



**Tamar Fire Management Area
Bushfire Risk Management Plan
2020**

Document Control

Document History

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Ian Sauer
Chair, SFMC
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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 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 button grass.
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

HSA	Human Settlement area
BRU	Bushfire Risk Unit
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. 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 at least yearly for the State Fire Management Council on the progress of implementation.

The Tamar Fire Management Area (FMA) is located on the north coast of Tasmania and encompasses Launceston City, 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 or lands with a high agricultural value. The region is dominated by agricultural and pastoral activities, particularly meat production, 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.

Understanding of the risk is essential to managing fire in the landscape. This interim document examines and identifies areas that are of a high priority for the treatment of fire risk. The treatment plan ([Appendix 2](#)) lists the actions determined by the FMAC required to treat bushfire risk in the Fire Management Area.

Areas that the FMAC have considered to be a priority for treatment are the East and West Tamar ridges (either side of the Tamar Estuary. These ridges have the potential to lead fires into the major population centres or impact minor communities.

Treatment options to reduce risk within the FMA may include:

- Development of appropriate fire management zoning including assets protection zoning;
- Development and the implementation of fuel reduction programs adjacent to the communities at risk including planned burning;
- Development of fire infrastructure including fuel breaks and access tracks adjacent to communities under risk;
- Community consultation and engagement including community education initiatives.

Implementation of the treatment plan may be constrained by:

- Resource availability to implement appropriate management activities such as fuel break construction;
- Appropriate windows in the weather may not exist to carry out planned burns;
- the management of fire risk on private land is a considerable challenge for the Tamar FMA;
- Agreement with all stakeholders as to the proposed works.

Future iterations of this document will be based on an expanded risk profile based around likelihood and consequences together with an understanding of the confidence in the data.

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 and the [State vegetation fire management policy](#).

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 on all land within the FMA
- Provide a reference point for the prioritisation and justification of bushfire treatment actions, as well as supporting evidence for funding requests
- Facilitate the integration of bushfire risk management into the business processes of councils, organisations and land managers
- Facilitate cooperation and the coordination of treatment actions between stakeholders
- Clearly and concisely communicate bushfire risk to stakeholders and the community
- Provide a basis for monitoring and reporting of implementation of bushfire risk treatments in the FMA

This BRMP is a strategic-level document that does not provide detail on treatment actions. Individual organisations and landowners, or collaborative groups, may have developed plans and processes for implementation of bushfire risk treatment; these can be considered to be linked to the strategic priorities identified here. This is an interim version of the BRMP – future versions will be based on a more comprehensive risk assessment.

2. Establishing the context

2.1 Description of the Tamar Fire Management Area

The Tamar Fire Management Area is located 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 Westbury.

Land tenure within the Tamar FMA is approximately 25% public land and 75% private/freehold land ([Map 2](#)).

Land Manager/Agency	% of Land Managed within the FMA
Private	75 %
DPIPWE (including Parks and Wildlife Service and Crown land Services)	15.8 %
Sustainable Timbers Tasmania	9 %
Hydro	<.2 %

Table 1: Overview of land tenure in FMAC

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;
- 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 ignition 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 planning area. 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 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.

The vegetation in the Tamar FMA is varied and can be categorised into groups that represent landscape or broad vegetation classifications ([Map 4](#)). A description of each of the vegetation classifications (Tas Veg 3) can be found in Harris and Kitchener, 2013 or at www.dpipwe.tas.gov.au/tasveg.

Broad Vegetation Group (TasVeg 3, 2013)	(ha)	% in FMA	Veg Flammability
Agricultural, urban and exotic vegetation	374576	43.6	Medium
Dry eucalypt forest and woodland	340014	39.6	Medium - High
Highland and Treeless Vegetation	6684	0.8	High
Moorland, sedge land, rush land and peatland	466	0.1	Low – Very High
Native grassland	42879	5.0	High
Non eucalypt forest and woodland	14899	1.7	High
Other natural environments	11761	1.4	N/A
Rainforest and related scrub	4655	0.5	Low
Saltmarsh and wetland	1758	0.2	Low
Scrub, heathland and coastal complexes	13615	1.6	High – Very high
Wet eucalypt forest and woodland	4733	5.5	Medium
Total	816040	100	

Table 2: Broad vegetation Groups Tamar FMA

Vegetation can also be classified as treatable or untreatable which is an important consideration for fuel reduction burning purposes. Agricultural lands while susceptible to fire, are not included in the treatable vegetation group due to the land use priority allocated to this vegetation type. Currently 42.8 % of the FMA is classified as treatable vegetation and is highlighted in [Map 3](#). A breakdown of the classification of treatable vegetation is detailed in table 3:

Fuel Reduction Burning Treatability – Tamar Fire Management Area		
	Tamar Area (ha)	(%)
Treatable	428356	49.9
Un-treatable	130608	15.2
Agricultural Land*	292587	34.1
Water	7041	0.8
<i>Not Mapped</i>	495	0.1

Table 3: Treatable vegetation- Tamar FMA

The climate of the Tamar Fire Management Area 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 FMA. 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.

