



**LEGISLATIVE ASSEMBLY**  
FOR THE AUSTRALIAN CAPITAL TERRITORY

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STANDING COMMITTEE ON JUSTICE AND COMMUNITY SERVICES  
Ms Elizabeth Lee MLA (Chair), Ms Bec Cody MLA (Deputy Chair)  
Mr Michael Petterson MLA

## Submission Cover Sheet

Review of ACT emergency services  
responses to the 2019-20 bushfire season

**Submission Number: 15**

**ACT Government**

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Minister for Advanced Technology and Space Industries  
Minister for the Environment and Heritage  
Minister for Planning and Land Management  
Minister for Police and Emergency Services  
Minister for Urban Renewal  
Manager of Government Business  
Member for Brindabella

Mrs Giulia Jones MLA  
Chair  
Standing Committee on Justice and Community Safety

Via: Committee Secretary: [andrew.snedden@parliament.act.gov.au](mailto:andrew.snedden@parliament.act.gov.au)

Dear Mrs Jones *Giulia*

I refer your letter of 18 August 2020 responding to my letter of 23 April 2020 regarding the Standing Committee on Justice and Community Safety (the Standing Committee) review of the responses by ACT emergency services agencies to the 2019-20 bushfire event.

As previously stated, the ACT Government is extremely proud of the efforts of all Directorates and Agencies for the work they undertook to ensure that, despite the severe conditions experienced during the previous bushfire season, Canberra remained well informed and protected. I would also like to acknowledge the significant efforts and resilience of the ACT community in taking responsibility and preparing.

In responding to incidents during the 2019-20 bushfire season, I believe the ACT Government, including the ACT Emergency Services Agency (ESA), demonstrated the benefits of the learnings from the 2003 bushfires.

The Independent Report on the ACT Emergency Services Agency Operational Review of the Bushfire Season 2019-20 and the Report on the Review of Whole of ACT Government Coordination and Response during the 2019-20 Bushfire Season have now been finalised. To assist the Standing Committee with its review, I enclose a copy of both reports, which will also be tabled in the Assembly today.

*Report on the ACT Emergency Services Agency Operational Review of the Bushfire Season 2019-20*

The ESA continually reviews what they do well, and what they can improve on. The aim is always to perform even better next time, for all members of our community. In line with this best practice, the ESA has been reflecting on the 2019-20 season. An external consultant was engaged to conduct an independent operational review to analyse the effectiveness of the ESA's preparation, planning, response and recovery.

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## ACT Legislative Assembly

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The report identifies several positives, including that the ACT is well placed to respond to a high level of demand for bushfire resources with skilled and motivated personnel, and the necessary equipment and resources to respond. The ESA was also able to support other jurisdictions because of the high levels of preparedness achieved and was successful in conducting operations through the Incident Management Team.

The report also details areas of improvement. There are 31 recommendations themed under the following categories:

- Capability;
- Collective Training and Exercise;
- Preparedness;
- Personnel;
- Planning; and
- Incident Management.

The ESA Commissioner has already taken proactive and strategic steps to make improvements and is committed to addressing each of the recommendations in the report. While some recommendations can be addressed immediately, others require long-term planning and consultation with stakeholders or may be impacted by the outcomes of other reviews, including the Royal Commission into National Natural Disaster Arrangements, which is due to report on 28 October 2020.

#### *Report on the Review of Whole of ACT Government Coordination and Response during the 2019-20 Bushfire Season*

In April 2020, the ACT Government announced its intent to undertake a Whole of Government (WHoG) review to complement the already commenced internal operational reviews being undertaken within the ESA and other government directorates.

The Report provides comfort that we responded to this year's extraordinary bushfire season in an effective and professional manner and highlights areas of best practice. It also recognises that we should not rest on our laurels by providing recommendations aimed at continuous learning and improvement, so that we are even better prepared if and when there is a 'next time'.

The individual recommendations arising from this report encompass four broad themes:

- recommendations focused on key updates to the Emergencies Act 2004, Emergency Plan and supporting sub-plans
- improvements recommended to 'Whole of Government' emergency management systems and processes
- approaches to strengthening key relationships across ACT Government and with federal and non-government entities
- the delivery of a regular and supporting exercise and testing program at a strategic as well as operational level.

The Government accepts the recommendations outlined in the WHOG review and will seek the Assembly's concurrence to make amendments to the Emergencies Act 2004 to implement these recommendations.

I also thank you for confirming that you have access to submissions the ACT Government has provided to the Royal Commission into National Disaster Arrangements.

I trust this information is of assistance. I look forward to discussing these matters further during my appearance with Officials across the ACT Government at the JACS Committee hearing on 25<sup>th</sup> August 2020 commencing at 4pm.

Yours sincerely



Mick Gentleman MLA  
Minister for Police and Emergency Services

*20/8/2020*

Encl.



**ACT**  
Government



# **ACT Emergency Services Agency Operational Review of the Bushfire Season 2019/20**

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# EXECUTIVE SUMMARY

## EXECUTIVE SUMMARY

The 2019-20 bushfire and storm season produced some of the most unprecedented weather conditions in Australia's history. Large parts of Australia were impacted by significant fires with unpredictable and dangerous fire behaviour fuelled by hot, dry and winding conditions. These conditions meant fires started easily and were difficult to contain with the ACT facing its worst season since the devastating 2003 bushfires.

Since August 2019, unprecedented fire activity heavily impacted large areas along the East Coast of Australia seeing firefighters and specialist emergency management personnel from the ACT deploy interstate to assist. Bushfires to the east of the ACT at Braidwood and on the NSW South Coast caused thick smoke in the ACT and region for a continuous period from late December 2019 through January 2020. A State of Alert was declared for the ACT on 2 January 2020 to assist community preparedness and organizational response and coordination with fires burning near the ACT border and forecasts of extreme weather.

Hot and dry conditions precipitated a record number of Total Fire Ban (TOBAN) days throughout the bushfire season, but fire and smoke were not the only emergency to threaten the ACT with severe and damaging thunderstorms occurring on 16 January, 20 January and 10 February. Fires continued to threaten the ACT locally and to the south of Canberra through January until February of this year.

The State of Alert was followed by the declaration of a State of Emergency on 31 January 2020 to appoint the ESA Commissioner as the Emergency Controller. This was the first time since 2003 that an Emergency Controller had been appointed in the ACT. The Emergency Controller was appointed for a period of 39 consecutive days in January and February.

The ACT was well placed to respond to a high level of demand for bushfire resources with skilled and motivated personnel, and the necessary equipment and resources to respond to and extinguish bushfires where this was operationally feasible. It also had the capacity to respond to significant weather and storm events. It is noteworthy that 'business as usual' emergency response remained largely unaffected throughout the season. There was a requirement to draw on external support from other states and the Commonwealth to respond to extreme circumstances, but this is an accepted and well-established practice across the Commonwealth. There is, however, a requirement to improve the capacity to establish and sustain an Emergency Coordination Centre (ECC), Incident Control Centre (ICC) and Public Information Coordination Centre (PICC) across multiple incidents over a protracted season.

The planning framework is thorough and proved adequate for the management of emergencies and their consequences. Some clarification and recommendations for refinement of the established plans hierarchy has been proposed but the ACT Government has an established and exercised governance structure to coordinate a whole of government response to emergency management across the territory. The transition between plans and incident management is achieved through the Australasian Inter-Service Incident Management System (AIIMS) which while thorough is procedural. Consideration should be given to improving the process of bringing multiple plans together into operational guidance that covers all hazards over the anticipated season.

ESA support to other states through staff deployments and strong community engagement activity within the ACT resulted in high levels of preparedness for the 2019/20 bushfire season. The services within ESA were well prepared overall having conducted detailed preparations, however, the tempo and duration of early deployments did impact on the capacity to train and exercise all staff.

ESA was able to successfully conduct operations through the establishment of a Incident Management Teams (IMT) to defend against a major fire and respond to concurrent unprecedented storm damage during the 2019/20 bushfire season. The leadership, management and resilience of ESA staff during the conduct of operations and the establishment of an IMT was exceptional given the challenging circumstances and contributed to the overall success of the response to the threats facing the ACT. An additional focus on planning skills and procedures and further refinement of the organisation and functions of the ECC/ICC/PICC would be of significant benefit to ESA.

The long-term investment in mitigating fire risk through material responses such a better building codes and regulations, land management and the reduction of fuel loads, and fielding progressively better capability contributed greatly to success. This included the use of an unprecedented amount of aviation assets and very advanced mapping and analytical capability. The ESA should build on this considerable foundation strategically, integrating advanced support capabilities further into the strategic capability framework, normalising specialist skills into both staff and deployed functions, and lifting understanding of what capability can and can't do across the ESA. This presents an opportunity within the ACT for the growth of expertise and the capability needed across regional NSW and Victoria.

# INTRODUCTION

# INTRODUCTION

This operational review analysed the effectiveness of the ESA's preparation, planning, response and recovery over the 2019/20 bushfire season.

This review sought the following outcomes:

- to identify opportunities for the enhancement or establishment of cooperative partnerships (including inter-operability) to enhance bushfire management outcomes for the community,
- to better understand ESA's strengths and residual risks in relation to its bushfire operational response and incident management capabilities,
- to identify bushfire risk management priorities for the Territory, and
- to develop an evidence base that informs future bushfire planning and response capabilities.

This Review reflects the ACT Emergency Services Agency's (ESA) culture of learning and continuous improvement across all phases of emergency management, encouraging the best use of resources and ensuring the best possible outcome for the protection of the Canberra community.

The Review was completed in 4 phases:

- the first, **establishing the guidance, authorities and intent** by reviewing the legislation, strategies, guidance, organisation, administration, planning and preparedness activities that had been completed prior to the season commencing;
- second, **establishing what occurred in response** against the timeline of events, this included a review of logs, after-action reviews, operational planning, orders and directives, and the intelligence, planning, management, resourcing and financing activities and processes;
- third, a **detailed analysis** of operations linking key actors and enablers to operational outcomes. The analysis identified the ESA's strengths and residual risks guiding further review work; before,
- closing with the **development of the final report and recommendations**.

The scope of the review remained on the operations of the ESA and did not focus on the interface between the ESA and the ACT Government or with other parties except where it was directly relevant to the conduct of emergency management. Land Management is central to the Strategic Bushfire Management Plan (SBMP) and is well understood and managed through the Regional Fire Management Plan (RFMP) and Bushfire Operational Plans (BOP) and similarly will only be covered in the review where it is directly relevant to the conduct of emergency management.

# SECTION 1: OVERVIEW

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## 1.a Background and Summary of 2019/20 Bushfire Season

The 2019/20 bushfire season brought some of the most volatile weather conditions since records began. Across Australia, bushfires contributed directly to the death of 34 people and devastated more than 8 million hectares of land along the south-eastern fringe of Australia, with major bushfires in every state and territory. A further 445 people are estimated to have died from smoke-induced respiratory problems. The first fires were as early as June 2019 in Queensland<sup>1</sup> and raged almost continuously until March 2020, a period of almost nine months.

At least 3,500 homes and thousands of other buildings were lost. The majority of deaths and buildings destroyed were in New South Wales (NSW), while the Northern Territory accounted for approximately 1/3 of the burned area. At least 80 percent of the Blue Mountains World Heritage area in NSW and 53 percent of the Gondwana World Heritage rainforests in Queensland were burned.<sup>2</sup> The Insurance Council estimated that between November 2019 and March 2020, losses from natural disasters were approximately \$2.32 billion in insured claims.<sup>3</sup>

2019 was the warmest and driest year on record for Australia as a whole, and spring was also the driest on record nationally. Record low rainfall for the year occurred over large areas of inland Australia. This resulted in very low soil moisture levels over most of the continent leading into December.<sup>4</sup>

The hot conditions combined with the dry landscape and strong winds to produce dangerous fire weather conditions during December 2019 into early January 2020. The Forest Fire Danger Index (FFDI) is one common measure of fire weather conditions and reflects longer-term rainfall and temperature patterns and shorter-term weather. Fire risk is driven by fire weather and fuel availability. The severe rainfall deficiencies and hydrological drought exacerbated the fire weather conditions throughout Australia.

According to the Bureau of Meteorology, the accumulated FFDI values for spring 2019 were the highest on record for Australia as a whole (based on all years since 1950), with record high values observed in areas of all States and Territories. Those dangerous fire weather conditions continued into summer, with December accumulated FFDI values highest on record across large areas of the country.<sup>5</sup>

Accumulated FFDI values for December were more than twice the average over large areas of Australia and the accumulated FFDI value for December was highest on record. The area-averaged accumulated FFDI values for December were also highest on record for each State and Territory except Tasmania (second highest). That included the highest accumulated FFDI for any month in Queensland, New South Wales, the ACT, and South Australia.

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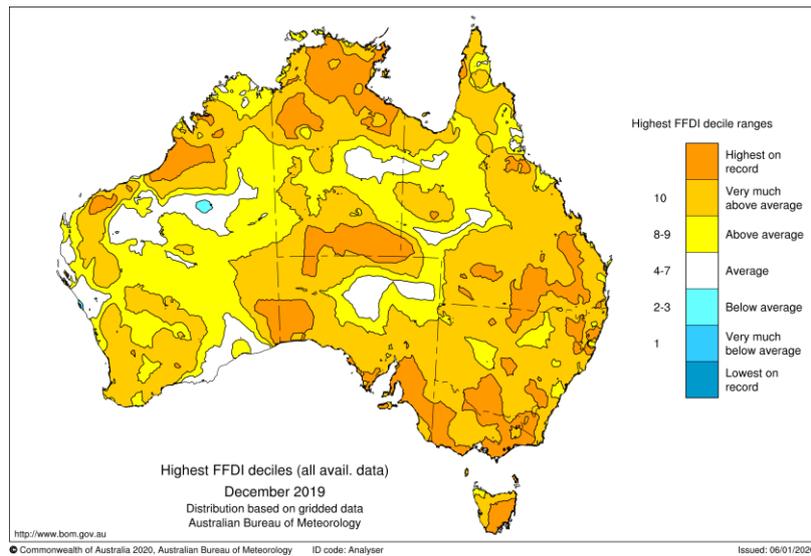
<sup>1</sup> <https://www.abc.net.au/news/2019-06-27/bushfire-outlook-queensland-2019/11251150>

<sup>2</sup> <https://www.theguardian.com/environment/2020/jan/17/its-heart-wrenching-80-of-blue-mountains-and-50-of-gondwana-rainforests-burn-in-bushfires>

<sup>3</sup> <https://www.insurancebusinessmag.com/au/news/breaking-news/revealed-insurance-bill-for-201920-summer-catastrophes-223760.aspx>

<sup>4</sup> Australian Government, Bureau of Meteorology, *Special Climate Statement 73—extreme heat and fire weather in December 2019 and January 2020*, 17 March 2020, p4

<sup>5</sup> Ibid, p9



On 4 January 2020, the most extreme heat occurred in eastern New South Wales and the Australian Capital Territory (ACT). The temperature reached 48.9 °C in Penrith, the highest known temperature in the Sydney basin (surpassing 47.8 °C in Richmond in January 1939) and at any site east of the ranges in New South Wales. Several other sites in metropolitan Sydney, away from the coast, exceeded 47 °C. Canberra reached 44.0 °C, 1.2 °C above the previous record.<sup>6</sup>

NASA estimated the fires appeared to have produced about three times as much carbon monoxide gas as major fires in British Columbia in 2017 and Australia in 2009, and the smoke plume had risen over 25 kilometres above the surface, making it the highest bushfire-caused plume ever recorded.<sup>7</sup> Smoke from the fires darkened the skies in New Zealand and continued to circle the globe for more than three months.



