

ORDINARY MEETING**29 MARCH 2023****11****CAIRNS REGIONAL COUNCIL OPERATIONAL FIRE STRATEGY**

Jade Monda | 61/6/1-01 | #7109022

RECOMMENDATION:**That Council:**

- 1. That Council endorses the Cairns Regional Council Operational Fire Strategy for 2023-2024.**
- 2. Delegates authority to the Chief Executive Officer in accordance with the *Local Government Act 2009* to finalise any and all matters relating to the above agreement.**

INTERESTED PARTIES

- Queensland Parks and Wildlife Service (QPWS)
- Queensland Fire and Emergency Services (QFES)
- Cairns Regional Council (CRC)
- Department of Transport and Main Roads (DTMR)
- Queensland Rail
- Ergon Energy
- Wet Tropics Management Authority (WTMA)
- Rural Fire Brigades (RFS)

Note: The identification of interested parties is provided on a best endeavours basis by Council Officers and may not be exhaustive.

EXECUTIVE SUMMARY:

All landholders have a legislative requirement under the *Queensland Fire and Emergency Services Act 1990* to manage the fire fuel load potential of their property and take reasonable actions to mitigate fire risk. The Cairns Regional Council Fire Strategy addresses risk mitigation actions via priority site selection and management of Council controlled land and identifies additional actions Council will take to work cooperatively with emergency services agencies.

The Strategy will be subject to an annual review to ensure the currency of the plans, actions, and mitigation measures.

Tactical plans such as fuel load reduction burns are living documents that require review and improvement after each event. This Strategy has had input from key stakeholders from within the Cairns and District Fire Management Committee to ensure a holistic approach to planning, communication, and actions.

BACKGROUND:

The Natural Assets Management (NAM) unit of Council takes the lead role in fire management to ensure Council's obligations as a landholder are met.

The fire program and practices were generally developed through the Cairns and District Fire Management Committee. This committee comprised land managers and Government agencies including:

- Queensland Parks and Wildlife Service (QPWS)
- Queensland Fire and Emergency Services (QFES)
- Cairns Regional Council (CRC)
- Department of Transport and Main Roads (DTMR)
- Queensland Rail
- Ergon Energy
- Wet Tropics Management Authority (WTMA)
- Rural Fire Brigades (RFS)

QFES are the front-line organisation in active firefighting in the Cairns urban area. QPWS are responsible for State Forests, National Parks, and Conservation Parks.

Council, however, is a primary landholder of bushland in the interface zones between the two areas and thus has a significant responsibility for managing risk in these areas per legislative requirements. Council also has responsibility for fuel loads and risk mitigation on all of its landholdings.

An important concept for the Cairns region due to the close proximity of hillslopes, vegetation and urban areas is the Bushfire Interface Zone (I-Zone). The I-Zone is the area at the urban/vegetation interface (Bushfire Prone Area), with a high risk of significant impact from bushfires under severe fire weather conditions. Risk mitigation aims at reducing the potential of fire events usually through fuel reduction. This is increasingly becoming an issue as development further encroaches on vegetated and hillslope areas.

As Council works primarily in these interface areas, significant consideration has been given to interagency communication, and the development of collaborative plans and procedures.

COMMENT:

The Cairns Regional Council Fire Strategy addresses both Council land ownership/control responsibilities with regard to fire risk mitigation and interagency cooperation with lead agencies such as Queensland Fire and Emergency Services making it an essential tool for Council officers.

The implementation of this plan and its ongoing review and improvement will assist fire risk mitigation within the region.

The current review resulted in the following major changes:

- Powers required for roles as recommended via legal advice provided and expectations of use (Table 2).
- Limitations to Hazard Reduction Burn Activities and outcomes that can be expected (s7.7) and residual risks (s7.8).
- Supporting operational documentation and safety procedures developed since initial approval linked into document e.g., s9.5.
- Inclusion of all developments in operational works, industry changes and evolution of program systems since initial approval since 2019.

OPTIONS:

Option 1 (Recommended)

That Council:

1. That Council endorses the Cairns Regional Council Operational Fire Strategy for 2023-2024.
2. Delegates authority to the Chief Executive Officer in accordance with the *Local Government Act 2009* to finalise any and all matters relating to the above agreement.

Option 2

That Council requests changes to the proposed Strategy prior to review and endorsement.

CONSIDERATIONS:

Risk Management:

The Cairns Regional Council Operational Fire Strategy addresses fire fuel load potential on Council-controlled land with tactical plans that target risk reduction.

Natural Environment:

The Cairns Regional Council Operational Fire Strategy has been developed by the Natural Assets Management team in conjunction with Biosecurity and Biodiversity values. Each tactical plan considers flora, fauna related biodiversity outcomes from these actions.

Corporate and Operational Plans

The Cairns Regional Council Operational Fire Strategy aligns to the following strategy in the Corporate Plan:

2. Natural Assets – That our iconic natural assets are maintained, enhanced, and connected.

CONSULTATION:

Content within this Strategy has had input from key stakeholders from within the Cairns and District Fire Management Committee. Operationally, the contents of the Strategy are reviewed annually through this Area Fire Meeting Group led by QFES. Powers, delegations, and authorities have been reviewed via legal advice received from Preston Law.

ATTACHMENTS:

Attachment 1: Cairns Regional Council Operational Fire Strategy



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Attachment 1: Cairns Regional Council Operational Fire Strategy



CAIRNS REGIONAL COUNCIL OPERATIONAL FIRE STRATEGY

Revision Table

Revision No.	Date	Purpose of issue	Prepared By
E	JAN 2019	Development and Implementation	Jade Monda
	16/07/2019	Endorsed by LDMG	
	12/09/2019	Endorsed by Cairns Regional Council	
J6	11/01/2022	Major revision - Draft	Jade Monda
		Endorsed by Cairns Regional Council	

Acronyms and Abbreviations

- AFAC - National Council for Fire and Emergency Services
- AFMG/FMG – Area Fire Management Group
- AIIMS – The Australasian Inter-Service Incident Management System
- BOM – Bureau of Meteorology
- CRC – Cairns Regional Council
- CSIRO - Commonwealth Scientific and Industrial Research Organisation
- DATSIP - Department of Aboriginal and Torres Strait Islander Partnerships
- BYD/ DBYD – Before you Dig/ Dial Before You Dig
- DES/EHP/DEHP – Department of Environment and Science
- DM# - Council's document management system with document reference number associated
- DTMR – Department of Transport and Main Roads
- FIRECOM – QFES Fire Communications Centres for fire emergencies
- HRB – Hazard Reduction Burns
- IC – Incident Controller
- ICS - Incident Control System
- JSA – Job Safety Analysis (safety documentation for specific tasks)
- LDMG – Local Disaster Management Group
- LGA – Local Government Area
- LMO – Council Land Management Officer
- NAM – Cairns Regional Council's Natural Assets Management team
- PBS – Planned Burn Supervisor
- QCAT - Queensland Civil and Administrative Tribunal
- QFD – Queensland Fire Department (Supersedes QFES and QRFS)
- QFES –Queensland Fire and Emergency Services
- QERMF - Queensland Emergency Risk Management Framework
- QPWS – Queensland Parks and Wildlife Service
- QRAIL – Queensland Rail
- RE-Type – Regional Ecosystem Type
- RFS/QRFS – QLD Rural Fire Service
- RIDC - Regional Interdepartmental Committee
- SSA – Spectrum Spatial; Council's mapping platform
- SMEACS - **S**ituation. **M**ission. **E**xecution. **A**dministration. **C**ommand & Communication, **S**afety: Hazard Reduction Burn Plan
- SOP – Standard Operating Procedure
- SWMS – Safe Work Method Statement (safety documentation)
- WTMA – Wet Tropics Management Authority

Glossary

Wherever practical it is intended that terminology used in this document uses the same meaning and language as AFAC Bushfire Glossary as the National Standard.

A copy of this is available here as at 21/11/22:

<https://www.afac.com.au/docs/default-source/doctrine/bushfire-terminology.pdf>

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1. Scope

At a minimum this document is expected to serve for a five-year period with a major review at the end of each period. If substantial changes are made to the Strategy post review, or the changes made are likely to impact the delegations given, then it is recommended that Council is given the opportunity to be informed of the changes and endorse them as required.

This strategy applies to all Council managed tenure and Crown land subject to wildfire within the region.

It also applies in cases of emergency where Council provides assistance to other land managers and fire fighters in other areas which may be outside the Region's boundaries if called upon to do so by the relevant and authorised person or agency.

In particular, this document focuses on at risk Council areas including:

- Hillslopes and associated urban hazard reduction burns.
- Specific natural areas requiring hazard reduction and environmental burns.
- Pest management control sites – weed reduction, vegetation type changes.

This document also seeks to set out a framework for management of fire within CRC managed tenure and identify Council's place within the overall strategic direction of fire management in the region.

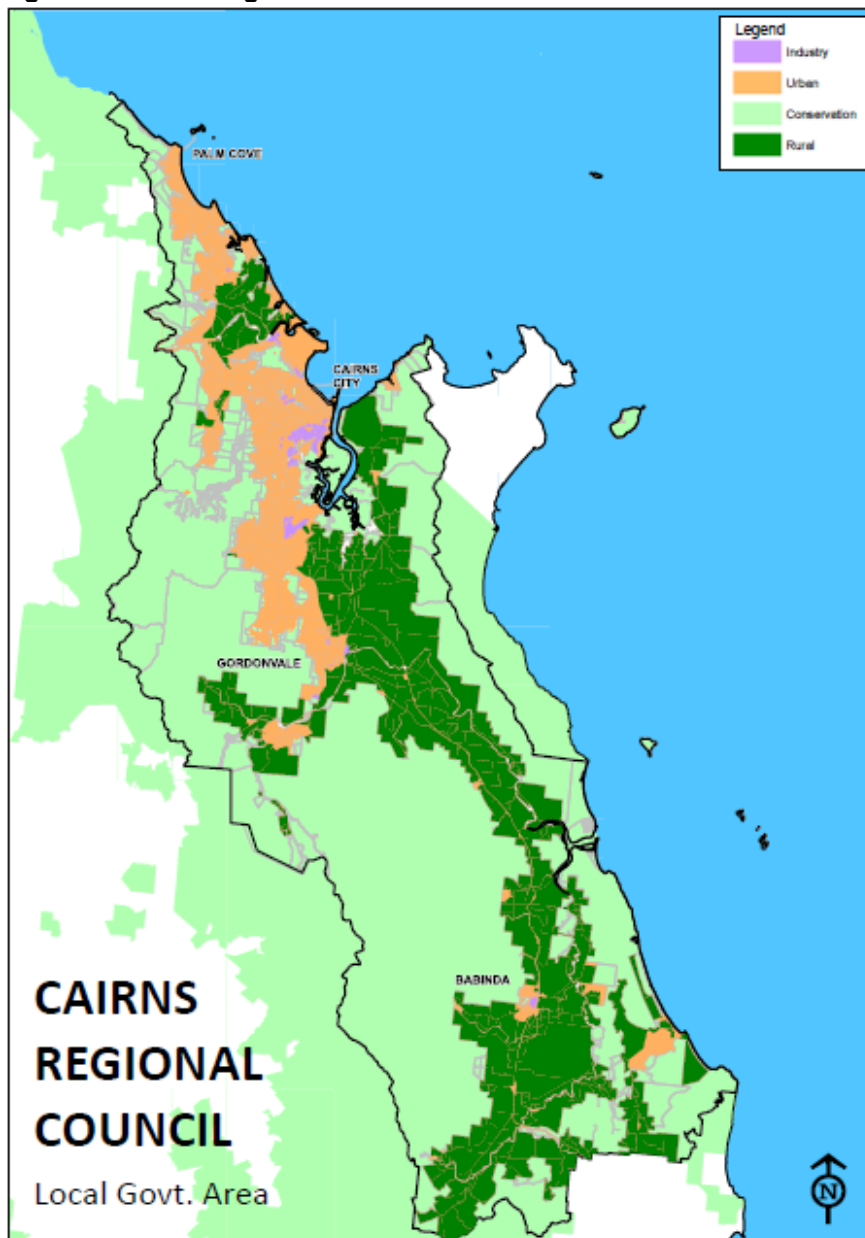
2. Objectives

The objectives are as following:

- Identify opportunities for integrated and alternative land management options.
- Reduce the number of wildfires and provide protection for urban areas.
- Assist in protecting human life and property.
- Minimising arson: Arson can lead to dangerous wildfire response and hot fires. Opportunities for ignition points can be reduced with improved grass maintenance and revegetation on the urban fringe, (i-zone).
- Conserve forest habitats and improving environmental function. Effective fire lines, herbicide vegetation management, selective herbicides can be used to encourage natural recruitment of desirable vegetation, and proactive revegetation can replace grass.
- Assist in retaining the scenic amenity of the region.
- Assist with the environmental management of the region's flora and fauna.
- Work in cooperation and consultation with fire agencies and stakeholders.
- Ensure that resourcing reflects the tasks required to manage the risks involved.