Mean Annual rainfall	Across the Tamar Fire Management Area mean annual rainfall varies from 498mm/yr. at Ross to 830mm/yr at Lake Leake. 610mm (Cressy), 677mm (Low head) and 680mm (Launceston – Ti Tree Bend)
Wettest months	Winter (July and August)
Driest Months	February & March
Windiest Months	Spring and summer
Months of least wind	June/July (winter)
Cloudiest Month	May at Low Head and July in Launceston

Table 4: Summary Climate Statistics – Tamar FMA

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 Tamar Fire Management Area increases in late December with January/ February generally being the driest and hottest months when bushfires are more difficult to control.

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

Ignition source	% of ignitions
Unknown cause	30%
Escapes from planned burns	14%
Planned burns	36%
Arson	12%
Lightning	1%
Accident, bushfire spotting, campfire (combined)	4%

Table 5: Ignition events Tamar FMA

Major wildfire events within the Tamar FMA within the last 10 years are identified in table 6.

Fire name	Year	Area Burnt (ha)
Nunamara (Tasman Highway)	2016 (Jan)	871
Connorville Road	2016 (Jan)	808
Lefroy	2015 (Mar)	1060
Back Creek Road	2012 (Nov)	3327
Asbestos Road, York Town	2010 (Jan)	2905
Tippogoree, Hills	2006 (Nov)	4098
Beechford	2003 (Feb)	4160

Table 6: Major wildfire events Tamar FMA

Fire seasons and fuel reduction burning seasons can vary. Planned burning will normally be carried out during the spring or autumn seasons but is not restricted to these periods. Planned burning should occur when the prescriptions that are applicable to the burn are met, not arbitrary dates.

Planned burning is limited by weather prescriptions, presence or otherwise of treatable fuels, appropriate boundaries and the availability of human resources to successfully conduct the ignition and suppression of the planned burn.

Climate is changing in Tasmania and it is evident from bushfire climate indicators (Fox-Hughes et al. 2015) that we can expect more extreme fire weather events with an associative increase in the frequency of more destructive bushfires. Of concern is the increased probability of ignitions from dry lightning events.

2.3 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);
- Westbury (population 2104);

Rural living and smaller dispersed settlements represent another element of population dispersal within the area. This is especially evident along the Tamar River and 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 Highway;
- East Tamar Highway;
- TasWater and TasNetworks infrastructure;
- Telecommunications infrastructure (radio and telephone towers, TV transmitters etc);
- Poatina Power Station.

The communities in the Tamar FMA have concerns regarding fire and fire management. Community concerns include:

- Smoke inundation from planned burning activities - near ventilation areas around mines including Beaconsfield (currently inactive).;
- The potential for smoke to accumulate in the Tamar Valley (health issues);
- Smoke near vineyards and airports;
- Inappropriate burning and the effects of planned burning on the environment;
- Climate and bushfire season.

2.4 Community engagement

The FMAC identifies the importance of ongoing community liaison and engagement with DPIPWE, STT, associated specialists, specialist groups along with 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 the planned burn development coordinated by the Bushfire Risk Unit, Parks and Wildlife and Sustainable Timbers Tasmania.

Recent engagement activities 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.

Round 2 of the Bushfire Ready Neighbourhood Program has identified the following localities in the Tamar FMA for community engagement:

- Rowella/Sidmouth/Kayena;
- Kelso/Greens Beach;
- Bellingham.

3. Identifying the risks

3.1 Bushfire and impact scenarios

To set the scene for this plan, 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. Some important examples for the Tamar Fire Management Area (FMA) include:

- 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 wildfire 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);
- Inter-agency Fuel Reduction Program – 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, 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 reliance education program;
- BRU, STT and PWS planned Burning programs.;
- Launceston Council Burning program – Minor reserves;
- The Bush fire ready neighbourhood (BRN) program.