Photo 1: NASA Earth Observatory image by Joshua Stevens, using MODIS data from NASA EOSDIS/LANCE and GIBS/Worldview, 4 January 2020

<sup>6</sup> Ibid, p6

<sup>7</sup> <https://earthobservatory.nasa.gov/images/146235/australian-smoke-plume-sets-records>

From August 2019, fire activity heavily impacted large areas along the East Coast of Australia. ACT ESA and PCS deployed firefighters and specialist emergency management personnel to Queensland and Northern NSW through September, October and November of 2019 to assist with these fires.

Bushfires to the east of the ACT at Braidwood and on the NSW South Coast caused thick smoke in the ACT and region for a continuous period from late December 2019 through January 2020. From December 17, the next three weeks had every single day exceed hazardous levels, choking Canberra with thick smoke at the height of the bushfire crisis in nearby NSW. Two large spikes occurred on New Year's Eve and on January 5 when the PM2.5 levels exceeded hazardous levels (200 is considered hazardous), with all three air quality stations in the ACT recording PM2.5 levels of at least 3000.<sup>8</sup>

Between 1 October 2019 and 4 February 2020, the ACT declared a record 24 Total Fire Ban (TOBAN) days, the ACT on average sees five or six TOBANs per bushfire season.

Following the hot and dry conditions the ACT experienced severe thunderstorms on 16 January, 20 January and 10 February. The storm event on 20 January produced large hail stones and caused significant damage resulting in the ACT State Emergency Service receiving approximately 2,500 calls for assistance.

The ACT then experienced its first significant bush and grass fire of the season on 23 January 2020 at the Pialligo Redwood Forest. This fire then spread across to Beard, threatening Oaks Estate and Queanbeyan. A second fire started in Pialligo the following day and joined with the first, eventually taking the fire to 424 hectares.

On 27 January 2020, the Orroral Valley fire ignited and threatened the southern rural areas of the ACT, most notably Tharwa, and potentially southern suburbs of Canberra. A State of Emergency was declared for the ACT on 31 January 2020 and the ACT Extreme Heat Plan was also activated.

The Orroral Valley fire was classified as 'out of control' until 8 February 2020, when significant rainfall allowed the status of the fire to be downgraded to 'being controlled'. By the time it was extinguished, the Orroral Valley burned over 86,000 hectares of land, approximately 30% of the ACT.

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<sup>8</sup> <https://www.canberratimes.com.au/story/6665438/just-how-bad-was-the-air-quality-in-canberra-this-summer/#gsc.tab=0>

## Climate change

Climate change is influencing the frequency and severity of dangerous bushfire conditions in Australia and other regions of the world, including through influencing temperature, environmental moisture, weather patterns and fuel conditions. There have been significant changes observed in recent decades towards more dangerous bushfire weather conditions for various regions of Australia.

Observed changes in southern and eastern Australia include more extreme conditions during summer, as well as an earlier start to the bushfire season with dangerous weather conditions occurring significantly earlier in spring than they used to. These trends towards more dangerous bushfire conditions are at least partly attributable to human-caused climate change, including through increased temperatures. Northern Australia, which sees significant fire activity during the dry season, has experienced increases in monsoonal rainfall that have increased fuel growth in recent decades and influenced fire danger in that region.

In relation to fire ignition, there is some indication that climate change could influence the risk of ignitions from dry lightning (i.e., lightning that occurs without significant rainfall) while noting relatively large uncertainties in currently available model representations of this phenomenon.

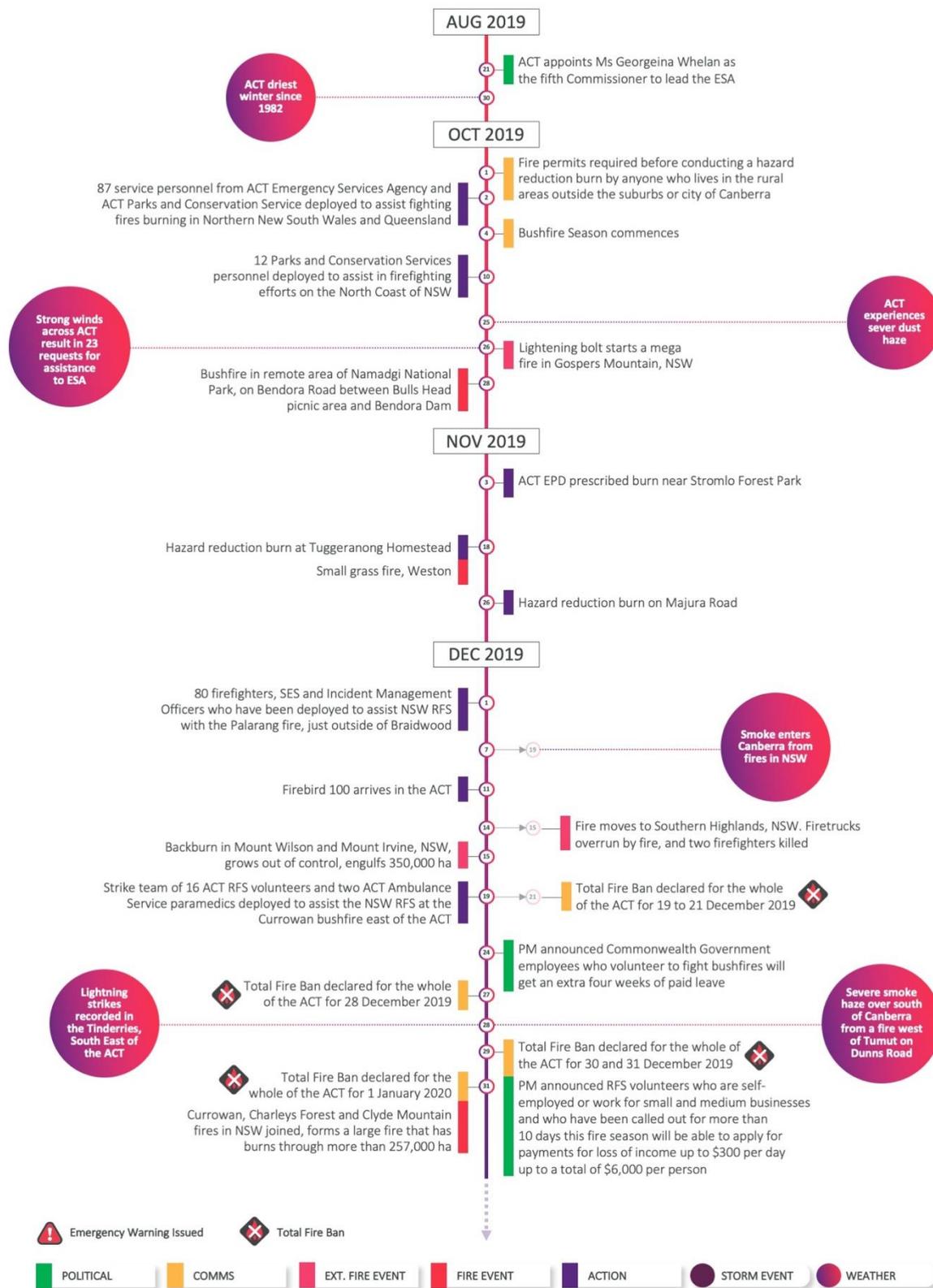
Additionally, there has recently been several devastating fire events in Australia associated with extreme pyroconvection (including thunderstorm development in a fire plume), with recent research indicating a long-term trend towards increased risk factors associated with pyroconvection in southeast Australia. Bushfire weather conditions in future years are projected to increase in severity for many regions of Australasia, including due to more extreme heat events, with the rate and magnitude of change increasing with greenhouse gas concentrations (and emissions).<sup>9</sup>

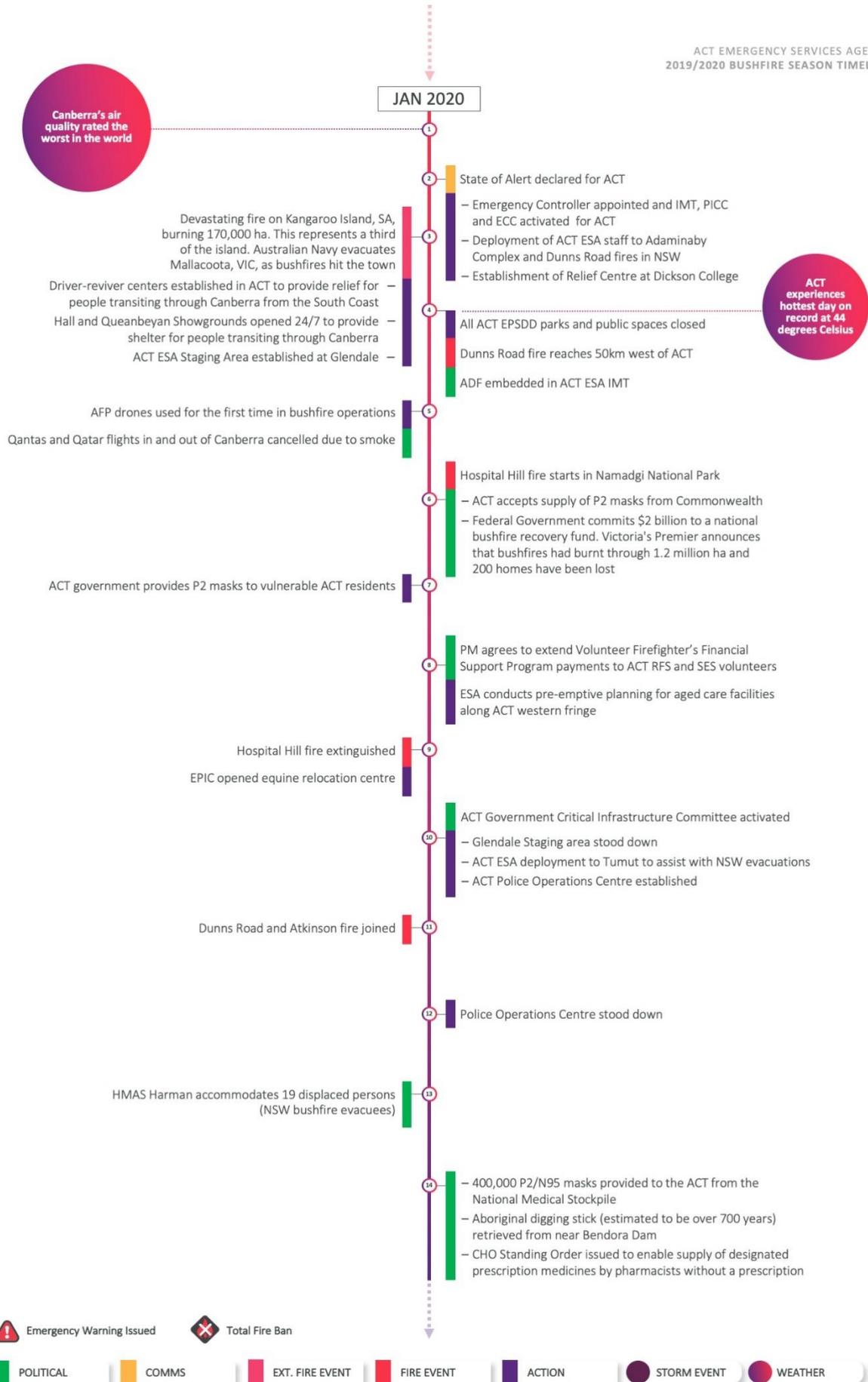
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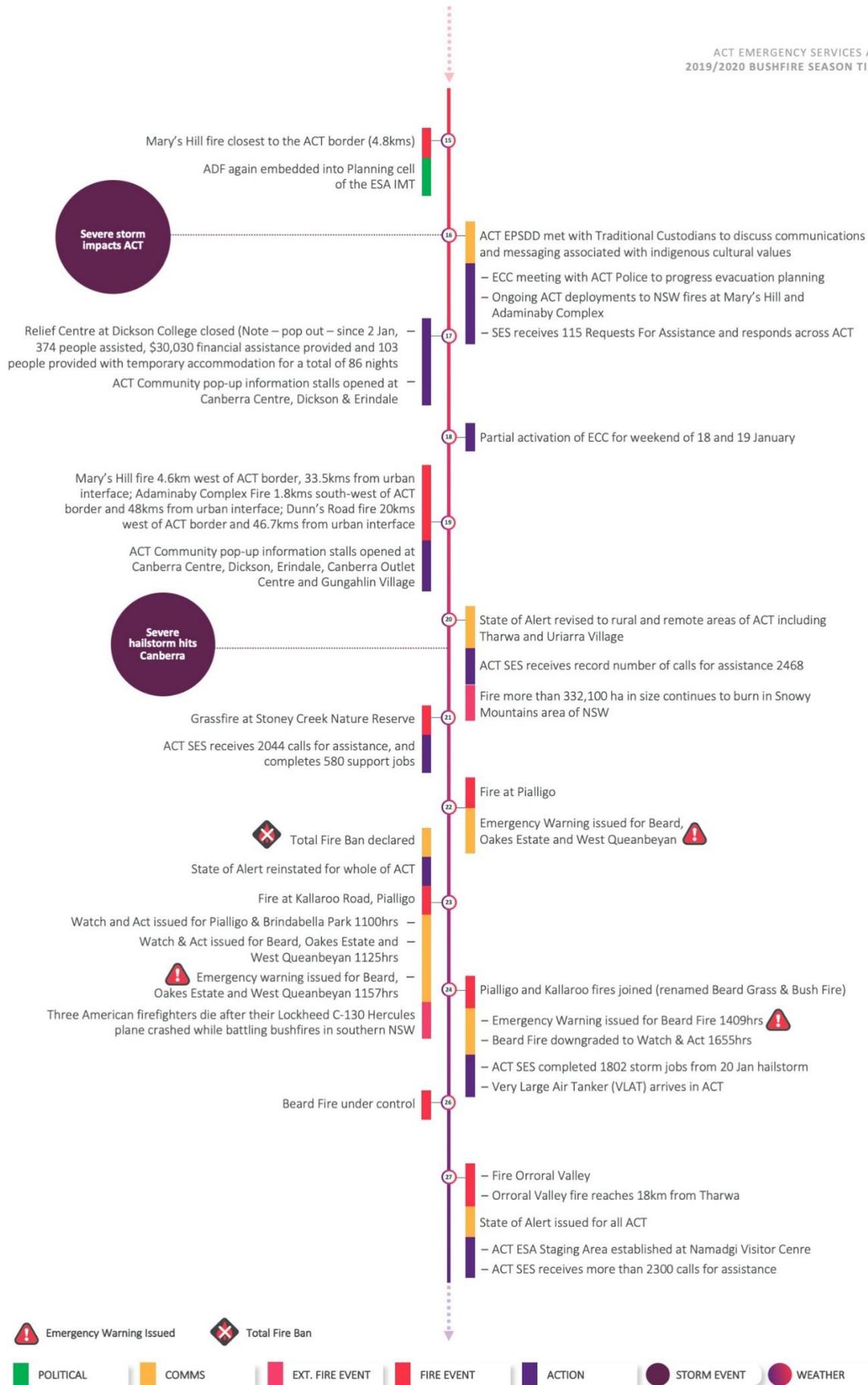
<sup>9</sup> <http://www.bom.gov.au/weather-services/fire-weather-centre/bushfire-weather/index.shtml>