2.1 Area of Responsibility

Figure 1. Cairns Regional Council Area



3. Background

Bushfire control in the Cairns Region is the responsibility of several agencies.

In previous years, both in planning and execution to meet its obligations in the region, the Natural Assets Management (NAM) Unit of Cairns Regional Council has organically increased its role to be a significant contributor to fire risk management in areas of its responsibility. The fire program and practices were generally developed through the Cairns and District Fire Management Committee. This committee comprised land managers including Queensland Parks and Wildlife Service (QPWS), Queensland Fire and Emergency Services (QFES, Cairns Regional Council (CRC), Department of Transport and Main Roads (DTMR), Queensland Rail, Ergon Energy, the Wet Tropics Management Authority (WTMA), representatives of Rural Fire Brigades (RFS), Canegrowers and other shareholders.

An important concept for the Cairns region due to the close proximity of hillslopes, vegetation and urban areas is the Bushfire Interface Zone (I-Zone). The I-Zone is the area at the urban/vegetation interface (Bushfire Prone Area), with a high risk of significant impact from bushfires under severe fire weather

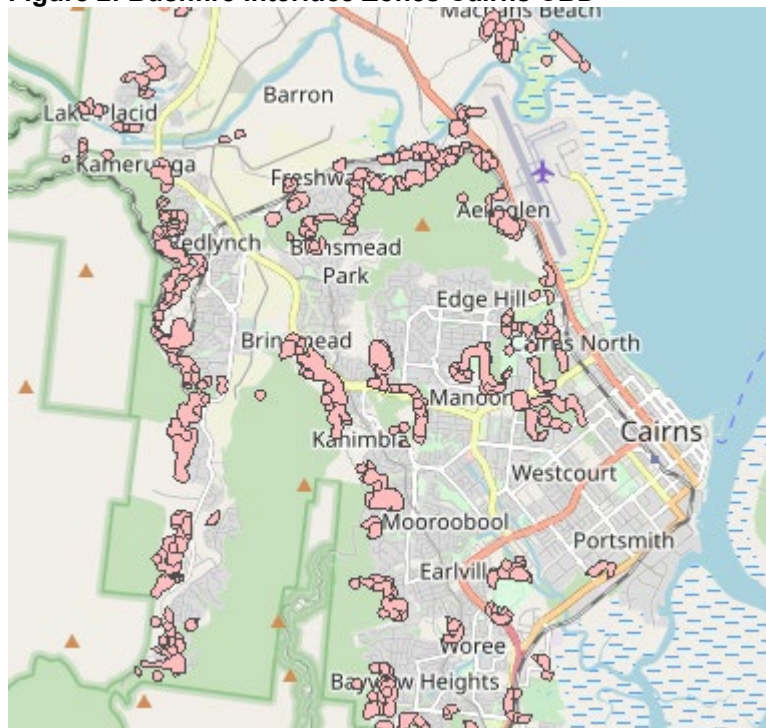
conditions. Risk mitigation aims at reducing the potential of fire events usually through fuel reduction. This is increasingly becoming an issue as development further encroaches on vegetated and hillslope areas.

Taken from Operation Cool Burn 2019 (Draft):

"The areas of greatest bushfire risk in Cairns Regional Council are covered by Eastern Eucalypt Woodlands, grass-fire prone grazing land and cropping areas which are predominately sugar cane. Typical fuel loads in forest areas can reach 5 -8 tonnes per hectare if the hazard is not reduced by burning, mechanical means or grazing. Vegetation that is typically not prone to bushfires includes Mangroves and tidal saltmarsh & Rainforest and scrub."

"Areas of steep topography that can magnify bushfire intensity and speed are found throughout the Cairns Regional Council area."

Figure 2: Bushfire Interface Zones Cairns CBD



BushfireInterfaceZone

Bushfire Interface Zone (Sept 2017)

Taken from RediPortal: Fire and Risk Mapping as at 7/3/2019.

As most of the risk from burns in the area is at this I-Zone, and often on Council land in that area, this is what Council has generally focussed its efforts on managing.

Council's fire-fighting capacity is targeted at carrying out limited fire control or hazard reduction burning, on council managed tenure in-line with reasonably expected events, (low to medium intensity burns). The fire-fighting unit will also co-operate with and support other fire-fighting agencies as demand and resources allow for during appropriate events.

Council does not intend to take a lead role or have the capacity to provide lead response to emergency events off Council land. Lead response to an emergency situation is the Queensland Fire and Emergency Services (QFES) responsibility.

The Queensland Fire and Emergency Services are the front-line organisation in active firefighting in the Cairns urban area and fringing bushland not including State Forests, National Parks, and Conservation Parks. These bushland areas are the responsibility of QPWS.

As Council works primarily in these interface areas, significant consideration must be given to interagency communication, and the development of collaborative plans and procedures.

Council's fire strategy development and operational review path:

- Internal Council discussion and reports recognizing room for improvement, external agency meetings identifying recommendations (2014-2016).
- External consultation confirming or identifying priority sites and further strategic development (2016).
- Assessment and improvement of Council capacity for operational works to meet strategic requirements (2017-2019).
- Development of this document, planning and operations going forward (2019).

Previous recommendations from consultation with stakeholders including QPWS, RFS, QFES and internally within CRC for effective implementation of a Council Fire Strategy, have largely been achieved and are now in maintenance phase. These have included:

- Formalise arrangements with other agencies (as needed),
- Contribute to Cairns Area Fire Management Group (AFMG) (annual actions associated),
- Joint management of appropriate sites (determined jointly with neighbouring landholders for priority identified areas through AFMG),
- Representation on the Local Disaster Management Group. Cairns Region, (to implement this strategy and ongoing for and Disaster Management implementation),
- Prepare wildfire response procedures for council reserves, (complete for all identified priority areas),
- Provide fire, Incident Control System (ICS) and fire investigation training to staff (implemented),
- Establish protocols to implement fire program (implemented),
- Prepare a communication strategy, (implemented in all priority site plans),
- Develop strong fire management links with QPWS and QFES (largely through AFMG but also ongoing joint site management with QPWS and contact with QRFS Bushfire Safety Officer).

Note that this review and development of operations and strategies occurred in conjunction with regular Hazard Reduction Burn activities and responses.

Council has also sought to review and update its practices to reflect the many changes that are impacting on Natural Assets at the time:

- Changes to legislation and State policies.
- Reduction of external funding, staffing and stakeholder resources.
- Increase in capacity targeted at Indigenous NRM groups/Traditional owners.
- Differences in opinions regarding the outcomes of fires, e.g. Safety vs Ecological outcomes.
- Differences in opinions regarding the effectiveness and benefits of fire practices.
- The increased risk and responsibility attributed to Council on other agencies' land.
- Effective adaption strategies for predicted climate change impacts.

4. Legislative Obligations

Table 1. Acts/ Legislation

Legislation	Section	Requirement
<i>Fire and Emergency Services Act 1990</i> occupier, of premises, means— (a) the owner, lessee or person apparently in charge of the premises; or (b) a person who has the care, management or supervision of the premises or who is conducting a business at the premises	s67	“Occupier to extinguish fire Where a fire is burning on any land and the lighting of the fire is not authorised by or under this or any other Act, the occupier of the land, immediately upon becoming aware of the fire (regardless of who lit it)— (a) must take all reasonable steps to extinguish or control the fire; and (b) must, as soon as is practicable, report the existence and location of the fire to a fire officer, an officer of a rural fire brigade, a member of an emergency service unit, a chief fire warden or fire warden, a forest officer (within the meaning of the Forestry Act 1959), a conservation officer within the meaning of the Nature Conservation Act 1992 or a police officer.”
<i>Fire and Emergency Services Act 1990</i> occupier, of premises, means— (a) the owner, lessee or person apparently in charge of the premises; or (b) a person who has the care, management or supervision of the premises or who is conducting a business at the premises prescribed person - means a fire officer, an officer of a rural fire brigade, a fire coordinator, a chief fire warden or fire warden, a forest officer (within the meaning of the Forestry Act 1959), a conservation officer within the meaning of the Nature Conservation Act 1992 or a police officer.	s68	“Powers of occupier of entry etc. (1) Subject to subsections (2) and (3), an occupier of land, who believes on reasonable grounds that a grass fire (that is, a fire that predominantly consumes vegetation) burning within 1.6km of that land constitutes a fire risk to that land may, together with persons acting at the direction of the occupier— (a) enter the land on which the fire is burning and any other land in order to gain access to the land on which the fire is burning; and (b) take on to that land equipment for extinguishing or controlling the fire; and (c) take all reasonable measures to extinguish or control the fire. (2) An occupier of land must not do or direct the doing of any act referred to in subsection (1) if prior notice (oral or written) of the intention to light the fire has been given to the occupier by the person lighting it or by a prescribed person unless the occupier believes on reasonable grounds that the fire has been unlawfully lit or is out of control. (3) If it is practicable to contact a prescribed person, an occupier of land— (a) must not do or direct the doing of any act referred to in subsection (1) unless the prescribed person has been notified of the situation; and (b) must comply with any direction given by the prescribed person in respect of the doing of any act.

		(4) If the occupier of land, or an employee, agent or contractor of the occupier of land, is also a prescribed person, the references to a prescribed person in subsections (2) and (3) do not include the occupier of land, or an employee, agent or contractor of the occupier of land.”
<i>Fire and Emergency Services Act 1990</i> To paraphrase: Council can be requested to take specific actions to reduce fire risk.	s69	“Requisition by commissioner to reduce fire risk (1) The commissioner may require any occupier of premises to take measures for the purpose of reducing the risk of a fire occurring on the premises or reducing potential danger to persons, property or the environment in the event of a fire occurring on the premises. (2) A requisition may be given— (a) in a particular case—by giving a notice to the occupier concerned; or (b) by notification published in the gazette in which case each occupier of land to whom the notification applies must comply with the requisition. (3) A person to whom a requisition is given must comply with the requisition. (4) Without limiting the measures that may be required to be taken, an occupier may be required to do any of the following— (a) make and maintain firebreaks in accordance with any directions contained in the notification or notice; (b) remove, dispose of or otherwise deal with any vegetation or other flammable material in accordance with any directions contained in the notification or notice; (c) obtain equipment and keep it available for use for fire fighting purposes; (d) take measures to ensure an adequate supply of water or any other substance for fire fighting purposes; (e) ensure that the means of escape from the premises in the event of fire can be safely and effectively used at all material times; (f) suspend such operations as may be specified for the period specified. (5) A notice under subsection (2)(a) must comply with the QCAT Act, section 157(2). (6) Where an occupier of premises fails to comply with a notification or notice an authorised fire officer and any assistant may enter the premises and take any of the measures directed by the notification or notice to be taken and any expenses incurred in taking those measures may be recovered by the commissioner in a court of competent jurisdiction from the occupier.

		(7) An authorised fire officer or an assistant who takes the measure of removing vegetation or other flammable material from premises, may take possession of and retain the material until it is disposed of pursuant to subsection (8) or until the person entitled to possession of it is determined. (8) Where the commissioner is satisfied that anything retained pursuant to subsection (7) is the property of the occupier who failed to comply with the notification or notice the commissioner may sell or otherwise dispose of the material and the proceeds of the disposal may be applied by the commissioner in payment of expenses incurred in consequence of the failure to comply. (9) Where the proceeds of the disposal of any material— (a) are insufficient to cover the expenses incurred—the amount of the expenses that may be recovered under subsection (6) must be reduced by the amount of those proceeds; (b) exceed the expenses incurred—the proceeds of the disposal must be applied in the following order— (i) if there is an amount owing to an entity under a security interest registered against the property under the <i>Personal Property Securities Act 2009</i> (Cwlth)—in payment of the amount owing under the security interest; (ii) in payment of any balance to the person whose property the commissioner believes the material to have been.”
<i>Fire and Emergency Services Act 1990</i>	s73 s74	“Liability of person for fire lit by agent or employee (1) Notwithstanding the Criminal Code, sections 7 and 23 where any person commits an offence against this division in respect of the lighting of a fire as an agent or employee, the principal or employer of that person is taken to have committed the offence and may be prosecuted and punished for the offence unless it is proved that the agent or employee was acting contrary to instructions and that the principal or employer could not have prevented the commission of the offence by exercising reasonable supervision. (2) Subsection (1) applies without prejudicing any liability imposed under this division upon the person by whom an offence is actually committed. “ “Liability for damage caused by certain fires (1) A person who lights a fire—

		(a) authorised to be lit by notification given under section 63 or by a permit granted under section 65; or (b) in order to comply with a notification or notice given under section 69; and who, in lighting the fire, complies with any condition or direction contained in the notification, notice or permit and does not contravene any provision of this Act does not incur any liability at common law for any loss, injury or damage caused by the fire unless it is shown that the person acted recklessly or maliciously caused the loss, injury or damage. (2) Subsection (1) applies only in respect of a fire lit for the purpose of or likely to have the effect of burning off vegetation.”
<i>QLD Nature Conservation Act 1992</i>		Protection requirements to maintain ecological sustainable systems and biological diversity particularly in line with threatened biota. This becomes a consideration for locations of Hazard Reduction Burns and things like frequency of fire events.
<i>QLD Land Act 1994</i>	s4	Land must be managed having regard to “sustainable resource use and development to ensure existing needs are met and the state’s resources are conserved for the benefit of future generations.”
<i>QLD Disaster Management Act 2003</i> Declared disaster powers Council Officers are considered non-government fire officers under the Act and can perform using declared disaster powers but only if called upon/directed.	s80 s76	“Functions of local government (1) The functions of a local government under this Act are as follows— (a) to ensure it has a disaster response capability;” “non-government fire officer means a person performing functions of a fire officer for a fire authority, brigade or service other than the Queensland Fire and Emergency Service.” “if a declared disaster officer is a non-government fire officer, the officer is subject to the directions of a government fire officer;”
<i>Native Title Act 1993 (cth), and the QLD Native Title Act 1993</i>		When preparing plans for hazard mitigation, CRC Officers must comply with the requirements of the Act.
<i>QLD Aboriginal Cultural Heritage Act 2003 and the QLD Torres Strait Islander Cultural Heritage Act 2003</i>		“Officers will also comply with the requirements ofDuty of Care Guidelines.”
<i>Local Law No. 3 Community and Environment Part 5</i>		Where an authorised person forms the opinion that a fire hazard exists on an allotment; can give a compliance notice to the responsible person to take specified action to reduce or remove the fire hazard.

