Whitsunday Regional Council

Community Bushfire Management Plan: Preston (South), Proserpine

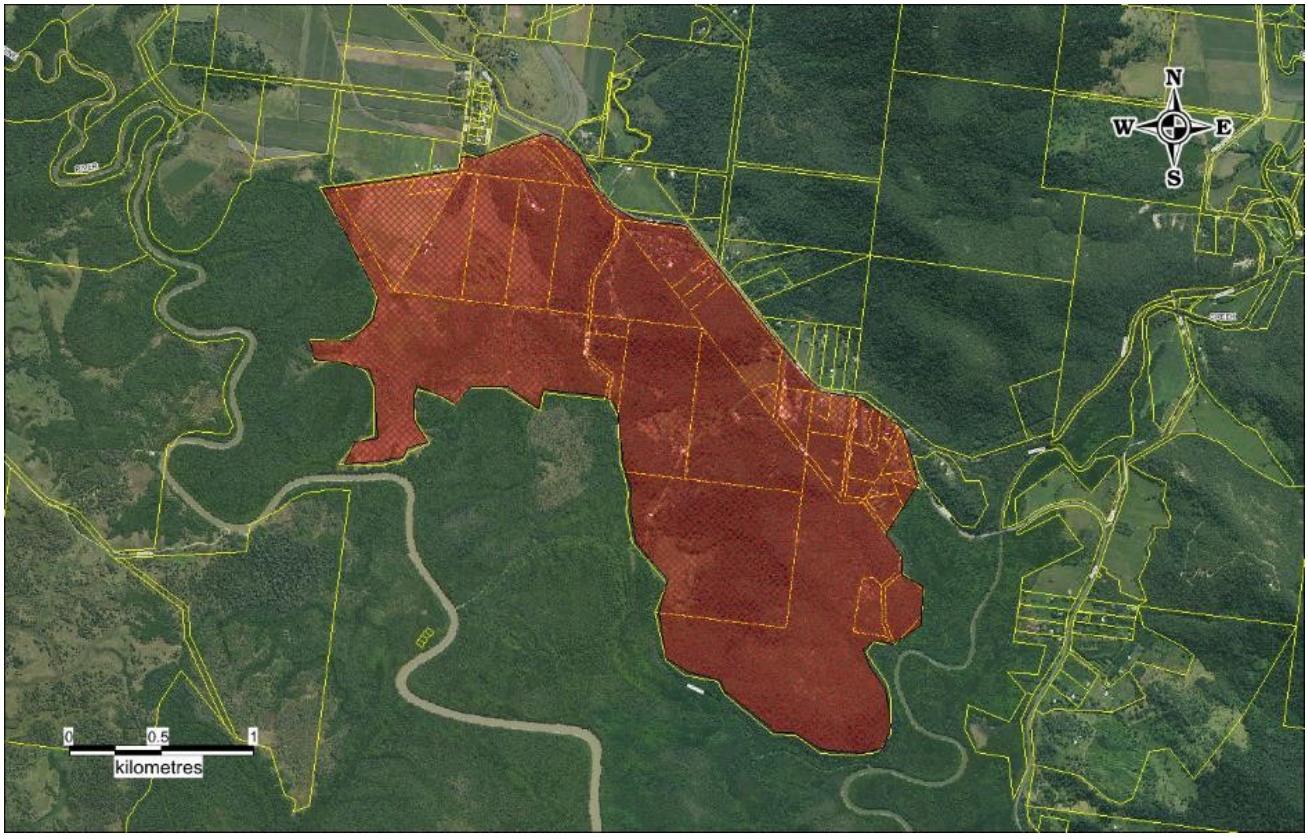

Table of Contents

Document History

Title	Version #	Date	Author	Reviewer	Approved by
Natural Resource Management Plan	0.4	August 2019	Scott Hardy	Julie Wright	Julie Wright

Executive Summary

The purpose of the Preston (South) community Bushfire Management Plan is to document bushfire hazard and describe how this hazard will be managed over time. This Bushfire Plan is specifically written for the Preston (South) residents and stakeholders. There are approximately 25 landholders in the Plan area.

The Council does not own or manage land in this Bushfire Management Plan area. The Preston (South) Bushfire Plan seeks the following outcomes:

- Describe the extent of bushfire hazard.
- Describe the location of fire control lines and fire breaks.
- List the roles and responsibilities for bushfire management.
- List the proposed schedule of bushfire mitigation tasks.

While the proposed Community Plan Management Plan provides guidelines on how the Preston (South) bushfire hazard could be managed, each landholder is responsible under legislation to manage their own bushfire hazard. The Council encourages landholders to discuss their bushfire planning and management with their neighbours.

The Council has developed this Community Bushfire Management Plan in consultation with the Queensland Fire and Emergency Services (QFES) and representatives of the Preston Rural Fire Brigade. The information contained in this Bushfire Plan is based on data collected from stakeholders over recent years.

Acknowledgements

The Whitsunday Regional Council would like to thank the following stakeholders who have contributed to this Bushfire Management Plan;

- Queensland Fire and Emergency Services (QFES)
- Queensland Department of Natural Resources and Mines
- Preston Rural Fire Brigade
- Conway Rural Fire Brigade

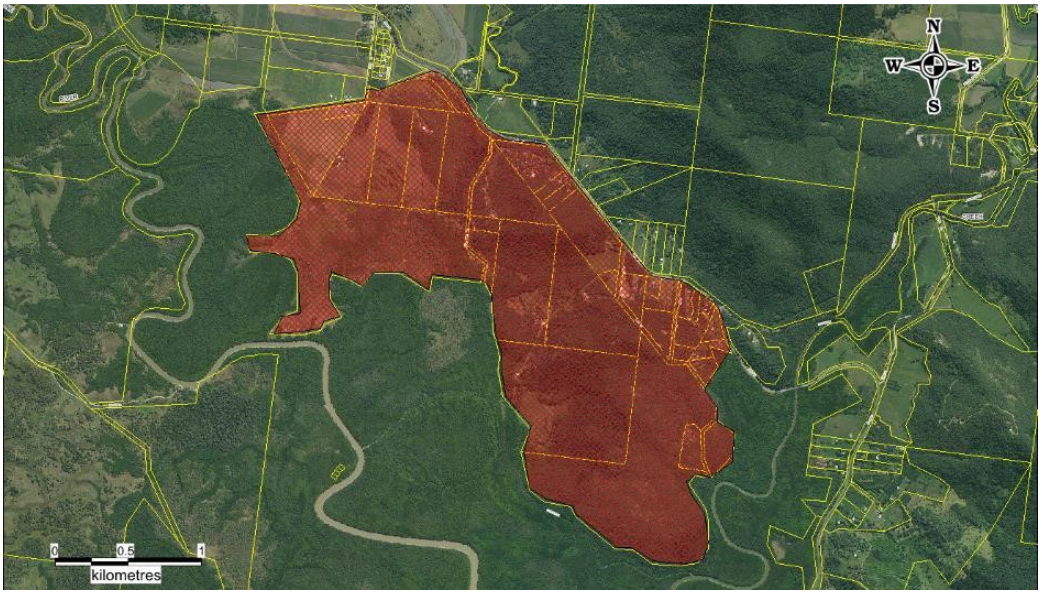

Figure **1.** The application area for the Preston (South) Bushfire Management Plan.