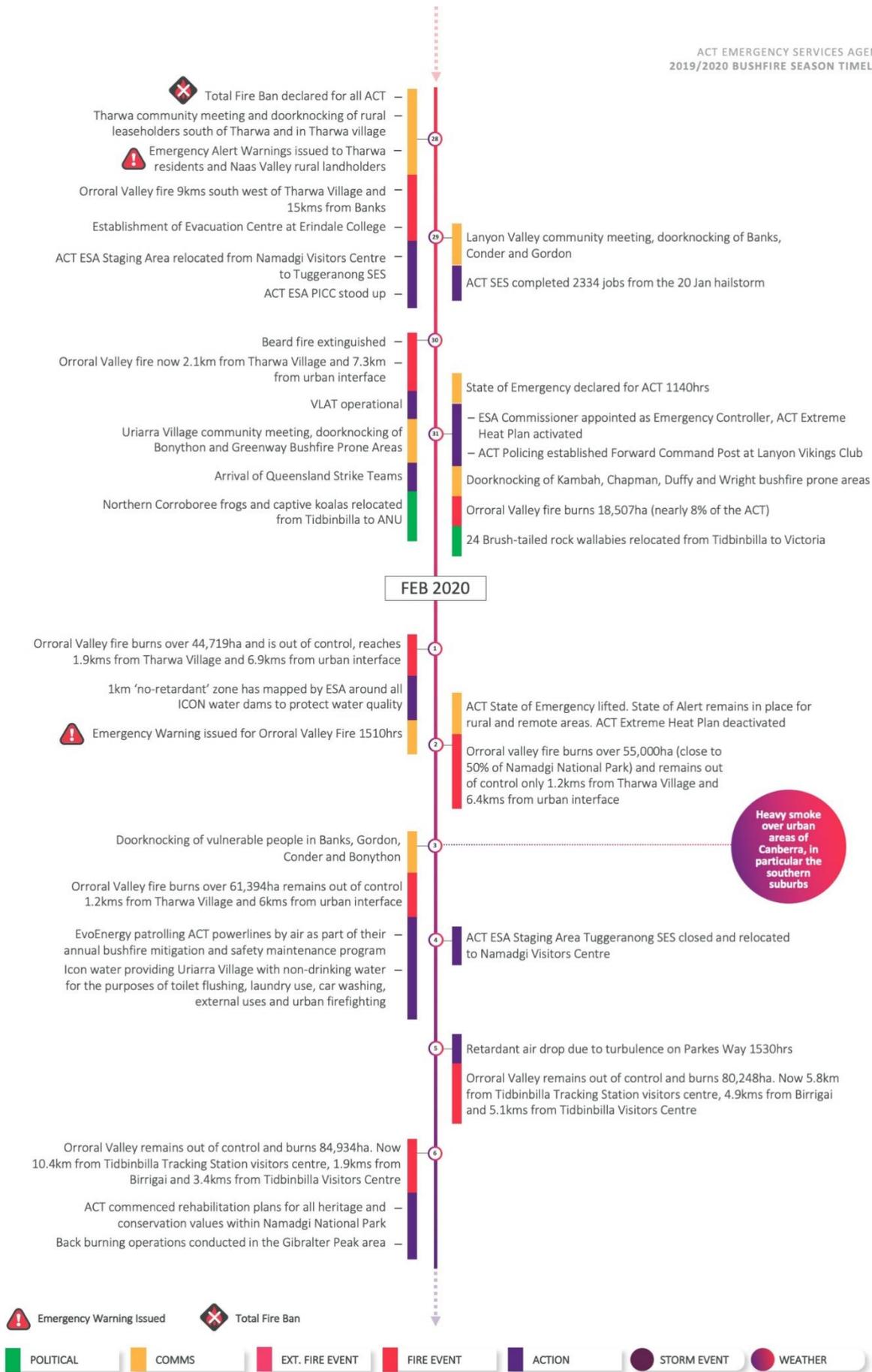
# 1b. Season Timeline

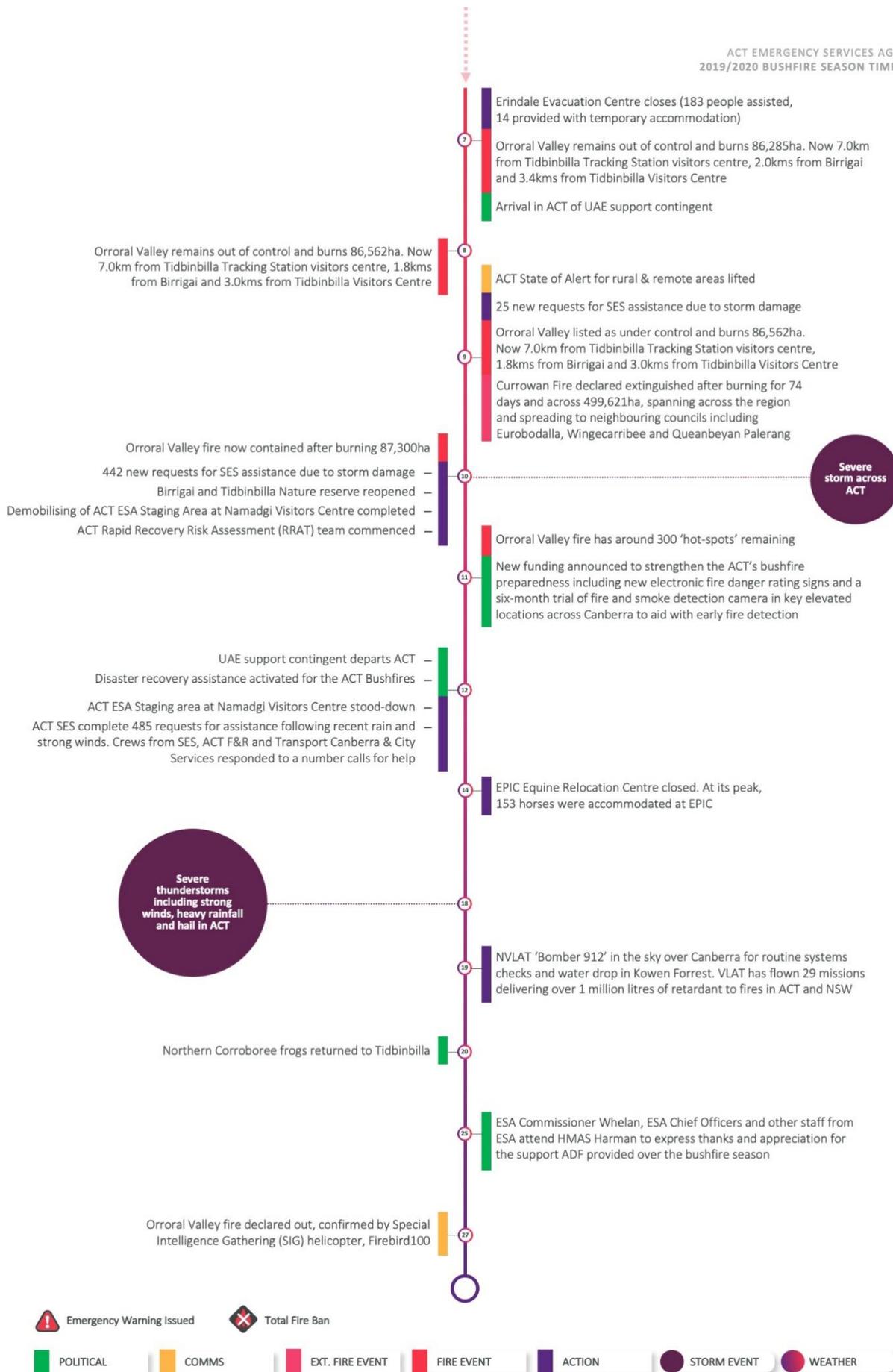
## ACT EMERGENCY SERVICES AGENCY 2019/2020 BUSHFIRE SEASON TIMELINE











## 1c. Methodology

The objective of this Review was to identify key observations, learning opportunities and good practice for ESA in preparation for the 2020/2021 Bushfire Season. The Review was conducted using a transparent and robust process which supported ESA staff to explore thematic issues or specific topics and identify key learnings with the intent of instituting change.

A review is more structured than a debrief (or After Action Review), but less formal than an investigation or inquiry.<sup>10</sup> It is a robust process aimed at supporting emergency management personnel to explore a specific topic and identify key learnings with the intent of instituting change.

Review outcomes typically inform the ongoing cycle of learning and improvement within the sector by validating and evaluating existing doctrine, arrangements, policy, procedure, and incident/emergency management application. Review outcomes provide evidence to inform a range of activities including training, exercising and briefings.

A review process enables individual and group learning, practicing respectful interaction, reflective discussion and problem solving, at all levels. It increases experience and insight, reducing serious accidents, resulting in more efficient emergency management practices. This review is framed as a 'State Review Team' as shown in the schematic below from Emergency Management Victoria. The Review analysed territory-level (ESA ECC/IMT) and multi-agency (RFS, F&R, ACTAS and SES) activity for trends and lessons.

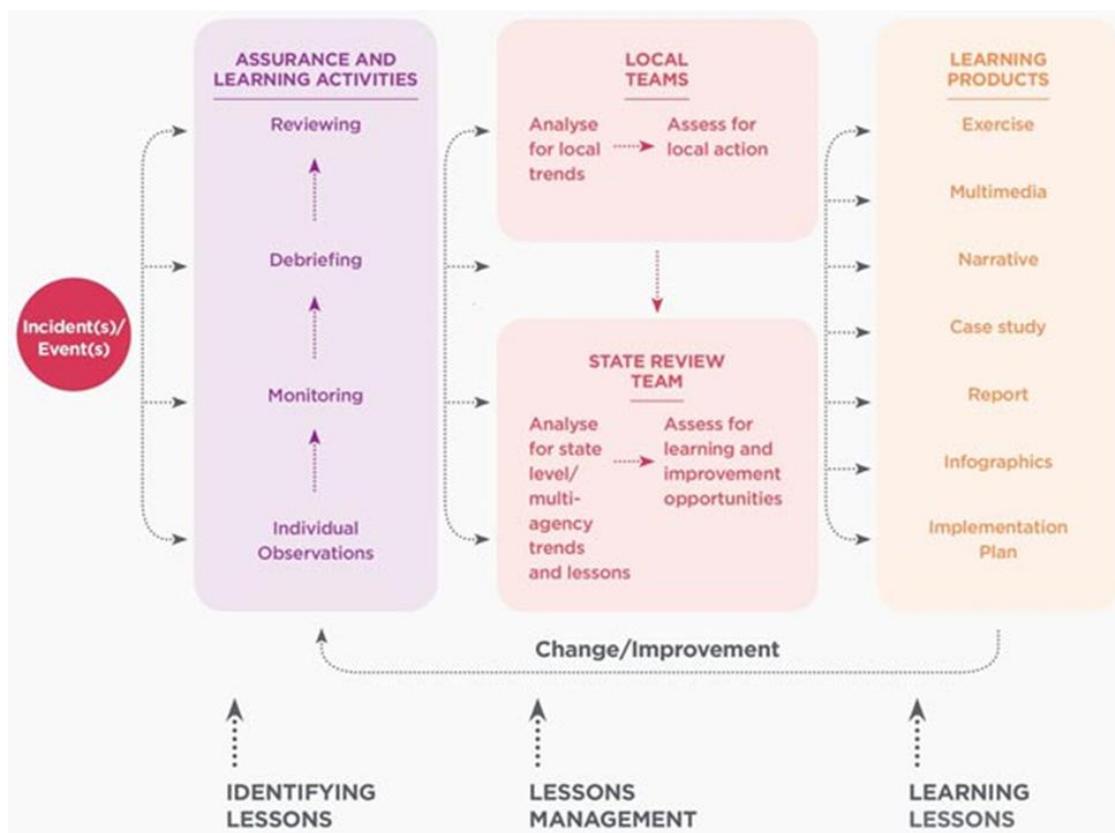


Diagram 1: Emergency Management Operational Reviews, Emergency Management Victoria

<sup>10</sup> This methodology has been adopted from the Operational Review Framework of Emergency Management Victoria. <https://www.emv.vic.gov.au/how-we-help/reviews-and-lessons-management/operational-reviews>

## Operational Analysis

The Review employed an 'operational analysis' (OA) systems approach to reviewing the ACT 2019/20 bushfire season.<sup>11</sup> Operational analysis is concerned with extracting information from a working system to develop projections about the system's future operations. Sometimes also known as 'operations research' (OR) in a military context, the process refers to the application of interdisciplinary science to complex problems arising in the direction and management of large systems. This enables the evaluation and analysis of problems to provide decision makers with a scientific basis to improve operations or capability.<sup>12</sup>

This Review both accommodated and acknowledged the layers of governance and coordination required for emergency management in the ACT, and the various supporting capabilities, systems and processes in play (including outside ESA, where relevant). A clear analytical framework with key methodological steps and evaluative criteria were developed for this task.

