



BUSHFIRE BRIGADE STANDARD OPERATING PROCEDURES

Shire of Cranbrook

Abstract

To provide a coordinated response to, and management of, fires in all areas of the Shire of Cranbrook protected under the authority of the Bush Fires Act 1954 and Bushfire Regulations.

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ACRONYMS

AAS	Aerial Attack Supervisor
ASOP	Administration Standard Operating Procedure
BFAC	Bushfire Advisory Committee
BFB	Bushfire Brigade
CBFCO	Chief Bushfire Control Officer
CEO	Chief Executive Officer
DBCA	Department of Biodiversity, Conservation and Attractions - Parks and Wildlife Service
DBCFCO	Deputy Chief Bushfire Control Officer
DFES	Department of Fire and Emergency Services
ESRO	Emergency Services and Recreation Officer
GC	Ground Controller
HMA	Hazard Management Agency
IC	Incident Controller
LEMA	Local Emergency Management Arrangements
LEMC	Local Emergency Management Committee
LG	Local Government
MFA	Manager of Finance and Administration
MOW	Manager of Works
SC	Sector Commander
SOC	Shire of Cranbrook
SOP	Standard Operating Procedure

OBJECTIVES

1. To outline administration procedures relating to the functioning of the Shire of Cranbrook Bushfire Advisory Committee (BFAC)
2. To outline fire response arrangements for bush fire brigades in the Shire of Cranbrook
3. To outline procedures for the management of major fire incidents in the Shire
4. To outline when and how the escalation of incident management procedures may occur
5. To provide additional operational information to facilitate effective bush fire suppression
6. To outline safety and welfare considerations for fire fighters and contractors
7. To provide a scope and background to the response plan.

SCOPE

The scope of this document is limited to:

1. The geographic areas for which the Shire of Cranbrook has responsibility for bushfire response
2. Administration functions of the Shire of Cranbrook BFAC
3. The operation and use of Shire of Cranbrook brigades and resources for bush fire suppression
4. To provide bushfire brigade operational support to neighbouring Shire's if required.

DISTRIBUTION LIST

COPY	ORGANISATION	LOCATION / OFFICER	CONTACT	MOBILE
1	Shire of Cranbrook	Office Hard Copy	9826 1008	0417 932 819
2	Shire of Cranbrook	CBFCO	9851 7265	0428 837 939
3	Shire of Cranbrook	DCBFCO - East	9834 3048	0427 343 048
4	Shire of Cranbrook	DCBFCO - West	9856 6232	0427 566 232

DOCUMENT REVIEW

Review Schedule

- Annually: Update '000' Agreement with the Department of Fire and Emergency Services (DFES);
- Emergency Services staff to update LEMA Emergency Contacts Register and confirm Recovery Coordinator.
- Every Two years: Shire Chief Executive Officer (CEO), Chief Bushfire Control Officer (CBFCO) and Emergency Services staff to review entire document, or as agreed by BFAC.

Review Responsibility

This Bush Fire Response Plan shall be jointly reviewed and jointly amended by the Shire of Cranbrook CEO, Emergency Services staff and CBFCO.

Review Number	Date	Section Amended	Reviewed by	Endorsed - BFAC	Endorsed - Council
Previous Document	15/06/2018	Full Biennial Review	Shire CEO, CBFCO, ESRO		
1	15/01/2019	New Document – Bushfire Brigade Standard Operating Procedures	ESRO		
1	09/07/2024	Full Biennial Review	CESM		

LOCAL AREA INFORMATION

Description Of LG

The Shire of Cranbrook is a in the Great Southern region of Western Australia, approximately 92 kilometres north of Albany and about 320 kilometres south-southeast of Perth. The Shire covers an area of 3,277 square kilometres and its seat of government is the town of Cranbrook.

The geography of the Shire is largely agricultural, with Stirling Range National Park, in the South-East of the Shire. The main industries are: sheep, wool, cattle, pigs, chickens, course grains, timber, vineyards, wineries, export vegetables, and olives.

Population And Demographics

The Shire of Cranbrook has a population of around 1096 - with urban areas consisting of approximately Cranbrook (pop. 275), Frankland River (pop. 90) and Tenterden (pop. 95).

Bush Fire Risk Areas And Elements At Risk

The following locations are High Bush Fire Risk areas:

- Stirling Range National Park – difficult terrain for suppression, isolated
- Town sites of Cranbrook, Frankland River and Tenterden
- Lake Poorrarecup and Lake Nunijup – popular tourist sites.

Land Use Areas

Areas of different land use are clearly marked on the following maps:

- Department of Biodiversity, Conservation and Attractions (DBCA) - Parks and Wildlife Service Map
- Shire of Cranbrook Bushfire Map
- DFES Great Southern Map Directory

Hazards To Fire fighters And Equipment

The following are known hazards to fire fighters and equipment:

- Farm sheds contain various fuels and toxins (pesticides, herbicides, etc.) and may be treated as a HAZMAT incident.

ASOP 1 – BUSHFIRE ADVISORY COMMITTEE MEETING

The BFAC is an advisory committee to the Council. To ensure that the BFAC is adhering to the required legislative requirements the following meeting procedures must be adhered to.

Bushfires Act 1954 - 67. Advisory committees

(1) A local government may at any time appoint such persons as it thinks fit as a bush fire advisory committee for the purpose of advising the local government regarding all matters relating to the preventing, controlling and extinguishing of bush fires, the planning of the layout of fire-breaks in the district, prosecutions for breaches of this Act, the formation of bush fire brigades and the grouping thereof under group brigade officers, the ensuring of co-operation and co-ordination of bush fire brigades in their efforts and activities, and any other matter relating to bush fire control whether of the same kind as, or a different kind from, those specified in this subsection.

Council votes on the membership of the BFAC at the special council meeting held after a Council election – this was last voted on in October 2015. The BFAC Membership is:

- Cr Casson
- CBFCO
- 2x Deputy Chief Bushfire Control Officers (DCBFCO's),
- Base Radio Operator
- 12x Captain of each BFB
- 12x Secretary of each BFB.

Therefore these are the only people who can vote at a BFAC meeting. Observers and Shire staff are unable to vote. The Council delegate and proxy cannot both vote. However, if the proxy is there in the capacity of a BFB Captain or Secretary, then both can vote.

(2) A committee appointed under this section shall include a member of the council of the local government nominated by it for that purpose as a member of the committee, and the committee shall elect one of their number to be chairman thereof.

In accordance with the Local Government Act 1995 a quorum is usually half and one of the number of members. For the current BFAC this equates to 14 voting delegates needing to be present for a meeting to occur.

(3) In respect to a committee so appointed, the local government shall fix the quorum for the transaction of business at meetings of the committee and may –
(a) make rules for the guidance of the committee; and
(b) accept the resignation in writing of, or remove, any member of the committee; and
(c) where for any reason a vacancy occurs in the office of a member of the committee, appoint a person to fill that vacancy.

The BFAC usually meets twice a year in March / April and again in September / October. The March / April meeting is considered to be the Annual General Meeting where office bearers are elected.

(4) A committee appointed under this section —

(a)) may from time to time meet and adjourn as the committee thinks fit;

(b))) shall not transact business at a meeting unless the quorum fixed by the local government is present;

(c) is answerable to the local government and shall, as and when required by the local government, report fully on its activities.

SOP 1 – PERSONAL PROTECTIVE EQUIPMENT (PPE)

All personnel should have appropriate Personal Protective Equipment on the fire ground and for some training activities. The Shire of Cranbrook provides PPE to all registered brigade members upon request. PPE is funded through the Annual Local Government Grants Scheme (LGGs) Operational Funding .

A copy of the PPE order form can be obtained from the Shire of Cranbrook website www.cranbrook.wa.gov.au/emergencies/bushfire-and-brigade-information or by contacting the Shire office on 9826 1008.

1.1 PPE The Shire Provides

- Proban Treated Overalls or Pants / Jackets
- Goggles
- WA Bushfire Helmet
- Leather Riggers Gloves.
- half mask respirator or equivalent smoke mask

1.2 Minimum Clothing Requirements To Attend A Fire In The Shire Of Cranbrook

- Long pants and long-sleeved shirt – natural fibres e.g. cotton / wool
- Protective boots
- Eye protection, goggles / Safety glasses
- Australian Standard safety helmet
- Gloves – leather.
- Respirator

1.3 Desirable PPE

- Wool or cotton socks
- Sturdy leather boots - preferably lace up type.

Personnel arriving at fires without the required minimum PPE must don the appropriate PPE, leave the fire ground or be assigned a non-fire fighting task. It is the responsibility of each individual and his or her supervisor to ensure the correct level of PPE is worn in the correct manner for all brigade activities. It is recommended for safety reasons that undergarments also be cotton.