		A ‘fire hazard’ is considered to be <i>“anything that, because of its flammable nature, its position or its quantity, exposes property to significant risk of damage or destruction by fire”</i> . It could also include live cinders not in an enclosed fireplace, a large accumulation of grass clippings or dry vegetation that could easily be ignited under section 22(3).
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It is important to note that Councils have only limited powers for action for Hazard Reduction Burns and emergency response compared to Government (not Council) under the *Fire and Emergency Services Act 1990*.

Council can only action Hazard Reduction Burns with the same powers as a landholder and does not have additional authorisations as a government entity for such under the Act. Council does have some powers as non-Government Fire Officers or Local Council Officers.

As there is no direct authority to Council Officers through the *QLD Fire and Emergency Services Act 1990*, legal advice provided Preston Law, (2022) has advised certain delegable powers and actions as detailed below, (Table 2).

Officer Authorities, Powers and actions pertaining to works are addressed by:

Table 2. Operational requirements and associated delegable powers

Action	Act/Section	Power required
<i>Local Government Act 2009</i>		
Allowing powers as a Local Government Worker in line with duties.	s138 Powers of other persons	To exercise powers as a Local Government Worker such as under s145.
Private Property entry in dangerous situation	s145 Entry by a local government worker, at any time, for urgent action	Entering property without permission of occupier to take urgent action in a potentially dangerous situation. Note requirements post event under the Act: the officer informs the occupier <i>“as soon as reasonably practicable after”</i> entering the property: • of the reason for entering the property; • that they are authorised as a local government worker under the LGA to enter the property without their permission; and • produce his/her identity card for inspection.
General duties* Obligations in line with Table 1. of this Fire Strategy (all trained Fire Officers).	s262 Powers in support of responsibilities	to do <i>‘anything that is necessary or convenient for performing the responsibilities for the local government’</i> for the purpose of implementing the Strategy. Note: Intended in a manner consistent with operations under this strategic document. The delegate’s power may only

		be exercised to the extent that the power is reasonably necessary in line with General duties* described below and within obligations in Table 1.
General Local Government worker duties in line with role and training.	<i>Local Government Act 2009 Authorization</i>	Authorised Person under the Act
QLD Disaster Management Act 2003		
Follow directions of Government Fire Officers, (QFES).	s76	“if a declared disaster officer is a non-government fire officer, the officer is subject to the directions of a government fire officer;” Note: Council workers are non-government fire officers.
Directions of Government Fire Officers, (QFES) can give Council staff	s77	General Powers that Officers can be directed to perform; additional Powers may apply in specific circumstances.
Fire and Emergency Services Act 1990		
Give information to QFES so that they can identify landholders of properties.	s58D Power to require information about identity of occupier	Power to comply with a requirement issued by an authorised fire officer under subsection (2).

Follow authorized (QFES) fire officer directions in line with powers under their s53 Powers of authorised officer in dangerous situations.	s59 Person acting at direction of authorised fire officer	Allows a person who has been directed by an authorised fire officer to exercise any power and will be taken as if the authorised fire officer exercised those powers.
Hazard reduction burns per permit (all trained Fire Officers)	s65 Granting of permits	Power to discharge obligations under a permit. Note: Intended in a manner consistent with operations under this strategic document.
Apply for permit (Planned Burn Supervisors)	s65 (1)	“(1) A person may apply to the commissioner (orally or in writing) for a permit to light a fire on any land.”
Officers can Act as an Occupier on Council land under specific sections which are intended to be delegated individually.	Schedule 6 Dictionary	For Council to be considered an occupier of land under section 67 and section 68, it would need to meet the definition of ‘occupier’ under the QFES Act, which provides that an: <i>“occupier, of premises, means— (a) the owner, lessee or person apparently in charge of the premises; or (b) a person who has the care, management or supervision of the premises or who is conducting a business at the premises.”</i> In circumstances where Council meets the above definition, then the proposed Delegation should sufficiently enable Officers to carry out the requirements under sections 67 and 68 as the ‘occupier’.
Wildfire/ arson response on Council land	s67 Occupier to extinguish fire	“Where a fire is burning on any land and the lighting of the fire is not authorised by or under this or any other Act, the occupier of the land, immediately upon becoming aware of the fire (regardless of who lit it)— (a) must take all reasonable steps to extinguish or control the fire; and (b) must, as soon as is practicable, report the existence and location of the fire to a fire officer, an officer of

		a rural fire brigade, a member of an emergency service unit, a chief fire warden or fire warden, a forest officer (within the meaning of the <i>Forestry Act 1959</i>), a conservation officer within the meaning of the <i>Nature Conservation Act 1992</i> or a police officer"
If Council is the 'occupier' of land and believes on reasonable grounds that a grassfire burning within 1.6km of its land constitutes a fire risk, it may (together with other people acting at the direction of the occupier):	s68 Powers of occupier of entry etc.	"(a) enter the land on which the fire is burning and any other land in order to gain access to the land on which the fire is burning; (b) take on to that land equipment for extinguishing or controlling the fire; and (c) take all reasonable measures to extinguish or control the fire." Note: Not entering the land if previous notice has been given of the intention to light the fire and/or notifying a 'prescribed person' (such as a fire officer) if practicable to do so s68 (2) and s68 (3).
Follow directions from Commissioner under the Act/ Responsibility for taking actions directed.	s69 Requisition by commissioner to reduce fire risk	"(1) The commissioner may require any occupier of premises to take measures for the purpose of reducing the risk of a fire occurring on the premises or reducing potential danger to persons, property or the environment in the event of a fire occurring on the premises. (2) A requisition may be given— (a) in a particular case—by giving a notice to the occupier concerned; or (b) by notification published in the gazette in which case each occupier of land to whom the notification applies must comply with the requisition. (3) A person to whom a requisition is given must comply with the requisition." Note: Many more details covering cost and expected duties in Act.
Local Laws		
Compliance Notices for Fire Hazards	Local Law No. 3, Part 5 s22	Allows an 'authorised person' to issue a compliance notice if

		they form the opinion that a fire hazard exists on an allotment. A 'fire hazard' is considered to be <i>"anything that, because of its flammable nature, its position or its quantity, exposes property to significant risk of damage or destruction by fire"</i> . It could also include live cinders not in an enclosed fireplace, a large accumulation of grass clippings or dry vegetation that could easily be ignited under section 22(3).
To give permission for other Agencies to burn on Council land via written permission (per delegation expected to be NAM Coordinator or above).	Local Law No. 11, Schedule 3 Restricted activities for local Government controlled area or roads.	"All local government controlled areas and roads" "(1) Any activity that may obstruct the safe movement of users of the area or which has the potential to damage or interfere with the area or infrastructure within the area", unless it is permitted with the written authorisation of the CEO or delegate. Note: The delegate's power may only be exercised to the extent that permission is sought from Council to perform a controlled burn on Council land pursuant to a permit under the Fire and Emergency Services Act 1990. This power is also intended to be limited by the burn plan having been reviewed, in line with Council's interests and risk profile consistent with Council's fire operations. Any Manager providing this permission should be supported in their decision making by an experienced senior Council fire officer/ Planned Burn Supervisor.

Any delegations or authorisations associated are to be specified in Council's delegations register and Instruments of Appointments to staff.

*General duties for the purpose of this strategy include:

- Planned Burns in line with permit conditions and SMEACS operational documentation
- Arson/wildfire response as directed by QFES on private property
- Arson/wildfire response on Council land
- Hazard reduction through vegetation management (spraying and mechanical removal of vegetation) on Council land
- Hazard Reduction through application of fire to reduce fuel loads on Council land
- Assistance to other Agencies/Operators for planned burns under Council permit, Land Manager permit or their own processes (QPWS no permit required) if in Council's interest

- Assistance to private landholders for burns on private property if under their permit if in Council's interested (e.g. priority pest management or reduction in fuel load adjacent to Council land)

5. Stakeholders

5.1 Collaboration and Consultation

Through the review process, Council's Fire Management team consults and collaborates with many other agencies and personnel to fulfil the burn plan. These stakeholders include:

- CRC Natural Assets Management Unit
- CRC Parks (Mt Lumley and Mt Whitfield burns)
- CRC Event Teams
- CRC Disaster Management Team
- Any other Council Departments or units with operations tied to priority locations
- Cairns and District Fire Management Committee
- Local Disaster Management Group, Cairns Region
- Traditional Landholder Groups
- Qld Fire and Emergency Service
- Qld Rural Fire Brigades
- Landcare Organisations
- Department of Transport and Main Roads
- Ergon/ Powerlink
- QPWS /DEHP /DES
- Council Contractors
- QRail

Of particular note, the importance of Council's relationship with QPWS is only second to Council's relationship with QFES when it comes to fire management activities. Much of Council land especially in the urban interface zones is on hillslopes and adjacent to QPWS managed land. This leaves Council in a situation where any Hazard Reduction Burns on Council sites in these areas or burns on QPWS managed land would cross over or progress into each other's tenures. This is particularly of note in areas where no break is practical between QPWS and Council land. Both Council and QPWS is dependent on each other to prevent travelling burns in these areas. This illustrates the particular importance of collaboration and communication between QPWS and Council.

Some Council areas specifically mentioned in the individual Site Burn Strategies are impractical for Council to manage fuel loads onsite. This is due to geography and limitations from Hazard Reduction Burns reasonably not encroaching uncontrolled into QPWS land (upslope). As such Council is largely dependent of effective management of QPWS land (downslope). Wherever practical, Council should assess implementing Hazard Reduction Burns on our land tenure in conjunction, or post QPWS land burns, taking advantage of areas burn as practical fire breaks.

Intrinsically, Council's site management targets are largely aimed at preventing ignition events from travelling up and across hillslopes and strategies for fire heading downslope from QPWS managed land is largely reliant on QPWS' effective fire management.

Another consideration is that QPWS is exempt from obtaining a 'permit to light a fire' which means that a traditional communication pathway through QFES for fire management activities and records is not guaranteed.

5.2 Meetings of note for fire management in the region include:

- Cairns Hillslopes Fire Management Group/ Cool Burn Meetings/District Fire Management Group Meetings
- Rural Fire Brigade meetings as appropriate
- Local Disaster Management Group Meetings (monthly) and long-range weather forecast meetings (two monthly)

5.3 Group Responsibilities

Under the scope of this plan the following groups have responsibility or obligations:

Table 3. Group Responsibilities

Group	Responsibility
CRC Natural Assets Management Unit	• Operational planning for fire management in Council. • Hazard Reduction Burns on Council land, fire risk mitigation planning and site risk assessments. • Limited response to events. • Risk Mitigation activity or arrangements on Council land.
QFES	• Emergency response. • Reporting high risk conditions so that Council can adequately plan for disaster responses through the LDMG. • Development of any burn plans requiring Council assistance in line with resources and training identified in this document.
CRC Disaster Management Team	• Providing advice to CRC's Natural Assets Management team of CRC disaster obligations for fire management. • As appropriate, develop evacuation plans for uncontrolled wildfire events.
LDMG	• Support during significant events detailed under Disaster Management Plans e.g. evacuations. Notification of predicted severe weather events impacting fire operations.
QPWS	• Management of surrounding State Forests, National Parks, and Conservation Parks.

6. Priority Identified Sites

A risk-based approach was adopted in determining the priority parcels to be managed under this plan. This approach considered in initial assessments:

- Previous wildfire and Hazard Reduction Burning activities
- Complaints from affected communities
- Advice from fire management committees; and
- Potential impactors in areas of major urban development.

Four separate analysis techniques carried out resulted in the same priority areas being repeatedly identified.

- i. RediPortal prioritisation mapping – see Figure 2.
- ii. Consultation with third party experts in fire management and industry
- iii. Previous Internal Risk Assessments
- iv. Operation Cool Burn (QFES)

The locations detailed below make up these high-risk areas identified.