4. Analysing and evaluating bushfire risk

4.1 Analysing bushfire risks

The analysis of bushfire risk for this plan considers the following:

- Consequences – what values and assets are at risk given the 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

4.2 Evaluating bushfire risks

In the absence of a dedicated risk register, assessment of the bushfire risk within the FMA was carried out by the FMAC. Analysis of FMA through the use of the Bushfire Risk Assessment Model (BRAM) and simulation of bushfires under various scenarios through the use of Phoenix Rapid fire (Tolhurst et al, 2008) have indicated human settlement areas that require mitigation. These communities are:

- In the vicinity of Hagley and Quamby Bend (north east of Westbury);
- North west of Lilydale;
- North west of Launceston - west of the Tamar River;
- Along the Midlands Highway from Launceston to Campbell Town;
- North west of Lake Leake and Rawlinna;
- North west of Tunbridge;
- North west of Nunamara;
- North west of George Town and Bell Bay;
- North of Bridport Rd in the Leroy/Pipers River area;
- North of Launceston - east of the Tamar River;
- North west of Poatina;
- North west of Cressy.

Agreed 'at risk' communities were then prioritised by members of the Tamar Fire Management Area Committee. This was reviewed in 2019 through discussion in the FMAC. As part of this review, it was identified that the East and West Tamar ridges (either side of the Tamar Estuary) are critical areas for mitigation and risk management.

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 Inter-agency Fuel Reduction Program with the agreement of landowners.

The treatment plan identifies priority works in the Tamar FMA. In the case of the Tamar FMA, the East and West Tamar ridges on either side of the Tamar estuary are the principal areas for priority works.

5.2 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 controls 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.

Resourcing constraint existing within the land management agencies precluding works on identified treatments. Identified works have not been budgeted for within existing programs and while the FMAC may have listed a program as a high priority, it may not be in organisations overall priority.

5.3 Strategic fire infrastructure

The identification of strategic infrastructure including roads, fuel breaks and fire trails within the Tamar FMA has not yet been undertaken but has been identified as a priority by the FMAC in future Fire Protection Plans.

5.4 Fuel reduction burning

Individual burn units are not identified in this BRMP but will need to be identified 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 2014); these vegetation communities are described as 'untreatable' and indicated on [Map 3](#). The broad vegetation communities within the FMA can be seen on [Map 4](#).

The [Fuel Reduction Program](#) 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 a comprehensive review in 2020. The revised BRMP will be based on a new risk assessment that may include revised input methods. 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 at least every 12 months by the 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;
- 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 state-wide level, the State Fire Management Council will examine the impacts of the strategic burning program on risk management as part of the strategic fuel management program.

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Appendices

Appendix 1: Treatment plan

Map	Asset Name and Location	Priority	Treatment No	Treatment category	Treatment Type and detail	Responsibility	Completion Date Proposed	Comment
	West Tamar ridge	High	1	Fuel reduction	develop localised fire strategy for ridge	TFS with input from PWS and STT	2021/ongoing	Greens Beach to Hadspen; Split into smaller projects associated with relevant community
	Beaconsfield	High - Med	2	fuel reduction	Continue with planned burning program	PWS/BRU	2018/ Ongoing	Cabbage tree hill
	Beaconsfield	High - Med	3	Fuel Reduction	Development of localised mitigation strategy	TFS/PWS	2020	Note: resources may not be available to conduct this type of work within TFS BRU Note: zero vegetation buffer at the top of Beaconsfield. Nursing home present
	Beaconsfield	High - Med	4	Fuel Reduction	Maintain existing fuel breaks	Crown Land Services	ongoing	Selected Fuel breaks/annual abatements west of Beaconsfield - Cabbage tree Hill; Note: Resource issues within Crown Land Services to undertake this type of treatment.
	Beaconsfield	High - Med	5	Preparedness	Develop a Bushfire response plan	TFS	2021	
	Beaconsfield	High - Med	6	Behavioural change	Develop community bushfire protection plan	TFS	2021	
	Travellers Rest	Med	7	Fuel reduction	Continue to implement planned burns from the mitigation plan	TFS	ongoing	
	Travellers Rest	med	8	Fuel reduction	Review of localised mitigation plan for Travellers Rest/ Blackstone heights	TFS	completed (need a review date)	Bushfire mitigation plan completed in 2014.