Research methods employed for the Review included: meta-analysis of existing internal ESA data and informational sources; document review; primary research interviews with participants (based on standardised 'semi-structured' interview format); and media and other open source data.

The Review's analysis and findings were organized by level of decision or action against task/capability/process or assurance activity to establish relationships, linkages and groupings of strengths and residual risk. Tactical coalface perspectives shared the same evidentiary weight as the strategic level. Thematic issues that emerged during analysis were shown additional effort with prioritization applied to insights of greatest significance and value.

## Measures of Performance

The Review identified and examined specific Measures of Performance (MOP) for each phase of the 2019/20 Bushfire season. Establishing MOPs helped determine progress relative to ESA's mission objectives, and end states; and in shaping relevant recommendations/guidance for improvement.

In the field of OA, MOPs are closely associated with task accomplishment. MOPs help answer questions like: 'was the action taken, were the tasks completed to standard, or how much effort was involved?'. The Review incorporated both quantitative (observation based) and qualitative (opinion based) indicators. The Review notes that human judgment is integral to assessment. A balanced judgment for any assessment identifies the information on which to concentrate.

Specific MOPs developed for ESA and the services (RFS, F&R, ATCAS and SES) for this included:

**Preparedness:** Resources, Facilities, Equipment and Staff Readiness, Specialist Capabilities, Previous Season Lessons, Risk Reduction Activity, Community Engagement.

**Planning:** Legislation, Policies, Plans (SBMP, RFMP, BOP), Doctrine and SOP, Exercises and Testing, Intelligence and Modelling, Risk.

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<sup>11</sup> Originally a scientific process to analyse military operations and tactics. The methods employed for this review were developed to enable performance analysis for ESA.

<sup>12</sup> See Defence Science and Technology <https://www.dst.defence.gov.au/research-area/operations-analysis>

**Response (Operations):** Incident Management Systems, Call-out and Deployment Standards, Operations and Tactics, Intelligence Support and Situational Awareness, Communications (internal), Logistics and Support, External Deployments (out), External Support (in), Safety, Resource Management/Reconstitution.

**Response (Management):** Command and Control, Leadership, Decision Making, Public Information, Liaison (ACT), Liaison (NSW), Liaison (Commonwealth and ADF).

**Recovery:** Assessment, Resources, Community Engagement and Support, Monitoring, AAR Processes.

## Operational Performance Rating System

The Review employed a purpose designed rating system for ESA to provide a numerical measure of the MOPs, considering intended versus delivered results as a two-factor calculation. This was merely one of the tools used in the operational analysis and was not intended to be a definitive or stand-alone ‘score’ of performance for ESA or any service. Rather, this was designed to build on qualitative data and allow some additional analytical perspectives, pattern and trend analysis.

Note: In some cases, the Review was not able to generate a score for a particular service against one of the metrics, due to the proportionality of available evidence lower than equivalent services. This decision was made to ensure consistency of scoring methodology. In other cases, actual detailed assessments of MOPs were combined – for several services the Review chose to combine ‘preparedness’ and ‘planning’ for the purposes of scoring and narrative assessment. These are reflected in Annex A (Operational Analysis Matrix) and Annex B (Operational Assessment Sheets).

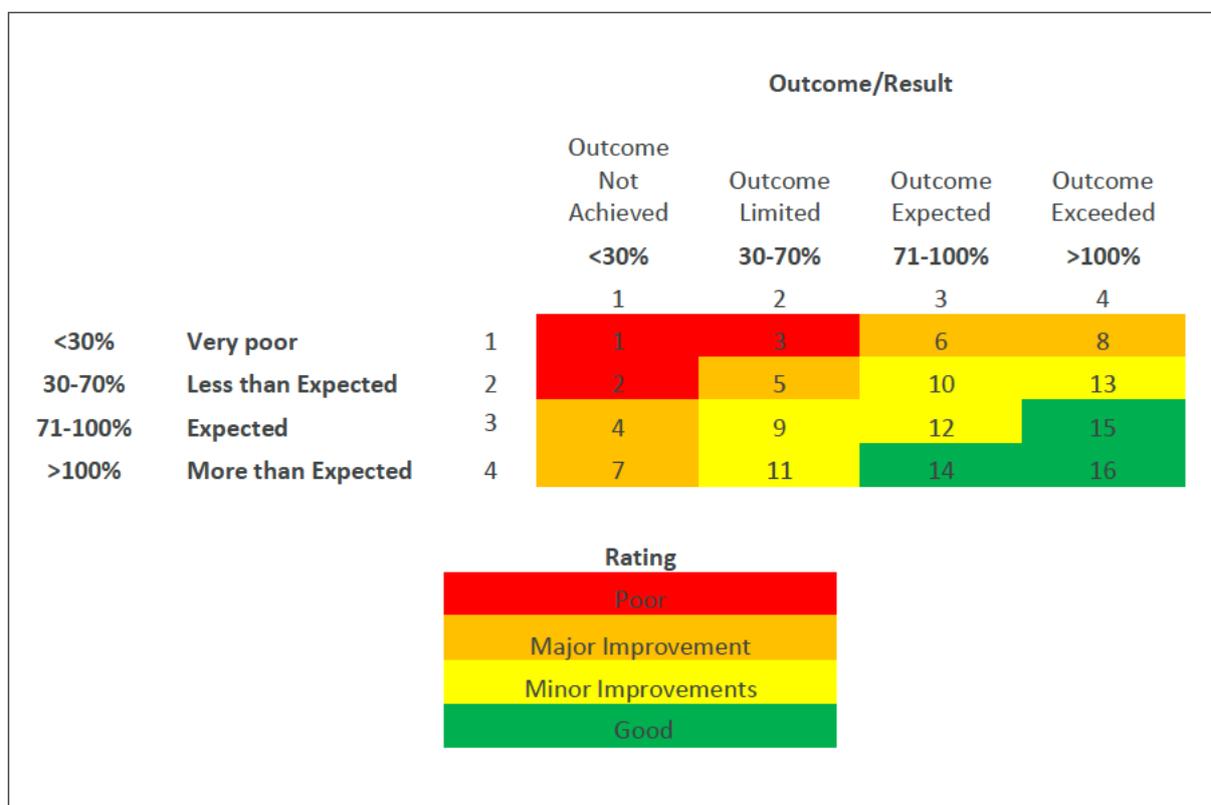


Diagram 2: Synergy Operational Assessment Performance Rating System for ESA

The Review also considered the measures of operational success for emergency services put forward by the Australasian Fire and Emergency Service Authorities Council (AFAC).<sup>13</sup> AFAC recognised that any assessment of operational success for emergency services needs a wider focus than just the emergency response itself. AFAC put forward certain 'measures of success' for emergency services:

1. Supporting resilient communities through risk reduction;
2. Providing trusted response;
3. The source of credible and timely information;
4. Effective governance and resource management; and
5. Informed by research.

## Core References

The Review examined the following core references:

ACT Emergencies Act 2004

ACT Emergencies (Emergency Plan) 2014 (No 1)

ACT Strategic Bushfire Management Plan 2019-2024

ACT Strategic Bushfire Capability Framework 2018

Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner's Guidelines 2017 and Amendment 2018

MOU ACT ESA and Environment and Heritage (NSW) – Cross Border Agreement on Fire Preparedness, Response and Suppression

ACT Bushfire Management Standards 2014

ACT ESA Bushfires Preparedness Project – Final Report 2019

Preseason Readiness Program 2020 – ESA Risk and Planning Branch

RFS Preseason Checklist 2019/20

ACT Recovery Sub-plan 2019

ACT Community Recovery Sub-plan 2017

The Australasian Inter-Service Incident Management System 2017

Australasian Fire and Emergency Service Authorities Council (AFAC) National Capabilities Framework

AFAC Discussion Paper (2014) What is Operational Success for Fire and Emergency Services

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<sup>13</sup> Australasian Fire and Emergency Service Authorities Council (AFAC), Discussion Paper Version 1.2 (2014), What is Operational Success for Fire and Emergency Services?

Hearing and evidence presented to the Royal Commission into National Natural Disaster Arrangements

After Action Reviews completed by:

- ACTAS
- ESA COMCEN
- ESA ECC
- F&R
- ESA Finance
- ESA ICT
- ESA Mapping
- ESA PI&E
- ESA IMT Planning and Operations
- ACT Police
- ESA Radio
- RFS
- SES

Daily operations and planning documents developed by the IMT, including Incident Action Plans and Situation Reports, ECC Critical Information Reports, and ECC SEMSOG Situation Report.

## **SECTION 2: REVIEW**

## SECTION 2: REVIEW

### 2a. Preparedness

The ACT Government has the governance structure with oversight of emergency planning and response coordination necessary to meet the direction of the Emergencies Act. The Security and Emergency Management Committee of Cabinet (SEMSOG) provides general strategic direction on ACT Government prevention and preparedness arrangements. It does this through the guidance set out in the Strategic Bushfire Management Plan (SBMP) that provides a strategic framework to protect the ACT community from bushfires and reduce resulting harm to the physical, social, cultural and economic environment of the Territory.

While the treatment of identified hazards will mitigate bushfire risk to an extent, it is simply not possible to eliminate all the risks. The ESA, through the SBMP, adopts an integrated risk-based approach to bushfire management, informed by shared responsibility, continual learning and evidence-based decision-making.

The SBMP recognises that the resources required to implement actions will vary every year, reflecting seasonal and operational priorities, and changes in the ACT's risk profile. It also recognises that additional funding may be required as risk profiles change. The SBMP expects objectives to be delivered within existing resources under the ACT Strategic Bushfire Capability Framework (SBCF). In achieving this the SBCF also recognises the requirement for additional resources from other states and the Commonwealth in extreme circumstances.

The SBCF identifies the Concept of Operations for bush and grass fires in the ACT (Concept of Operations) as the capstone document that establishes the principles for managing bush and grass fires. The Concept of Operations recognises the need to ensure that the territory is sufficiently prepared to manage bush and grass fires under the worst possible conditions. This includes determining the levels of resourcing to fulfil;

- firefighting roles,
- AIIMS functions,
- ECC functions, and
- PICC functions.

The SEMSOG is the primary mechanism for ensuring cooperation and coordination between ACT Government agencies in planning for and responding to emergencies. It is supported by the Security and Emergency Management Policy Group (SEMPG) which comprises officials from all relevant ACT Government directorates. It develops, implements and reviews specific security and emergency management matters including plans and sub-plans. These two groups work closely with the ESA Commissioner on a coordinated and cooperative approach in planning for and responding to emergencies in the ACT, including bushfires.

The ESA, including fire services, other emergency services and support agencies, has in place doctrine, operational procedures and internal policy documents to guide preparedness and response arrangements in the ACT. These include the Emergency Plan and its sub plans, Commissioner's guidelines, standard operating procedures and MOUs between government and non-government agencies.

Direction on preparedness is contained in the Emergency Plan 2014 (The Plan) which outlines roles and responsibilities for hazard management, the relationship between Supporting Agencies and the Lead Response Agency, and Emergency and Other Planning Arrangements. Beyond directing that plans are in place and resources are provided The Plan directs that the Territory will undertake exercises and workshops to examine and assess the effectiveness of emergency arrangements. This direction includes that training and exercising

will be undertaken on a routine basis to ensure Agencies are familiar with and understand the described emergency arrangements, and to provide for ongoing review of arrangements.

At the strategic level preparedness is defined through objectives and actions for agency and community preparation and response for bushfires, bushfire hazard assessment and risk analysis, and bushfire prevention. An adaptive management approach is used to apply best practice to bushfire management and prevention practices in the ACT in a changing environment. This is cascaded through the SBCF, The Plan and the Concept of Operations into operational objectives directing appropriate levels of capability be prepared against the prevailing strategic and seasonal risk. Preparedness levels are to be maintained to meet incidents as they occur. Achieving effective levels of preparedness in this context requires the maintenance of continuous levels of readiness, a familiar concept across response agencies and emergency services.

Bushfire prevention is not the responsibility of one body but rather the collective responsibility of the entire ACT community. Led by the ESA and Environment, Planning and Sustainable Development Directorate (EPSDD), bushfire risk management involves all other ACT directorates, utility providers, private landholders and the broader community. While the ESA Commissioner may make standards relating to requirements under the SBMP, effective fuel load mitigation relies heavily on the activities of landowners and managers.

The ACT Parks and Conservation Service (PCS) is responsible for managing fuel, undertaking fire mitigation and maintaining roads, fire trails and access on unleased Territory lands that it manages on behalf of EPSDD as well as relevant areas of Transport Canberra and City Services Directorate (TCCS). PCS is responsible for preparing annual Bushfire Operational Plans (BOPs) for these areas and undertaking fire preparedness and mitigation works under those BOPs. All BOPs are subject to sign-off by the ESA Commissioner.

The SBMP takes an 'integrated risk-based approach' to bushfire management and accepts residual risk. This concept of residual risk—developed for land management purposes—is focused on bushfire fuel hazard and the SBMP states that it 'cannot be readily applied to other aspects of bushfire prevention, preparedness, response or recovery'. Using a 'residual risk' target allows bushfire fuel management activities (such as prescribed burning) to focus on areas that fire modelling shows will have the greatest effect in reducing risk to life, property and the environment.

While the SBMP acknowledges that it is impossible to completely remove all bushfire risk, reducing fuel loads to manageable levels remains problematic for land managers such as EPSDD (who manage 80% of ACT lands) when faced with the extreme conditions experienced during the 2019/20 bushfire season. Comments were made that fuel loads and conditions meant that 'anything that could burn did', including area previously burnt. Very high levels of practical cooperation are required between ESA and land owners and managers in such circumstances. Preparedness levels must match the significant levels of residual risk that remains, and additional other measures taken to reduce risk that may impact on longer term land management.