1. Introduction

The Preston (South) area has been identified as having a high bushfire hazard due to the vegetation type, slope and aspect. The rural township and the surrounding land has a moderate to high risk for loss of life and/or property if the bushfire hazard is not managed appropriately.

In 2018, bushfires occurred in the Preston area which threatened properties and infrastructure. Debrief meetings after the fires found that some residents were not prepared for the fires. In April 2019, the Preston rural fire brigade supported the development of a community based bushfire plan for the area.

The purpose of this community Bushfire Management Plan is to identify the actions required to reduce bushfire hazard in the Preston (South) township and surrounding area (Figure 1). The objectives of this Plan include;

- Identify where fire lines are required to protect life and property from fire,
- Maintain an ecologically appropriate controlled burn program,
- Improve community awareness,
- Maintain coordination and communication between landowners,
- Description of a maintenance program to manage bushfire hazard and risk.

It is envisaged that this community Bushfire Management Plan will be used as a communication tool to inform stakeholders and the community of the bushfire hazard surrounding Preston (South) and how it could be managed. Ultimately, each landholder will be responsible for managing bushfire hazard on their own land. The Council encourages a coordinated and cooperative approach to community bushfire hazard management.

2. Background

2.1 Land tenure and ownership

The land in this bushfire management plan is all privately owned land. There are no Council or State owned lots of land in the fire management plan area.

2.2 Site description

2.2.1 *Geology, landform and soils*

The geology of the Preston area was mapped by the Queensland government in 1972. An extract of the Proserpine geology map is shown in figure 2. The hills of the Preston area are predominantly formed by the Whitsunday Volcanics (Kp). The Airlie Volcanics are mostly comprised of Cretaceous acid volcanic rocks such as rhyolite which produce gravelly, shallow duplex soils which are relatively low in soil fertility. The low fertility of the soils have an influence over the vegetation which is found on the hills.

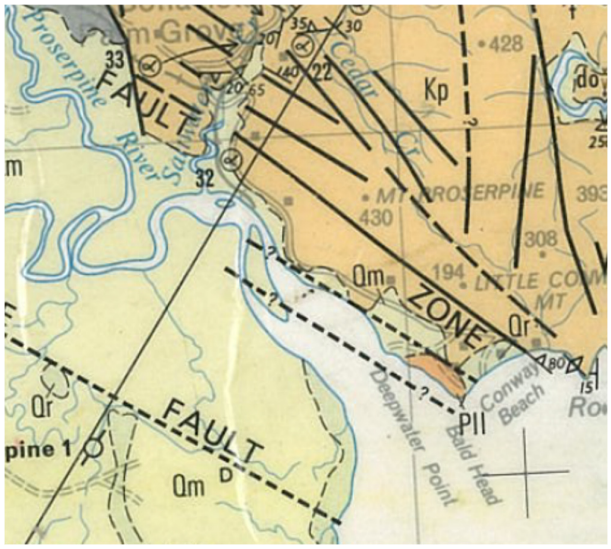

Figure 2. The geology map covering the Preston – Conway area (*Paine and Cameron, 1972).*

2.2.2 Vegetation

The vegetation of the Preston (South) area has been mapped by the State government. The regional ecosystem map for the Preston (South) area can be found in the appendix of this report. The geology, fertility of the soils and rainfall patterns influence the vegetation of the Preston (South) area. The dominant vegetation surrounding the Preston (South) area is open eucalypt forest and woodland. The dominant regional ecosystems are:

- 8.12.18 - Semi-evergreen notophyll/microphyll to complex notophyll Argyrodendron spp. Vine forest +/- Araucaria cunninghamii, of foothills and uplands on near-coastal ranges and islands, on Mesozoic to Proterozoic igneous rocks.
- 8.12.26. Corymbia tessellaris and/or Eucalyptus tereticornis open forest on hill slopes of islands and near coastal areas, on Mesozoic to Proterozoic igneous rocks, and Tertiary acid to intermediate volcanics.
- 8.12.5 Eucalyptus portuensis and/or Lophostemon confertus and/or E. exserta and/or Corymbia trachyphloia and/or E. fibrosa open forest on Mesozoic to Proterozoic igneous rocks

The regional ecosystem map for the Preston area can be found in the appendix.

2.3 Bushfire legislation and policy

2.3.1 Australia and Queensland

All levels of government have a responsibility and role in bushfire management. In 2014, the Council of Australian Governments approved the National Bushfire Management Policy Statement (National Forest Fire Management Group, 2014). The National Policy identifies Local government and other landholders having an important role in bushfire management and planning.

The National Bushfire Policy identifies four main strategic objectives and 14 bushfire management goals. The four strategic National bushfire management objectives are:

- Effectively managing the land with fire
- Involved and capable communities
- Strong land, fire and emergency partnerships and capability
- Actively and adaptively managing risk

There is a legislative requirement under Common Law and the *Queensland Fire and Emergency Services Act 1990* for Local Government and residents as owners and occupiers of land to prevent fires escaping from their land and damaging property (Tran and Peacock, 2002). Councils and other landholders have an obligation to manage their land responsibly to prevent the loss of life or property and reduce the 'human' impacts of bushfires. Landholders are also required however to achieve this and still maintain their obligations under other legislation. Obligations under the *Nature Conservation Act 1992* for example require local authorities to protect and conserve rare or threatened species, biodiversity and ecological processes.

The *Fire and Emergency Services Act 1990* is the principle legislation that deals with lighting fires in the open in Queensland. The Act makes it illegal to light a fire without a 'Permit to Light Fire' issued by a fire warden.

2.3.2 Whitsunday Regional Council

The Whitsunday Regional Council developed a Bushfire Management Policy and Bushfire Management Plan in 2018. The purpose of the Policy is to define Council's intension in bushfire management, planning and on-ground actions. The purpose of the Council's Bushfire Plan is to identify high risk Council lots for bushfire risk and outline a program of works to better manage bushfire risk on Council managed lots. The Council Bushfire Management Plan lists community education and awareness concerning bushfire hazard as an important action and outcome.