Map	Asset Name and Location	Priority	Treatment No	Treatment category	Treatment Type and detail	Responsibility	Completion Date Proposed	Comment
	Travellers Rest		9	Behavioural change	Review of existing community bush fire protection plans	TFS	completed (need a review date)	Sits within the Hadspen response plan (2012) and protection plan (2012) Completed but in need of review
	Travellers Rest		10	Preparedness	Review of bushfire response plans	TFS	completed (need a review date)	Sits within the Hadspen response plan (2012) and protection plan (2012) Completed but in need of review
	Greens Beach	Revisit in 2020	11	Fuel reduction	Development of localised mitigation strategy	TFS	2021	Input from PWS re Narawntapu NP Engagement for treatment on private land is required Town surrounded by flammable fuels, gorse on private freehold
	Greens Beach	Med	12	Behavioural change	Bushfire ready neighbourhood program	TFS	started 2018	BRN meetings occurred in 2018
	Bridge north - Exeter, Grindelwald	high	13	Fuel reduction	Development of localised mitigation strategy	TFS	2020	Mitigation plan for Exeter, Grindelwald and Bridgnorth areas;
	Launceston - West of Riverside	high	14	Fuel reduction	Development of localised mitigation strategy	TFS/BRU	2020	Localised Bushfire Mitigation strategies are proposed for Stephensdale/Ecclestone and Riverside/Trevallyn areas. - Grassy Hut Tier
	Launceston - West of Riverside	high	15	Fuel reduction	planned burning program	TFS	2020	Grassy Hut Tier
	Four Springs	med	16	Fuel Reduction	Planned burn program as part of STT operations	STT / Forico	ongoing	Mixed planation and native Forest Communities - Bridgenorth, Rosevale, Selbourne
	East Tamar Ridge	High	17	Fuel reduction	develop localised fire strategy for ridge	TFS with input from PWS and STT	2021/ongoing	Tippogoree hills to Nunamara Split into smaller projects associated with relevant community
	Nunamara	High	18	Fuel reduction	Development of localised mitigation strategy	TFS	???	Immediate area around Nunamara No resources currently within TFS BRU to develop mitigation plans

Map	Asset Name and Location	Priority	Treatment No	Treatment category	Treatment Type and detail	Responsibility	Completion Date Proposed	Comment
	Nunamara	high	19	Fuel reduction	Continue with FRB program	TFS	Update in 2020	Priority areas: Boomer hills and Tippogoree hills Include in comments burns that are planned by STT, TFS. And a comment on the progress of what has been burnt.
	Lake Leake	High	20	Fuel reduction	Continue with fuel reduction program	TFS / BRU	Review in 2020	Badger hill - burn plan approved but has not yet been implemented due to conditions Note: that a TFS Lake Leake burn was conducted in 2019
	Lake Leake	High	21	Fuel reduction	Development of localised mitigation strategy	TFS	Revisit in 2020	No resources currently within TFS BRU to develop mitigation plans; Requires engagement with private landholders
	Lake Leake	Med	22	Preparedness	Review of bush fire response plan	TFS	2020	Response plan published in 2014. Needs a review
	Rossarden	Med	23	Fuel Reduction	Continue planned burns	PWS/ STT/ TFS	ongoing	proposed burns - Castle Cary 2, McGinties Tier
	Rossarden	Med	24	Behavioural Change	Development of a bushfire response plan	TFS	2020	Has a bushfire protection plan (2015) Untreatable fuels (wet forests) - Ben Lomond - Stacks Bluff Water treatment plant
	Cleveland	low	25	Fuel reduction	Investigate fuel reduction burning NW of community	PWS	Revisit in 2020 (after risk assessment has been undertaken)	need risk assessment to reassess risk to Cleveland and whether treatments are necessary
	George Town/Bell bay	Med	26	Fuel reduction	Development of localised fire mitigation strategy	TFS	2020	input from Bell Bay industrial complex
	George Town/ Bell bay	high	27	Fuel reduction	Planned burning program	TFS/ BRU	2020	may include Tippogoree Hills down to Mount Direction Transmission lines, power stations...

