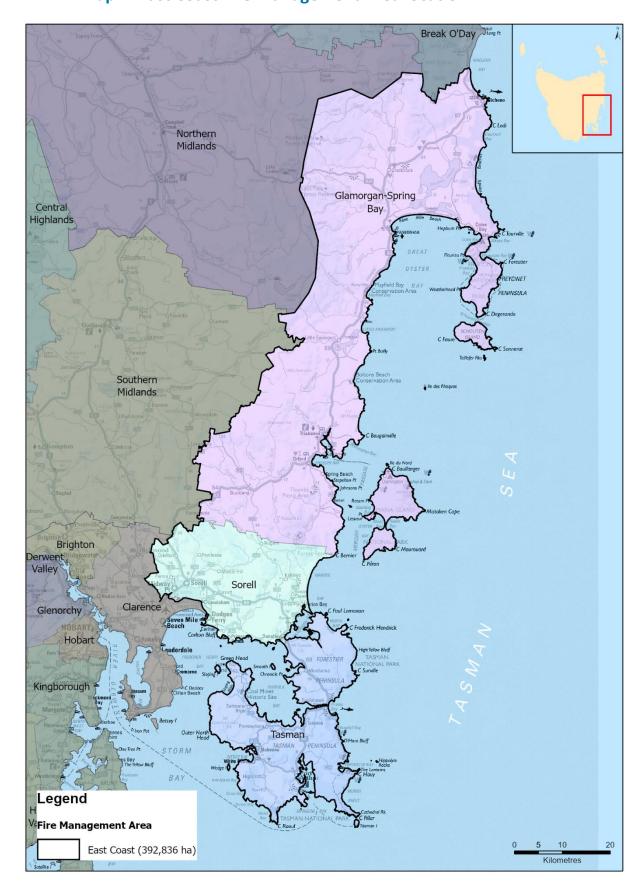
**Community Bushfire Mitigation Plan:** The purpose of a TFS Bushfire Mitigation Plan is to provide guidance regarding bushfire fuel management; to increase community bushfire safety and provide protection to important community assets.

## **Maps**

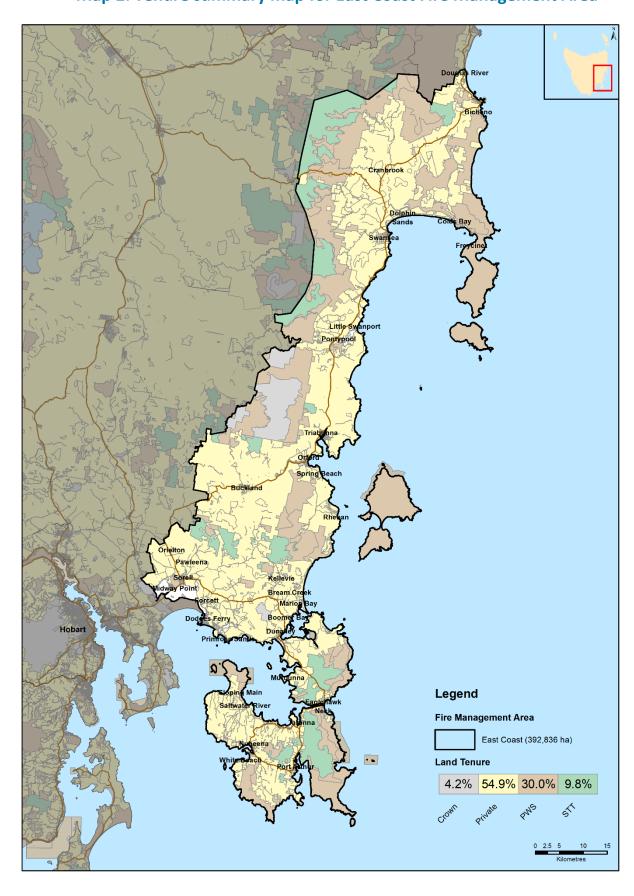
All maps are published on LISTmap; Maps 3 and 4 are not published in full in the BRMP because they include too much detail to be seen on an A4 map.