Of note, some of these locations combine significantly different areas based on the grouping identified in consultant reports, (Firescape Science). Multiple strategic site plans are required for each priority site identified as planning for some of these sites as per priority identified grouping would be impractical. Some identified sites are also not primary Council responsibility or Council manages only a small portion of the area. These site plans are expected to be developed by the lead burn agency with Council input, based on resources and capabilities identified within this document. Council will have pre-developed site strategic plans only for CRC identified (led) sites as per the below in Table 4. Council will assist in

developing site plans for all Council managed areas on request and will be actively seeking involvement per all areas listed below.

Some areas have been included due to ongoing Council management or responsibility for those areas and not specifically as a high risk or priority location, e.g. Cattana Wetlands and Kamerunga Conservation Park.

Table 4. List of Priority Identified Sites for Risk Mitigation Planning

General Description of Sites	Sub-sites	Lots, Tenure	Physical Address	Intended Lead Agency for a Hazard Reduction Burn Event
Pyramid Estate, Gordonvale Dump, the Pyramid	Gordonvale Transfer Station and hillside above	1RP729022 Cairns Regional Council, 3SP288908, 5SP208083 Freehold	70523R Bruce Highway, ALOOMBA	CRC
Pyramid Estate, Gordonvale Dump, the Pyramid	The Pyramid (Djaragun)	Pyramid Car Park in road reserve Moss Access; Cairns Regional Council, 2SP222289, 3RP734040, 3SP208087, 3SP288908, 4SP208087, 22RP706045, 23RP706045, 560N157134, 596NR5472, Freehold 19NPW970 QLD State Gov.	Moss Access, GORDONVALE	QPWS
Pyramid Estate, Gordonvale Dump, the Pyramid	Pyramid Estate; hillslopes above	179RP881699, 21CP885643, Cairns Regional Council, and multiple freeholds in the I-Zone	Pyramid Estate, GORDONVALE	QPWS
Mt Whitfield (and Lumley Hill, Stratford and Aeroglen)	Mt Whitfield –Aeroglen	514NPW581, 20SP274034, 21SP274034, 22SP274034, 82C198327, Cairns Regional Council, and multiple freeholds in the I-Zone	Mayers Street, EDGE HILL	CRC
Mt Whitfield (and Lumley Hill, Stratford and Aeroglen)	Lumley Hill	756NR6265 100CP864219 514NPW581 - Cairns Regional Council 160NR7985 - Telstra 180SP181102, 2RP737248 - Freehold (Fire Line), and multiple freeholds in the I-Zone	Aeroglen Drive, STRATFORD	CRC
Mt Whitfield (and Lumley Hill, Stratford and Aeroglen)	Green Arrow	700SP178672, 514NPW581 - Cairns Regional Council	700L Bel-Air Drive MT WHITFIELD	CRC
Ellis Beach hillslopes and	Buchan's Point; hillslopes	31SP129117 Cairns Regional Council	Colonel Cummings Drive, PALM COVE	CRC

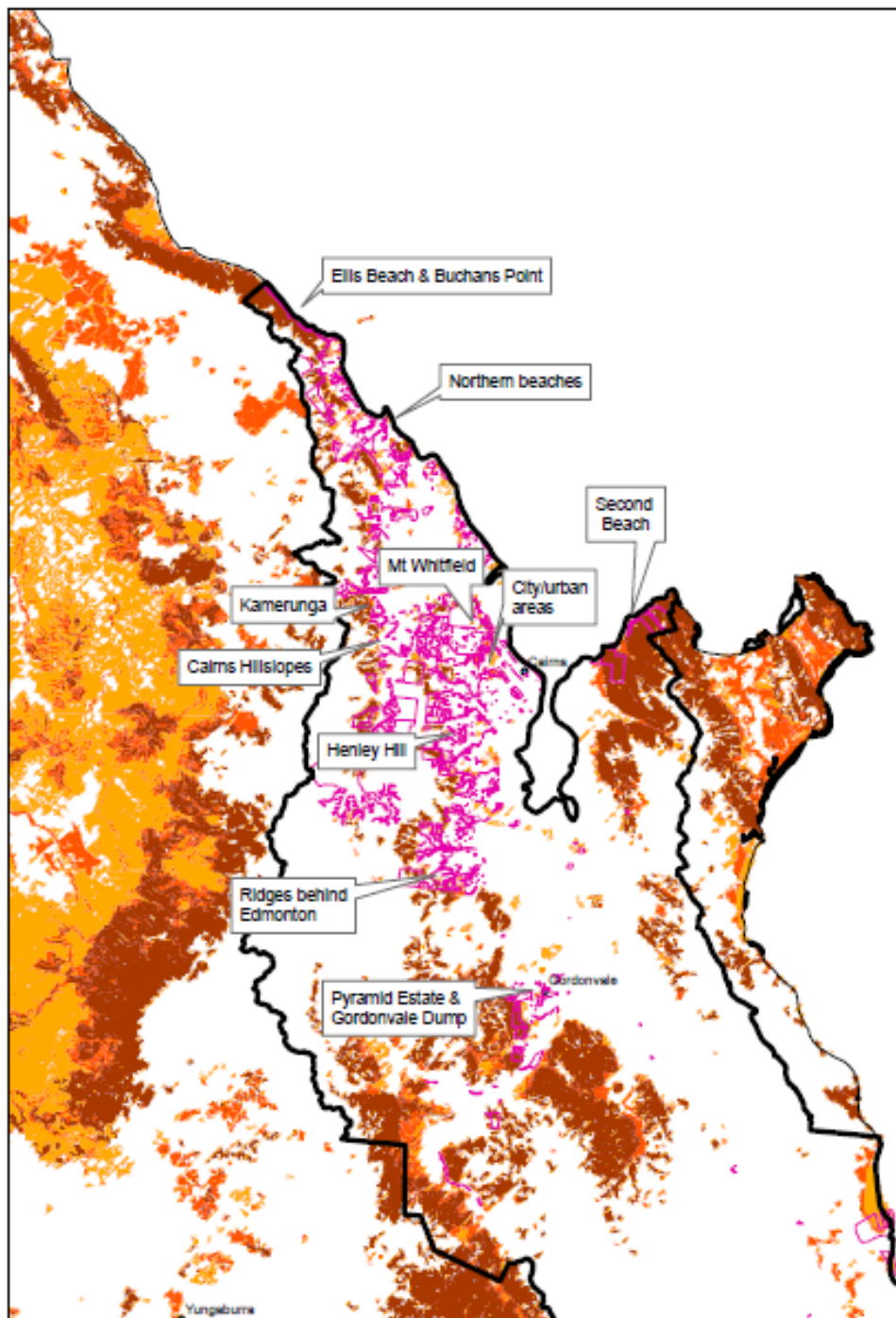
Buchan's Point	below houses			
Ellis Beach hillslopes and Buchan's Point	Ellis Beach; hillslopes above	31SP129117 Cairns Regional Council	Captain Cook Highway, ELLIS BEACH	QPWS
Kamerunga Conservation Park	Kamerunga Conservation Park	254NR7826 Cairns Regional Council	Lake Placid Road, KAMERUNGA	CRC
Cattana Wetlands	Cattana Wetlands	2SP269644, 3RP865122, 5RP865122 Cairns Regional Council	SMITHFIELD	CRC
Cairns Hillslopes	Kuranda Range/ Ridge above Skyrail	33SP172978, 999SP160307 - Cairns Regional Council 89AP12218 – QPWS 25AP19345 - unknown ratepayer 1SP207020, CCP891022 – Skyrail	SMITHFIELD /CARAVONICA	QPWS
Cairns Hillslopes	Copperlode Rd/ Lake Morris Road	1RP737206, 1CP851472, 227RP857537, 788SP101074, 982RP835645, 987RP835646, 995RP749321, 996CP903196, 999RP851635, – Cairns Regional Council, 103RP835641 - Freehold, and multiple freeholds in the I-Zone	Lake Morris Road, MOOROOBOOL	CRC
Cairns Hillslopes	Between Redlynch Estate to Smiths track (Stoney Creek Rd); hillslopes above	323SP254662, 27RP804193, Smiths Track - 777NR7576 Cairns Regional Council, 880NPW459, 174AP17383, 806SP254662 QLD State Gov., and multiple freeholds in the I-Zone	Kamerunga Road area, KAMERUNGA	CRC/QPWS
Cairns Hillslopes	Redlynch Valley (Horseshoe bend/ Jungara Loop)	2RP703137 QRail Reserve 49NR7898, 900SP279538, 998SP149837, Cairns Regional Council 20SP279538 - Freehold	REDLYNCH	QRAIL/ Private Land Management
Cairns Hillslopes	Redlynch Hillslopes Mitigation Area – Hillslope South of Jungara Loop and North of Boral Quarry	6RP749301, 7RP749301 - Cairns Regional Council 8RP749301, 20SP279538 Freehold	REDLYNCH	QPWS/CRC

Cairns Hillslopes	WaddleBlair Ridge/ Track/ Peak Bayview Heights; hillslopes above	328RP733850, 21RP893044, 16RP891009, 453NR6871, 202SP178682, 23RP865060, 10RP8577724, Cairns Regional Council	BAYVIEW HEIGHTS	QPWS/CRC
Cairns Hillslopes	Ridges behind Edmonton to Forest Gardens	Mt Sheridan - 502SP202661, Cairns Regional Council, and multiple freeholds in the I-Zone Edmonton - 5RP882236, 500RP907303, 1SP246911, 603N157224, 602SP298376, 101SP267834, 22SP133790, 800SP276832, 998RP748575, Cairns Regional Council, and multiple freeholds in the I-Zone	FOREST GARDENS/BENTLEY ARK, MT SHERIDAN EDMONTON	QPWS
Cairns Hillslopes	Mount Sheridan hillslopes	502SP202661, Cairns Regional Council	MOUNT SHERIDAN	QPWS
Cairns Hillslopes	Mt Peter Spur	7RP808432 Cairns Regional Council, 22SP182456 Freehold	MT PETER/ GORDONVALE	QPWS
Yarrabah	Second Beach (Pine Creek-Yarrabah Road); hillslopes above	204SP154564 Cairns Regional Council	Pine Creek-Yarrabah Road, Pine Creek-Yarrabah Road, EAST TRINITY	QPWS
Yarrabah	Giangurra (Pine Creek-Yarrabah Road) and Bessie Point	111NR7962 Cairns Regional Council	2067R Pine Creek-Yarrabah Road, EAST TRINITY	CRC
Northern Beaches	Earl Hill	88RP748088, 802SP212575, 903SP196222, 501SP265185 Cairns Regional Council, 202SP178664 QLD State Gov. and multiple freeholds in the I-Zone	Earl Hill, TRINITY BEACH	QPWS
Northern Beaches	Ridges behind Clifton Beach (Clifton Spurs)	999SP146125, 998SP146125 - Freehold 1NR7743, 997SP146125, 225NR7107 - Cairns Regional Council	CLIFTON BEACH	QPWS
City and Urban Areas	Cairns Central Swamp D (Across from TAFE)	122SP136287 Cairns Regional Council	2-16 Wilkinson Street, MANUNDA	CRC

City and Urban Areas	Cairns Central Swamp E (Behind Edge Hill School)	123SP261205 Cairns Regional Council	Mayers Street, MANUNDA	CRC
City and Urban Areas	Cairns Central Swamp F (End Mayers Street)	123SP261205 Cairns Regional Council	Mayers Street, MANUNDA	CRC
City and Urban Areas	Cairns Central Swamp G	1RP725844 Cairns Regional Council	163-247 Pease Street, MANOORA	CRC
City and Urban Areas	Henley Hill	100SP296202, 101RP888507, 1SP198079 Cairns Regional Council	De Jarlais Street, EARLVILLE	CRC