Map	Asset Name and Location	Priority	Treatment No	Treatment category	Treatment Type and detail	Responsibility	Completion Date Proposed	Comment
	Underwood	high	28	Fuel reduction	Development of localised mitigation strategy	TFS with assistance from STT and private companies	2020	Mitigation plan started Holly Bank potential vulnerable group Maze (tourists)
	Underwood	high	29	Fuel Reduction	Planned burning program	TFS/Bru	2020	Boomer hills/ Turners marsh/ Tippogoree hills
	Underwood	high	30	Behavioural change	Review bush fire protection plan	TFS	completed	Lilydale areas (2013)
	Underwood	high	31	Preparedness	Review Bush Fire response plan	TFS	Completed	Lilydale area (2012)
	Launceston-Trevallyn	med	32	Fuel reduction	Continue with burning program	PWS, Launceston Council	ongoing	Trevallyn Fire management strategy/ Cataract Gorge Fire management plan 2 burns in the last 2 years have been conducted by City of Launceston.
	Launceston	med	33	Fuel Reduction	Review of fire strategy Trevallyn	PWS	2020	
	Launceston -Trevallyn	high	34	Preparedness	maintenance of fire trails in Trevallyn SRA/ Cataract Gorge	PWS, Launceston Council	Ongoing	
	Launceston -Bushland Reserves	med	35	Fuel reduction	Implementation of council burning program	Launceston Council/ BRU/TFS	Ongoing	City of Launceston Bushland Reserves (34 reserves across the LGA including Cataract Gorge, Punchbowl, Carr Villa, Lilydale Falls and Myrtle Park)
	Westbury	medium	36	Behaviour Change	Community engagement/education program - potential BRN involvement	TFS	2020	Potential impact from fires Reedy Marsh area (Central North FMAC); Westbury Industrial estate Grasslands, five-acre private properties