The ESA publicly declared that it was prepared for the forthcoming bushfire Season on 31 August 2019, urging that the public be also 'Bushfire Ready', and announcing that the Bushfire Season would commence on 1 October. The Annual Preparedness Briefing occurred on 6 September. The ESA deployed 28 firefighters from the RFS and P&C to assist QLD Fire and Emergency Services in Rockhampton and Warwick on 12 September. The ESA officially ended the 2019-20 ACT bushfire season on 31 March 2020 following a challenging season of unprecedented conditions

The ESA was well placed to respond to a high level of demand for bushfire resources and completed extensive preparations in the lead up to the 2019/20 bushfire season. This included the required skilled and motivated personnel, and the necessary equipment and resources to extinguish and manage bushfires where this was operationally feasible. It also had the capacity to respond to significant weather and storm events. BAU emergency response remained largely unaffected throughout the season. Notably the ESA deployed substantial levels of support and expertise to assist fire management in other states. The recognised

requirement for interstate resources in extreme situations was realised during the response to the Orroral Fire demonstrating the effectiveness of inter-state and state to commonwealth resource sharing mechanism.

The ACT Government's coherent position on the risk posed by the 2019-202 Bushfire Season was communicated clearly to the public early in the season and the Government continued to provide or support updates throughout the season. Important lessons were taken from the 2003 fires with specific effort being placed on ensuring that the public were ready to share responsibility for being bushfire ready. A comprehensive community safety and notification campaign significantly helped the ACT in its readiness. This was timely given the gravity of bushfires underway in other states.

The high levels of preparedness of the ESA was clearly shown through the numerous examples of reciprocity and cooperation with other states and jurisdictions in the very early stages of the season. This included:

- The ACT's spatial capability is highly regarded and sought after. ACT Mapping and Planning Support (MAPS) volunteers deployed on numerous occasions across NSW and Queensland.
- ESA Liaison Officers were deployed into various Regional Emergency Operations Centres in NSW.
- The ACT's Firebird 100 specialist intelligence gathering helicopter was extensively deployed interstate during the bushfire season.
- Firefighting personal, aviation resources, firefighting and support appliances, heavy plant, specialist technical roles. ICT services and incident intelligence were also shared between agencies.
- The ESA utilised 58 personnel (18 employees and 40 volunteers) in aerial firefighting operations across two air bases (Hume Heli base and the Canberra LAT base) in support of firefighting activities across three states (ACT, NSW and VIC).
- Mechanical and paramedic support was also provided to all frontline firefighting teams deployed to firegrounds outside of the ACT.

Deliberate preparedness gaps analysis and a plan to address priority shortfalls informed the ACT Strategic Bushfire Capability Framework (SBCF) published in September 2018. This was complimented by the Bushfire Preparedness Project (BPP) which brought together the 24 operational and strategic works streams considered critical to delivering greater preparedness in anticipation of severe bushfire conditions in the 2018/19 season. Key deliverables included mitigation activities, enhanced capabilities, community preparedness, and collaboration. The additional strategic and programmatic steps taken to manage and prepare for 2018/19 Bushfire season clearly benefited preparedness for the 2019/20 Bushfire Season.

RFS pre-season checks from July through to October 2019 identified some shortfalls across 25% of specified actions that impacted on preparedness and contributed to much of the commentary that is discussed below. For example, desktop fire command and service wide exercises were not conducted, and interviews confirmed these activities were subsumed by the tempo of inter-state deployments. The Review also notes that while checklists are a necessary and efficient means of auditing achievement against specific actions, they do not provide an effective validation of the performance of an organisation. In the case of the RFS both material and individual preparedness levels were high but the opportunity to conduct and validate Level 3 training and complete other training was missed.

There was no evidence made available to the Review that an Annual Bushfire Preparedness Calendar (action 5.10 of the SBMP) had been established for the 2019/20 Bushfire Season. Preseason readiness programs were however developed by ESA to assist preparedness. The preseason readiness programs are comprehensive but rely on strategic plans for context with little tangible reference to the programming of outcomes in an operational context, prioritisation of tasks or to the assessment of risks posed by the forthcoming season.

Additional appointments have been made for Senior Directors for both Planning and Preparedness, and Operations and Capability Development, to provide assurance to the Commissioner, Chief Officers and

Executive Branch Manager of the effective and efficient oversight and management of emergency planning and preparedness activities at an agency wide level. Importantly, this includes the strategic oversight of emergency planning and preparedness activities at an agency wide level, and the development, conduct, review and evaluation of exercises to test joint planning and preparedness arrangements between ESA and external stakeholders. This represents a significant opportunity for ESA to address concerns of yearly and seasonal planning which is discussed later in this Review.

The opportunity also exists to take a strategic approach to capability planning to further benefit from significant advances in fire intelligence and situational awareness capability, networked communications technology and utility assets such as aerial operations. Longer-term plans for forecasting, resourcing, prioritisation, basing and coordination of a national aerial fire-fighting capability is an example of improvements that have wider reaching benefit regionally and nationally. The ACT's role as a strategic hub for south east Australia means it is well suited as a base for domestic aerial firefighting capability and associated fire intelligence and situational awareness development.

#### **RECOMMENDATIONS:**

- The ACT SBCF should be complimented by a strategic approach to preparedness that incorporates capability planning for mutual aid, enhancing the capability to source, deploy and command at the sector level and above, and arrangements to routinely share resources across states and draw on commonwealth assets.
- 'Other Resource Capability Activities' should be integrated into this approach in recognition of their significant enabling and inter-service capability.
- This strategic approach should also address developing the capacity to innovate around advanced capabilities and adapt them to firefighting in a coherent and safe manner.

Many staff deployed to both provide support to other jurisdictions but to also gain further experience very early in the fire season. Gaining experience through deployments can be invaluable and meets the objectives of the SBCF but the tempo of deployments needs to be managed to minimise impact on the training and exercises for concurrent ECC and Level 3 IMT.

Despite the thoroughness of preparation there was a perception among ECC/IMT/PICC staff that they were not prepared for protracted responses beyond 2-3 days. They found the length of campaign daunting, raising concerns about not having practised the application of their qualifications (AIIMS and other skills) sufficiently before being involved in response management. As the ECC and ICC scaled in response to worsening conditions over an extended season there was a view that there was a growing mismatch of qualifications, commitment, competency, and availability.

Similarly, comment was made that the pre-season logistics checks did not envisage the scale of events and that contracts (e.g. catering) were stretched to deliver over the season. There was a sense that ESA level operational support or "surge" plans had not been adequately developed to support extended Level 3 Incidents. Other logistics and resources planning made assumptions that were not covered by MOU or formal support arrangements requiring ad-hoc arrangements and 'work-arounds' to be established. The source concern driving commentary appeared to stem from pre-season planning and analysis not being sufficiently

comprehensive or adequately testing with respect to supply chain requirements and some supply relationships.

There is a requirement to establish pre-incident functional plans to coordinate the provision of capability for a range of supporting and logistics functions in the Concept of Operations. The guidelines also have a requirement for pre-formed incident management teams and pre-incident operations planning, although much of this is framed in very incident specific language. Stand-up arrangements are clear in the guidelines and an approved list of persons possessing the relevant competency and/or experience was published in December 2018. Operations of the ECC are detailed in the ECC Emergency Operations Sub-Plan which describes the physical and ICT infrastructure, business continuity, personnel roles, processes and products of the ECC in supporting the emergency operations. It positions the ECC of the lead response agency for support to an all-hazards, all-agencies emergency response but does not describe the requirement to scale nor does it discuss the management of tempo over protracted operations.

Many of the issues raised can be addressed through auditing and updating all ESA staff AIIIMS qualifications, the development of an IMT staff support matrix that shows qualifications down to team member levels, and the incorporation of surge contingencies into revised sub-plans. Relevant knowledge and skills can be validated, and experience gained through pre-season Level 3 ECC command readiness exercises.

#### **RECOMMENDATION:**

Annual series of exercises involving ESA and all agencies for L3 incident response and IMT establishment to improve: all hazards response; cross agency relationships and interoperability; and capability and skills maintenance and development for all staff.

The RFS undertook extensive annual preparations for the 2019/20 bushfire season including vehicles and equipment maintenance and personnel training. Preparation included extensive support to interstate deployments in support of national emergencies, ensuring currency and exposure to major incident management. The RFS was unable to conduct specific collective training for IMT Level 2, or participate in an ACT led, Level 3 IMT. In 2019, RFS was not requested to conduct its usual quota of hazard reduction activities by PCS.

The RFS has good baseline facilities, equipment and personnel levels. A high number of TOBAN days provided opportunity to test stand-up and ensure personnel and equipment readiness. The Farm Fire Wise program is extensive and had up to date coverage and assessments with plans reviewed every five years, or on change of lease.

The RFS had also conducted a schedule of hazard reduction burns with private landholders. Extensive participation in inter-state deployments gave the RFS an opportunity to put training into practice and helped reinforce existing high levels of coordination with NSW RFS. The normal allocation of BOP hazard reduction burns for RFS in 2019 (managed by the PCS) were not available however due, in the main, to weather conditions. Controlled activities such as hazard reduction burns are of significant benefit to the RFS for mandatory career assessments and training.

There were several factors that hampered otherwise good levels of preparedness for the RFS. It should be noted that no specific IMT-level exercises were conducted (IMX) in 2019 prior to the bushfire season. The

impressive numbers of early and extensive deployments interstate meant many volunteers were already fatigued (and constrained by release from employers) at the start of bushfire season (The Review was informed by RFS total numbers were 450 members, 1183 total deployments for total of 2212 days). Fatigue also impacted on post-deployment vehicle and equipment maintenance.

Comments were also made that a high turnover of RFS permanent staff in ESA (from among only 12 in total) in previous years lead to inconsistency in approach and experience. This runs contrary to the stated objective of the SBCF.

Very high levels of motivation across the RFS and a strong desire to serve the community was evident during the Review and was shown through very high levels of volunteerism for interstate deployments. The high levels of praise that the ACT RFS received while deployed interstate and their high level of utilisation was contrasted to their employment within the Territory in commentary during the Review.

#### **RECOMMENDATIONS:**

- Review RFS hazard reduction task allocations (including from BOP tasks from PCS) to ensure adequate opportunities for professional development and skills maintenance.
- Review fatigue management systems for ESA (including RFS), and other support arrangements for volunteer staff in the ACT.
- RFS pre-season training and preparedness activities with ESA and other services, including combined interstate deployments for L3 qualified ICs.

ACT Fire and Rescue (F&R) was well prepared. The established program for BAU preparedness meant that staff and equipment was ready for tasking and the demands of the bushfire season. Long term investment in ACT building codes and regulations meant the urban interface was less of a concern in the lead up to the bushfire season. F&R noted that the PCS annual hazard reduction and debris removal program was successful in 2019 and contributed to hazard reduction in the numerous green spaces within the urban limits of Canberra. As with many ESA staff a program of interstate deployments in preceding months (to NSW) helped develop currency, situational awareness and contributed to collaborative inter-service approach.

It was noted that while there are a considerable number of Level 3 qualified Incident Controllers (IC) in the ACT not all had currency or relevant competency. It was clear that ICs benefited greatly from experience controlling L2 and L3 incidents, and where this wasn't possible, experience was gained by supporting other ICs during interstate deployments. The strategic objective of growing the available number of ICs was questioned when steps to ensure the currency of Level 2 and 3 qualified staff to support ESA IMT was not in place. This issue was exacerbated by the lack of an ESA level annual exercise in 2019 leaving staff less familiar and prepared for all functional roles in IMT.

#### RECOMMENDATIONS:

- Review AIIMS qualifications among F&R staff for IMT roles.
- F&R active involvement in pre-season training and preparedness activity with ESA and other services, including combined interstate deployments for L3 qualified ICs.

The high levels of readiness and response demanded by BAU assisted ACTAS as it had with F&S. The requirement for medical support to remote bushfire operations that had been recommended in the SBCF had been actively supported by ACTAS resulting in adequate numbers of people with the correct levels of qualifications (driving and bushfire awareness).

#### RECOMMENDATION:

Continue to develop a dedicated ACTAS cadre with specific training who can be extracted from BAU to support fire operations. It is recommended that specific training occur across ESA to allow staff to be extracted from BAU to support fire operations.

The SES were similarly well prepared for the 2019/20 bushfire season and had conducted detailed vehicle and equipment servicing and personnel training at the individual level. It is worth noting that the SES had undertaken service-only planning, readiness and exercise.

#### RECOMMENDATION:

Review SES support to ESA/RFS incidents and further enhance deliberate preparations, planning and training for staging area development and IMT requirements in support of bushfires.

## 2b. Planning

The ACT has long benefited from a multifaceted, comprehensive approach to managing bushfire risk in the Territory and encompasses measures for prevention, preparedness, response and recovery (PPRR). These measures include:

- establishing planning controls so developments are appropriately located and designed
- managing potential fuel loads
- adopting management and operational plans
- ensuring well-resourced and effective emergency services

- increasing community awareness and personal action on the risks posed by bushfires.

Governance and management of PPRR is operationalised through a hierarchy of detailed plans made under the Emergencies Act 2004 (The Act) which sets out the emergency management arrangements in the ACT. The objects of the Act include:

- protect and preserve life, property and the environment; and
- provide for effective emergency management that;
- has regard to the need to prepare for, prevent, respond to and recover from
- emergencies; and
- takes an all-hazards approach to emergency management; and
- to provide for the effective and cohesive management by the Commissioner of the State
- Emergency Service, the Ambulance Service, Fire and Rescue and the Rural Fire Service; and
- recognise the value to the community of all emergency service members, including volunteer
- members.

The Act provides for the preparation of a Plan, which must include details of a plan for an emergency if there is a reasonable possibility of the emergency happening in the ACT, and a community communication and information plan.

At the strategic level of planning the Strategic Bushfire Management Plan (SBMP) provides a strategic framework to protect the ACT community from bushfires and reducing resulting harm to the physical, social, cultural and economic environment of the Territory. The SBMP delivers a 5-year basis for fire hazard assessment, risk analysis, prevention, preparation and response. This is complimented by the Strategic Bushfire Capability Framework (SBCF) which identifies the level of resources available to respond to bush and grass fires in the ACT, ensures that resources match the prevailing risk, and provides an indication of capability against the objectives and action laid out in the SBMP.

The ACT Emergency Plan (The Plan) is also considered a strategic plan and describes the responsibilities, authorities and the mechanisms to prevent, or if they occur, manage emergencies and their consequences within the Australian Capital Territory Emergencies Act 2004.