To view a map in LISTmap, follow these instructions:

- 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.



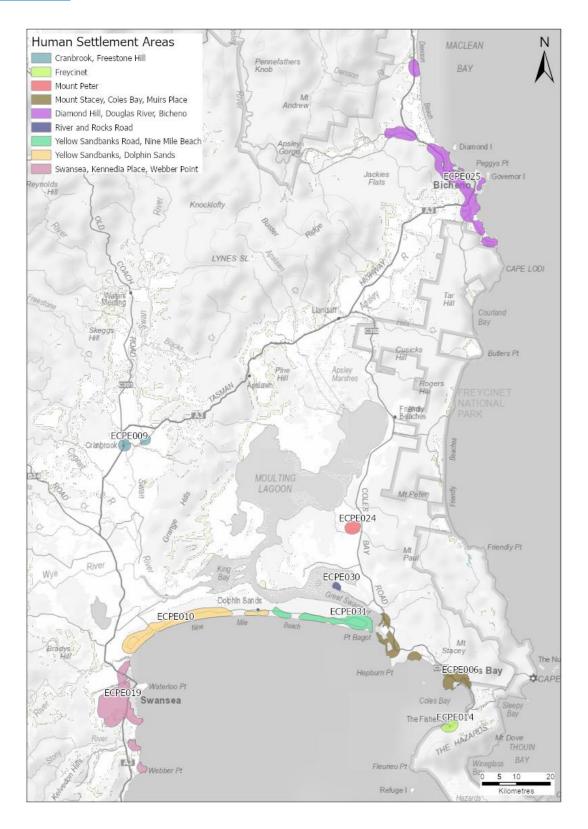
**Map 1: East Coast Fire Management Area location** 

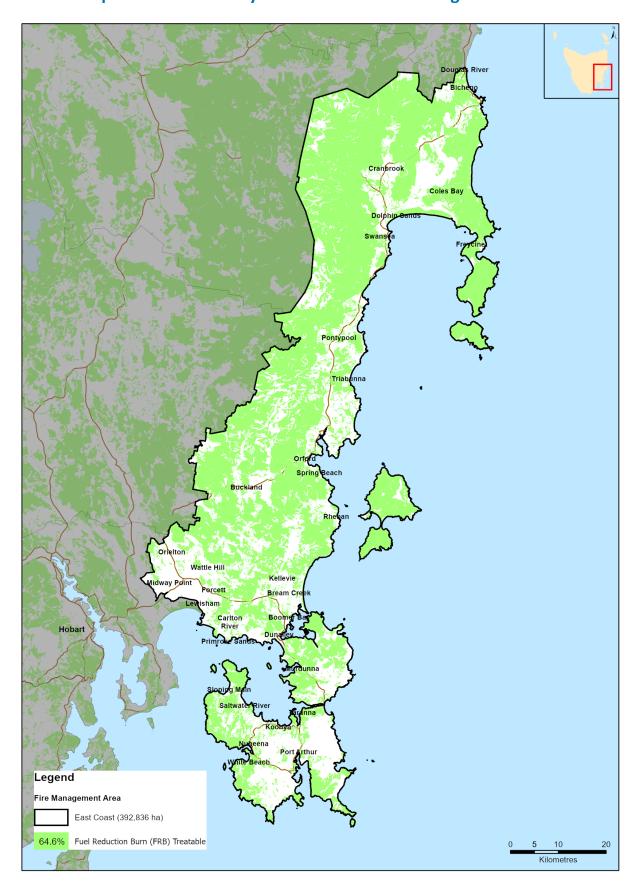


Map 2: Tenure summary map for East Coast Fire Management Area

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

An example of the assets and values from the risk register in the Swnasea, Bicheno and Freycinet area of the East Coast FMA. The full map covering the entire FMA is published on LISTmap –  $\frac{\text{click here to}}{\text{go to this link}}$ 





Map 4: Fuel treatability for East Coast Fire Management Area

**Map 5: Vegetation for East Coast Fire Management Area** 