	George Town Council coastal area	med	37	fuel reduction	Development of localised mitigation strategy	TFS	2020	
	George Town Council coastal area	high	38	Fuel reduction	continuation of Planned burning	TFS/PWS/DOD	2020	Burn units Weymouth; Burn units with Stony Head Artillery range; Burn units Lefroy Regional Reserve
	George Town Council coastal area	high	39	Behaviour Change	BRN - Lulworth etc	TFS	2020	Recent major wildfire activity in area - 2019

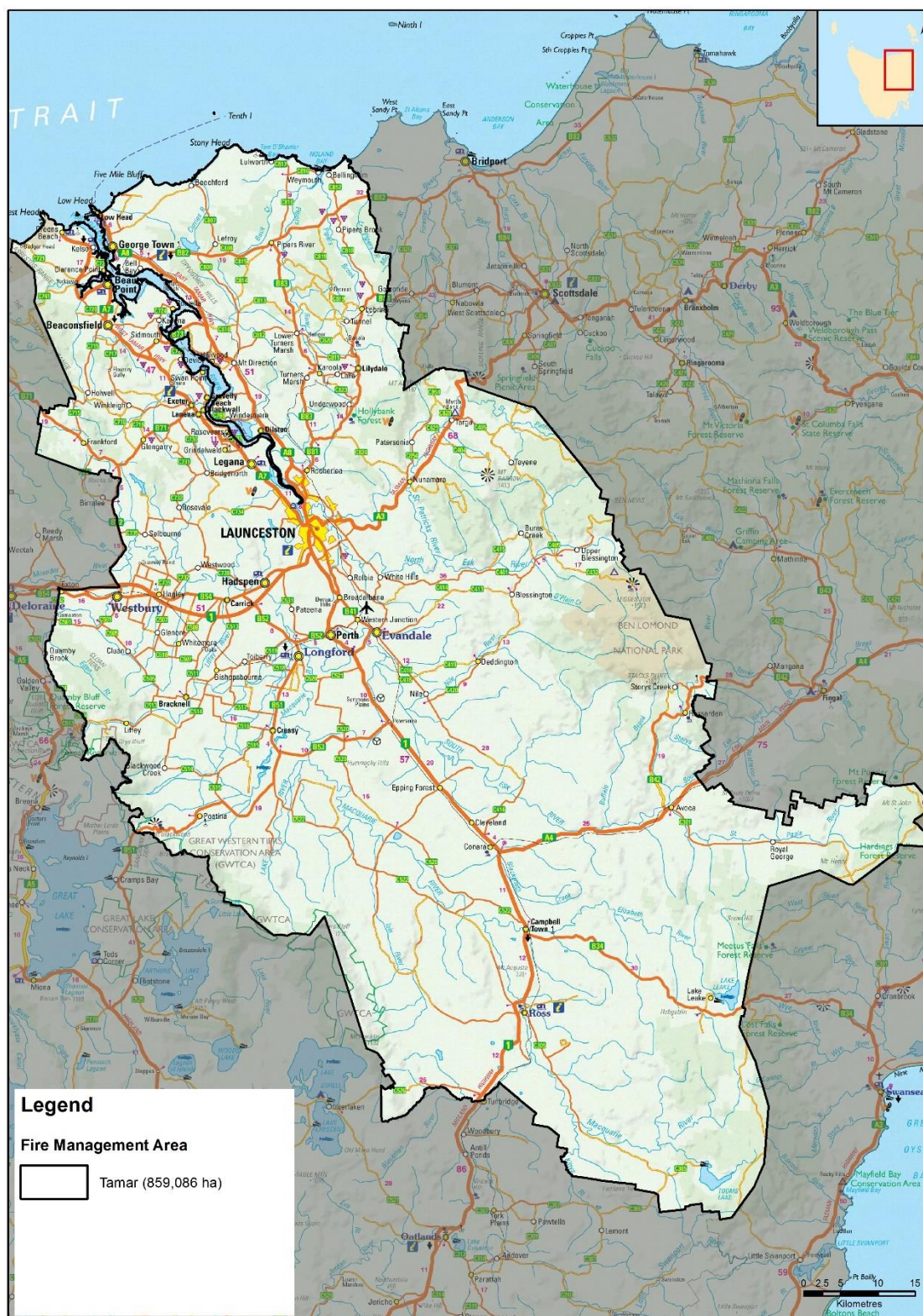
Map	Asset Name and Location	Priority	Treatment No	Treatment category	Treatment Type and detail	Responsibility	Completion Date Proposed	Comment
	George Town Council coastal area	high	40	Fuel reduction	slashing of Fuel breaks	Council/Community/ Crown land Services/ PWS	ongoing	Beechford, Lulworth, Weymouth, Bell Buoy Beach
	Launceston NE suburbs Newnham Creek Area (Ravenswood) & rail line at Mayfield and Tamar River	high	41	Fuel reduction	Development of localised mitigation strategy	Council/Community/ Crown land Services/ PWS/TFS	completed	
	Launceston NE suburbs Newnham Creek Area (Ravenswood) & rail line at Mayfield and Tamar River	high	42	Fuel reduction	planned burning as per Mitigation plan	TFS/PWS/City of Launceston	???	PWS proposed burns Bouchers Creek and Russell Plains; Native point
	Powranna	low	43	Fuel reduction	development of localised mitigation strategy	TFS	2020	Feed lot Tom Gibson Nature Reserve & Conservation Land
	Poatina		44	Fuel Reduction	Complete Fuel reduction burn	TFS and Hydro	2020	Already conducted burn on southern side of Poatina road...