1.4 Respirators

The Shire has provided DFES sanctioned respirators in all heavy duty appliances in accordance with the crew numbers per vehicle – plus some spares.

Disposable particle masks are available upon request to those working on a fire ground. It is the responsibility of the brigade captain of the heavy duty appliances to notify the Shire should replacement PPE be required, including respirators and disposable respirators.

1.5 PPE Maintenance

All brigade personnel are responsible for the availability, care and cleanliness of their own PPE in accordance with the manufacturers care instructions. PPE equipment may be replaced on a 'like for like' basis and only if damaged or lost.

SOP 2 – INITIAL NOTIFICATION AND CALL OUT

2.1 000 Calls

Fires reported from the public travelling should be via the “000” number, this will enable the most effective response. DFES Communication Centre will record the relevant details and notify the Shire of Cranbrook, as per the ‘000’ Agreement (see section 10) between DFES and the Shire.

2.2 000 Agreement Contacts

In order to advise Local Government of 000 calls promptly it is suggested that:

- Contacts are 24 / 7 numbers.
- The 4th contact will always be DFES Regional Duty Coordinator
- No more than 3 contacts per LG will be recorded.

Name	Role	Phone	Mobile
Linda Gray	CEO	9826 1008	0456 600 133
Graeme Marshall	CBFCO		0407 261 005
Petter Ettridge	DCBFCO		0458 552 271
Simon Hilder	DCBFCO		0427 888 379
Duty Officer	DFES	1800 314 644	

2.3 Fire / Smoke Notification Direct To Shire

If smoke is reported by a member of the public during the Shire the following procedure will occur:

- Shire staff notifies the CBFCO (or Deputy Chief Bushfire Control Officer (DBFCO) if CBFCO unavailable)
- CBFCO contacts local brigade to ascertain fire location /or if it is or isn't a permit burn during the restricted burning period
- CBFCO contacts the Shire to put out an SMS with the following example information included:
 - “Shire of Cranbrook – Fire Away on “Insert property owners name”
 - “Insert location e.g. road name”.
 - “All available units within a 15km etc. radius please respond and / or all brigades on standby”.

Subsequent SMS's can be sent during the incident providing further information to brigades or the community.

Local Brigade Captains:

BRIGADE	NAME	PHONE	MOBILE
CBFCO	Graeme Marshall		0407 261 005
DCBFCO – West	Peter Ettridge		0458 552 271
DCBFCO – East	Simon Hilder		0427 888 379
Base Radio Operator	Vacant		
Bokerup / Unicap	Tom Ettridge		0427 566 232
Bokerup / Unicap	Greg Banks		
Central	Jamie Clime		0419 921 169
Cranbrook Town	Peter Eddy		0499 976 502
East Cranbrook	Harley Smith		0427 258 237
Frankland River	Peter Ettridge		0458 552 271
Frankland River Town	Andrew Murray		0427 552 321
Gordon	John Egerton-Warburton		0428 267 088
Kybellup	Simon Hilder		0427 888 379
Nunijup	Lindsay Watterson		0427 524 007
Tenterden	Chris Tomlinson		0428 751 100
Tunney	Sean Morgan		0427 343 066
Woolonga	Neil Preston		0427 268 062

SOP 3 – BRIGADE MOBILISATION

On receiving information about a fire, the CBFCO (or DBFCO in his absence) will notify the appropriate brigades via telephone, WAERN radio, or SMS. The CBFCO (or DBFCO in his absence) will mobilise brigades depending on prevalent weather conditions and assets at risk.

3.1 On Call Rosters

- Bushfire Brigades (BFB) in the Shire of Cranbrook do not use rosters
- There is a scheduled radio check that occurs each day from the start of the restricted burning period (as required). This allows officers to ascertain the availability of personnel during the day
- Scheduled radio checks involves all personnel on the Shire of Cranbrook bushfire radio network.

3.2 Mobilised Brigade Members

Are required to send a return SMS to the Shires dedicated SMS Number 0488 868 750 (which they receive the initial SMS fire notification on) when they attend an incident. This is to ensure that the Shire can maintain adequate records on brigade volunteers attendance at all incidents.

3.3 Fire Appliance Mobilisation

Crew levels must not exceed the number of available seat belts in accordance with the Western Australia Road Traffic Act 1974 and Road Traffic Code 2000.

- Farmer Units to adhere to the seat belt requirements in the Road Traffic Act 1974 and Road Traffic Code 2000
- Fast Attack / Light Tanker appliances must be crewed by two people
- Heavy Duty appliances must be crewed by three people.

Driver Licence	All drivers must hold a current and appropriate class of driving licence.
Alcohol And Drugs	Drivers are not to operate any vehicle whilst under the influence of alcohol or non-prescribed drugs. This includes fire appliances.
No Smoking	Smoking is not permitted in any Shire of Cranbrook vehicle.
Mobile Phones / VHF Radios	Drivers are not to use mobile phones or operate a two-way radio whilst driving.
Traffic Infringements	Drivers will be personally responsible for any parking or traffic fines.
Lights On	Driver to ensure appliances are driven with headlights on.
Seat Belts	Personnel are to wear seat belts when travelling to, and from a fire.
Travelling On The Outside of Vehicles	Personnel are only to ride on the outside of an appliance when the appliance is specifically designed to do so and only when on a fire ground.
Fire Hazards	Crews are to check the undercarriage of appliances to ensure it is free of leaves and other debris.

3.4 Non-Emergency Driving

During non-emergency driving (i.e. when not responding to an incident), drivers of fire appliances and vehicles are subject to all regulations and laws detailed in the WA Road Traffic Code 2000.

Emergency warning lights must not be used when returning to fire sheds, attending training or exercises and general operations except for the purposes of testing.

3.5 Exemption From Traffic Code

Shire of Cranbrook BFB members are to obey all traffic rules and regulations when attending all incidents. While the Road Traffic Code 2000 gives drivers of emergency vehicles certain exemptions to certain provisions under the Code the safety of crew and the public remains of paramount importance.

3.6 Provisional Driver's Licence Holders ('P' Plates)

Provisional Licence Holders MAY drive the following:

- Any vehicle / appliance under GVM 4.5 tonnes (they must display the appropriate 'P' plate on the rear and front of the vehicle)

Provisional Licence Holders MAY NOT drive the following:

- Any type of emergency vehicle / appliance responding to an incident.
- Any motor vehicle / appliance that has a Gross Vehicle Mass (GVM) of 4.5 tonnes or more (all dual rear wheel fire appliances)
- Any motor vehicle / appliance that is equipped to seat 12 or more adults including the driver (personnel carrier).

SOP 4 – INCIDENT MANAGEMENT

Co-ordination of bush fire suppression efforts will be based on the principles of the Australasian Inter-Agency Incident Management System (AIIMS) and authority is defined by the relevant Acts and legislation.

Implementation is scaled to the needs of the incident. The AIIMS structure is based on the eight functional areas described below, not all of which may be implemented at every incident.



4.1 Incident Controller

A designated Incident Controller (IC) shall be in place for every fire, regardless of its size.

- The CBFCO will ensure the IC is competent for the size and nature of the incident
- In the first instance the first arriving Crew Leader assumes the role and responsibilities of the IC. This role can be passed on to more senior personnel when they arrive at the incident
- The identity of the IC must be declared to all personnel involved in the incident and recorded.

Incident Controller Responsibilities For Duration Of Incident

- Confirm location of the fire
- Contact DFES COMCEN or 000 and log the Incident
- Conduct initial assessment of the fire zone
- Confirm sufficient resources or request additional resources
- Ensure brigade members have sent an SMS to the Shire stating their attendance at the incident
- Request spot weather forecast if required
- Assume control and brief incoming crews
- Identify and preserve the point of ignition
- Monitor the safety of crew
- Establish a Forward Control Point if required
- Monitor fire ground and base communications
- Maintain frequent radio and or mobile communications with the CBFCO
- Scale up, or down, incident as required
- Advise that the fire is under control and send control message including the time fire was controlled
- Ensure mop up meets safety requirements
- Report any damages, incidents or accidents to the CBFCO and Shire of Cranbrook.

4.2 Incident Escalation

It is the role of the CBFCO (or DCBFCO in his absence) to mobilise brigades to a fire incident. It may be common for this initial mobilisation to include multiple brigades.

If, in the opinion of the CFBCO (or DBFCO in his absence) a fire is likely to take a significant time to control (e.g. half a day), assistance can be sought from DFES and / or DBCA for additional fire fighting and incident management resources. See Mutual Aid section in SOP 5 - Response

4.3 Incident Management Team (IMT)

In the event of a Level 2 or 3 fire, a joint Incident Management Team from the Shire, DFES and / or Department of Biodiversity, Conservation and Attractions (DBCA) may be established to manage the incident, in line with ALLIMS.