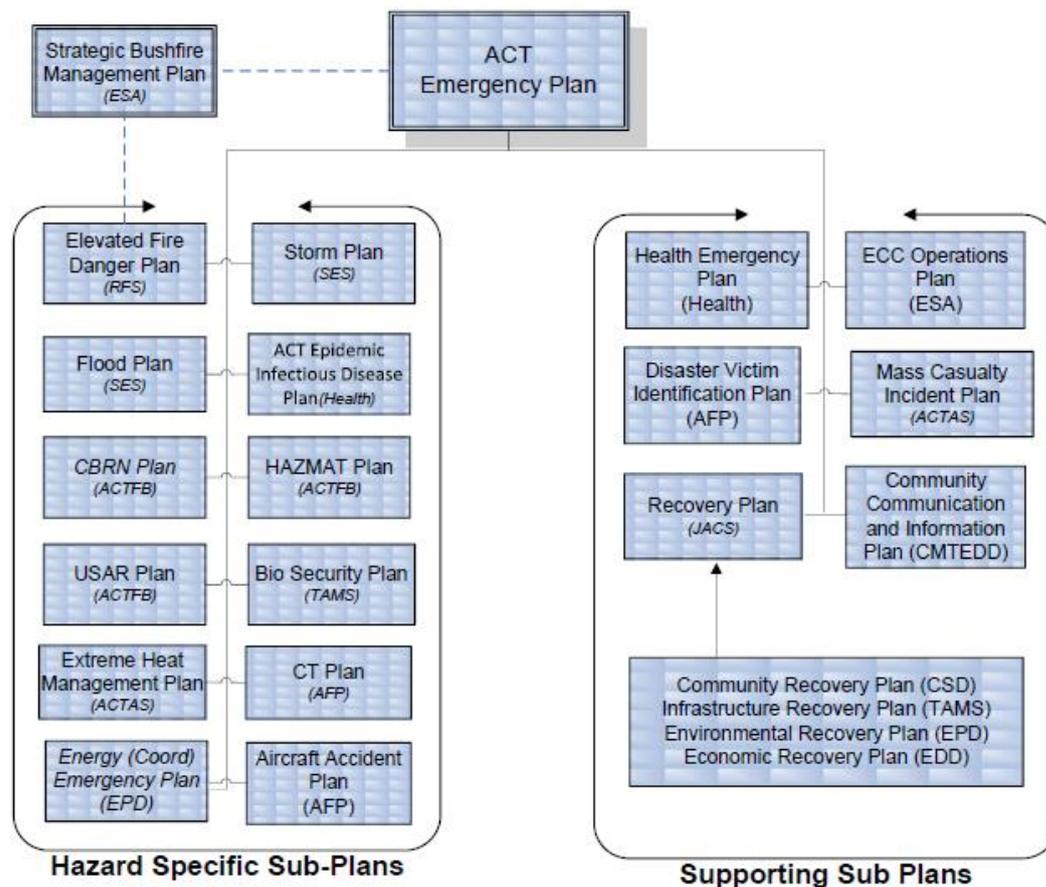
The objectives of the ACT Emergency Plan are to:

- outline the principles for emergency management in the ACT;
- describe how the components of emergency management in the ACT work together under a
- single, comprehensive and flexible framework;
- identify roles and responsibilities related to identified hazards and associated emergencies;
- identify, in relation to each different form of hazard, the lead agency primarily responsible for
- controlling the response to the emergency;
- provide for the coordination of the activities of other agencies in the Territory and elsewhere in
- support of a lead response agency in the event of an emergency; and
- identify the key roles and responsibilities that may be activated during an emergency.

The emergency management arrangements in The Plan are based on the following core principles which are intended to guide balanced, effective and efficient emergency management.

- The comprehensive approach which encompasses the spectrum of PPRR will be applied.
- An all hazards approach for managing the possible effects of emergencies will be applied.
- All agencies are involved to some extent in emergency management.
- Public safety and community engagement is fundamental to effective emergency management in the ACT.
- A risk-based approach to emergency management will be applied.

There is a comprehensive range of hazard specific sub-plans described in The Plan. Each has a designated lead and authorities attached.



Actions under The Plan are further detailed in The Concept of Operations for bush and grass fires in the ACT (Concept of Operations) which is also described as a capstone document that establishes, at the ‘strategic’ level, the principles for managing bush and grass fires. Importantly from a planning perspective the Concept of Operations seeks to ensure that the territory is sufficiently prepared to manage bush and grass fires under the worst possible conditions. This includes determining the levels of resourcing to fulfil;

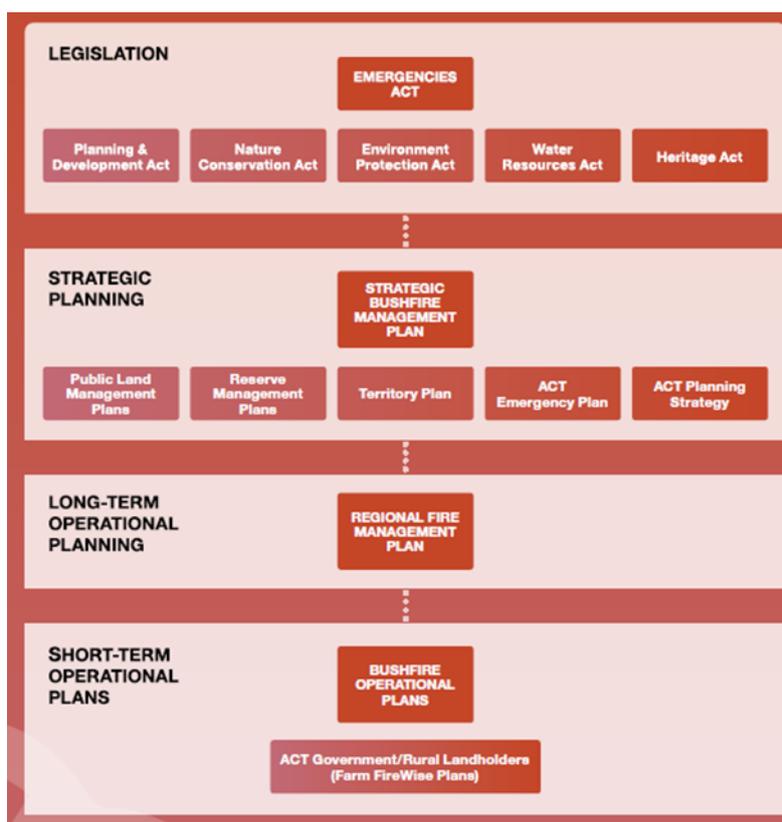
- firefighting roles,
- AIIMS functions,
- ECC functions, and
- PICC functions.

Functions such as the ECC are detailed separately through plans such as the ECC Operations Plan 2019.

Of fundamental importance to meeting the stated aims of fire related plans both in response or impact is the Regional Fire Management Plan (RFMP). Described as a long-term operational plan it is considered a foundation document that informs the SBMP and outlines how bushfire fuel management will be conducted on ACT government managed land. The annual and more detailed Bushfire Operational Plans (BOPs) – are drawn from the information contained in the RFMP. The annual BOP includes a range of activities and fuel treatments, such as prescribed burning, fire trail maintenance, slashing and physical removal as well as grazing to reduce grass fuels. The RFMP is a ten-year plan with a five-year review and balances fire fuel management with all the other values that the natural estate is managed for in the ACT.

The SEMSOG is responsible for developing, implementing and reviewing all plans and sub-plans. The planning framework is thorough and adequate for the management of emergencies and their consequences. Some clarification and recommendations for refinement of the established plans hierarchy has been proposed, such as recognising supporting sub-plans as part of the emergency management framework, but this reinforces the suitability of the extant framework of plans.

The hierarchy of plans detailing the responsibilities, authorities and mechanisms to prevent, or if they occur, manage emergencies and their consequences worked and allowed effective responses to fire and storm incidents. Decades of progressive SBMP have ensured that the governance and management of plans was proven effective.



The connection between strategic and operational plans has worked well to-date but the tension between being able to deliver against longer-term preparedness strategies and maintaining responsive operational plans across longer, hotter and dryer bushfire seasons will require very adept management. Mitigation and operational response must be progressive and operate with synergy to manage emergencies of the nature of the Orroral Fire and to deal with the potential consequences of such fires, particularly if they cross into the urban environment.

In a season that was dominated by almost continuous fire-related deployments, a heightened state of national emergency, and bushfire risk that was largely beyond mitigation it is understandable and right that the ESA was focussed on managing and responding to bushfires. While appropriate, this focus was perceived to be consuming and draw priority away from planning effort and resources for other issues affecting the ACT such as heat, smoke (air quality) and storms that may have triggered the ACT Evacuation Plan.

It is worth noting that the most extreme risks listed in the Territory Wide Risk Assessment 2017 (TWRA), Heatwave and Bushfire, were realised over the season with the ACT experiencing its hottest day and month on record and uncontrollable fire in January 2020. Fire induced smoke pushed air pollution to hazardous levels from 20 Dec 2019 to 2 Jan 2020 with the worst being experienced on 1 Jan 2020, with a hazardous daily average that was more than 34 times above the World Health Organization (WHO) 24-hour guidelines.

January also included severe storms and threats to the continuity of electricity supply both of which are assessed as representing high risk in the TWRA. The Pialligo Fire and the fatal crash of large air tanker during aerial firefighting operations against the Good Good Fire north-east of Cooma on 23 January 2020 came close to the TWRA definition of an aviation emergency when combined, causing disruption to aviation and regional air operations.

The first coronavirus case was recorded in Victoria in January in the same week as the Orroral fire started, with the first reported case of coronavirus occurring in Canberra in March as Australia reached peak infections rates. Federal, State and territory governments closed non-essential business and imposing social distancing measures in the following week. Five of the eight extreme or high risks identified in the TWRA were realised during the season.

		CONSEQUENCE				
		Insignificant	Minor	Moderate	Major	Catastrophic
LIKELIHOOD	Almost Certain			Severe Storm	Heatwave	
	Likely			Hazardous Materials Emergency Flash Flood	Bio-Security Emergency	Bushfire
	Possible			Fire – Industrial and Structural Transport Infrastructure Failure	Human Epidemic Infectious Disease Energy Supply Emergency	
	Unlikely				Riverine Flood Water or Sewerage Emergency Communications Infrastructure Failure	
	Rare				Aviation Emergency Earthquake	Infrastructure Failure – Dam Flood
RISK LEVEL			Low	Medium	High	Extreme

TABLE ONE. THE RISK RATING FOR EACH OF THE ACT'S IDENTIFIED NATURAL AND OTHER HAZARDS.

The Plan recognises the importance of clear and robust emergency plans and continuous planning to respond to continuing extreme weather conditions and anticipated natural disasters. There is also a stated requirement for planning to continue for other consequential, emergent or contingent risks. AIIMS stresses that effective planning is central to incident response management and that high levels of collective competency adds considerably to multiple agency interoperability and helps generate action against common objectives.

The Review Team found deliberate strategic planning to be very extensive and thorough. The framework of plans is comprehensive, appropriately contemporary and was in place for the last Bushfire season. The capacity of IC's and the IMT to develop immediate response plans was also good. Planners and Coordinators were well respected for their experience and judgement and tactical plans were formulated and implemented with due diligence. There was comment, however, that planning across the ECC, ICC and PICC was harder than it needed to be and could be improved.

Despite a thorough suite of plans and clear AIIMS procedures, the criticality of plans and planning was raised throughout the review. This may be the result of several factors:

- **The immediacy of plans, response and consequence in the Territory.** Longer-term plans focus on addressing risk through strategic measures (such as the SBMP, SBCF, RFMP and associated BOP) and on being prepared to respond (Concept of Operations, SBCF) to emergencies when they occur. There is no evident tension between strategic or hazard specific plans, however, the ACT is a unique environment where there is little separation between the public and the fire front and, as an expanding ‘bush’ capital, the threat of bushfire is immediate and real as was proven this last season. Carefully thought through and implemented plans can face sense defying disruption. The necessity for public warnings and admonition relating to ‘disaster tourism’ on 28 January illustrates that while the immediacy of the Orroral Fire caused a combination of heightened fear and uncertainty for those directly at risk or reliving anxious memories of 20003, it also generated a perverse and dangerous fascination for many who weren’t.

As a matter of necessity incident management develops in a modular fashion, based upon the type and size of an incident. The response organisation builds from the top down with responsibility placed in the Incident Controller. Even in cases where an Emergency Controller is appointed for Level 3 incidents priority of effort and authority remains appropriately on dealing with the incident/s at hand by the IC. This logic underpins all emergency response and is necessary to minimise the impact on community and the environment, to deliver an effectively and efficiently controlled response, and for the provision of a safe work environment for all responders.

This has significant advantage in terms of making decisions amongst known and trusted colleagues in an environment that is highly familiar such as the Territory. It can, however, lead to some agencies and services being ‘left-behind’ and feeling ‘left-out’ when one hazard or agency dominates. This can only be avoided through deliberate action as recognised in the ‘Unity of Command’ approach outlined in the Concept of Operations, where all attending services contribute to the process of:

- determining the overall incident objectives
- selection of strategies
- ensuring that joint planning for tactical activities will be accomplished
- ensuring that integrated tactical operations are conducted
- making maximum use of all assigned resources

AIIMS interprets Unity of Command as there being only one IC for any incident, directing and coordinating the actions of all forces, with one set of objectives, and one plan for the management of the incident. The definition of ‘Unity of Command’ contained in the Concept of Operations and that contained in AIIMS are not mutually exclusive. A combination of clear authority and collaboration towards achieving the overall incident objectives enables an effective response against an agreed plan.

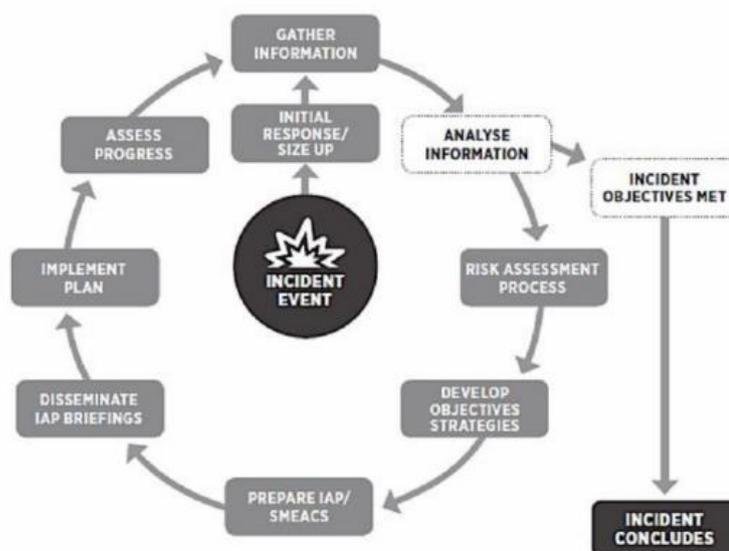
Small changes of strategic direction will ripple through to the tactical level quickly in a relatively contained environment such as the Territory. Similarly, changes at the fire-front impact on the outlook of senior leaders and the ACT community. Small issues can unseat longer term plans in the circumstances such as those experienced in the 2019/20 Season unless managed judiciously. Decisions and their outcomes are immediately apparent.