Appendix 2: Current implementation plans

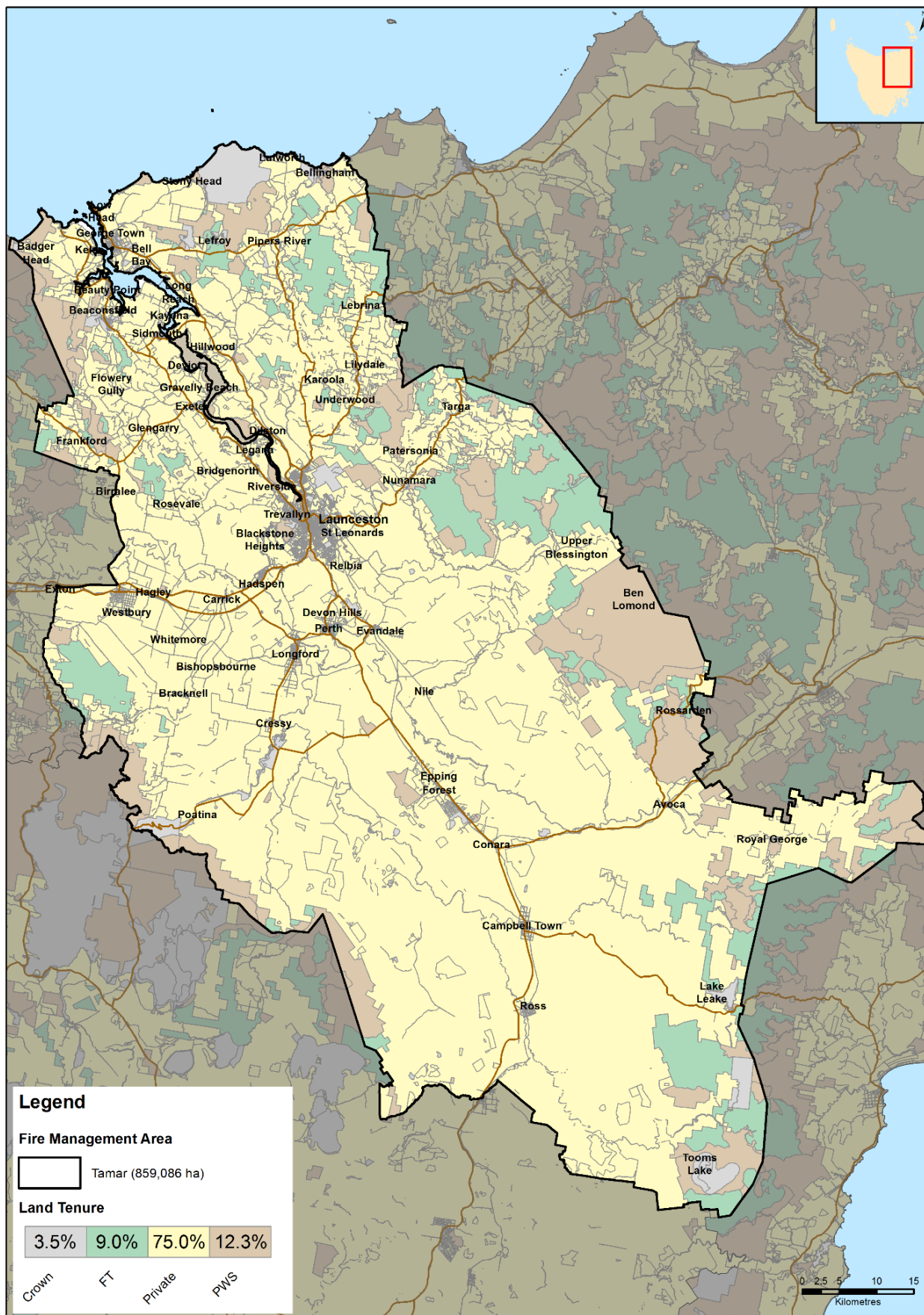
Plan owner	Plan title	Year	Treatment numbers
TFS	Avoca CPP	2016	
TFS	Bellingham CPP	2018	
TFS	Bellingham BRP	2018	
TFS	Blackstone Heights CPP	2012	
TFS	Blackstone BRP	2012	
TFS	Conara CPP	2015	
TFS	Conara BRP	2015	
TFS	Hadspen (including Travellers Rest) CPP	2012	
TFS	Hadspen (including Travellers Rest) BRP	2012	
TFS	Lake Leake including Kalangadoo and Rawlinna CPP	2014	
TFS	Lake Leake including Kalangadoo and Rawlinna BRP	2014	
TFS	Lilydale CPP	2012	
TFS	Lilydale BRP	2012	
TFS	Nunamara CPP	2017	
TFS	Nunamara BRP	2017	
TFS	Prospect CPP	2012	
TFS	Prospect BRP	2012	
TFS	Ravenswood CPP	2015	
TFS	Ravenswood BRP	2015	
TFS	Rocherlea CPP	2015	
TFS	Rocherlea BRP	2015	
TFS	Rossarden CPP	2015	
TFS	Rossarden BRP	2015	
TFS	Royal George CPP	2016	
TFS	Turners Marsh (including Lower Turners Marsh, Bangor, Karoola and Lalla) CPP	2012	
TFS	Turners Marsh (including Lower Turners Marsh, Bangor, Karoola and Lalla) BRP	2012	
TFS	Weymouth Area (including Tam O'Shanter and Lulworth) CPP	2013	
TFS	Weymouth Area (including Tam O'Shanter and Lulworth) BRP	2013	
TFS			
TFS	Travellers Rest Mitigation plan	2014	
TFS	Launceston (northern Suburbs) Mitigation Plan		
PWS	Northern region Strategic fire plan	2009	
PWS	PWS fire action Plan	2019-2020	
PWS	Beechford fire management plan	2012	
PWS	Trevallyn Fire management strategy	2011-2016	
PWS	Kate reed fire management strategy	2011	
Launceston Council	Cataract Gorge fire strategy	2016-2026	
Launceston Council	Bush fire Management strategy for council owned and managed lands	2015-2025	
Launceston Council	Carr Villa Flora Reserve and Memorial Park Fire Management Plan	2017-2027	
Launceston Council	Distillery Creek Gorge and Waverley lake Fire Management Plan	2017-2027	
Launceston Council	Havelock Street Reserve Fire management plan	2017-2027	
Launceston Council	Lilydale Area Reserves Fire Management Plan (including Merthyr Park & Lilydale Falls Reserve)	2017-2027	
Launceston Council	Punchbowl Reserve Fire management plan	2016-2026	
Launceston Council	Ravenswood area reserves fire management plan (Incorp Vermont Road and Ravenswood Bushland Reserves)	2017-2027	
Launceston Council	Russell Plains Fire Management Plan	2016-2026	
Launceston Council	Tasman Bushland Highway Fire Management plan	2017-2027	
Launceston Council	Youngtown Regional Park Fire management plan	2017-2027	