4.4 Incident Handover to DFES

The IC or CFBCO may wish to hand over control of the fire incident to DFES Operations or DBCA if one or more of the following occur:

- A major bush fire (Level 2/3)
- Multiple incidents (Level 1/2/3)
- Long duration incidents (Level 2/3)
- Serious injury or fatality
- Community under threat
- Major infrastructure threat or loss (lifelines).

Handover MOU

The Shire of Cranbrook does not currently have a signed Handover Agreement with DFES.

SOP 5 - RESPONSE

IC and or CBFCO:

5.1 Emergency Operations Centres

There are a number of pre-determined Emergency Operations Centres in the Shire of Cranbrook. Each facility has a minimum: dedicated phone, internet, fax, potable water, toilets.

Location	Facility	Address	Phone	Mobile	Fax
Tenterden	CBFCO Residence	Lunt Road Tenterden	9851 7265	0428 837 939	9851 7275
Cranbrook	Cranbrook Shire Office (CEO – Linda Gray)	Gathorne Street	9826 1008	040456 600 133	9826 1090
Cranbrook	The Hub	Cnr Dunn & Climie Street	9826 1008		

5.2 Forward Control Centres

Location	Facility	Address	Phone	Mobile	Fax
Frankland River	Frankland River Community Centre	Wingebellup Road	9855 2310		
Tenterden	Tenterden Fire Shed / Community Hall	Cnr Gillam St & Trimmer St	Contact CBFCO	Contact CBFCO	

5.3 Control Point

In establishing an initial Control Point the following should be considered:

- Low fuel zone
- Good access (for incoming crews, or escape path)
- Room for vehicles to park and turn around (away from major roads)
- Good communications (mobile phone and bush fire radio)
- Close to a water point.

5.4 Briefings

Incoming crews should ideally be briefed before commencing fire fighting activities. It is suggested that any briefings follow the SMEAC format:

- Situation
- Mission
- Execution
- Administration / Logistics
- Communications.

5.5 L.A.C.E.S Principle For Safety

FACTOR	ALL FIRE FIGHTERS	CREW/SECTOR LEADERS
L Lookouts	<p>Everybody looks out for everybody else</p> <p>All personnel continuously re-evaluate their situation and are able to communicate changes to the environment that may threaten their safety.</p>	<p>Assign a lookout to a safe vantage point who remains in communications with the Crew Leader</p> <p>Task all crew members to be alert.</p>
A Awareness	<p>Everybody is aware of the current and anticipated behaviour of the fire and other incident hazards</p> <p>All personnel have a responsibility to be alert and act decisively before situations become critical</p>	<p>Remain aware of the fire situation including:</p> <ul style="list-style-type: none"> • Current and potential weather • Terrain • Fire behaviour • Fuel types and fuel loads • Hazards • Crew locations • Nearby activities.
C Communication	<p>Everybody speaks up about what is happening and their concerns at the incident, and everybody listens.</p>	<p>Stay in communication with your people</p> <p>Maintain suitable radio contact Communicate changes in situation</p> <p>Provide regular updates</p> <p>Use briefing procedures.</p>
E Escape Routes	<p>Know your escape route at all times.</p>	<p>Ensure your crew know the escape route</p> <p>Position vehicles to allow for rapid escape.</p>
S Safety Zone	<p>Identify a safety zone (anchor point) to which you can retreat if fire behaviour escalates</p> <p>Everybody helps everybody to survive.</p>	<p>Ensure all crew are aware of suitable safety zones</p> <p>The safety zone must be large enough, close enough and free of hazards.</p>

5.6 Crew Safe Working Practices

Personal Safety	<ul style="list-style-type: none"> • Understand your task • Maintain visual or electronic communications • Always adhere to PPE standards • Work from an anchor point – where practical work from burnt or clear ground - at a minimum do not work too far from safe ground • Identify suitable escape routes • Withdraw if you feel threatened • Avoid burnt out trees as branches or the tree may fall without warning
Protective Water Supply	<ul style="list-style-type: none"> • Ensure that the appliance maintains a 25% minimum reserve of water for crew and vehicle protection.
Protective Water Supply	<ul style="list-style-type: none"> • Ensure that the appliance maintains a 25% minimum reserve of water for crew and vehicle protection.
Safe Driving	<ul style="list-style-type: none"> • Observe safe driving practices - drive cautiously when driving in smoke or rough terrain • Activate beacons and headlights on the fire ground • Do not park appliances where they may obstruct or limit access to escape routes • Park appliances on burnt or clear ground facing the escape route
Aerial Suppression	<ul style="list-style-type: none"> • Clear the drop zone where water bombing is being undertaken. If this is not possible, take precautions as per item 31 in the Operations Checklist booklet.
Report Near-Misses	<ul style="list-style-type: none"> • All near miss accidents are to be reported

Entrapment and Burn Over

It is vital personnel understand both entrapment and burnover situations including how they can be prevented and how to respond when they occur.

- Entrapment:

“A situation in which individuals are exposed to life threatening or potentially life threatening conditions from which they cannot safely remove themselves.”

- Burnover:

“A section of fire that overruns personnel and/or equipment.”

Please see Attachment 1- DFES SOP 3.5.11 – Entrapment and Burnovers at Bushfires

5.7 Electrical Hazards

<p>When an electrical hazard is found</p>	<ul style="list-style-type: none"> • Immediately inform OIC and all crew members. • Don't apply water as a fire suppressant on any AC power until the hazard has been isolated. • Maintain a safe distance for emergency service personnel and equipment. • Demarcate and isolate the danger area as soon as possible, observe and monitor residual water flows. • Maintain a minimum safety distance of 30 metres for members of the public
<p>Location of a broken or downed wire</p>	<ul style="list-style-type: none"> • On arrival at an incident treat all wires in contact with the ground as though they are energised. • Request the assistance of the energy provider. • While maintaining a minimum safe distance, locate the length of the fallen wire in both directions, in order to determine the total size of the danger area. • Ensure the energy source is not being transferred through another conductor e.g. steel fence, vehicle body etc. • Demarcate the area, keep bystanders away and isolate source using the Isolation • Method (for low voltage if possible) or await the assistance of the energy provider. Note: When wire and cable products are exposed to water or excessive moisture, e.g. following flooding or storm damage, the components may be damaged resulting in insulation or termination failure
<p>Pole top fires</p>	<ul style="list-style-type: none"> • On arrival at an incident treat all electrical components as though they are energised. • Do not apply water until isolation has been confirmed. • Do not park under or work in the fall zone of the power lines as the pole may be weakened or burn through causing the lines to fall. • While maintaining a safe distance, demarcate the area, keep bystanders away and request the assistance of the energy provider. • Once the area has been made safe by the energy provider, firefighters can apply water to the pole.
<p>Vehicle accidents involving electricity</p>	<ul style="list-style-type: none"> • Where a vehicle has collided with a power pole or is in contact with electrical wires: • Request the assistance of the energy provider via ComCen • Maintain a safe distance (minimum of 6

	<p>metres) until power has been isolated.</p> <ul style="list-style-type: none"> • Do not stand, work, park appliances or position equipment beneath power lines or poles as they may fall during the incident. • Demarcate danger area and keep bystanders away. • If safe to do so, occupant/s should remain in the vehicle and must be advised to remain calm, stay still and avoid touching any metal on the vehicle until power is isolated. • If the occupants must evacuate the vehicle they need to be instructed to not touch the vehicle and the ground at the same time, as this may create a path for the electricity to flow through their body, resulting in electrocution. They should jump clear of the vehicle with their feet together and shuffle at least 6 metres away to a safe area. • Rescue by crews can only be affected once the power supply has been isolated.
<p>Pyrolysis in vehicle tyres</p> <p>**Tyres on trucks, cranes and other heavy vehicles may catch fire under a range of circumstances, with the obvious potential for the tyres to explode. A lesser-known danger arises when the combustion takes place inside the tyre, with no external signs. This can cause a build-up of flammable gases and pressure within the tyre, which may ultimately rupture or explode.</p>	<ul style="list-style-type: none"> • Pyrolysis in vehicle tyres can be caused by a lightning strike, contact with live high voltage apparatus, or other methods of overheating. • If a vehicle has been struck by lightning or contacted live high voltage power lines, it is recommended by Western Power that the vehicle should be towed to a safe area such as a depot, with an exclusion zone established around the vehicle of at least 100m for 24hrs before approaching.

5.8 Water Resources

Fast Fill Units

The following brigades have fast fill units:

- Cranbrook Town
- East Cranbrook
- Frankland River
- Frankland River Town
- Gordon
- Nunijup
- Tenterden
- Tunney
- Woolonga

Hydrants

Cranbrook and Frankland River have numerous hydrants located within the town sites – please see attached hydrant location maps. [See Appendix 1 for hydrant locations – Cranbrook and Frankland River.](#)

Standpipes

There are standpipes in the town sites of Cranbrook and Frankland River. These are marked on maps (see Appendix 1) attached to this document.