A common response to managing high tempo operations where the consequence of failure is significant

and subject to immediate public scrutiny is to focus on the known, drawing heavily on pre-established practices and experience to make decisions in response to incidents as they occur and delaying decisions that aren't immediately relevant. This can absorb significant leadership, staff effort and focus but is an entirely necessary approach to managing responses to emergency incidents.

There were numerous examples throughout the season of experienced professionals generating focus and priority to coordinate highly effective responses. Tactical planning and incident response should not, however, subsume efforts for longer-term planning, deliberate intelligence analysis, considered strategies and options, the development of sustainable resourcing plans or plans for immediate consequence management and longer-term plans for recovery, or any other essential future action in response to unexpected incidents that may make existing plans worthless. Tactical and longer-term planning must function effectively and concurrently if the ESA is to be prepared for large scale, long duration and complex incidents or emergencies that require a coordinated multi-agency response.

While clear direction and consistent leadership plays a significant role, planning should not depend on, or wait for, perfect direction drawn from perfect intelligence. Planning is a proactive and continuous process that enables difficult decisions to be made in time, based on what is known or can be assumed at the time the decision is necessary. Timely decisions allow staff effort and resources to be focussed on essential outcomes and the development and refinement of analysis, enabling support and logistics.



The comprehensive approach used in the Territory is the longest standing Australian emergency management practice and is made up of four key areas of operation. These are (1) Preparing for Emergencies, (2) Preventing Emergencies, (3) Responding to Emergencies, (4) Recovering from Emergencies, when combined referred to as PPRR, and has been referred to earlier in this review. This model is widely used as the benchmark for practice in emergency management in Australia but has been criticised for diminishing the treatment of anticipation and assessment. Anticipation is horizon scanning to identify potential dangers through risk calculation (as opposed to risk identification) and assessment is understanding the capability of all actors to mitigate the potential danger.

The all-hazards approach does not mean that the ESA is prepared for any and all potential events all of the time, but does mean that plans across the disaster cycle should recognise the commonalities in situational response mechanisms, and that these commonalities across all emergencies can be translated into

supported operational standards and best-practice used across all-hazards.<sup>14</sup> The discipline of considered operational planning underpins the full PPRR cycle and in the case of the ESA needs to play a fundamental role across the ECC/ICC and PICC, particularly during States of Alert and Emergency.

Robust collaboration between planning and execution helps mitigate this problem as does a continued focus on strategic objectives. Consistent and coherent planning combined with flexible and responsive operational direction minimises disruption in emergencies and establishes a sustainable tempo of decision, direction and response. A sustainable tempo builds organisational resilience and provides a foundation for adaption and major changes in focus.

- **Operationalising plans over years across seasons of growing length and severity, encompassing a greater range of emergencies and incidents.** Delivering against the Emergencies Act over many years (the RFMP is a 5-year plan with a 10 year outlook, for example) requires significant alignment through the hierarchy of legislation (The Act), strategic planning (SBMP, TWRA, RFMP, and associated BOP) and operational plans (Concept of Operations, SBCF), to achieve unity of action. As noted above the planning framework is thorough and adequate for the management of emergencies and their consequences. It is comprehensive and structured by design, using a risk-based approach to prioritise preparedness efforts while also recognising the dynamic and emergent nature of emergencies. The management of incidents through to Level 3 and the stand-up arrangements are clearly laid out in documents such as The Plan, the SBCF, the Concept of Operations and the ECC Operations Plan.

The logic of the hierarchy of plans aligns with AIMS in that it treats:

- Incidents as a scalable concept that may be relatively small but calls for a response and can be expected to be brought to an effective resolution.
- Incident management as activities to control or to bring an emergency to an end to enable a new normality to be established
- Emergency management as an ongoing process that has no beginning or end and may be considered a cycle.

Plans identified the requirement to manage bush and grass fires under the worst possible conditions anticipating the medium to long-term variables including soil dryness, the potential duration of incidents, and the risk posed by fuel levels (particularly in historical fire threat areas to the north west of Canberra). All factors pointed to an extended season of many months, which became 6 months long with some ESA personnel engaged at a ready level for as long as 7 months when early deployments inter-state are included. Of note is that the Commissioner of the ESA was appointed as the Emergency Commissioner for a total of 39 days across the season.

As noted earlier in this Review, preparedness levels are to be maintained to meet incidents as they occur. Achieving effective levels of preparedness in this context requires the maintenance of continuous levels of readiness, a familiar concept across response agencies and emergency services but one that requires management as the dynamics of responding is far more appealing for volunteers than the boredom that can come in some cases from being ready through manning equipment. Long multi-hazard seasons place significant demands on staff and volunteers and should be addressed through a 'campaign' approach to seasonal planning, addressing potential phases and priority of effort, and including plans to generate and sustain capability at directed levels of tempo.

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<sup>14</sup> The Australian Journal of Emergency Management Volume 26, No. 01, January 2011, p. 56

This Review defines campaigns as a controlled series of simultaneous or sequential operations designed to achieve an operational commander's objective, normally within a given time or space.

The ACT Sub Plan Community Communication and Public Information Plan is an example of a campaign approach that met with considerable success over the season. A known issue from 2003 and inherently important to ESA, the Public Information Plan sought to deliver concise, factual and timely information via channels that meet the information needs of the Territory and took the community on the journey to strengthen the relationship between ESA and the community.

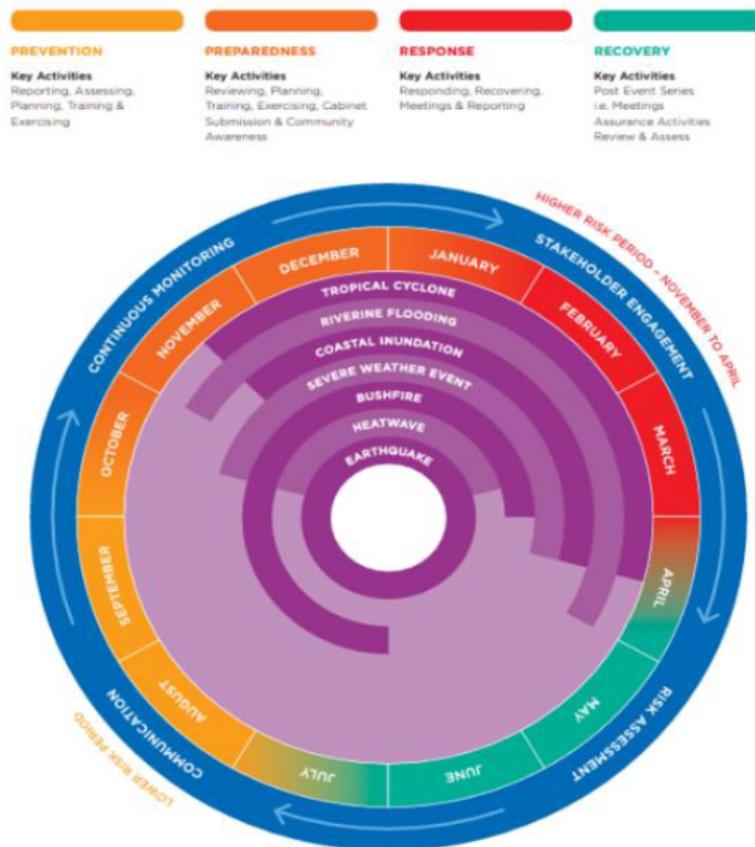
ESA implemented an annual bushfire awareness campaign titled CBR Be Bushfire Ready using external SME with all products being market tested prior to delivery. The campaign was also reviewed by the ACT Government campaign peer review panel. The campaign included broadcast advertising, community engagement, social media posts and media liaison activities.

ESA engaged face-to-face with 27,000 community members via town-hall meetings, shopping centre pop-ups and doorknocking to discuss bushfire preparedness, reached 506,000 people through a strategic media campaign and recorded 33 million online engagements, 12.5 million just through Facebook.

ESA operations, actions, and activities could be similarly coordinated through a unifying season campaign approach. The campaign would ensure all activities and operations are synchronized to achieve the strategic objectives of The Act and its supporting plans. It should operationalize the strategy and approach relevant to the expected season by organizing and aligning available resources.

Campaign planning would follow the existing principles of emergency management and complement existing plans while synchronizing efforts with all participants and supporting agencies prior to the season commencing. The season campaign plan should include contingency plans, subordinate and supporting plans, resource, logistics and finance plans.

The example below from the Fraser Coast Regional Council Local Disaster Management Plan, shows clearly how activity can be synchronised across an annual PPRR cycle while also showing a potential for peak activity in February and March that will require a multi-agency response.



An example of PRRR applied across an annual cycle for multiple risks contained in the Fraser Coast Regional Council Local Disaster Management Plan 2019 <https://www.frasercoast.qld.gov.au/downloads/file/1118/local-disaster-management-plan>

Existing strategies, emergency and framework plans, and hazard-specific and supporting sub-plans (e.g. recovery, ECC, disaster victim identification plans) also need to be better understood by designated participants across whole of government. This builds clarity and coherence around responsibilities, authorities and mechanisms, and enhances pre-season preparation. Much of is achieved through the planning review cycle but can be enhanced through additional briefings and scenario based ‘table-top’ planning exercises that are linked to and inform ECC response exercises. The SEMP should enhance and exercise the deliberate planning cycle before bushfire season 2020-21 incorporating designated and relevant elements of the ACT Government to ensure plans are understood and practiced. A new planning cycle could be aligned with the revision of the Territory Wide Risk Assessment (TWRA) due to be updated this year (2020) to inform government priorities, actions and investment in managing natural disaster risk.

#### RECOMMENDATIONS:

- The annual planning review cycle be enhanced through additional briefings and scenario based ‘table-top’ planning exercises that are linked to and inform ECC response exercises.
- The ESA adopt a campaign approach to future fire seasons.

## 2c. Response

By the very nature of the ACT landscape all properties, particularly those located in the Bushfire Prone Area (BPA), are recognised as assets at risk from bushfire. The ACT has long benefited from a multifaceted, comprehensive approach to managing bushfire risk in the Territory.

Assigning precise consequences to critical infrastructure (particularly physical facilities, supply chains, information technology, communication networks and utilities in the ACT) is difficult and extremely varied because each category may impact on another (for example, a power outage may affect communications).

The ACT Government has a well-established and exercised governance structure with oversight of emergency planning, response and recovery coordination in order to coordinate a whole of government response to emergency management across the territory.

On this occasion, a State of Alert was declared on 2 January 2020 which showed good foresight, and this was followed by the declaration of a State of Emergency on 31 January 2020 to appoint the ESA Commissioner as the Emergency Controller. This was the first time since 2003 that an Emergency Controller had been appointed in the ACT. The Emergency Controller (EC) was appointed for a period of 39 consecutive days in January and February. As there is no express power under the ACT Emergencies Act 2004 to appoint an acting or deputy Emergency Controller, the Review notes managing fatigue for lengthy periods of time may require some functions to be delegated, or for authorities to be temporarily transferred to an acting appointment.

The Security and Emergency Management Committee of Cabinet provided the strategic direction of ACT government arrangements. And the Security and Emergency Management Senior Officials Group (SEMSOG) was the primary mechanism for ensuring cooperation and coordination between ACT Government agencies in planning for, responding to and recovering from emergencies.

ESA's use of on-line telecommunications ensured secure, effective and convenient briefings, and the establishment of a Secretariat also proved effective in scheduling and preparing for SEMSOG meetings.

Once appointed, the interaction between the EC, the management executive and SEMSOG was critical to ensuring that the government was informed during what was a rapidly evolving emergency, and that the full capacity of the government was made available for the response.

During the entirety of the 2019/20 bushfire season, The Commissioner (including later as the EC) was able to provide clear advice to the Chief Minister and Minister on what actions were needed by government and what information, warnings and advice needed to be provided to the community.

Arrangements between the ESA Emergency Control Centre (ECC), ESA Incident Control Centre (ICC) and ACT Government Public Information Coordination Centre (PICC) were, however, not always well understood by participants. Support to the EC in managing the overall response and ensuring ECC and PICC support the ICC must be the primary focus of any effective emergency response. Greater familiarity with these processes is needed through individual and collective level training.

## **RECOMMENDATION:**

ACT Government/EC/ECC/ICC/PICC interaction be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform annual emergency response exercises.

## **INCIDENT MANAGEMENT TEAM**

Following an extensive period of supporting serious interstate fires in the later months of 2019, including in regions surrounding the ACT, ESA was able to successfully conduct emergency response operations in its own jurisdiction. Principally this was achieved by establishment of an ICC and Level Three Incident Management Team (IMT). This IMT was able to defend the ACT against a major fire and respond to concurrent unprecedented storm damage.

The IMT arrangements set up by ESA to manage the protracted and serious threats faced during the 2019/20 bushfire season were effective and helped lead to the ultimate mitigation of the fire threats facing the ACT. The scale and duration of the IMT response (in combination with the ECC establishment following the declaration of a State of Emergency) was unprecedented and it is acknowledged this caused some strain on both the ESA facility at Fairbairn, and the orthodox IMT structures envisaged under AIIMS.

During the Review, ESA staff were self-critical of the interactions between the IMT Planning and Operations cells, and more generally on the need for better coordination within the IMT during critical periods of time. Key areas identified included: situational awareness and intelligence; information flows and processes and templates; communications planning and contingencies; firefighting strategy development; prioritisation of tasks and allocation of resources; and command and control arrangements and relationships with key subordinate leaders like Divisional Commanders and Staging Area Managers. The Review applauds the maturity and professionalism of ESA staff to reflect on the performance of the IMT in this manner.