The Whitsunday Regional Council has developed a local law which includes the regulation of fires.

2.4 Bushfire hazard and risk

2.4.1 Bushfire hazard

Bushfire hazard refers to the conditions which could support the presence of a fire. There are a number of methods that can be used to assess bushfire hazard. One of the most commonly used bushfire hazard assessment tool is documented in the Queensland State Planning Policy 1/03.

According to Risk Frontiers (2011) the Queensland Fire and Rescue Service have adapted the SPP 1/03 bushfire hazard methodology and the Interface Zone (I Zone) methodology to identify bushfire hazard areas. The I-Zone is where the urban-rural residential land use meet flammable vegetation (Risk Frontiers, 2011).

The Queensland State Planning Policy bushfire hazard process involves the assessment of vegetation, slope and aspect. Scores are allocated to vegetation, slope and aspect. The bushfire attribute scores are then added to determine the total hazard score. The vegetation communities hazard assessment is shown in table 1, the slope assessment is shown in table 2 and the aspect assessment is shown in table 3. The classification of bushfire hazard is shown in table 4.

Table 1. Vegetation communities assessment table used to determine vegetation hazard score.

Vegetation communities [1]	Fire behaviour	Hazard score
Wet sclerophyll forest, tall eucalypts (>30 m), with grass and mixed shrub understorey.	Infrequent fires under severe conditions, flame lengths may exceed 40 m, floating embers attack structures for 1 hour, radiant heat and direct flame are destructive for 30 minutes.	10
Paperbark heath and swamps, eucalypt forest with dry-shrub ladder fuels.	Fire intensity depends on fuel accumulation, but can be severe, with flame lengths to 20 m, spot fires frequent across firebreaks, radiant heat and direct flame for 15 minutes.	8
Grassy eucalypt and acacia forest, exotic pine plantations, cypress pine forests, wallum heath.	Fire intensity may be severe with flame lengths to 20 m, but less attack from embers.	6
Native grasslands (ungrazed), open woodlands, canefields.	Fast moving fires, available to fire annually to 4 years. Usually no ember attack, radiant heat for >10 m, duration <2 minutes.	5
Intact acacia forests, with light grass to leaf litter, disturbed rainforest.	Fires infrequent, usually burn only under severe conditions, relatively slow fires, usually little ember attack.	4
Orchards, farmlands, kikuyu pastures.	Fires very infrequent, slow moving, may be difficult to extinguish, frequent fire breaks.	2
Grazed grasslands, slashed grass.	Grazing reduces intensity and rate of spread of fire, duration <2 minutes.	2
Desert lands (sparse fuels), mowed grass.	Gaps in fuel, usually slow fire spread.	1
Intact rainforest, mangrove forest, intact riverine rainforest.	Virtually fireproof.	0

Table 2. The slope assessment table used to determine the slope hazard score.

Slope	Hazard score
Gorges and mountains (>30%)	5
Steep Hills (>20% to 30%)	4
Rolling Hills (>10% to 20%)	3
Undulating (>5% to 10%)	2
Plain (0% to 5%)	1

Table 3. The aspect assessment table used to determine the aspect hazard score.

Aspect	Hazard score
North to North-West	3.5
North-West to West	3
West to South	2
North to East	1
East to South and all land under 5% slope	0

Table 4. The determination of bushfire hazard using the Queensland SPP 1/03 system.

Total hazard score	Severity of bushfire hazard
13 or greater	High[45]
6 to 12.5	Medium
1 to 5.5	Low

Fuel load is a main contributor to bushfire hazard (Middelmann, 2007). There are a number of methods used to estimate, measure and assess fuel loads. Hines *et al.* (2010) have developed a system of measuring forest fuel loads in Victoria. The method developed by Hines *et al.,* (2010) for estimating fuel loads is based on separating the forest into fuel layers and then estimating or measuring the potential fuel within each of these layers. The amount of fuel contained in these layers is measured in terms of tonnes per hectare.

The Queensland Fire Emergency Service (QFES) have produced bushfire hazard rating maps for Queensland. Bushfire hazard is rated as either low, medium or high based on vegetation type, aspect, topography and climate. The QFES bushfire hazard rating maps are usually produced at a scale of 1:250,000 or 1:100,000. Bushfire hazard areas rated as low on the QFES maps mostly relate to rainforest areas, while high risk areas relate to Eucalypt and wattle areas. The bushfire hazard maps can be a useful guide to bushfire hazard and the likely risk of bushfire occurring in a locality. However, these bushfire hazard maps may not be accurate on properties less than 20ha. Land with a high or medium bushfire hazard rating should have some bushfire management plan or process in place.

2.4.2 Bushfire risk

Bushfire risk refers to the likely occurrence or frequency of a bushfire. Middlemann (2007) states that "the likelihood of bushfire hazard can be summarised in terms of the probability of a fire arriving at a point in the landscape and the intensity of the fire at that point ". Risk can be increased due to a number of factors including a high bushfire hazard and proximity to ignition sources such as roadsides and populated areas. Bushfire planning and mitigation measures can reduce bushfire hazard and risk.
Local governments are involved in bushfire risk reduction measures such as the development of local laws regulating fires, development planning, development of disaster management plans and implementation of bushfire mitigation measures (Middlemann, 2010).

There are a number of methods used to measure risk. The NSW Rural Fire Service (2008) have developed a matrix to describe bushfire risk (Figure 3). The NSW Rural Fire Service risk matrix requires the determination of the likelihood of a bushfire occurring and the likely consequences.

Consequence / Likelihood	Minor	Moderate	Major	Catastrophic
Almost certain	High	Very High	Extreme	Extreme
Likely	Medium	High	Very High	Extreme
Possible	Low	Medium	High	Very High
Unlikely	Low	Low	Medium	High

Figure 3. The determination of bushfire risk (NSW Rural Fire Service 2008).

The likelihood of a bushfire occurring will depend largely on the bushfire hazard. The consequence of a bushfire occurring at a given location will depend on the environmental values and development present (NSW Rural Fire Service, 2008).

2.4.3 Preston (South) bushfire hazard

The Queensland State government have mapped the bushfire hazard in the Preston (South) area (Figure 4). The upland areas north of Preston (South) have been mapped as having high bushfire hazard.