Locality	Standpipe / Tank	Road	Cross Road / Landmark
Cranbrook	Standpipe	Salt River Road	Across the road from CBH facility
Cranbrook Depot	Standpipe	Great Southern Highway	Shire Depot Buildings
Frankland River	Standpipe	Centre of town	Information Bay
Tenterden	Water Tank	Cnr Gilliam & Trimmer Street	Located behind the Tenterden Fire Shed and Hall

Portable Water Tanks

Contractors have portable water tanks. If portable tanks are required, follow the procedures under SOP 5.15 - Authorising Expenditure and Equipment Use.

5.9 Air Support

A suitably qualified Ground Controller (GC) is to be appointed if air support is to be deployed to the incident. The Ground Controller must be briefed on the tactical requirements by the IC and operate on the appropriate control channel. The GC should not be required to assist in any other way on the fire ground to ensure open communication with the aircraft is maintained to fire fighters safety at all times.

Responsibilities Of The Ground Controller

General Safety Procedures	<ul style="list-style-type: none"> • Brief ground crews prior to commencement of fire bombing operation • Clear drop zone upon receiving 1 minute in-bound call • GC / pilot / AAS to confirm drop zone is clear • Ground crews may re-enter the drop zone on GC confirmation • The GC is to maintain contact with the AAS throughout continuous fire bombing operations
Standard Brief to Ground Crews	<ul style="list-style-type: none"> • If you are caught in the drop zone make sure that you: • Move away from the fire line • Don't run or panic • Watch out for falling branches and debris • Place hand tools well clear • Ensure your hard hat is on and secured • Watch your footing • Wash thoroughly with cold water if you are hit by foam
Hazards to Aerial Platforms	<ul style="list-style-type: none"> • Towers/Power lines • Stags/Tall trees • Turbulence/changing winds • Other aircraft flying over the incident ground • Low visibility areas • Erratic/Extreme fire behaviour • Terrain – especially steeply rising ground

Requests For Air Support

- IC requests air support via CBFCO
- CBFCO contacts DFES Duty Officer on 9845 5000
- DFES Duty Officer coordinates and informs CBFCO of what resources are being committed, contact details and an ETA.

The following air support may available to the Shire of Cranbrook:

- Water Bombers with Air Attack Supervisor – Albany or Manjimup

5.10 Bushfire Status	
STATUS	DEFINITION/MEANING
Running / Going	The fire is spreading / expanding at its perimeter
Contained	The spread / expansion of the fire has been halted Suppression activities are continuing Note: A contained fire may still be burning freely within control lines
Controlled/ Under Control	The complete perimeter of the fire is secured and no breakaway is expected Continued patrolling of control lines is required
Mopping Up / Black Out	The fire is under control but works is still required to secure the site before it can be declared safe. Blackout requires the establishment of an appropriate perimeter / firebreak for the size of the fire and current and forecast weather conditions. This means all potential re-ignition sources should be physically removed and / or extinguishment through the use of earth-moving machinery and/or personnel. The IC is responsible for deciding and declaring the minimum blackout area.
Safe	The fire requires no further suppression action or patrols - Resources will be stood down. Only the IC may declare a bushfire ' <i>safe</i> '.

5.11 Fire Fighting Tactics

The methods used to contain, control and extinguish a bush fire are varied and influenced by many factors. Strategies fall into three broad categories:

Direct Attack

The direct suppression of fire fronts and edges can offer the greatest opportunity to restrict the spread of a bushfire. Direct attack techniques are to be employed when safe to do so.

Parallel Attack

Conducting fire fighting activities along the running edges of a fire can offer protection for fire fighters whilst restricting the spread of bushfires. Parallel attack techniques are to be used when it is not safe to use the direct attack approach.

Defensive Tactics

Where conditions prevent the application of resources against the fire front, the IC is to adopt defensive strategies to protect life, property and key infrastructure. A return to offensive tactics can be considered when it is safe to do so.

Sectorisation

Sectors may be physical or functional in nature. Creating sectors and appointing Sector Commanders (SC) allows the IC to better manage an incident.

Back Burning

When conditions are favourable, back burning is a legitimate method of controlling a running bushfire. However, back burning involves inherent risk and should not be used if conditions are unsuitable. Back burning is only to be conducted at the direction of the IC.

The IC is to ensure that prior to conducting a back burn, the following prerequisites have been met and noted in the incident diary.

PREREQUISITE	NOTES
Reasoning Justified	<ul style="list-style-type: none"> The requirement / opportunity to back burn has been reasoned and established and recorded in an incident diary.
Risk Assessed	<ul style="list-style-type: none"> Meteorological conditions are suitable (and BOM forecast indicates conditions will remain suitable) Vegetation types / fuel loading are suitable
Resources Assessed & Positioned	<ul style="list-style-type: none"> Sufficient resources are in position to safely establish the new containment line created by the back burn A reserve of resources are in position to safely respond to any breakout created by the back burn
Safety / Notifications	<p>All personnel on the fire ground have been made aware of the following:</p> <ul style="list-style-type: none"> The intention to conduct a back burn The timing, location and extent of the back burn The route/s and system of reporting the evacuation of operational personnel from any known or potentially hazardous locations created by the back burn

5.12 Use Of Class A Foams

Suppressants such as A Class foam greatly enhance the penetration and insulation properties of water. Used correctly, A Class foam generates efficiencies during attack and mop-up phases by preventing re-ignition of previously suppressed fuels. Some foam concentrates pose a risk to the environment and there are restrictions imposed on their use near sensitive waterways and agricultural/horticultural areas

DESIRED EFFECT	MIX RATIO (%)	DESCRIPTION	BRANCH	
			CONVENTIONAL (Non-aspirating)	FOAM (Aspirating)
Enhanced Penetration	0.1 – 0.3	FOAM SOLUTION	✓	
	0.3 – 0.5	WET FOAM	✓	✓
Fuel Insulation	0.5 – 0.7	FLUID FOAM		✓
	0.7 – 1.0	DRY FOAM		✓

5.13 Traffic Management

A CBFCO may order a road to be closed during a bush fire incident, to make a situation safer. However, stopping traffic can be very dangerous in and of itself. Police may close a road in any emergency, if requested by the Hazard Management Agency (HMA).

Local Government Roads

The following officers may close / block a local road during a bush fire:

- CBFCO
- IC - HMA
- CEO
- Manager of Works (MOW).

Main Roads

On Main Roads, Main Roads WA engages contractors to perform traffic control and road closure functions. To obtain Main Roads assistance, contact the Main Roads Duty Officer on 138 138, or the DFES Duty Officer on 9845 5000.

5.14 Mutual Aid

To request assistance from other local governments or agencies for a fire burning in and being managed by the Shire of Cranbrook, the IC or CBFCO may contact the DFES Duty Officer Great Southern on 9845 5000.

Response Outside of the Shire

If the Shire receives a request for assistance of Shire of Cranbrook brigades or equipment, the CBFCO and DCBFCOs have the authority to dispatch appliances as available.

- Senior Brigade Officers should monitor the availability of private resources
- Requests for Shire equipment to be used outside of the Shire must be approved by the Shire CEO or MOW.

5.15 Authorising Expenditure and Equipment Use

Local Government Equipment

The following persons (*only*) are authorised by Council to request / authorise the use of Local Government equipment:

- CEO – Linda Gray
- MOW – Joe Duina
- CESM – Shane Harris

Under authorisation of one of the Shire Executive Management Team the following Officers may direct the use of Local Government equipment:

- Chief Bush Fire Control Officer – Graeme Marshall
- DCBFCO's are authorised when operating as the CBFCO
 - Peter Ettridge
 - Simon Hilder

Engage Contractors / Incur Expense On Behalf Of The Local Government

The following persons (*only*) are authorised to engage machinery contractors or incur expenses for the Local Government. **Approval must be made through DFES RDC Albany before contractors are engaged on any work.**

- CEO – Linda Gray
- MOW – Joe Duina
- **CESM – Shane Harris**
- CBFCO – Graeme Marshall
- DCBFCO's are authorised when operating as the CBFCO
 - Peter Ettridge
 - Simon Hilder

State Government Assistance

If significant Local Government resources are already committed, State Government assistance may be sought for additional resources (machinery hire, catering, etc.).

The protocol should be that the Incident Controller requests assistance through the CBFCO (or DCBFCO if the CBFCO is unavailable), who liaises with the DFES Duty Officer on 1800 314 644.

Note: Prior approval must be sought before engaging contractors or incurring expenses or costs.

Fires On Private Property

If significant Local Government resources are committed, assistance can be sought from DFES, contact the Duty Officer on 1800 314 644.