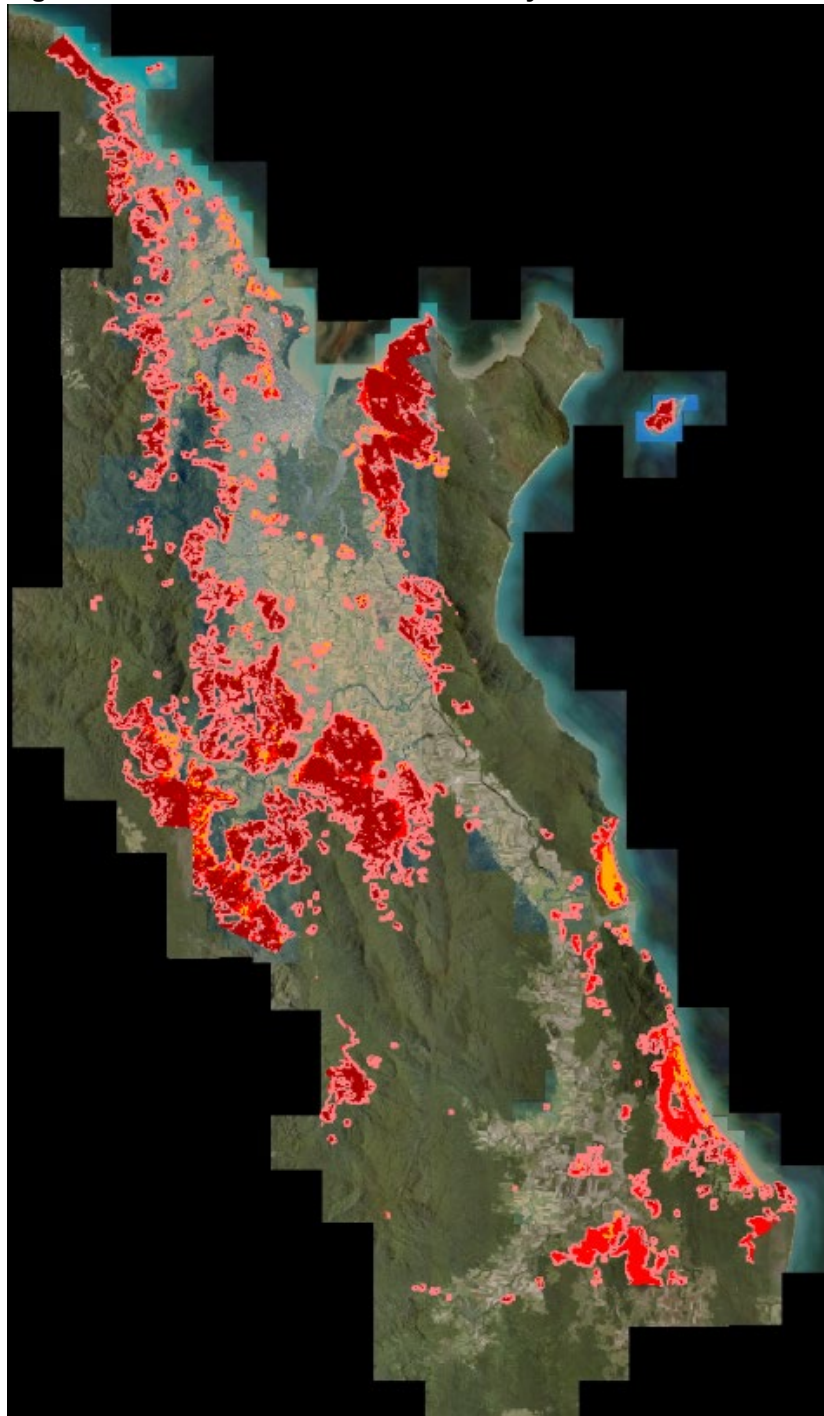
Regular meetings through the AFMG and ongoing consultation will be used as a basis for newly identified sites to add to this list. Long term risk associated with many sites on this list are expected to be mitigated through permanent site management actions, (e.g. vegetation changes). This should allow removal of priority sites. As an example, Holloways Beach Jago Park was previously on this list but due to vegetation changes is no longer considered a risk and has been removed.

Figure 3. Map of Risk in Area/Priority Sites



Map generated as part of Consultant Report Cairns Regional Council Regional Bushfire Management Strategy developed by Leasia Felderhoff: Firescape Science

Figure 4. Council Bushfire Hazard Overlay: Bushfire Prone Areas (Bushfire Risk)



Bushfire Prone Area

Very High Potential Bushfire Intensity

High Potential Bushfire Intensity

Medium Potential Bushfire Intensity

Potential Impact Buffer

Taken from Council Spectrum Spatial Mapping System: Bushfire Prone Area as at 21/11/2022.

7. Hazard Reduction Burn Events and Operational Burn Response

7.1 Overview/Discussion

The following considerations were required for site burn planning and are discussed below:

- Burn scheduling possibilities,
- Available resources,
- Training,
- Operational alternatives to Hazard Reduction Burns.

Site Strategic Plans were then developed based on the considerations below and contained in Appendix 7.

7.2 Burn Scheduling

Hazard Reduction Burns are generally scheduled outside the fire season, in winter when conditions are considered to be less volatile. Council also takes part in the yearly, QFES led, AFMG meetings identifying risk, collaborating and coordinating efforts to address.

Council has additional considerations surrounding fire events and specifically smoke or vegetation impacts on community events. Several high visibility burns have potential to impact events and it is in the community and fire program interests to minimise impacts.

The extreme example of undesirable impacts on an event would be having a Pyramid burn impact on the Pyramid Race. Hazard Reduction Burn events must take place allowing for suitable vegetation to regrow prior to the race to meet community expectations and reduce risk to people running on the hill and have no smoke, (residual or otherwise), from nearby burn events interfering with the event.

Burn scheduling for a fire season will have to occur yearly with consultation with Council's Events Team. Council's Events Teams can be contacted on: Events@cairns.qld.gov.au and Officers are able to generate a list of events on request. The major event list for 2019 has been included in Appendix 6 as an example of scheduling considerations that must be made. The final events list for year tends to be ready in March.

Secondly, burn frequency is given as a range due to the potential for seasonal or yearly weather differences and impacts on fuel load. Fuel load assessments will take place yearly for upcoming burns if within the frequency range.

If Council is notified of expected extreme conditions for the year, assessment will be made of burn events and fuel loads with this consideration in mind. Hazard Reduction Burn events will be bought forward in line with risk assessments and practical requirements. This could mean that burn frequency could be bought to its lower limit, be further reduced if the risk is significant for individual years, or time of year scheduling changes.

For Council's upcoming Hazard Reduction Burn schedule, see Appendix 10. This lists events expected for the current year, past events, and the next predicted date for burns at each site dependant on risk analysis and vegetation guidelines.

7.3 Site Strategic Plan Development

Site strategies based on the priority sites are available in Appendix 7.

Site Strategic Plans are not operational and operational plans will have to be developed per site using the on-ground conditions closer to intended events. Site Strategic Plans are intended as support documents to develop operational burns plans, manage resources, and find alternatives to burns.

Plans were generated for each of the priority sites through the following process:

- Desktop Investigation e.g. Regional Ecosystem types identified under QLD Government mapping.
 - Regional Ecosystem Type determined burn frequency and mosaic for remnant vegetation.
 - Regional Ecosystem Type searches also identified environmental assets to protect for each site.
 - Cultural heritage and associated asset for protection through DATSIP Cultural heritage search.
 - Known assets and infrastructure at site.
 - Previous burn and site history.
- Onsite ground assessments e.g. risk, assets to protect, desktop truthing, current conditions, possible remediation works.

7.4 Resources

Table 5: Major Plant Natural Assets (Fire Management Team)

Description	Detail	Purpose
Light Attack Vehicle	Isuzu Ute Fleet# 4405 with 340L Water tank and foam unit.	- To combat small fires and perform mop-up duties. - Access along fire lines for operations, identified at each existing priority site.
Light Attack Vehicle	Landcruiser Ute Fleet# 4353 with slip-on Fire Unit; 400L Water tank and foam unit – only permanently mounted during fire season. Slip-on unit may mount to other suitable vehicles.	- To combat small fires and perform mop-up duties. - Access along fire lines for operations, identified at each existing priority site.
Light Attack Vehicle	Hilux Ute Fleet# 4349 with slip-on Water tank and pump. Slip-on unit may mount to other suitable vehicles. 500L Water tank.	- To combat small fires and perform mop-up duties. - Access along fire lines for operations, identified at each existing priority site.
Water Trailer	Fleet# 1000L water tank with water pump and hose nozzle.	- Refills Light Attack Vehicle tanks if required as an emergency reservoir. - Mop up operations.

All current CRC fire plant has identified secondary uses. This is usually associated with revegetation project maintenance to eliminate unit downtime during the off season.

Regardless of availability of equipment internally, additional resources have historically been available through prior arrangement with QPWS, QFES, and RFS for interagency burns. QFES shall also be contacted in the event of risk to buildings or an unexpected increase in the severity of a burn event. Other units such as water trailers and trucks can be arranged internally to Council. Consideration must be made that equipment is not built for purpose.

Table 6. CRC's Fire Management Team

Role	Officer	Position within Council	Email	Mobile
Planned Burn Supervisor	Dave Lloyd	Land Protection Officer	D.Lloyd@Cairns.qld.gov.au	0459 904 227
Planned Burn Supervisor	Lewis Defranciscis	Land Management Officer	L.Defranciscis@cairns.qld.gov.au	0457 823 890
Planned Burn Supervisor	Tom Crumpton	Land Protection Officer	T.Crumpton@cairns.qld.gov.au	0459 877 005
Planned Burn Supervisor	Jade Monda	Coordinator Natural Assets	J.Monda@Cairns.qld.gov.au	0408 746 447
Fire Management Crew Leader	Dave Paschetto	Supervisor Botanic Areas	D.Paschetto@Cairns.qld.gov.au	0408 870 606
Fire Management Crew Member	Shadah Houston	Land Protection Officer	S.Houston@Cairns.qld.gov.au	0436 406 411
Fire Management Crew Member	Isaac Gregory	Land Protection Officer	I.Gregory@cairns.qld.gov.au	0437 822 724
Fire Management Crew Member	Jesse Ball	Natural Assets Ranger	J.Ball@Cairns.qld.gov.au	0459 999 106
Fire Management Crew Member	Brooklyn Lancaster	Land Protection Officer	B.Lancaster@Cairns.qld.gov.au	0437 632 125
Fire Management Crew Member	Rodney Williamson	Natural Assets Ranger	R.Williamson@Cairns.qld.gov.au	0476 832 748
Fire Management Crew Member	Declan Delargy	Horticulturalist Botanic Areas	D.Delargy@cairns.qld.gov.au	0459 400 070
Fire Management Crew Member	Paul Marnock	Ganger Botanic Areas	P.Marnock@cairns.qld.gov.au	0447 931 384
NAM Fire Team Support	Kea Lewry	Natural Assets Ranger	K.Lewry@Cairns.qld.gov.au	0429 059 903
NAM Fire Team Support	Ethan Parker	Natural Assets Ranger	E.Parker@cairns.qld.gov.au	0482 835 180

Table 7. Other Fire Associated Contacts / Stakeholders

Agency	Person	Position	Email	Mobile/ Phone
FIRECOM				4080 2572
QPWS	Sam Di Bella	Ranger in Charge Cairns South	Sam.Dibella@des.qld.gov.au	4047 9609

QPWS	Jodie Cross	Ranger in Charge Cairns North	Jodie.Cross@DES.qld.gov.au	0436 932 724
QPWS	Theo Davis	Resource Ranger for region	Theo.Davis@DES.qld.gov.au	0447 821 655
QFES; RFS	Aaron Regan	Bushfire Mitigation Manager	Aaron.Regan@qfes.qld.gov.au fnr.rfsbso@qfes.qld.gov.au	0439 611 389
Ergon/ Powerlink	Andy Summers	Area Asset Officer	andy.summers@ergon.com.au	4080 4866 0418 151 506
Q Rail	Dominic Macri	Asset Maintenance Coordinator	dominic.macri@qr.com.au	
Q Rail	William Kelly	Vegetation Maintenance Officer	William.Kelly3@qr.com.au	
DTMR	Lawrence Wah Day	DTMR Rep.	lawrence.c.wah.day@tmr.qld.gov.au	4045 7262
WTMA	Angus McLeod	Senior Conservation Officer	angus.mcleod@wtma.qld.gov.au	0429 566 931
Airport Notification	General Contact	Smoke Notification		4050 5328
CRC Disaster Management Team	TBA	Local Disaster Coordinator	TBA	TBA
CRC Disaster Management Team	Sioux Campbell	Disaster Management Resilience Officer	S.Campbell@cairns.qld.gov.au	4044 3571

Established contacts for fire wardens at specific locations can be found in each Site Strategic Plan under Appendix 7. However, for any changes to Fire Wardens and contact methods, please check the Fire Warden Finder: https://www.ruralfire.qld.gov.au/Pages/fw_finder.aspx

7.5 Training

7.5.1 Officer Training Requirements/Standard

Ongoing, all Council staff performing fire management, will be deemed competent to one of the following standards or training:

- Planned Burn Supervisors (roughly equivalent to QPWS Red Flag Burn Supervisors)
- Crew Leaders (roughly equivalent to State level 2 Wildfire Response training)
- Crew Members (roughly equivalent to State level 1 Wildfire Response training)

Some Hazard Reduction Burns, when appropriate (low risk and sufficient trained staff operating as Supervisors), will be used as training events and staff members without completed training at these levels will take part.

These packages are based on nationally recognised units tailored to meet Council requirements for each task purpose and delivered by expert fire trainers. Courses have been selected per industry recommendations based on components of Certificates in Public Safety, (firefighting related).

Further detail can be found here, relating to Public Safety training packages:

<https://training.gov.au/Training/Details/PUA12>

Previously staff were required to only have level 1 or level 2 Wildfire Response training. Council has since taken the position that old training and competencies were inadequate for the level of response and planning being required of staff. This was reinforced by inconsistencies in advice, standards and

training given between agencies and industry related groups. Lastly, as Council has seen the necessity to plan burns on its own land, the level of training required has increased to match requirements. All on-site NAM officers are expected to have current First Aid Training. All officers will be expected to sign-off on associated safety documentation as part of training. This includes, but is not limited to, the Safe Work Method Statement for Fire Operations DM#[7010169](#) and Job Safety Analysis for Arson Response DM#[7010129](#).