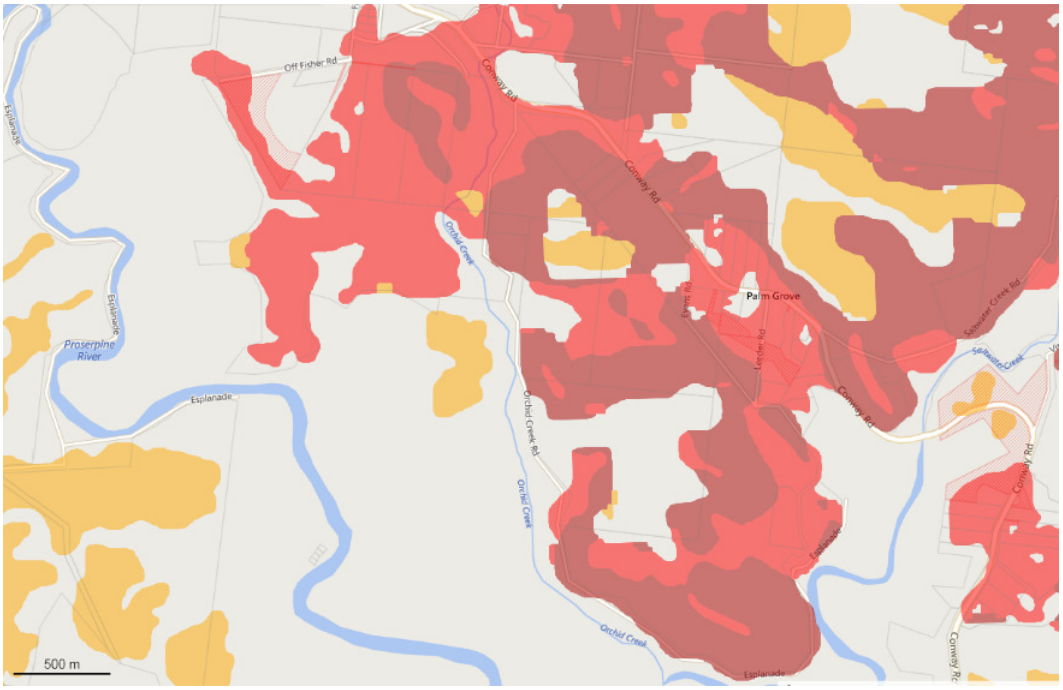

Figure 4. Showing the bushfire hazard in the Preston (South) area (Red = High hazard, Orange = Medium hazard).

2.5 Bushfire management guidelines

2.5.1 Bushfire guidelines for regional ecosystems

The regional ecosystem characteristics can provide information which can guide bushfire management and planning. The Whitsunday Regional Council is partially included in the Central Queensland Coast and Northern Brigalow Belt bioregions. There are 83 individual regional ecosystems in the Central Queensland Coast bioregion and 172 regional ecosystems found in the Northern Brigalow Belt bioregion.

The type of vegetation community, it's fire requirements and hazard can be used for bushfire planning. Bushfire management advice for a selected number of regional ecosystems are listed in table 5. The bushfire management advice provided by the Queensland State government for each regional ecosystem is found at:
https://publications.qld.gov.au/dataset/redd/resource/c77196df-7af9-4c09-ac88-256867c39806

Table 5. Showing the bushfire management advice for selected regional ecosystems.

81205	CQC	8.12.5	Eucalyptus portuensis and/or Lophostemon confertus and/or E. exserta and/or Corymbia trachyphloia and/or E. fibrosa open forest on Mesozoic to Proterozoic igneous rocks	SEASON: 8.12.5a and c: Early winter. 8.12.5b: Any time when sufficient soil moisture is present (during growing season). INTENSITY: 8.12.5a: Moderate. 8.12.5b: Low to moderate. INTERVAL: 8.12.5a and c: 4 - 7 years. 8.12.5b: Minimum 4 - 7 years. STRATEGY: Attempt to retain at least 20% unburnt at any given time. ISSUES: 8.12.5a and b: Important to maintain layering within the forest structure. High fuel accumulations are possible and as such it is important to adopt fire regimes which will maintain fallen litter and timber habitats on the forest floor. 8.12.5c: In the Whitsunday sub-region prone to development of dense vine thicket understorey which will eventually preclude burning. High fuel accumulations are possible and as such it is important to adopt fire regimes which will maintain fallen litter and timber habitats on the forest floor.

2.5.2 Other regional fire management guidelines

The Reef Catchments Natural Resource Management Group together with the Clarke Connors Range Bush Fire Consortium developed fire management guidelines for the Central Queensland coast region (Reef Catchments, 2009). The fire guidelines have been developed for 12 landscape types. For each of the 12 landscape types recommendations are made for fire frequency, fire intensity, season and whether mosaic burns are required.

The purpose of the guidelines is to reduce unplanned burns (wild fires). The landscape types and the recommended guidelines are shown in table 6.

Table 6. Clarke - Connors range fire management guidelines.

Landscape type	Fire frequency	Fire intensity	Preferred season for hazard reduction	Mosaic burning
Mangroves and estuaries	Not burnt	Nil	Nil	No
Beaches and foreshores	Not burnt	Nil	Nil	No
Hind dunes	Not burnt	Nil	Nil	No
Riverine and wetlands	Not burnt	Nil	Nil	No
Alluvial flat country	Every 5 years	Medium	Winter	50%
Grassy woodlands and open forests	Every 5 years	Medium	Winter	50%
Tall wet eucalypt forests	Every 3-5 years	Medium	Winter	50%
Eucalypt forest and woodlands on hills	Every 5 years	Medium	Winter	25%
Rainforest and vine thickets	Not burnt	Nil	Nil	No
Island and rocky headlands	Every 3-5 years	Medium	Winter	50%

The Queensland State government have developed Planned Burn Guidelines for Central Queensland Coast Bioregion of Queensland (DNPRSR, 2012). The planned burn guidelines are used to plan and implement prescribed burns in National Parks and State land. The State government guidelines are also applicable to Council owned and managed bushland lots.

2.6 Whitsunday bushfire management planning framework

The bushfire management and planning structure and workflow between organisations is reflected in figure 5. The Whitsunday Regional Council has a Bushfire Management Policy and a Bushfire Management Plan to guide the management of bushfire hazard and risk on Council managed lots.