Fires On Unallocated Crown Land And Unmanaged Reserve

DFES to be notified as soon as possible and assistance should be sought:

- Contact the DFES Duty Officer on 1800 314 644

Fires On DBCA Estate

DBCA to be notified as soon as possible and assistance should be sought from DBCA:

- Albany (Southern Coastal District) DBCA Duty Officer on - 9842 4500
- Manjimup (Warren Region) DBCA Duty Officer - 9771 7988 / 0409 298 845
- Narrogin (Great Southern District) DBCA Duty Officer - 9881 9200
- Walpole DBCA Duty Officer - 9840 0400

5.16 Catering

The CBFCO (DCBFCO) will determine the provision of catering, as required, for extended incidents. The local Red Cross may be engaged to provide catering for fire incidents.

At DFES or DBCA managed incidents they are responsible for providing catering services.

Grade Meal/ Refreshment Type

1. Water (every hour)
2. Refreshment Packs (working between 1 and 3 hours)
3. Light Meals (sandwiches, rolls) (working between 3 and 6 hours)
4. Substantial Meals (nutritional value considered) (working over 6 hours).

SOP 6 – COMMUNICATIONS - PUBLIC

6.1 Warning Levels And Alerts

Advice

This is not compulsory to read on-air

- Issued when bushfire not threatening lives or property but causing smoke affecting roads or homes
- ABC will read if there are major roads affected
- Incorporate into program at a convenient point (not a set time.)
- DFES will update info before 11am and 4pm.

Watch And Act

Must read - at the end of the read the first sentence will be repeated

- TWEET and FACEBOOK a link to the latest DFES alert
- MUST read at quarter past and quarter to the hour
- Will be issued when there is the potential for lives and property to be threatened. DFES will aim to update every two hours.

Emergency Warning

Must read - at the end of the read the first sentence will be repeated

- This is the highest level of warning and will tell public of immediate danger
- TWEET and FACEBOOK a link to the latest DFES alert. Check that relevant ABC webpage has been updated. If not, ensure online colleague is aware of incident
- DFES will advise if SEWS (siren sound) required - otherwise play Bushfire Information 'alert sting'
- MUST read key information (see above)* as soon as received then on the quarter hour every 15 minutes - ie 0015, 0030, 0045 – and BRIEFLY at 0059 (pointing to full update at 0015)
- Consider going into continuous on air coverage of the incident.

When The Threat Is Over

- Must broadcast downgrade info: If earlier alerts for the same fire have been broadcast
- The fire is downgraded to 'Advice' level **Note there is no longer an all clear notice**
- Retweet all alerts from:
 - @DFES_wa,
 - @WA_Police
 - @WA_Roads
 - @Perth_Traffic.

6.2 Public Information

Media / Broadcasting Public Information

The Shire of Cranbrook will use the following systems to provide confirmed information to the community during an incident:

- SMS
- Facebook
- Website
- Harvest Ban Hotline

- Radio Broadcasts
- Television (if required)

Shire Responsibilities – SMS, Facebook and Website

SMS

CBFCO contacts the Shire to put out an SMS with the following example information included:

- “Shire of Cranbrook – Fire Away on “Insert property owners name”
- “Insert location e.g. road name”.
- “All available units within a 15km etc. radius please respond and / or all brigades on standby”.

Subsequent SMS’s can be sent during the incident providing further information to brigades or the community.

Facebook

All SMS messages are to be placed on the Shire Facebook page during a fire incident by Shire staff.

Shire Website

All SMS messages are to be placed on the Shire website Current Warnings page during a fire incident by Shire staff.

6.3 ABC Procedures For Broadcast Of Warnings

Radio

For an Emergency Broadcast of Public Information, contact DFES Com Cen and / or Local ABC Radio. DFES will send out an SMS message via state channels if required and will also contact other radio stations, who will place information on their websites, Facebook pages, and twitter accounts.

- Public Information must be accurate and timely.
- All media releases or public information broadcasts must be approved by the Incident Controller.

The ABC will interrupt any program should DFES or any other HMA seek an urgent broadcast of information in an emergency.

Getting The Message To Air

During the fire season, the quickest means of getting a message to air will generally be by contacting the ABC and other radio stations listed in the Shire LEMA:

ABC Emergency Broadcast Content Director - Gianfranco Di Giovanni

Phone - 9220 2731

Mobile - 0421 284 334

Email - digiovanni.gianfranco@abc.net.au

The messages will be broad cast on:

ABC Radio

Will broadcast community alerts as a priority.

Broadcast Bands - 558 AM & 630 AM.

A first message and subsequent messages can be broadcast at any time.

SOP 7 – COMMUNICATIONS – RESPONSE

7.1 Radio Communications

- Channel 9 has been adopted as the nominated channel for all operation communications when using UHF Radios
- Channel 363 has been nominated when using High Band Simplex Radios
- Regular channels for the Shire VHF radios are 162 Cranbrook West and 163 Cranbrook East.

The following procedure to be adopted adheres to the Radio Communications Act 1992.

Single Call Protocol

- “Other Persons Call sign” this is “Your Call Sign” question / message “Over.”

Multiple Call Protocol

- Call signs must continue to be used after the initial call and reply. There are currently no communications plans utilised during incidents within the Shire of Cranbrook.

7.2 Incident Management – Comm’s Plan

For larger incidents (Level 2 or 3), a more comprehensive communications plan should be developed by the Incident Management Team, using an AIIMS template.

7.3 Communications Contingencies

If the following mishaps occur, the following procedures should be followed:

Repeater Failure

- Use alternate channels - Channel 41 (Shire of Kojonup) or Channel 37 (Shire of Tambellup)
- To advise crews of an alternate channel, it may be possible to use Repeater Talk-Around, especially from an aircraft (Bomber)
- Additional alternate channels available are: Channel 25 (DFES), Channel 21 (DBCA) and Channel 12 (DBCA)
- Send suitable persons to investigate the cause of the failure
- If the cause cannot be determined quickly, seek assistance from DFES for a mobile repeater.

SOP 8 – ENVIRONMENT AND CULTURAL CONSIDERATIONS

8.1 Dieback

Native vegetation within the Shire is vulnerable to the disease *Phytophthora Cinnamomi* (Dieback). To ensure that the soil borne fungus is contained, vehicles and machinery must be free of soil before entering quarantine areas, forestland, reserves or bush areas. DPAW or DFES Operations Officers may advise on adequate hygiene procedures.

8.2 Use Of Foam

Foam should be avoided near water courses or riparian zones.

8.3 Indigenous Historical Sites

Note: Contact should be made by contacting DFES RDC Albany to seek advice on the land you are entering to check if there are any indigenous historical sites

If historical and cultural sites are known of or marked on maps, care should be taken in the use of vehicles, especially earthmoving equipment, in these areas.

A registry of important sites to local indigenous people is available through the Shire, from the Department of Indigenous Affairs, [Department of Planning, Lands and Heritage](#).

8.4 European Heritage Sites

Note: Contact should be made by contacting DFES RDC Albany to seek advice on the land you are entering to check if there are any Heritage historical sites

Can be found on the Municipal Heritage Inventory.

8.5 Declared Rare Flora / Fauna

A register of Rare Declared Flora and Fauna is managed by DBCA, who also manage a register of apiary sites.

SOP 9 – EVACUATION

The Shire of Cranbrook encourages residents and visitors to consider the “Stay and Defend, or Go Early” advice.

When there is a Very High, Extreme or Catastrophic Fire Danger Rating, people are encouraged to invoke their fire response plan (Stay or Go), based on:

- Circle of safety around the home and family preparedness
- Young children
- Elderly / infirm
- Location (i.e. camping)

To inform the public about a bush fire and to advise about early evacuation, use the avenues for broadcasting Public Information – SOP 6

9.1 Green Means I’ve Gone Bags – Evacuation Signal

Green Means I’ve Gone Bags have been distributed to every household within the Shire of Cranbrook and the community educated about their use in an evacuation event. If sighted at the front of a property (on a front gate, fence post etc.) once an evacuation order has been given, emergency services can reasonably presume that the residents of that property have evacuated to a safer location and they can move on with the evacuation order to the next property.

Please refer to the Shires Preliminary Evacuation Sector Maps and Tasking Sheet to assist with this process.

9.2 Main Evacuation Centres – Cranbrook Shire:

- Cranbrook Sporting Club
- Frankland River Hall
- Tenterden Fire Shed & Community Hall

A full list of the Shires’ designated Evacuation / Welfare centres can be found in the Shire Local Emergency Management Arrangements (LEMA).

These centres have the capability to provide toilets, sleeping space and telephones if required. The Local Government’s Welfare Plan should be activated if Evacuation Centres are opened. To open an evacuation centre the HMA must place the request with Department of Communities - Child Protection and Family Support.