7.5.2 Fire Training Drills

Council staff will regularly be performing training drills for event readiness. The expected frequency is one drill per month.

Template Fire Drills are available via NAM team's internal folder documentation and can be accessed by request through the NAM team. These are actively developed and reviewed per drill training events and requirements. Records of training/drills are kept in Council's document management system.

Training burns are intended to be implemented at low-risk sites such as Kamerunga Conservation Park.

7.6 AIIMS

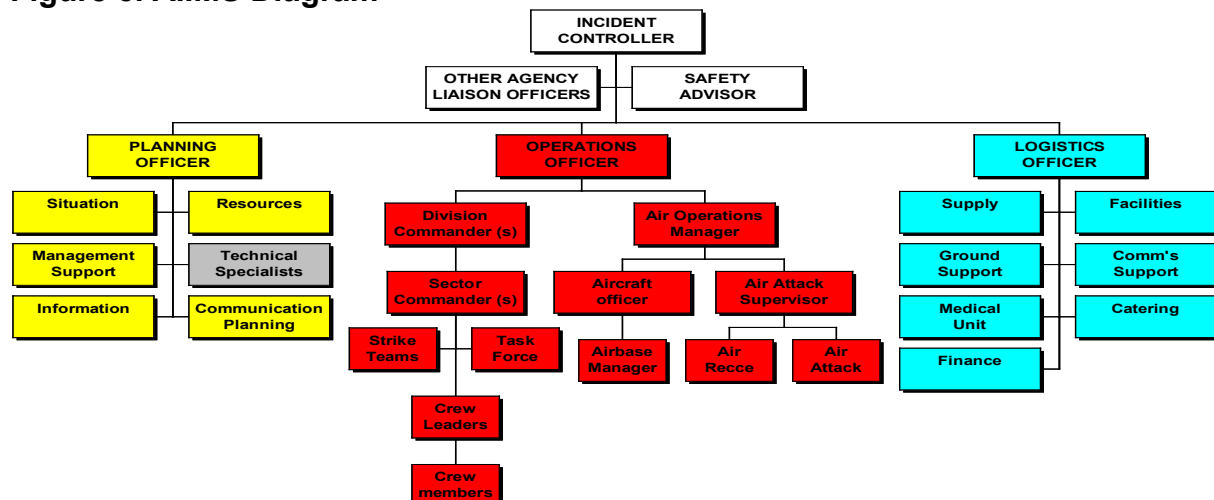
Council training and roles have focused on delivery of service in line with the Australasian Inter-Service Incident Management System (AIIMS) model. This is a nationally recognised emergency response model and is well suited to Council requirements for emergency response as well as management during Hazard Reduction Burn events.

The three key principles upon which AIIMS is based are:

- management by objectives
 - **S Specific**
 - **M Measurable**
 - **A Achievable**
 - **R Relevant**
 - **T Time-framed**
- functional management roles, i.e. control, planning, operations and logistics
- span of control, (a ratio of 5 staff to 1 supervisor during events)

AIIMS is scalable, has event handover capability and is familiar to most emergency response agencies.

Figure 5. AIIMS Diagram



It is important to note that roles can be combined or expanded as resources and complexity allows. Roles like Sector Commander and Aircraft Officers are not necessary until those components are required.

A Crew Leader will be responsible for no more than five crew members in line with AIIMS concept of span of control.

Each burn event will have an Incident Controller appointed ideally drawn from Planned Burn Supervisors but as practically and the situation calls for. This Incident Controller is to have no more than five staff directly reporting to them. The Incident Controller can often be the first officer on scene or

responding to an event as long as the situation is well in hand. Otherwise, if the situation calls for it, handover can occur.

If more staff need to be incorporated into a response, an extra level with the ratio of five staff to one supervisor can be scaled in.

As standard, most Council Hazard Reduction Burns will have two light attack vehicles manned by a minimum of three trained staff each and an Incident Controller. Additional staff will be generally available for fatigue management, logistics and additional risk mitigation depending on requirements.

7.7 Limitations to Hazard Reduction Burn Activities

Hazard Reduction Burns are generally considered the most effective and efficient tool for bushfire risk reduction. However, recent fire events in Australia have illustrated the limitations of Hazard Reduction Burns to reduce the risk of extreme fire events, (2019-2020 Fire Season). Of particular note:

- Hazard Reduction Burns to reduce fuel load more than 2 years old, has appeared to have limited effect slowing down or reducing the severity of large life/asset threatening fires.
- Hazard Reduction Burns more often than every 2 years are unsuitable for this region's vegetation types, in some areas counterproductively reducing canopy cover, increasing fuels such as grass in vegetated areas.
- The traditional Cool Burn season and conditions for undertaking Hazard Reduction Burns has been reducing yearly associated with climate change, specifically dry weather and temperature trends across Australia. This means that the window for performing Hazard Reduction Burns has reduced and will continue to do so if current trends continue. This gives less opportunities for effective management if reliance is placed on Hazard Reduction Burns. Previous years have not had all desirable burns completed, (the burn schedule including burns not able to be completed is discussed at Regional Fire Planning meetings before and after fire season).
- The risk and associated health hazards associated with Hazard Reduction Burns are difficult to benchmark vs the risk and health hazards generated by not burning e.g. risk of burns becoming uncontrollable, smoke generated vs. increased risk of unplanned fire event or severity of fire events.
- Some vegetation types such as rainforests and wet forests are unable to be burnt in usual conditions to reduce fuel loads as they are too wet to carry a Hazard Reduction Burn. In severe or catastrophic burns these vegetation types will carry a fire. Traditionally these vegetation types have been considered to be "safe" in the region, but recent events have proven that given the right conditions rainforest will burn in the area, e.g. 2018 Nyleta rainforest fire within Cassowary Coast Regional Council area with an estimated 200 hectares burnt.
- Currently in some identified priority areas no practical and safe strategies have been identified to allow Hazard Reduction Burns.

7.8 Unmanaged or Residual Operational Risks

There are known risks for effective fire management in the region and residual risks as a result of the region's urban profile and development. Wherever possible these risks should be addressed, however, predominantly no practical management has been identified for many cases. These include:

- Land banking in urban areas, (developers holding onto undeveloped blocks waiting for circumstances to develop). Then becoming a fire risk or not actively managing fire risk on the land yet to be developed.
- Urban development abutting hillslope vegetation with no fire breaks and no suitable remaining land to implement fire breaks (steep). These would have substantial financial implications to implement with limited current short-term risk to justify.
- Community resistance to vegetation clearing adjacent to properties to separate properties from vegetation with low perceived risk.
- This Strategy does not take into account extreme or drought condition events that would lead to rainforest burning. This situation lays outside of historical and practical management addressed in this Strategy and individual site plans. Regardless, risk assessments of fuel load on site may give an indicator of upcoming risk and allow for management that addresses some of the risk for the sites.
- No actions identified in this strategy are expected to be able to completely remove risk associated with an extreme event only reduce some of the severity. The hillslope, vegetation and I-zone makeup in the Cairns region would have to be significantly addressed to be ready for such an event with clear and wide breaks probably being the most practical manner of

addressing risk of such an event. At this time most suburbs do not have suitable locations for breaks to be implemented without significant engineering or land buy back.

- Increased impacts covered expected through climate change, - dryer, hotter, new pests resulting in fuel changes or vegetation types.

7.9 Operational Alternatives to Hazard Reduction Burns

Alternatives to Hazard Reduction Burns for fire risk mitigation against fire events, must be considered and in many cases is preferred. Wherever possible these have been built into the site fire strategies as appropriate. The following has the potential for lower risk, better outcomes, and resource efficiencies, generally targeted at lowering fuel loads:

- Revegetation or canopy thickening in some cases where grass is an annual occurrence.
- Increased slashing, sidearm and drum mulching prior to fire season.
- Clearing, vegetation reduction, or selective spraying.

Note also that selective spraying of vegetation like Guinea Grass, will see an increase in native tree recruitment and less grassfires will result. Arguably, previous practices of over cautious fuel reduction burns, (too frequent), have increased the annual fire hazard/fuel load at certain sites by decreasing tree recruitment and increasing Guinea Grass. Any spraying should be timed to reduce vegetation through natural breakdown in the wet season (resulting in near to bare earth). Late wet sprays may brown off vegetation creating extra fuel having the opposite of intended effect.

Works that reduce the need for Hazard Reduction Burns or maintenance effort on sites are preferred as a long-term solution.

The development or consideration for implementation of fire lines for access and operations is important not to understate. Without access, these works cannot occur, and fire lines can be used as the basis for fire breaks and other physical/mechanical control measures.

7.10 Suspected Arson and Evidence Preservation

If serious arson is suspected onsite, where practical and appropriate preserve the site and take note of conditions. Suspected areas of interest can be meshed off to prevent degradation of site and evidence, (no trampling or driving over any potential evidence).

Job Safety Analysis for Arson Response DM#[7010129](#) documents components of works and expected process.

Serious arson for this purpose, includes events that cause or intend to cause substantial damage or injury and is beyond usual regular events.

Notify Supervisor and FIRECOM if serious arson is suspected.

Minor arson otherwise seen as common events with limited impact are expected to be addressed as a matter of practicality per event. Updates to FIRECOM and RFS Bushfire Safety Officer may be appropriate depending on the event.

9. Operational Works/Interpretation of Site Burn Strategies

9.1 Fire Lines

As no identified specific cross industry standard exists, a guide for fire line maintenance works can be found in Appendix 2. These are conditional of on-site assessments, risk and practicality.

This guidance is not expected to apply year-round and should only be applied in line for seasonal events, (before fire season). Most maintenance will occur pre-fire season.

Fire line assessments both post events and pre-season will establish future development of fire lines.

Table 8. CRC Fire Line Annual Works or Maintenance

Risk Site	Fire Line Name/ Specifics	Days maintenance per year
Between Redlynch Estate to Smiths track (Stoney Creek Rd); hillslopes above	Vegetation spray line at single targeted location.	Yearly (at a minimum) spray at end of wet season, 2 days per yr.

Buchan's Point	No Fire Lines present or annual works planned.	NIL
Cairns Central Swamps D-G	Access Tracks throughout.	Yearly (at a minimum) spray at end of wet season, 5 days per yr. Some maintenance has been taken over by local interest groups
Cattana Wetlands	General access tracks and pathways.	Maintained as part of other works or on demand post risk assessment. Some maintenance has been taken over by local interest groups
Copperlode Rd/ Lake Morris Road	No Fire Lines present or annual works planned.	Yearly (at a minimum) spray at end of wet season, 2 days per yr.
Earl Hill; Trinity Beach	No Fire Lines present or annual works planned.	Yearly (at a minimum) spray at end of wet season, 2 days per yr.
Ellis Beach; hillslopes above	No Fire Lines present or annual works planned.	Maintained by QPWS.
Giangurra (Pine Creek-Yarrabah Road)	Giangurra (Pine Creek-Yarrabah Road) Fire Line	Yearly (at a minimum) spray at end of wet season, 2 days per yr. Yearly Assessment for any track levelling required.
Gordonvale Transfer Station	Between Transfer Station and HWY, Vegetation selective spraying. Along top end (rear) of Transfer Station Fire Line. Below capped mound Fire Line.	Yearly (at a minimum) spray at end of wet season, 2 days per yr. Year-round slashing program run by Cairns Water and Waste.
Henley Hill	Henley Hill Fire Line	Yearly (at a minimum) spray at end of wet season, 1 day per yr.
Kamerunga Conservation Park	Fire Line along length of Conservation Park.	Yearly (at a minimum) spray at end of wet season, 1 day per yr.
Kuranda Range/ Ridge above Skyrail	No Fire Lines present or annual works planned.	NIL
Lumley Hill (Mt Whitfield)	Spay Line and Access Tracks	Yearly (at a minimum) spray at end of wet season, 3 days per yr.
Mount Sheridan hillslopes	No Fire Lines present or annual works planned.	NIL
Mt Peter Spur	Fire Lines present but unmaintained – see site plan	NIL
Mt Whitfield	Spot spraying as required along access track and at selected areas.	Yearly (at a minimum) spray at end of wet season, 2 days per yr.
Pyramid Estate; hillslopes above	No Fire Lines present or annual works planned.	NIL
Redlynch Hillslopes Mitigation Area	No Fire Lines present or annual works planned.	NIL
Redlynch Valley (Horseshoe bend/ Jungara Loop)	Track along south-eastern edge of Council land.	Yearly (at a minimum) spray at end of wet season, 1 day per yr.
Ridges behind Clifton Beach (Clifton Spurs)	No Fire Lines present or annual works planned.	NIL
Ridges behind Edmonton to Forest Gardens	No Fire Lines present or annual works planned.	NIL

Second Beach (Pine Creek-Yarrabah Road)	Second Beach (Pine Creek-Yarrabah Road) Fire Line	Yearly (at a minimum) spray at end of wet season, 1 day per yr.
Pyramid	Pyramid Car Park	Yearly (at a minimum) spray at end of wet season, 0.3 days per yr.
WaddleBla Ridge/ Track/ Peak Bayview Heights; hillslopes above	No Fire Lines present or annual works planned.	NIL

9.2 Annual Actions/Programme

The following are the annual actions and program:

1. Prioritizing mitigation works and fire line maintenance. Use the Fire Risk Matrix found in Appendix 4. to prioritize between sites identified and risk of events.
2. Fuel load assessment, (dependent on end of wet season and burns due).
3. Initialize Site Operational burn plan (SMEACS Template), identifying appropriate burn conditions and further informing date, conditions and other operational burn requirements.
4. For Hazard Reduction Burn events, obtain Fire Permits through the local fire wardens.
 - a. Advice to appropriate stakeholders of intentions/notification, (target 10 days)-
 - i. Councillor, managers, media team and stakeholders.
 - ii. Neighbour notification, access arranged, (DM#[6078104](#) for community notification template letter).
5. For Hazard Reduction Burn events, smoke advice/notification – refer to CRC Whispir SOP, (disaster group CRC process).
6. Carry out mitigation works/ Hazard Reduction Burns
7. Modification to site management plans to reflect learnings from the fire season
8. Review of site management plans for burns that have not taken place on a five-yearly rotation
9. Feedback of events and data into Council systems and QFES datasets
10. Interagency reporting such as at Fire Committee meetings detailing residual risk and successful events. Ensure specific notification to QFES.