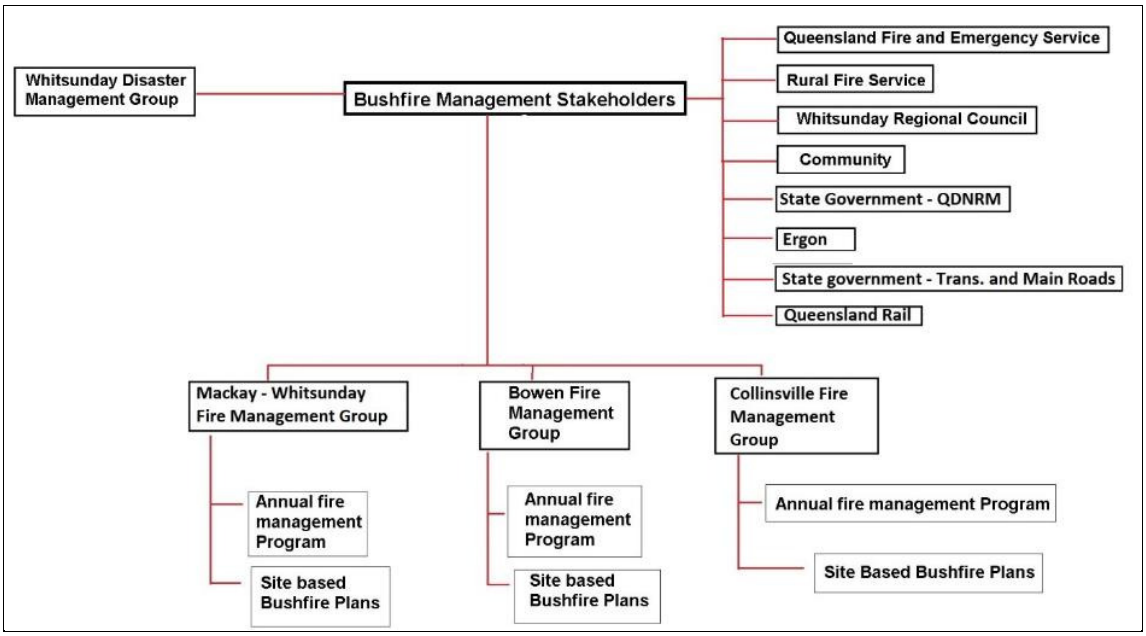

Figure 5. The bushfire management and planning framework.

2.7 Bushfire mitigation and management strategies

There are a number of strategies that can be undertaken to reduce bushfire hazard and risk. Table 7 lists the bushfire risk factors and some of the mitigation measures that can be used to reduce the occurrence of bushfires.

Table 7. Common bushfire mitigation strategies.

Bushfire Factor	Mitigation strategy or measure
Litter build up from Eucalypt vegetation communities	• Obtain a permit to light fire from the local fire warden to reduce fuel loads. • Liaise with a local Rural Fire Brigade to undertake a fuel reduction burn. Subsequent burns may need to be conducted every 3 years. • Clear juvenile gum tree samplings from areas near the house and property. • Gum trees (such as Iron barks and Blue gums) should be removed from within 30 m of the house and properties. This may require an application to Council for permission. If in doubt contact the Council for advice.
Grass build up	• Grass species such as Guinea grass (*Megathyrsus maximus*) respond well to fire. This species needs to be chemically controlled, kept short through mowing or slashing, or grazed.

	• Revegetate areas with rainforest species to shade out grass and therefore reduce fuel loads. • Grass should be kept to a minimal height around houses and property using mowing, brush cutting or use of approved herbicides depending on site conditions. • Establish separation zones between buildings and grassy fuel by installing hard areas eg paving and gravel etc.
Aspect	• Northerly aspects are worse for fires. The siting or positioning of houses on a property should consider aspect. • The head of gullies should also be avoided • East to south facing slopes generally have a low hazard rating.
Slope	• Updraughts assist fire movement upslope. There should be a sufficient distance down slope of houses and properties that are free of fire prone vegetation. • Slopes above 30% have a higher hazard score opposed to flat to undulating land. • Installation of hard areas of gravel and paving may be necessary. • To reduce erosion on steep slopes, these areas could be revegetated using rainforest shrubs or low growing grasses that are easily controlled and are less flammable.
Climate	• Hot dry climates assist fire. Beware of climatic conditions that increase fire risk severity such as the dry season in the Whitsunday's, especially between the months of July and December.
Proximity to land uses that use fire	• Fire breaks could be used to reduce spread of fire, provide access for fire fighters, a secure line from which to burn from or back burn from. • Sugarcane land has a moderate to high bushfire risk
Vegetation communities that have a high fire risk	• Fire breaks could be used to reduce the spread of fire. The SPP recommends that perimeter roads be constructed that are cleared for 20 m AND comply with local government standards. • Fire maintenance trails should only be accepted if it is not practicable to provide firebreaks in the form of a road due to topographic conditions or vegetation constraints. • The construction of the fire breaks should consider plants protected under the *Nature Conservation Act (1992)* or communities protected under the Vegetation Management legislation. • Site the house in the lowest risk area on the property. • For lots greater than 2500m2, buildings and structures should be set back from hazardous vegetation by at least 1.5 times the height of the canopy vegetation (particularly if they are Eucalypt) or a minimum of 10 m. • Retention of rainforest in drainage lines and creeks will assist in reducing bushfire risk. • Design subdivisions without cul-de-sacs and provide access for a conventional drive vehicle (eg fire engine).

2.8 Previous bushfire management

This Bushfire Plan is the first formal Bushfire Plan for the Preston (South)area. The QFES and local rural fire brigade conduct planned burns on public land in the Preston (South) area where it occurs, such as road reserve when the conditions have been suitable.

The following is a brief summary of previous large planned and un-planned burns in the Preston (South) area:

- 2018 large wildfire (unplanned) – November 2018 (Figure 6).
- December 1- 4 – unplanned burn – Conway to Saltwater creek