SOP 10 – RECOVERY

Recovery processes are important and should start as soon as possible (i.e. during or immediately following the Response Phase). Recovery processes should be initiated if any of the following have occurred:

- Structural Damage
- Stock Loss
- Considerable pasture loss
- Injury / Death

A debrief or Post Incident Analysis of the incident should also be conducted.

Please refer to the Local Emergency Management Arrangements (LEMA) for further recovery information.

10.1 Trauma Counselling / Peer Support

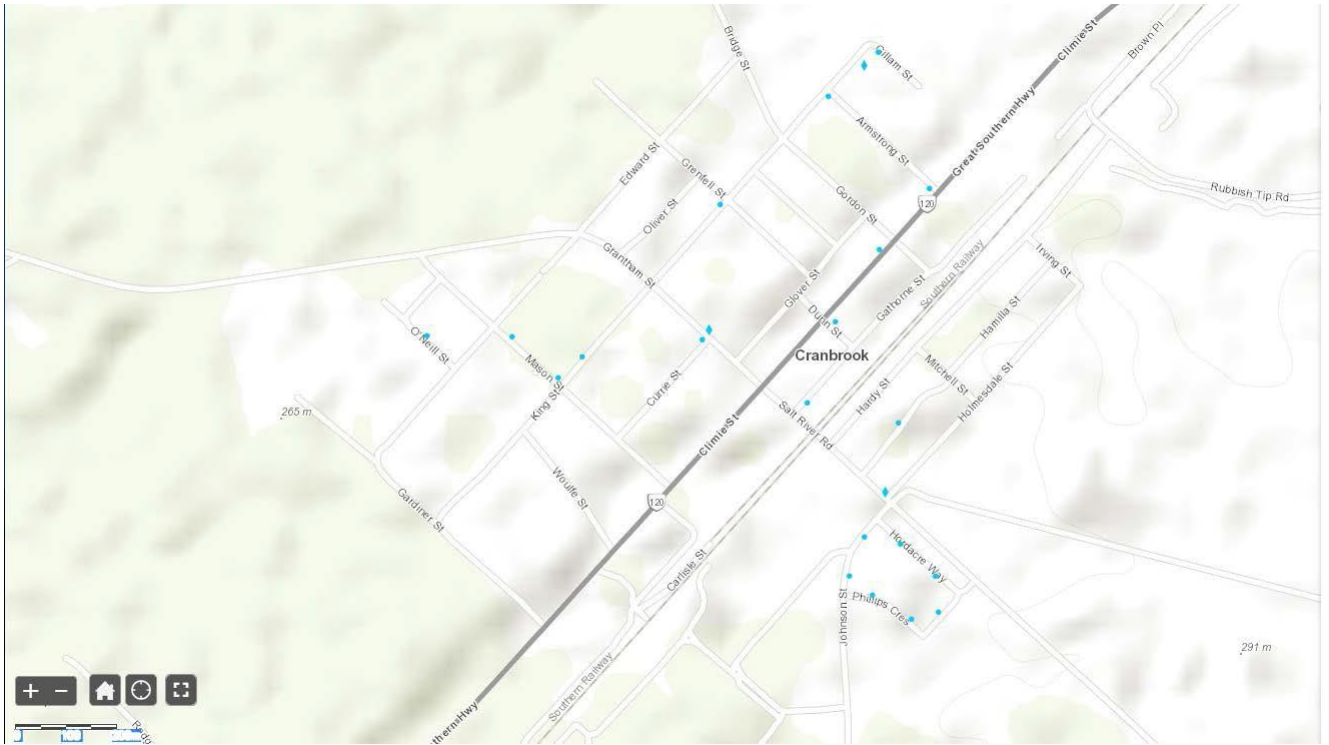
Brigade personnel who have been involved in a significant incident are encouraged to discuss the matter informally at a local level. In addition, trauma counselling following an incident might be required, not only for Local Government and Brigade personnel, but for members of the public who might have been involved in the incident prior to the brigades arrival and directly affected by the incident.

Contact the DFES Regional Office on 1800 314 644 or DFES Communications Centre on 1800 198 140.

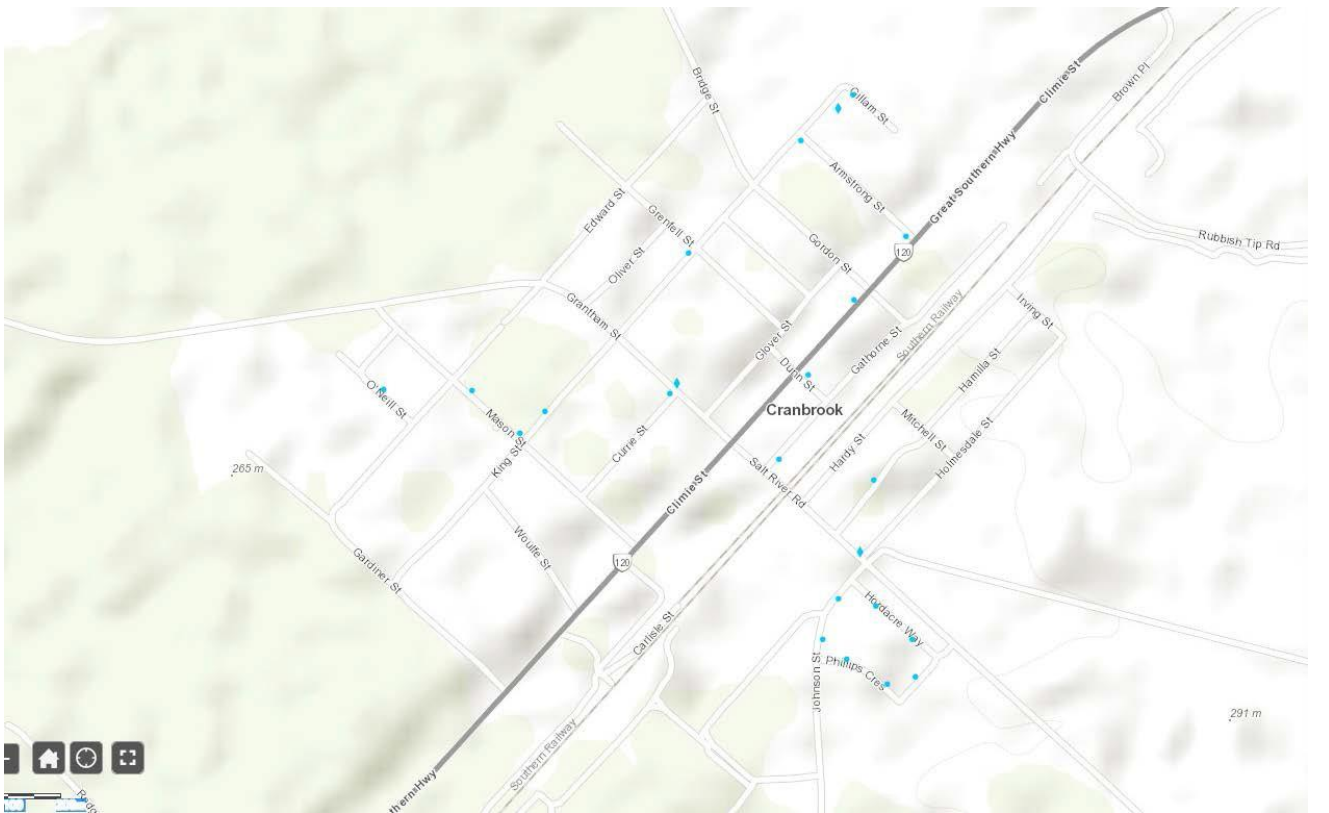
APPENDIX

Appendix 1 - Maps

Cranbrook Town Site Fire Hydrant / Standpipe Locations



Frankland River Town Site Hydrant / Standpipe Locations



ATTACHMENT 1

DFES SOP 3.5.11 – Entrapment And Burnovers At Bushfires

Introduction

1. This procedure provides a guideline for personnel to utilise prior to, during or following an entrapment or burnover at a bushfire. It is vital personnel understand both entrapment and burnover situations including how they can be prevented and how to respond when they occur.

- Entrapment:

“A situation in which individuals are exposed to life threatening or potentially life threatening conditions from which they cannot safely remove themselves.”

- Burnover:

“A section of fire that overruns personnel and/or equipment.”

Further information is provided at Directive 3.5 – Bushfires and SOP 3.5.10 – Crew Safety at Bushfires.

[Directive 3.5 – Bushfires](#)

[SOP 3.5.10 – Crew Safety at Bushfires](#)

Procedures

2. **Prevention.** The application of LACES and safety practices in accordance with SOP 3.5.10 – Crew Safety at Bushfires assists in the prevention of burnover and entrapment situations. LACES enables personnel to minimise the risk of becoming entrapped through:

- Maintain situational awareness;
- Maintain communications; and
- Monitor fire behavior and crew safety.