Maps

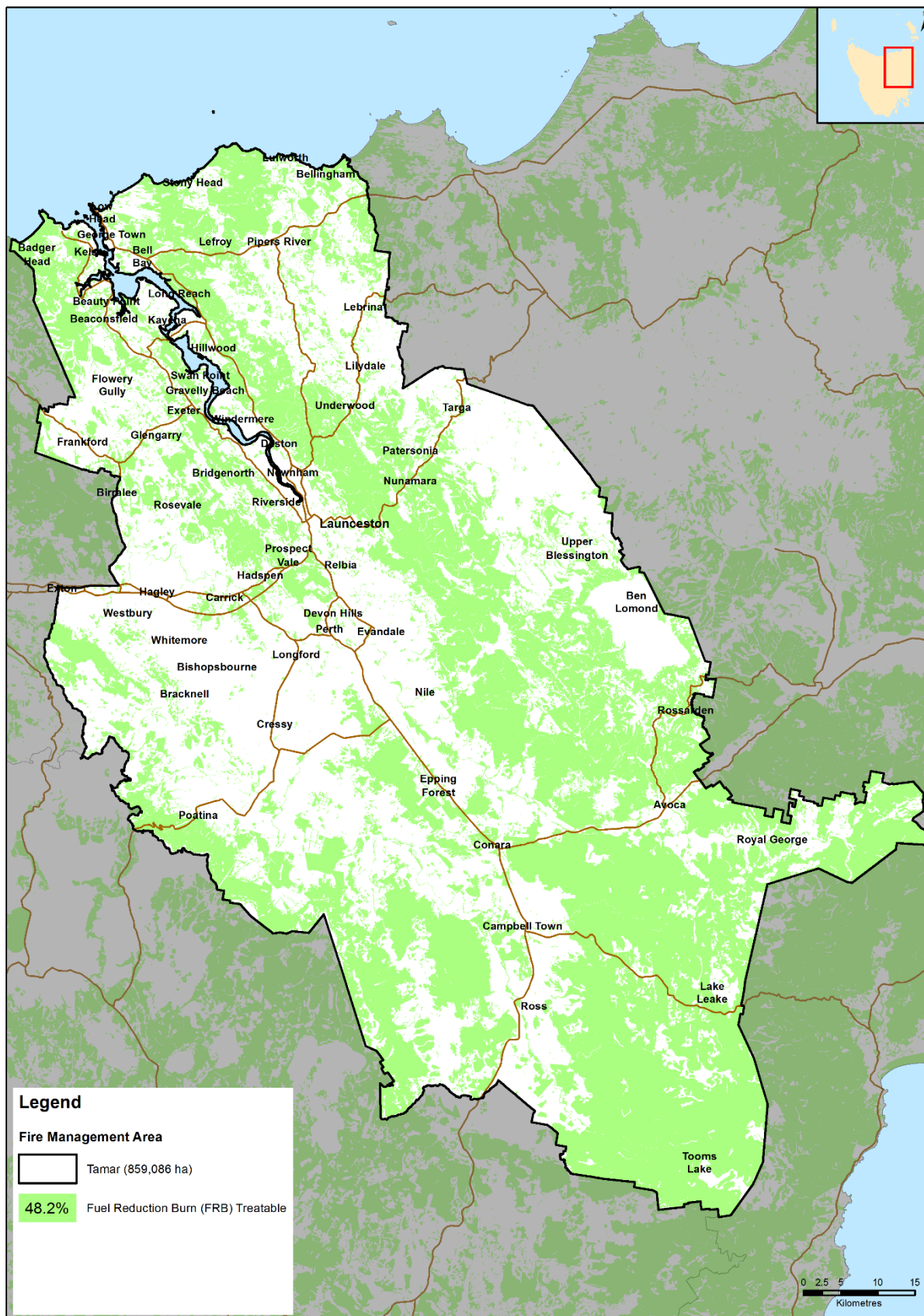
Map 1: Tamar Fire Management Area location



Map 2: Tenure summary map for Tamar Fire Management Area



Map 3: Fuel treatability for Tamar Fire Management Area



Map 4: Vegetation for Tamar Fire Management Area