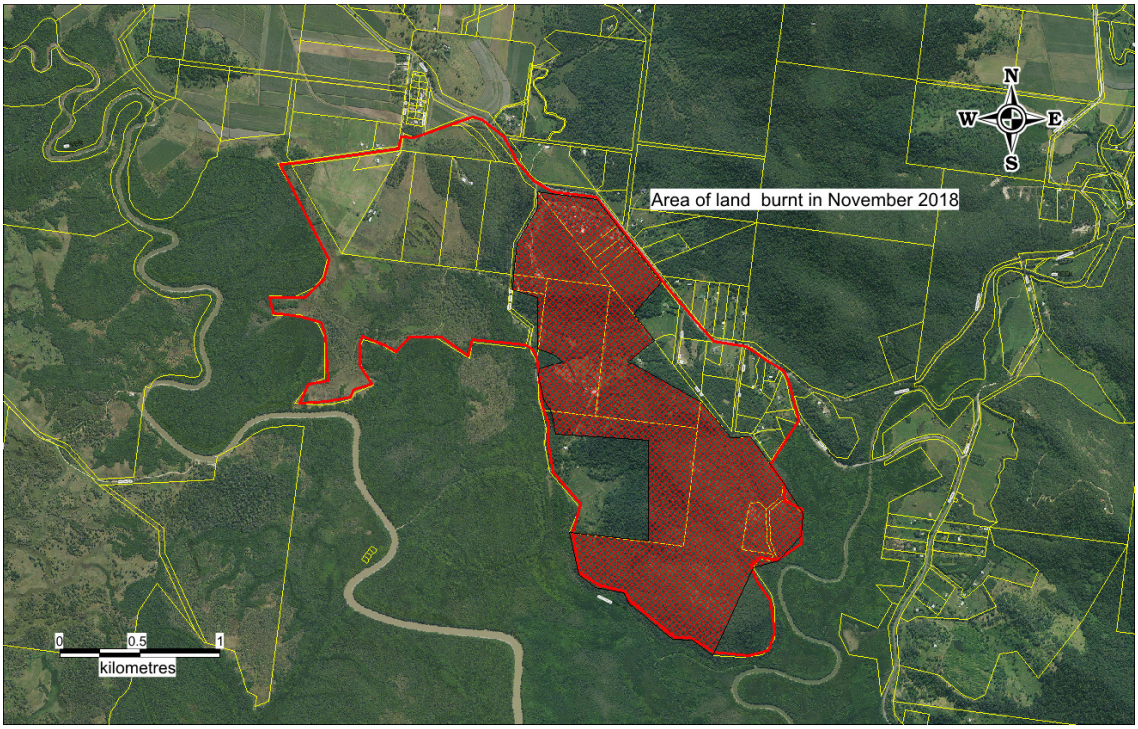

Figure 6. Area burnt in November 2018 (approximate).

3. Management Plan

3.1 Bushfire Plan goals

The goals of this Bushfire Management Plan are:

- To protect life and property as a priority then ensure the bushfire management practises maximise biodiversity values.
- To ensure all stakeholders support a common bushfire management direction.
- To pro-actively manage the bushfire hazard surrounding Preston (South).
- To develop and maintain good relationships between the stakeholders and landholders and encourage cooperative approaches to manage bushfire hazard in the area.

3.2 Stakeholder general roles and responsibilities

The general roles and responsibilities for bushfire management, planning and mitigation are summarised in table 8.

Table 8. The main tasks for each stakeholder.

Task	Council	Rural Fire	QFES	QDNRME	Landholder
Legal control of the fire					√
Conduct hazard reduction burns		√			√
Applying for permits					√
Supervising the hazard reduction burn		√			√
Informing the community		√			√
Monitoring fuel loads					√
Maintaining the fire breaks					√
Developing and updating the bushfire plan	√	√	√		√
Reporting hazard reduction burns		√			√
Regulating and control of illegal dumping					√
Manage accumulation of green waste					√

3.3 Bushfire management areas

The landscape of the Preston (South) area needs to be prioritised in terms of bushfire management and planning. Areas close to residential areas need a higher level of monitoring and fuel management than areas further away. The Victorian state government has developed a system of prioritising bushfire management activities (DSE, 2012). The Victorian government have developed fire management zones as a means of prioritising land areas for bushfire management:

- APZ – Asset Protection zone - Areas close to residential areas – high priority for management.
- BMZ – Bushfire Moderation zone – aim to achieve asset protection and achieve some ecological outcomes.
- LMZ - Landscape management zone – planned burns are primarily undertaken for fuel reduction to maintain ecological processes.
- PBEZ - Planned burning exclusion zone – no fire permitted.

The majority of the Preston (South) area has been mapped as Bushfire Moderation zone due to the low population numbers (figure 7).

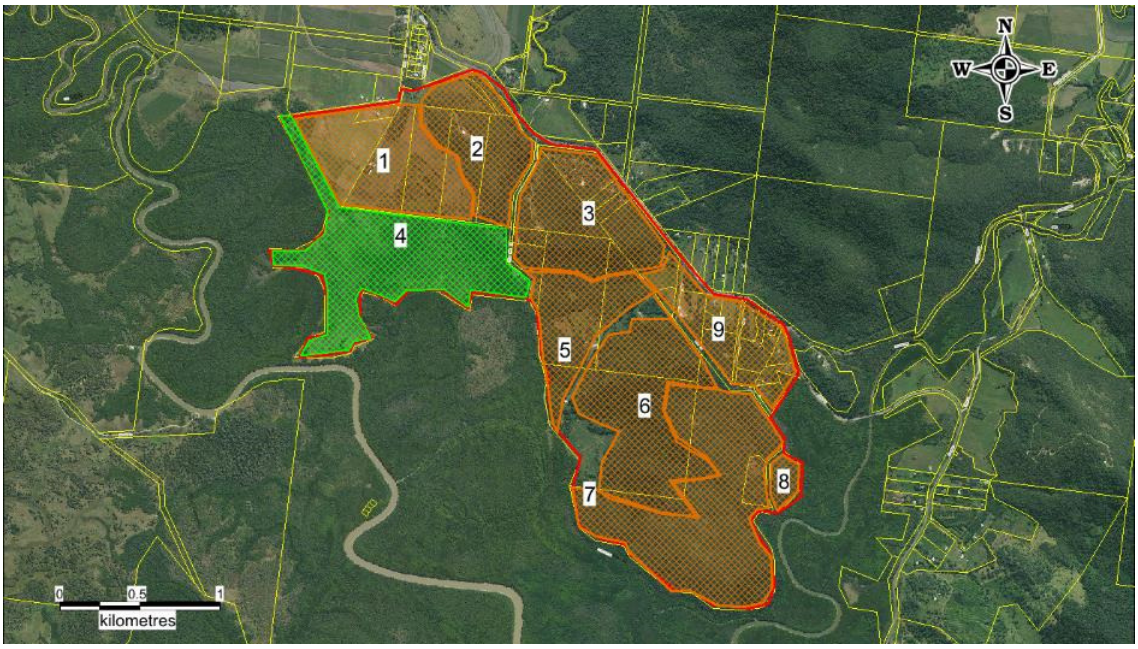

Figure 7. The fire management areas and management zones (Orange =BMZ and Green = PBEZ).

3.4 Hazard reduction burning frequencies and methods

The prescribed burn program for Preston (South) area will be programmed around the site vegetation, seasonal fuel load and timed for optimum climatic conditions. The timing of prescribed burns will be based on recommendations as given at the time of annual hazard assessments. The frequency of prescribed burns will be guided by the recommendations set out in "Fire Management Guidelines" by Reef Catchments 2009, recommendations from the Queensland government and from site specific annual fuel load assessments. Ultimately, it will be up to individual landholders to decide whether they are willing and prepared to undertake planned burns.

The fire management areas will also be used to determine hazard reduction burn frequencies. The proposed planned burn frequencies for each vegetation type is shown in table 9. The frequency of hazard reduction burns for the Preston (South) will be generally every 2 to 5 years.