3. **Burnover and Entrapment Procedure – Appliance Crew.** This procedure applies to all appliances and crew undertaking both offensive, defensive and safeguarding operations at bushfires.

Action	Description
Identifying Burnover and Entrapment situations	
Establish and maintain LACES	All personnel to maintain LACES as per SOP 3.5.10 – Crew Safety at Bushfires.
Situational Awareness	Assess forecast information; Monitor for changes in fire behaviour associated with changes in topography, weather and fuel, specific indicators include. <ul style="list-style-type: none"> • Change in wind speed and direction. • Change in smoke direction. • Erratic fire behaviour and change in direction. • Atmospheric instability (Smoke plume behaviour).

SOP 3.5.11 – Entrapment at Bushfires			
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Situation reporting	<p>Crew leaders should ensure they;</p> <ul style="list-style-type: none"> • Report all changes in fire behaviour to IC/IMT • Provide timely and accurate situation reports IC/IMT • Monitor for situation reports
When you identify the burnover or entrapment situation:	
Situational Awareness	<p>Crew leaders should ensure they;</p> <ul style="list-style-type: none"> • Inform all crew of the situation. • Select (from LACES) the safest escape route if possible. • Monitor safety of the crew. • Monitor situation and fire behaviour. <p>Crew Members should ensure they;</p> <ul style="list-style-type: none"> • Respond to instructions from crew leader. • Report changes in situation to the crew leader.
Cease Operations	<p>Crew Leader is to direct that;</p> <ul style="list-style-type: none"> • Branch operators close down all branches and place them on the ground. • All crew return to the appliance. • Available crew close down and remove the delivery lines at the pump (except for personal protection lines). • Crew leader is to conduct a head count to ensure all the crew are present and mount the appliance.
Move to Safety (if possible)	If possible move the appliance and crew away from danger to a safety zone or escape route.
Activate AVL Emergency	Activate the AVL Emergency Function by pressing the AVL Emergency and Distress Button (Press and hold for 4 seconds) .
Emergency Message	<p>Crew leader is to (or may delegate);</p> <ul style="list-style-type: none"> • Transmit an Emergency Message on the relevant channel (sector or control). <ul style="list-style-type: none"> ○ Details to be transmitted; <ul style="list-style-type: none"> ▪ Appliance. ▪ Name and rank. ▪ Number of crew. ▪ SITREP. ▪ Location.

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As the fire approaches:	
Prepare the Appliance	<p><u>If an escape route is not available;</u></p> <ul style="list-style-type: none"> • If possible move the appliance to the nearest safety zone • If no safety zone is accessible, park the vehicle on a burnt/cleared area in a position that affords as much protection as possible for the crew (e.g. rear of the vehicle facing the fire front). • Parking as near as is practicable on level ground. <p><u>Once positioned safely;</u></p> <ul style="list-style-type: none"> • Leave the pump running at a speed that allows the protective sprays to operate. • Close all doors, windows, air vents and leave the engine running on fast idle, turn air conditioner to recirculate and deploy curtains (if available). <p>Turn on sirens, beacons and headlights.</p>
Prepare the Crew	<p><u>All crew will;</u></p> <ul style="list-style-type: none"> • Remove any loose non-essential / flammable material from dashboard and cabin. • Take cover in the cabin. • Remain in full PPE (helmet may be removed if necessary), do not hose down crew. • Drink potable water to minimise the risk of dehydration. • Don in cab air. • Locate hand held radio. • Deploy burn over blanket. <p>STAY INSIDE THE VEHICLE</p>
As the fire impacts the appliance:	
Protect the Crew and Appliance	<ul style="list-style-type: none"> • On imminent fire contact, operate protective sprays. (Ensure the spray pattern envelopes the cab and if possible protects the pump from burnover temperatures which may exceed the stall temperature of the pump motor.) • Wait for the fire front to pass. Immediately after the fire front has passed, account for all the crew and check the vehicle for damage. <p>Note: Do not hose down crew members with water prior to the fire front passing as the conduction of heat through PPC/clothing may induce steam burns.</p>

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<p>What to expect</p>	<p><u>Cabin Internal Temperature Rise;</u></p> <ul style="list-style-type: none"> As the fire front approaches, the intensity of the heat will increase along with the amount of smoke and embers. Radiated heat will transfer directly to inside the cabin. <p><u>Cabin Infiltrated by Smoke;</u></p> <ul style="list-style-type: none"> Smoke gradually ingresses the vehicle and fumes will be released from the interior of the appliance. Stay as close to the floor as possible to minimize smoke inhalation. <p><u>Appliance External Fittings Catch Alight;</u></p> <ul style="list-style-type: none"> Tyres and external plastic body parts may catch alight. <p><u>Fuel Tanks;</u></p> <ul style="list-style-type: none"> Fuel tanks are very unlikely to explode. Fuel Jerry Cans and drip torches not fitted with anti-explosive mesh may be at risk.
<p>After the fire has passed</p>	
<p>Post Burn over procedures</p>	<p><u>Determine it is safe to exit the appliance;</u></p> <ul style="list-style-type: none"> Visual observation. Check temperature of glass (gloved hand). Exiting the appliance. Crew leader to instruct crew to exit the appliance, meet at the front. Take hand held radio. Keeping blankets in place carefully exit appliance (Note: blankets may create trip hazard, also be aware of open doors as another hazard). Crew leader conducts head count and then instructs crew to move to a safe location / arranges for first aid. <p><u>Immediate Actions after burnover</u></p> <ul style="list-style-type: none"> Check crew for injuries – Provide or arrange for first aid for any injuries or burns. Inspect appliance – Ascertain if it is functional to move to safer ground. Provide a SITREP to the sector commander/incident controller. <p><u>Further actions after a burnover</u></p> <ul style="list-style-type: none"> Attach out of service tag to steering wheel of the vehicle, the vehicle is deemed unsafe till inspected by a qualified technician. Return in cab air units and burn over blankets to the vehicle. (Required for investigation). Record incident (use the DFES safety reporting system, including your personal incident diary).
<p>What to Expect</p>	<p>Post incident involving entrapment or burn over an immediate investigation will occur by the appointed person.</p>

<p>SOP 3.5.11 – Entrapment at Bushfires</p>				
<p>Version:</p>	<p>Issue Date:</p>	<p>Review Date:</p>	<p>Accountable Position:</p>	<p><i>Uncontrolled When Printed</i></p>
<p>2.0</p>	<p>Mar 18</p>	<p>Mar 20</p>	<p>AC Country Operations</p>	

4. **Burnover and Entrapment Procedure – Sector/Division Commanders.** Incident Controller or Operations Officer to undertake these tasks if no Sector or Divisional Commanders appointed.

Action	Description
Ensuring fireline safety and mobility	
Briefings	Briefings are to be conducted using a SMEACS format prior to, during and post crews working on a sector.
Situational awareness	<p><u>Sector Commanders must maintain awareness of;</u></p> <ul style="list-style-type: none"> • Tasking and location of crews. • Appliance locations. • Current and forecasted weather. • Current and predicted fire behaviour. • Potential fireline hazards (Hazardous trees, terrain, accessibility, etc). • Strategies and tactics of other sectors.
Turn around areas	Turn around areas should be constructed to accommodate the largest appliance expected to use a fire control line. The positioning of turn around areas will be determined by the potential fire behavior and condition of the fire line. Vehicles must be able to perform a three point turn. Therefore the turnaround area must be at least the length and three times the width of the largest appliance at the incident.
Passing areas	A passing area is intended to run parallel to the fire control line and its purpose is to allow an appliance to pull off the fire control line to let other appliances pass. As a minimum it should be as wide as and twice the length of the largest appliance being utilised at the bushfire.
Safety zones	As a rule of thumb, four times the flame height is considered the minimum acceptable comfortable distance. This minimum acceptable comfortable distance applies when determining firefighter safety zones and refuge areas.
On notification	
On receipt of emergency message	<p><u>Sector Commander is to ensure that the following occurs;</u></p> <ul style="list-style-type: none"> • Acknowledge sender of emergency message and verify SITREP. • Confirm name and rank of crew if not provided. • Confirm the location of the appliance and crew. • Record in incident diary and maintain log. • Advise Officer In Charge (OIC)/ Operations Officer (OO)/ Incident Management Team (IMT)/ Incident Control Vehicle (ICV). • Priority direction to Ground Controller (or to OO) for aerial suppression resources / tasked to respond.