An operational workflow for Hazard Reduction Burn events, targeting Council Field Officers, can be found under DM#[6093723](#).

9.3 Callout/Emergency Response Procedure

In the event of a callout or emergency event, FIRECOM have been provided with a communications plan for Council contact. This can be found in Appendix 5.

Council is not a response agency for fires, however QFES has powers to request assistance and Council has a responsibility for our "best endeavour". Council can assist if it is deemed reasonably safe and is within Council resources and training, (2 people min, not beyond medium intensity, etc).

If QFES wants Council to go to private land without being on-site, then this can only be done under QFES direction. Similarly, QFES when lead, cannot hand-off site responsibility on private land as Council has no powers in that circumstance beyond QFES direction. This needs to be made clear to QFES on attending and at a minimum handover needs to be to a Council Crew Leader, but ideally a Council Planned Burn Supervisor.

Internally Council's callout procedure when assistance is requested by FIRECOM is as follows:

- Initial CRC Officer contacted by FIRECOM; passes information on to appropriate officer for callout response (on-call fire trained Officer).
- Response Officer contacts for backup, (a secondary CRC officer).
- Officer checks all equipment before responding, (checklists available).
- Officer responds and takes appropriate action based on event.
- Officer provides outcome back to FIRECOM.
- Officer advises Supervisor of response and event details at next appropriate opportunity.

If the fire intensity is assessed as medium or greater, (or becomes an emergency), Officers are to call in QFES in all circumstances for assistance.

Job Safety Analysis (JSA) is available at DM#[7010129](#) covering safety requirements for an arson event.

9.4 Emergency or Fire Weather Condition Considerations

The LDMG gives notice to NAM of predicted upcoming high fire danger ratings or heatwave events from QFES/BOM. There is a reasonable expectation of no more than 7 days for warnings of extreme conditions.

Serious consideration to halting any Hazard Reduction Burns must occur when a high fire danger rating is predicted. Risk assessments must be documented justifying actions before any Hazard Reduction Burns progress in this circumstance.

BOM's Heatwave forecast, (reasonably accurate out to 3 days), can also be found here:

<http://www.bom.gov.au/australia/heatwave/>

The Fire Danger rating system is currently being updated State-wide, but this process will be ongoing for some time.

9.5 Safety Considerations

Please refer to CRC's associated safety documentation for any controls, risk assessments and risk/hazard management not covered by this document.

This documentation includes but is not limited to:

- DM#[7010169](#) NAM – Template Safe Work Method Statement Fire Operations
- DM#[7010129](#) NAM – Template Job Safety Analysis Arson Response
- DM#[6165504](#) Safe Work Procedure Herbicide Operations
- DM#[6039932](#) NAM – SMEACS burn plan template Planned Burn Operational Template

10. Communication of Strategy and Events

10.1 Community understanding of risk and mitigation actions

Prior to events, affected communities will be contacted and provided with pertinent information. Avenues for seeking further information will be included.

The relevant Councillor/s, managers and Council media team will also have been advised and will be able to provide information and/or pass on queries.

Any Hazard Reduction Burns will be communicated to QFES and events are recorded in Council mapping software.

10.2 Notification for Hazard Reduction Burns

Notification of Hazard Reduction Burn events can utilise the following:

- QFES community engagement resources,
- CRC notification letter to immediately affected landholders/ occupiers,
- CRC/LDMG media resources.

It is important to note that a mail out is not sufficient for notification to affected landholders/ occupiers. Council generally only has contact details available for landholders. Occupiers must be contacted, preferably by letterbox drop and/or door knock. A record of those properties contacted should be kept. Notification for Hazard Reduction Burn events should be at a minimum, 10 days out from an event. A notification template letter can be found under DM#[6078104](#).

Specific burn notification requirements and contacts are mapped out in individual Site Burn Strategies (Appendix 7).

Of particular importance is notification surrounding any Hazard Reduction Burns on Mt Whitfield/ Mt Lumley due to community interest and potentially impacted groups. At all stages of scheduling for events at these locations, communication must be forwarded to greater Council through appropriate managers.

10.3 Distribution of Strategy

Copies of this strategy will be distributed to the Cairns and District Fire Management Group, the CRC Fire Management team, and any other specific stakeholders identified on request. The Strategy will also be hosted on CRC's internal digital filing system, (DM).

Major revisions of this Strategy are expected to be provided to the LDMG for Disaster response and planning purposes.

Due to sensitivities and risks associated with some information in this document such as contact details, **this plan is not for general publication**. Portions of this plan can be provided to appropriate external agencies such as site plans shared during interagency burn planning.

This plan should generally be sent for both consultation and distribution to all appropriate stakeholders listed in Table 3, if major changes are identified as required.

11. References

Firescape Science, Consultant Report - *Cairns Regional Council Regional Bushfire Management Strategy* developed by Leasia Felderhoff [DM#5299740](#)

Operation Cool Burn 2019; Draft - Cairns Hillslopes Fire Management Group Bush Fire Mitigation Plan 2019.

Penman, T. D., Bradstock, R. A., Price, O.F. Reducing wildfire risk to urban developments: Simulation of cost-effective fuel treatment solutions in south eastern Australia

<https://www.sciencedirect.com/science/article/pii/S1364815213002326>

Preston Law (2022) Advice to Council – Fire Strategy Delegations [DM#7091460](#)

RediPortal: Fire and Risk Mapping (now defunct) <https://redi.psba.qld.gov.au/portal/>

Tony Johnston (2005) *QNRM Regional Fire Strategy and Implementation Plan; Northern Region*
Regional Ecosystem Descriptions <https://apps.des.qld.gov.au/regional-ecosystems/landzones/?bioregion=7> as at Feb 2019

12. Appendices

12.1 Appendix 1. Approximate Burn Frequency

A burn schedule and history is tracked under [DM#6396256](#) NAM - Planned Burn Schedule and Burn History.

Sites	Frequency*
Between Redlynch Estate to Smiths track	2-10 years
Buchan's Point	2-5 years
Cairns Central Swamp D (Across from TAFE)	2-10 years
Cairns Central Swamp E (Behind Edge Hill School)	2-10 years
Cairns Central Swamp F (End Mayers Street)	2-10 years
Cairns Central Swamp G	2-10 years
Cattana Wetlands	3-15 years
Copperlode Rd/ Lake Morris Road Lake Morris Road - Spurs	2-10 years
Earl Hill; Trinity Beach	2-5 years
Ellis Beach	2-5 years
Giangurra (Pine Creek-Yarrabah Road) and Bessie Point	2-15 years
Gordonvale Transfer Station	2-3 years
Green Arrow	3-5yrs/ Do Not Burn
Henley Hill	1-2 years
Kamerunga Conservation Park	7-10 years
Kuranda Range/ Ridge above Skyrail	2-5 years
Lumley Hill	3-10 years
Mt Peter Spur	2-10 years
Mt Sheridan Hillslope	2-10 years
Mt Whitfield –Aeroglen	3-10 years
Pyramid Estate Hillslopes	2-5 years
Redlynch Hillslopes Mitigation Area	Do Not Burn
Redlynch Valley (Horseshoe bend/ Jungara Loop)	3-5yrs/ Do Not Burn
Ridges behind Clifton Beach/ Clifton Beach Spurs	2-5 years
Ridges behind Edmonton, Forest Gardens	2-5 years
Second Beach (Pine Creek-Yarrabah Road)	2-10 years
The Pyramid (Djaragun)	3-10 years
WaddleBla Track/ Peak/ Ridge Bayview Heights	2-5 years

Taken from individual site burn strategies Appendix 7. See site burn strategies for more detail including areas suitable for burning and more exact date ranges for separate

*Frequency: The frequency will be modified to meet risk, e.g. a greater fuel load in a given year will reduce the timeframe considered. Some burns will achieve only a partial mosaic of site that may lead to more frequent burns to achieve percentage coverage targets.

12.2 Appendix 2. Fire Line Guidelines (suggested minimum design)

This is all under the assumption that the land being worked on is Council managed tenure. These fire lines are for managing fire on or passing through Council managed tenure only at this stage.

These guidelines are expected to be met only where practical and reasonable, however suitable justification should be made where the guideline can't be met.

- Four meters wide minimum. Fire height (to be determined), at locations will extend this line based on risk.
- Any flammable garbage removed.
- Mineral earth or gravel acceptable. Asphalt or other hard surfaces acceptable, if existing constructed surfaces.
- All vegetation crossing from one side of road to opposite over centreline of fire line, trimmed back (removed). Trees excepted when shading out grass but generally should be assessed on a case-by-case basis. Pest trees should always be removed.
- All vegetation cleared vertically from lines edge to 2.5m high to allow clear passage of fire unit.
- Easy maintenance preferred possible, either side of track. Allow for follow-up spraying events to reduce grass. Tracks that can be easily slashed and/or sprayed are preferred.
- Any stumps, logs or dead trees removed either side of track up to two meters from lines edge each side. Large piles of brush or similar flammable material removed. Any dead overhanging tree limbs or parts removed.
- Erosion reasonably controlled to prevent degradation of tracks. Steeper inclines = more controls. Preferred to last one wet season minimum.
- Anything past 10 degrees grade has a higher level of requirements.
- Trees within 2m of lines edge, with extensive loose bark considered for removal.
- Any win-rowing, push dirt to non-fire side of track to remove build-up of flammable material in dirt on fire side. Do not push material up against assets to be protected, remove from location.
- Target vehicle to travel on tracks is a light attack fire unit (Ute). Fire trucks are not expected to travel on these fire lines. Fire trucks as a rule will never leave gazetted roads.
- Identified infrastructure assets to have cleared area around e.g. Power pole to have similar fire line cleared if within expected area of impact.
- Continuous tracks with no dead ends. Long tracks with periodic turnabout and/or passing areas. No specification or set distance exists and this will be on a per site basis. If an area suggests itself, then that should be considered for a turnaround. Two access tracks preferred to allow quick egress and avoid collision during refilling actions.

12.3 Appendix 3. Previous Documentation/Policies/ Other Resources

Aboriginal and Torres Strait Islander Cultural Heritage Database and Register
<https://culturalheritage.datsip.qld.gov.au/achris/public/home> as at April-June 2019

AFAC Bushfire Glossary <https://www.afac.com.au/docs/default-source/doctrine/bushfire-terminology.pdf>

BOM Heatwave forecast: <http://www.bom.gov.au/australia/heatwave/>

Cairns Area Fire Management Group – Area Fire Management Plan 2015-2016

Cairns Hillslopes Fire management committee – Objectives

Cairns Regional Council – Biodiversity Strategy 2012-2022 [DM#3589293](#)

Cairns Regional Council – Bushfire Hazard Overlay from CRC Planning Scheme in SSA (Figure 4).
<https://ssapub.cairns.qld.gov.au/connect/analyst/mobile/#/main?mapcfg=CairnsPlan%202016>

Cairns Regional Council – Controlled Burn Program 2008 [DM#1713557](#)

Cairns Regional Council – Internal Traffic Management Advice and Plan [DM#6096264](#)

Cairns Regional Council – LDMG – Spot weather forecasts and long-term weather forecasts

CATALYST - <https://catalyst.qfes.qld.gov.au/> Fire and Risk Mapping

Consultant Report –*Fire Management Practices Cairns Regional Council* September 2014 developed by Nathan Conner: People Country Fire [DM#4544003](#)

Fire Danger and Spread Calculators, Meters or Mobile Applications: -

- CSIRO Grassland Fire Spread Meter for Northern Australia 1997
- CSIRO McArthur Mk5 Forest Fire Danger Meter 1992
- CSIRO McArthur Mk4 Grassland Fire Danger Meter
- CSIRO Fire Spread Meter for Northern Australia Mk2
- NSW Rural Fire Service Pocketbook (Android: Play Store)
- NSW RFS Firefighter Pocketbook (Apple Store)

Fire Warden Finder https://www.ruralfire.qld.gov.au/Pages/fw_finder.aspx

NAM – Simple Workflow per Planned Burn Event (Fire Operations) [DM#6093723](#)

Online Fire Mapping Resources (very similar use):

- NAFI Fire mapping: <https://www.firenorth.org.au/nafi3/>
- Digital Earth Australia Hotspots: <https://hotspots.dea.ga.gov.au/>
- FIRMS <https://firms.modaps.eosdis.nasa.gov/map/#z:6;c:137.9,-32.9;d:2019-12-30..2019-12-31>

QLD State Disaster Management Plan <https://www.disaster.qld.gov.au/cdmp/Documents/Queensland-State-Disaster-Management-Plan.pdf>

RESCINDED - Cairns Regional Council NO.1:06:32 – Bushfire management General Policy [DM#515532](#)

Regional ecosystem descriptions, protection status and fire management guidelines taken from <https://apps.des.qld.gov.au/regional-ecosystems/landzones/?bioregion=7> as at April-June 2019

Regional Ecosystems Mapping and Fire regime groups - Wet Tropics <http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={132A5EF1-C626-4B7D-9C33-30311F76FF30}> from QSpatial as at 18/2/2019.