Table 9. Vegetation communities and hazard reduction burn frequencies.

Vegetation community	RE	Hazard reduction burn frequency	Fire management areas
Eucalyptus portuensis and/or Lophostemon confertus and/or E. exserta and/or Corymbia trachyphloia and/or E. fibrosa open forest on Mesozoic to Proterozoic igneous rocks	8.12.5	SEASON: 8.12.5a and c: Early winter. 8.12.5b: Any time when sufficient soil moisture is present (during growing season). INTENSITY: 8.12.5a: Moderate. 8.12.5b: Low to moderate. INTERVAL: 8.12.5a and c: 4 - 7 years. 8.12.5b: Minimum 4 - 7 years. STRATEGY: Attempt to retain at least 20% unburnt at any given time. ISSUES: 8.12.5a and b: Important to maintain layering within the forest structure. High fuel accumulations are possible and as such it is important to adopt fire regimes which will maintain fallen litter and timber habitats on the forest floor. 8.12.5c: In the Whitsunday sub-region prone to development of dense vine thicket understorey which will eventually preclude burning. High fuel accumulations are possible and as such it is important to adopt fire regimes which will maintain fallen litter and timber habitats on the forest floor.	1 – 9 (excluding area 4)

3.5 Schedule of bushfire management and mitigation tasks

The schedule of bushfire management and maintenance tasks is summarised in table 10.

Table 10. Schedule of bushfire management actions.

No	Task	Who is responsible	Timing
1	Assess fuel loads	Landholder and Rural Fire Brigade	May
2	Develop an annual fire plan	Rural fire brigade and residents	June
3	Approve the annual fire plan	Rural fire brigade	June
4	Slash fire lines/fire breaks	Landholders	May and December
5	Inspect condition of fire lines	Landholders	May
5	Earthworks for fire lines/breaks	Landholders	As required
6	Coordinate planned burns	Conway Rural fire brigade and residents	As per approved plan
7	Community awareness	Conway Rural fire brigade and residents	
8	Seeking fire permit	Landholders	As per approved plan

The draft schedule of planned burns for the various fire management areas are shown in table 11.

Table 11. The proposed timing of future planned burns for Preston (South) management areas.

Fire Management area	Zone	2019	2020	2021	2022	2023	2024	2025	2026
1	BPZ								
2	BPZ								
3	BPZ								
4	PBPZ								
5	BPZ								
6	BPZ								
7	BPZ								
8	BPZ								
9	BPZ								

The development of fire breaks and fire control lines are a landholder's responsibility. Ideally the breaks should be created along property boundaries, or along contours, or between different forest types (eg rainforest- Eucalypt forest). Fire breaks or control line tracks located on steep slopes will be subject to erosion and will cost more to maintain.

4. Conclusion

In 2018, wild fires impacted upon a number of properties in the Preston (South) area. In April 2019, a small number of Preston residents supported the development of a fire management plan for the Preston (South) area. The Bushfire Management Plan for Preston (South) area has been developed to document stakeholder responsibilities, guide mitigation measures and communicate the main bushfire priorities for this area.

The intension of the Bushfire Plan is to enable bushfire management mitigation to occur under agreed conditions and to maximise community safety whilst recognising the importance of the areas ecological values.

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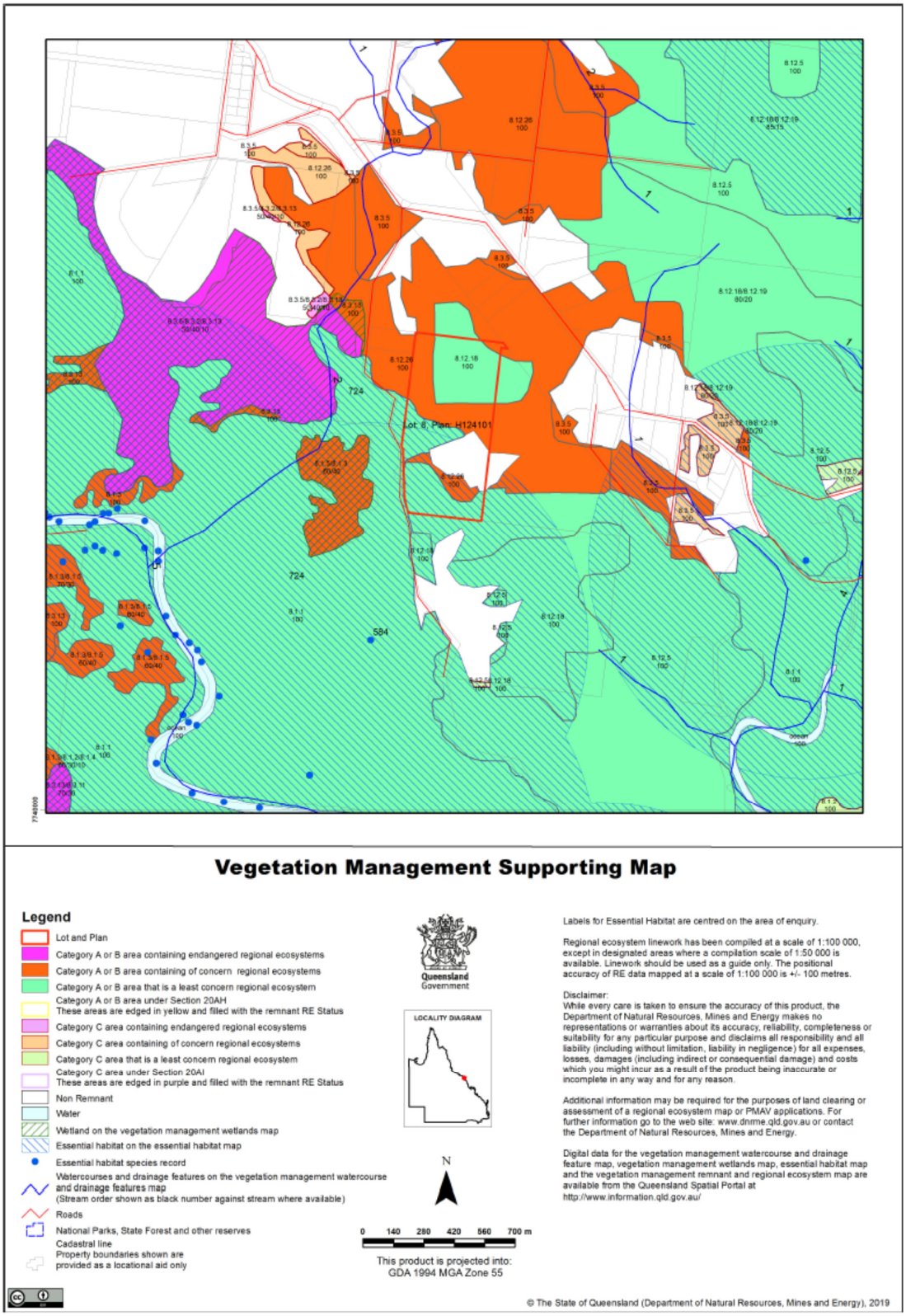
6. Appendix

6.1 Hydrant map

No map available

6.2 Regional Ecosystem map



6.3 Bushfire management control lines

No map available. Bushfire Control lines and access tracks should be located along property boundaries or along the contour.