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Direction to Personnel on the sector	<ul style="list-style-type: none"> • Ascertain risk to other crew and appliances on sector. • Other crews to remain on task unless directed or at risk. • Radio traffic to remain silent unless urgent.
As the fire approaches or impacts the appliance:	
Organise assistance	<ul style="list-style-type: none"> • If possible, provide a safe location for crew and appliance to move to if the appliance is drivable. • Contact ground controller for aerial support if available. • If possible while ensuring their safety send appropriate resources to assist. • If not possible prepare appropriate resources to assist following burnover or entrapment. • Maintain ongoing communications with the crew in danger. • Organise standby ambulance and medical response. • Develop an egress plan for crew for use after the fire has passed.
After the fire has passed:	
Post burnover assistance	<ul style="list-style-type: none"> • Confirm welfare of crew members and condition of the appliance. • Assess any medical assistance required. • Relay medical assistance required to IMT/OO/Incident Controller (IC). • Send assistance to assess the situation, crew and appliance. • When possible and safe, Implement the egress plan and organise for crew to be transported from fire ground. • Confirm the welfare of all personnel on the sector that responded to assist the endangered crew prior to continuing routine operation.
Post burn over investigation	<ul style="list-style-type: none"> • Isolate and preserve the vehicle and equipment for investigation. (ensure all crew protection items left with the appliance for investigation). • If possible photograph the appliance in situ.

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5. **Burnover and Entrapment Procedure – ICV.** During a Burnover or Entrapment situation ICV personnel may receive an emergency call direct to the ICV via a sector/division commander or directly from an appliance the following procedure outlines correct actions for personnel to take should this occur.

Action	Description
On notification	
On receipt of emergency message from an appliance or crew	<ul style="list-style-type: none"> • Acknowledge details of appliance and crew. • Prioritise Emergency Message. • Record all information in the emergency message. • Refer to OO, IC as priority. • Perform priority actions as directed by IC, OO.
On receipt of emergency message from a Sector or Division Commander	<ul style="list-style-type: none"> • Prioritise Emergency Message. • Record all information in the emergency message. • Refer to OO, IC as priority. • Perform priority actions as directed by IC, OO.

6. **Burnover and Entrapment Procedure – IMT** The following procedure outlines correct actions for IMT personnel to take to prevent and, if required, respond during a burnover or entrapment situation.

Action	Description
Ensuring fireline safety and mobility	
Briefings	<ul style="list-style-type: none"> • IMT to ensure regular briefings of all IMT personnel. • Operations section to ensure briefings occur in accordance with SOP 3.5.10 Crew Safety at Bushfires. • SMEACS format to be used for all briefings.
Situational awareness	<p><u>Operations Section Personnel must maintain awareness of and communicate to all personnel;</u></p> <ul style="list-style-type: none"> • Division, sector structure and resourcing. • Current and forecasted weather. • Current and predicted fire behavior. • Potential fireline hazards (hazardous trees, terrain, accessibility, etc). • Objectives, strategies and tactics. • If possible monitor appliance / equipment location through AVL and identify and notify operations of potential risks.
Operational Standards	<p><u>Operations Officer is to ensure that;</u></p> <ul style="list-style-type: none"> • Turn around and passing areas are constructed according to standard. • Safety zones are identified or constructed. • Crews are tasked appropriately for the observed and forecasted fire behaviour.
On notification	

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<p>On receipt of emergency message</p>	<p><u>Operations Officer is to ensure that the following occurs:</u></p> <ul style="list-style-type: none"> • Acknowledge the sender of emergency message and verify SITREP. • Confirm Name and rank of crew if not provided. • Confirm the location of the appliance and crew. • Confirm threat to other personnel and appliances. • Notify Division and Sector Commanders of the emerging risk. • Record in incident diary and maintain log. • Advise Incident Controller. • Task Aerial suppression resources to protect crews if possible. • Task aerial intelligence resources to provide intelligence direct to crew / Sector Commander (SC) and or OO.
<p>Direction to Division and Sector Commanders</p>	<ul style="list-style-type: none"> • Ascertain the risk to other Divisions and Sectors, provide appropriate direction if required. • Personnel are to remain on task unless directed or at risk. • Radio traffic to remain silent unless urgent.
<p>As the fire approaches or impacts the appliance:</p>	
<p>Assistance</p>	<ul style="list-style-type: none"> • The Operations Officer is to establish assistance required by the Division or Sector Commander. • Determine priority of assistance required. • Operations Officer to organise the required assistance.
<p>After the fire has passed:</p>	
<p>Post burnover assistance</p>	<p><u>Operations Officer to confirm Sector/Division Commander:</u></p> <ul style="list-style-type: none"> • The extent of burnover impact crews and appliances. • The welfare of effected crew members and condition of the appliance. • Any medical or egress assistance required. <p><u>The Operations Officer will ensure:</u></p> <ul style="list-style-type: none"> • When possible and safe, implement the egress plan and organise for crew to be transported from fire ground. • Send assistance to assess the situation, crew and appliance. • Confirm the welfare of all personnel on the sector that responded to assist the endangered crew prior to continuing routine operations.
<p>Post burn over investigation</p>	<p><u>Incident Controller will ensure that:</u></p> <ul style="list-style-type: none"> • The safety investigation is initiated. • The appliance and associated equipment is isolated and preserved for investigation. (ensure all crew protection items left with the appliance for investigation).

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7. **Burnover and Entrapment Procedure – COMCEN** The DFES COMCEN may receive emergency messages from first responding appliances during the initial and escalating stages of an incident when command, control and communication have not yet been established at an incident. The following provides a procedure for COMCEN personnel to follow should this occur.

Action	Description
On receipt of emergency message	<p><u>COMCEN personnel are to ensure:</u></p> <ul style="list-style-type: none"> • Acknowledge details of appliance and crew. • Prioritise Emergency Message. • Record all information in the emergency message. • Refer to Supervisor COMCEN as priority. • Perform actions as a priority as directed by Supervisor COMCEN. <p><u>Supervisor COMCEN is to ensure:</u></p> <ul style="list-style-type: none"> • Assistance required is confirmed and dispatched. • Closest available and suitable appliance is dispatched to assist. • Appropriate manager dispatched (District Officer (DO), Area Officer (AO), Community Emergency Services Manager (CESM)). • Air Desk is notified and assistance dispatched if appropriate. • Ambulance Communication Centre is notified. • Maintain communications with affected appliance and crew.
Notifications	<p>Supervisor COMCEN is to notify the State Situation & Analysis Officer (SAO).</p> <p><u>SAO to notify:</u></p> <ul style="list-style-type: none"> • Major incident group as per SOP 2.1.2 - Mobilising. • Local Government Chief Bush Fire Control Officer if involving a Bush Fire Brigade appliance.
On arrival of assistance	<p><u>The Supervisor COMCEN is to ensure that:</u></p> <ul style="list-style-type: none"> • Communications are handed over to the first arriving assistance. • Communications are established and maintained with the Incident Controller. • The SAO is kept informed of the situation.

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8. **Burnover and Entrapment Procedure – Wellness** The Incident Controller is to ensure that following a burnover or entrapment situation all personnel involved are;

- Debriefed prior to leaving the incident.
- Offered support from the DFES Wellness Branch.
- Referred to the available support services.
- Wellness Branch are notified of personnel involved in incident for follow up.
- The relevant line manager is notified of incident i.e. DO, AO, CESM, CBFCO.

9. **Burnover and Entrapment Next of Kin Notifications** In the event of death or injury during a burnover or entrapment situation, Next of Kin Notification is to occur as per [Directive 1.1 – Personnel Administration](#).

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DOCUMENT HISTORY

VERSION	DATE	DESCRIPTION of CHANGE
1.0	Apr 10	New SOP created. New sections created: <ul style="list-style-type: none"> • (All) Sourced documents: SOP 62 – Appliance and Crew Protection at Wildfires <i>All listed SOP/SAP, now retired.</i>
1.1	Mar 12	Repair hyperlinks and add version to doc control
1.2	Jan 14	Update formatting and general review
1.3	Jan 14	Procedure change (section 3) to transmit emergency message as a priority prior to activating sirens to prevent interference of back ground noise.
1.4	Sep 14	Protect Crew <ul style="list-style-type: none"> • On imminent fire contact, operate protective sprays. (Ensure the spray pattern envelopes the cab and if possible protects the pump from burnover temperatures which may exceed the stall temperature of the pump motor.)
1.5	Aug 15	After the Fire Front Has Passed Under no circumstances are crews to re-enter or move the vehicle. Maintain a safe distance from the vehicle. The vehicle must be checked by a qualified technician prior to recovery. The scene must be preserved to aid subsequent investigation.
1.6	Dec 17	Updated SOP to include the comprehensive crew protection systems in the relevant areas. Updated procedure to reflect current training practices for burnover and entrapment
2.0	Feb 18	Major review and rewrite of complete SOP 3.5.11 <ul style="list-style-type: none"> • New introduction with AFAC definitions for entrapment and burnover • Update procedures to incorporate comprehensive crew protection systems • Add procedures for actions on receipt of an emergency message.
2.1	July 24	Review and update <ul style="list-style-type: none"> • Contacts • Australian Warning System • Aboriginal, European heritage

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