SMEACS Template; Planned Burns Operation Plan and Risk Mitigation Checklist [DM#6039932](#)

SUPERSEDED (replaced by CATALYST) - RediPortal: Fire and Risk Mapping <https://redi.psba.qld.gov.au/portal/>

12.4 Appendix 4. Fire Risk Matrices

Field Assessment Tool –To be used determining risk between identified priority properties

LIKELIHOOD	CONSEQUENCES				
	Insignificant Loss of grasses and minor burning of common tree species	Minor Damage /destruction of Historical & memorial sites, Major inundation of plant pest. Damage to Stock Routes	Moderate Special considerations: Damage to endangered ecosystems & habitats	Major Loss Of Property, Infrastructure, Damage To Primary Production Areas	Catastrophic Community safety – Loss of life
Almost Certain <i>Extremely high fuel load 15 - 20 tonne/hectare, very dry conditions, history of arson</i>	Medium (11)	Medium (16)	High (20)	Extreme (23)	Extreme (25)
Likely <i>High fuel load, 10-15 tonne/hectare, dry conditions</i>	Low (7)	Medium (12)	High (17)	High (21)	Extreme (24)
Possible <i>Medium fuel load 5-10 tonne/hectare, dry conditions</i>	Low (4)	Medium (8)	Medium (13)	High (18)	High (22)
Unlikely <i>Small fuel load 2-5 tonne/hectare normal conditions</i>	Low (2)	Low (5)	Medium (9)	Medium (14)	High (19)
Rare <i>Little fuel load .5-2 tonne/hectare damp conditions</i>	Low (1)	Low (3)	Low (6)	Low {6}	Low {6}

Taken from: Tony Johnston (2005) QNRM Regional Fire Strategy and Implementation Plan; Northern Region.

12.5 Appendix 5. FIRECOM Plan

CRC Wildfire Emergency Contacts for Assistance

Cairns Regional Council staff should be contacted in the order provided below if a response is required.

All Fires

On-call Natural Assets Management Officer	4044 3024	-	-
David Lloyd	-	0459 904 227	D.Lloyd@cairns.qld.gov.au
Lewis Defranciscis	-	0457 823 890	L.Defranciscis@cairns.qld.gov.au
Tom Crumpton	-	0459 877 005	T.Crumpton@cairns.qld.gov.au
Jade Monda	-	0408 746 447	J.Monda@Cairns.qld.gov.au

Mt Whitfield and Lumley Fires as backup

Dave Parsons	-	0458 023 387	D.Parsons@cairns.qld.gov.au

12.6 Appendix 6. Event Plan 2019

2019

Event	Dept.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Citizenship Ceremonies	M&C												
Australia Day Esplanade	M&C	26											
Australia Day Northern Beaches	M&C	26											
Australia Day Awards	M&C	25											
Chinese New Year	P&E		4-20										
International Women's Day Breakfast	M&C			8									
Youth Week	CS&CS				TBC (3-14)								
ANZAC DAY - Cairns	M&C				25								
ANZAC DAY - Regional	M&C				25								
Trinity Beach Vibe	P&E					12							
Beach Netball	P&E					TBC							
Cairns African Festival	P&E					21-26							
Eco Fiesta	M&C						TBC						
Mayors Charity Golf Day	M&C						TBC						
Cairns Airport Adventure Festival	P&E						TBC						
Australian Dolphins National Swimming Team Training Camp	P&E						23-31	1-8					
Cairns Junior Eisteddfod	CS&CS						TBC	TBC					
CIAF (Cairns Indigenous Art Fair)	CS&CS							TBC					
Australian Pole Sports Championships	P&E							6-7					
Naidoc Week	CS&CS							8-15					
Arrow Experience	P&E							14					
Cairns Show	P&E							27-28					
Relay for Life	P&E							TBC					
Multicultural Month	CS&CS								1-31				
Australian Dolphins National Paralympic Swimming Team Camp	P&E								TBC				
Reef to Reef	P&E								8-11				
Gordonvale Pyramid Race	P&E								17				
Cairns Cup	P&E								TBC				
Seniors Week	M&C								18-26				
Cairns Festival	CS&CS								24-31	1			
Targa Great Barrier Reef	P&E								30-31	1			
Carnival on Collins	CS&CS									1			
Cairns Amateurs	P&E									12-14			
Baseball QLD U16 State Championships	P&E									TBC			
Crocodile Trophy	P&E										TBC		
Reef Feast Palm Cove	P&E										4-6		
Cairns Tropical Pride	P&E										TBC		
Cairns Tennis International	P&E										TBC		
Ride to Work Day	M&C										18		
Trinity Beach Vibe	P&E										20		
Babinda Harvest Festival	P&E										12		

Cairns Regional Council Events Distribution List per Department 2018-2019

Event	Dept.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Marketing and Communications	Planning & Environment	Cultural Services	Economic Development
Baby Welcome	M&C																
25 Year Service Dinner	M&C																
CBD Christmas Lights	M&C																1
Mayors Christmas Cheer Appeal	M&C																TBC
Queensland Bulls Match	P&E																TBC
Carols by Candlelight	M&C																TBC
New Year's Eve	M&C																31

12.7 Appendix 7. Site Burn Strategies

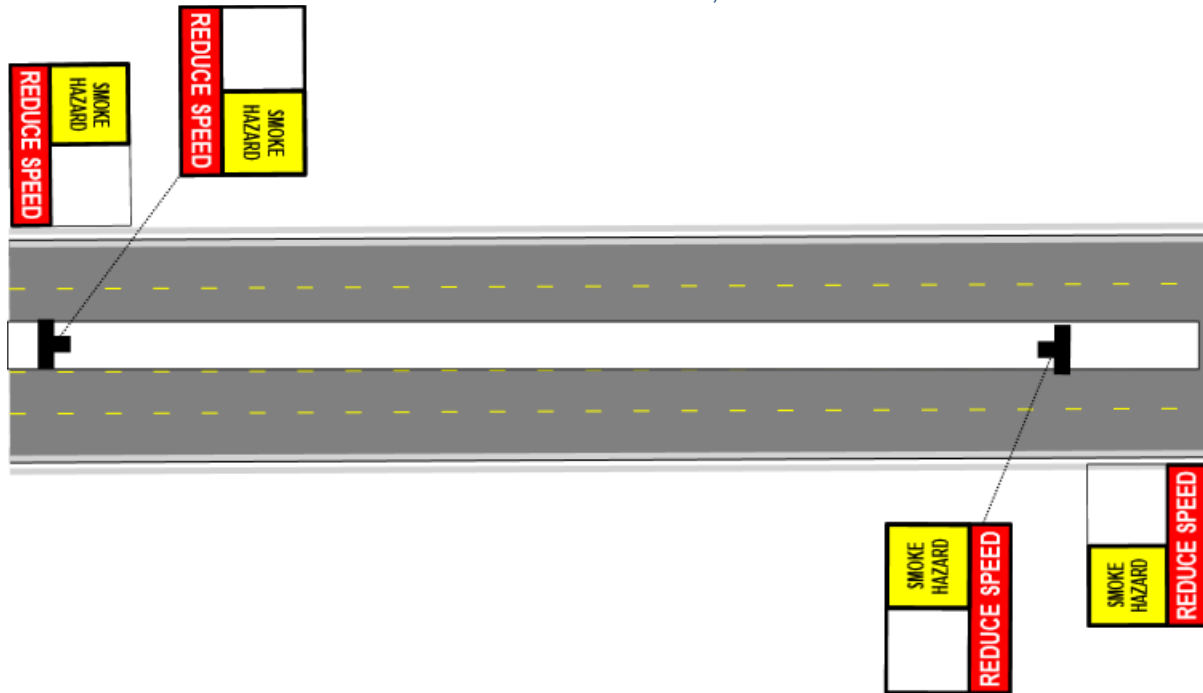
Site	Document Number
Between Redlynch Estate to Smiths track (Stoney Creek Rd); hillslopes above	DM#6111735
Buchan's Point	DM#6111604
Cairns Central Swamp D (Across from TAFE)	DM#6106791
Cairns Central Swamp E (Behind Edge Hill School)	DM#6106792
Cairns Central Swamp F (End Mayers Street)	DM#6106794
Cairns Central Swamp G (163-247 Pease Street)	DM#6106789
Cattana Wetlands	DM#6111764
Copperlode Rd/ Lake Morris Road Lake Morris Road - Spurs	DM#6111789
Earl Hill; Trinity Beach	DM#6108671
Ellis Beach	DM#6071959
Giangurra (Pine Creek-Yarrabah Road) and Bessie Point	DM#6111795
Gordonvale Transfer Station	DM#6071931
Green Arrow	DM#6554159
Henley's Hill	DM#6071939
Kamerunga Conservation Park	DM#6071982
Kuranda Range/ Skyrail Ridge	DM#6111134
Mt Lumley - Stratford	DM#6113184
Mt Sheridan Hillslopes Area	DM#6111797
Mt Peter Spur	DM#6111812
Mount Whitfield – Aeroglen	DM#6071945
Pyramid (Djaragun) and Car Park	DM#6106784
Pyramid Estate; hillslopes above	DM#6111811
Redlynch Hillslopes Mitigation Area	DM#6108156
Redlynch - Jungara Loop (Horseshoe Bend)	DM#6108787
Ridges behind Clifton Beach - Clifton Spurs	DM#6111803
Ridges behind Edmonton, Forest Gardens	DM#6111808
Second Beach (Pine Creek-Yarrabah Road)	DM#6111816
WaddleBla Track/ Peak/ Ridge; Bayview Heights	DM#6111817

Reviews and plan development will be ongoing either on a five-year review cycle or post events.

12.8 Appendix 8. Standard Traffic Management Plan for Hazard Reduction Burns/ Smoke Hazard

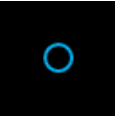
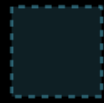
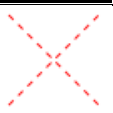
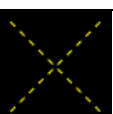
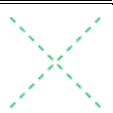
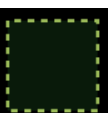
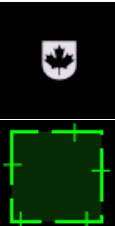
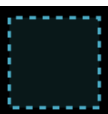


On roads before fire zone about 150m -200m. If a dual road, then should be on both sides of road.



As per internal CRC advice provided in [DM#6096264](#)

12.9 Appendix 9. Site Burn Strategies Map Legend

Access Closure (road, path etc.)		Strategic Point 1		Fire Line (Green Break)		Smoke or Hazard Sign	
Assets to be Protected		Strategic Point 2		Fire Line (Spray and Mechanical Line)		Strategic or Tactical Significance	
Command, Control and Coordination		Strategic Point 3		Mechanical Fire Line		Traffic Control Point	
Contained (fire edge)		Strategic Point 4		Spray Fire Line		Council Land	
Drafting Point (intake)		Strategic Point 5		Walking Track (Blue Arrow)		Cadastre/ Lot Borders	
Helipad		Sector Alpha		Walking Track (default or Red Arrow)		Spot Fire	
Ignition Point		Sector Bravo		Walking Track (Yellow Arrow)		Primary Site Hydrant	
Logistics Related		Sector Charlie		Walking Track (Green Arrow)		Secondary Site Hydrant	
Predicted (fire edge)		Sector Delta		Other (Note in comments)		Third/ Backup Site Hydrant	
Staging Area		Sector Echo		Proposed (back-burn)		Other Hydrants	

12.10 Appendix 10. Upcoming Burn Schedule

See DM# [6075278](#)