6.4 Objectives for bushfire hazard reduction burning

Source: NSW Rural Fire Service - www.rfs.nsw.gov.au

A successful low intensity hazard reduction burn will reduce fuel load so that it creates a safe defensible area around an asset. It should also minimise the impact from the burn on the environment.

In carrying out a burn, you need to consider:

1) The fuel load and structure
2) The effects on the environment and the community
3) The specific zone objectives
4) If there are adequate fire breaks and control lines
5) The season and weather conditions
6) The topography and fire behaviour
7) What lighting patterns to use
8) Conducting a test burn
9) What safety measures may be needed
10) Mopping up afterwards
11) If you need to report the results

6.5 Check list for hazard reduction burns

The following is a checklist of tasks that should be followed prior to hazard reduction burns:

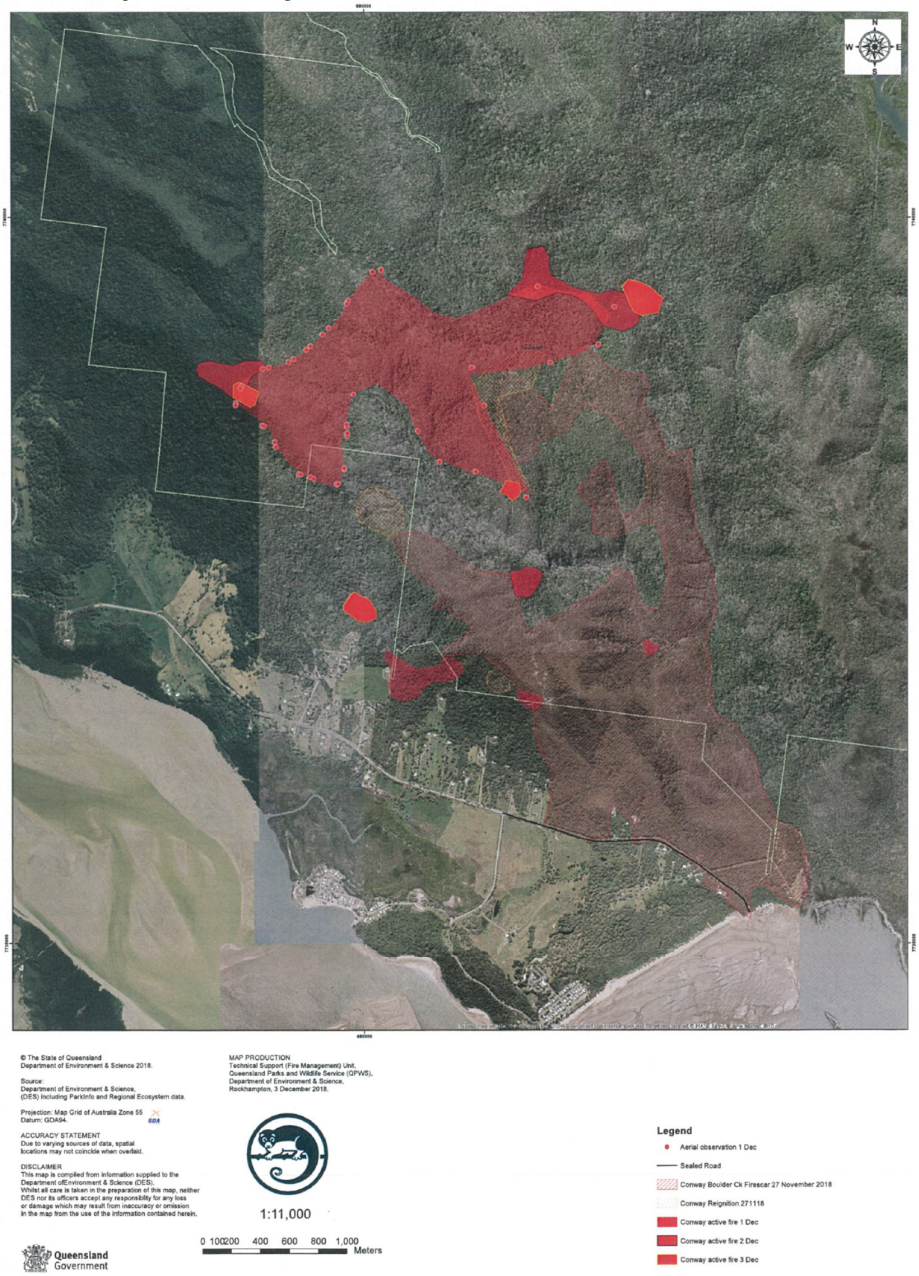
No.	Task	√
1	Fuel load assessment conducted	
2	Bushfire fire hazard sufficient to warrant a hazard reduction burn	
3	Fire breaks and control lines are in good condition	
4	Burn plan developed – identifying where the burn will occur, timing and personnel availability	
5	Ensure adequate trained personnel are on hand for planned burn	
6	Fire permit gained for proposed burn plan	
7	Proposed hazard reduction burn is approved by Conway / Preston fire brigade	
8	Community awareness plan is developed and activated prior to burn	
9	Bushfire stakeholders advised of hazard reduction burn timing	
10	Machinery and trucks are in good working order. Water available.	
11	Contingency plan developed in case fire escapes the target area	
12	Hazard reduction burn is undertaken in accordance with QFES guidelines	
13	Fire control personnel ensure fire is out before leaving fire control area.	
14	A brief account of the hazard reduction burn submitted to QFES and Council.	

6.6 Stakeholder contacts

- WRC – Scott Hardy – 0428722236 / 49450245.
- QDNRM - Dan Burndred –- 0472 847 894, Tim Koch - 0418 970 097
- Preston Fire Warden (No 1) – John Penhalurick - 0409279497

For more information regarding the Queensland Rural Fire Brigade:
https://www.ruralfire.qld.gov.au/Pages/fw_finder.aspx

6.7 Map of Conway – Preston bushfire 2018



6.8 Map of rural fire areas