The Review found that these shortcomings in IMT operations were likely caused as much by relative lack of experience in Level 3 multi-hazard emergency responses and did not indicate a systemic problem with either ESA staff, structures or the AIIMS system of national management. An increased focus on development and enhancement of technical and specialist skills (for example air operations), and on internal processes (for example coordination between the Operations and Plans functional areas of the IMT) will improve overall effectiveness and efficiency of ESA in any future responses.

The three significant storm events - which all occurred concurrent to the major fires - while managed exceptionally well from an operational perspective by the SES – also further demonstrated the need for greater focus on 'all hazards' responses across ESA and IMT adaptability in terms of both scale and expertise, especially for Level 3 events such as faced during this bushfire season.

## **PUBLIC INFORMATION AND WARNINGS**

The public information and warning system established had extensive reach and impact in the community and contributed to the overall success of public safety and the reputation and visibility of ESA in the ACT. The decision by the EC to move the ESA Public Information Cell (PIC) into the IMT enhanced communications

response and messaging, providing a clear delineation of emergency communications and government communications.

It is acknowledged the relevance, roles and functions of the ACT Government PICC were unclear once the State of emergency was declared, with the primary responsibility for public warnings and alerts resting with the IMT PIC. ESA ran a highly successful community outreach and public information campaigns, including on social media (multiple platforms) and direct to the public (community meetings, doorknocking) and via the employment of novel and innovative methods to reach target audiences (community pop-ups, live Facebook conferences). The role of the Commissioner providing a 'voice' for ESA engagement with the public was seen to be particularly effective.

The Review acknowledges the value of work undertaken by ESA in 2019 with Bushfire Hazards CRC researchers from the University of Queensland which reviewed the ACT's bushfire warning templates. The results of the research were revised warning templates that were successfully used during the 2019/20 bushfire season.

The Single Point of Truth (SPOT) digital platform (introduced in 2012) was used by the IMT to simultaneously send warnings and public information updates to the ESA website, ESA social media accounts (Facebook and Twitter), local media outlets and government officials. This was a highly successful system which ensured both accuracy across platforms and consistency of public messages.

ESA also used the Emergency Alert warning system to issue Emergency Warnings and this worked well for time sensitive and targeted messages, although this produced unpredictable results because of technical difficulties when developing polygons defining the alert area for areas that crossed the ACT/NSW border. The Review noted ESA partnered with NSW RFS to ensure ACT bushfire warnings appeared on the NSW 'Fires Near Me' app.

## SPECIALIST CAPABILITIES

Investments by ESA during 2019 in specialist capabilities such as the Specialist Intelligence Gathering (SIG) helicopter in the ACT provided enhanced situational awareness for ESA and enabled quicker and more informed strategic decision making.

ESA utilised the SIG helicopter extensively in the ACT and surrounding NSW during the season. The Review notes the aircraft performed a wide range of intelligence and surveillance functions, including fire detection flights after lightning storms, hot spot identification in ongoing incidents, fire edge mapping and asset risk identification. This led to regular updates to the ESA website incident map showing the current location of the fire perimeters and, most importantly a clear situational understanding by the IMT. The Review notes that the SIG capability is currently funded and contracted for day operations only, and this meant the IMT was unable to have of fidelity on fire intelligence on a 24-hour basis.

ESA also employed high altitude line scanning aircraft to capture images using multi spectral imagery techniques a part of its intelligence collection efforts. Line scans proved important flying 24 hours a day to provide live updates on the location, direction of travel and intensity of a fire. The Review notes, however, that due to the number of fires throughout the region, and extensive fire perimeter, line scanning was not performed as regularly as ESA would have preferred.

ADF and AFP intelligence and aviation assets enhanced full spectrum and real time situational awareness of the fire ground and surrounding high risk areas. (the Review understands ESA experienced difficulties in accessing raw data in a timely fashion from ADF assets because of security classification issues.)

AFP Policing Drones were also used for aerial surveillance and reconnaissance. The innovative and adaptive use of this capability is to be commended.

There was high quality predictive weather intelligence and Mapping and Planning Support (MAPS) teams within ESA. Both capabilities provided key weather and fire intelligence and geospatial support to the ECC and IMT throughout the bushfire season.

Despite high levels of intelligence capability and a volume of information available more generally, there appeared to be no specific deliberate process for intelligence collection, analysis, dissemination and evaluation within the IMT, and the IAP contained no priority information requirements. This reduced the impact of intelligence for senior staff (EC and IC) and meant various information sources were not as impactful as they potentially could be. This improved progressively as SME with intimate knowledge of regional fire behaviours were combined with advanced sensing capability. The reciprocal relationship between plans and intelligence is captured in the AIIMS system, with the planning cycle driving the intelligence cycle (through tasking) and the intelligence cycle driving the planning cycle in turn by providing the intelligence relevant for risk management and options analysis activities of the prevailing conditions and incidents.<sup>15</sup>



Figure One: The Intelligence Cycle

## AIR OPERATIONS

The Review noted the extensive use of air attack as a firefighting strategy and the practical utility of the ACT for centralised and coordinated air support for fires in the broader ACT and NSW region. The ACT actively supported national arrangements through the National Aerial Firefighting Centre (NAFC) for basing and deploying aerial firefighting platforms throughout the region during the bushfire season.

The Review notes the use of aircraft to assist in the suppression of bushfires in Australia is a proven, efficient and cost-effective technique, providing valuable protection of communities and environmental values.<sup>16</sup> All Governments in Australia have recognised the importance of having access to a sophisticated aerial firefighting capability to respond to bushfires, protect communities and to support firefighters on the ground.

Aircraft offer three major advantages over ground suppression resources: speed; access; and observation. According to a study by the Bushfire Cooperative Research Centre, the most effective use of aircraft is rapid

<sup>15</sup> Australasian Fire and Emergency Service Authorities Council (AFAC), *The Australasian Inter-Service Incident Management System (AIIMS)*, 2017, p115

<sup>16</sup> Submission of the National Aerial Firefighting Centre (NAFC) to the Senate Environment and Communications References Committee Inquiry into the response to, and lessons learnt from, recent bushfires in remote Tasmanian wilderness, May 2016, p3

attack on fires in the incipient stage. The Bushfire CRC research showed, however, that aerial suppression alone was not enough to improve effective suppression, and a combination of fuel management, ground crew support and aerial firefighting resources were all significant in increasing probability of first attack success.<sup>17</sup>

Aircraft contribute to fire suppression efforts in a wide variety of roles including direct suppression or asset protection by dropping fire suppressants or retardants; insertion of firefighters into remote areas; and gathering of information to support response planning and provision of updates and warnings to communities. The Review notes all these elements of aircraft capability were employed by ESA as a core element of its firefighting strategy.

The Review found ESA's employment of aviation had mixed results. While it was perceived that fixed wing bombing to create containment lines against the Orroral Valley fire stopped or slowed fire progression retardant often failed to adequately penetrate to a level it would be effective due to the combination of forest canopy and the extremely dry and rugged terrain. Fire would continue to progress after a short delay in these circumstances.

Rotary wing water bombing was moderately successful during fire-fighting efforts this season, providing ESA a method to deal with small fires inaccessible to ground crews. The most effective approach to fire suppression for the ACT during the 2019-20 season was the use of ground crews supported by rotary wing aircraft. ESA's remote crew insertion capabilities made a significant impact in keeping fires small where weather permitted.

There were multiple instances where ESA was able to deploy a mix of aircraft and ground capabilities which, when combined, proved to be both innovative and effective. The best illustrative example of this being the deployment of the SIG helicopter using high resolution infrared camera to detect hot spots close to the fires edge. Once hot spots were detected, the SIG aircraft coordinated the pin-point insertion of Remote Area Fire Team (RAFT) personnel by winch using two Bell 412 helicopters. Once crews were safely on the ground, the Bell 412 aircraft reconfigured to support the inserted crews with a water bombing capability while the SIG aircraft continued to scan the area for new hot spots and maintained overwatch for crew safety.<sup>18</sup>

ESA also used aerial firefighting to successfully protect assets and slow the progression of fire in support of ground-based operations. Large and Very Large Air Tanker (LAT and VLAT) deployments played a significant role in performing asset protection in remote areas of the ACT. This was particularly effective in the less accessible locations containing high risk assets (for example the interface between rural landholders and the National Park), as well as for critical infrastructure, and the protection of historic and cultural assets within Namadgi National Park, including Mt Tennent and Mt Clear communications towers, Cotter Hut and homesteads in the Naas area, and also protection of the habitats for the Endangered Northern Corroboree Frog in the Mt Ginini area.

ESA staff involved in aviation planning in the IMT were self-critical during the Review despite impressive results using a wide variety and number of aircraft types, and the mix of employment capabilities (air attack, surveillance, transport, etc), and the innovative employment of the capability. While the review recognises the requirement for expertise in the planning and coordination of this capability (such as the Air Attack Supervisor) the employment of air capability would be enhanced significantly by developing a much greater understanding across IMT planners and front-line fire commanders of how to best manage air assets operationally and integrate air and ground firefighting techniques.

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<sup>17</sup> First attack success is defined as fire containment within eight hours of detection. Bushfire Cooperative Research Centre Technical Report Number A0701, The Effectiveness and Efficiency of Aerial Firefighting in Australia, Part 1, June 2007

<sup>18</sup> The Review notes ESA has recently provided specific policy guidance on employment of the RAFT capability. <https://esa.act.gov.au/sites/default/files/2020-03/2.3.4%20RAFT%20Guideline.pdf>

The Review notes the *prima facie* case that a strategic opportunity exists for the ACT to further develop the expertise and capabilities to support the operation of the ACT as a Fire-Bombing Air Base capable of supporting all aircraft types including Very Large Air Tankers (VLAT).

#### RECOMMENDATIONS:

- Review of ESA Fairbairn facility for “fit-for-purpose” of concurrent ECC and L3 IMT (and identification of remedial or alternate facilities if required).
- Review of ESA approach to Level 3 IMT structures and internal processes (planning, operations, intelligence, logistics) under AIIMS for suitability for all-hazards and multi-agency approach.
- ESA conduct at least annual L3 incident exercises testing “non-standard” scenarios to develop contingencies and test SOP, including contractual support arrangements.
- Review of all ESA and service level awards and different roster systems (including full time and volunteer staff conditions) to look for potential to align or combine during IMT operations.
- Review the development and application of a more deliberate and coordinated intelligence cycle within IMT planning function under AIIMS
- Enhanced training or familiarisation for ESA senior L3 and L2 qualified staff on specialist and emergent bushfire fighting strategies and capabilities, including aviation operations (air attack, air base operations, surveillance and transport).

#### EXTERNAL COOPERATION

The Review found the ESA collaborated effectively with external agencies. ESA contributions to - and allocation of resources from - the National Resource Sharing Centre (NRSC) for both interstate and local incident response was timely and adequate. ESA’s use of ADF resources prior to any major outbreak of fire in the ACT allowed for major preparation works to occur and for issues of interoperability and coordination to be resolved.

This fire season presented the ACT with numerous major fire events on its borders and fires which transgressed jurisdictions in both directions. The Review found that ESA relationships with its closest cross-border counterparts, including the NSW Rural Fire Service and the NSW Office of Environment and Heritage, were effective.

The ESA and NSW RFS have a strong history of regular interaction which has over time facilitated greatly improved coordination of responses to cross-border emergencies. The Review noted formal Memorandums of Understanding (MOU) were in place with relevant NSW agencies.

Detailed and persistent coordination measures to manage fires impacting ACT and NSW borders was evident. The placement of Liaison Officers in the ESA IMT and NSW RFS Headquarters was a major contributor to that effective exchange of information. The ACT benefitted significantly by embedding experienced planning and operational officers from NSW within the IMT.

The Review concluded ESA requests for ADF assistance under the Defence Aid to the Civil Community (DACC) arrangements were both timely and necessary given the scale of the emergency and the range of capabilities required. ADF DACC support to ESA included:

- heavy plant and support vehicles and operators;
- remote paramedical support;
- mechanical support;
- all-weather reconnaissance and transport aircraft capability;
- personnel transport;
- accommodation and catering for interstate fire crews; and
- personnel to assist with doorknocking.

ESA coordination with the ADF was effective and was achieved by embedding representatives from the ADF Joint Task Force within the IMT and ECC providing the ADF with real-time information on fire response operations. While not part of the Terms of Reference for this Review, it is noted that the ADF was able to support all ACT requests in a timely manner.

## SERVICE RESPONSES

The review identified a perception that the RFS were underutilised as Strike Teams during response to major fires in the ACT - in particular the Orroral Valley fire – and that senior officers were proportionately underrepresented in the IMT and as Divisional and Sector Commanders. The majority of Divisional Commander and Sector Leader appointments were allocated to ACT Parks and Conservation Service (PCS) officers.

Overall, the Review considers the decision by ESA to embed PCS staff within the IMT, including in key operational and planning roles, strengthened the ESA's awareness of the environment within the ACT's parks and reserves. The local knowledge of PCS as the land manager of the ACT's parks and reserves was a clear advantage to the operation of the IMT.

It is noted there were significant PCS firefighting assets (operating as a brigade of RFS) and staff in support of ESA from outside the ACT, including Queensland, and this was a factor in making resource allocation decisions in the IAP. When called on, the RFS met all response times for incidents and major incident tasking during the entire 2019/20 bushfire season.

The Review notes that Harris UHF/VHF radio enhancements to the RFS provided seamless tactical communications with all ACT elements and NSW during interstate deployments before the bushfire season and during operations inside the ACT.

F&R provided effective protection of the urban edge in accordance with its established tasks and responsibilities. The F&R service was able to continue its mandated coverage of the ACT without impact over the entire bushfire season and provided all support requirements to ESA for the bushfire response. An Urban Interface Plan was developed as a specific contingency.

It is noted the employment of F&R communications staff in the IMT significantly assisted IMT operations management. The review noted significant contributions to the IMT were made by senior F&R staff.

## RECOMMENDATIONS:

- Review of RFS capability and ability to generate strike teams for bushfires in ACT and interstate, with a view to have more detailed standing deployment options for consideration by ESA IMT/ICs during Level 3 incidents.
- Continued integration and employment of both RFS and PCS officers into ESA IMT/IC roles and expanded opportunities for collaboration and combined leadership training between all ESA fire services (RFS, F&R) and ACT directorates with fire-fighting responsibilities (PCS).
- Enhanced opportunities for interagency collaboration and leadership, to further develop ability of senior ESA officers from non-bushfire trained backgrounds (F&R, SES) to support ESA IMT structures and leadership response.

ACTAS was able to continue its mandated coverage of ACT for paramedic support without impact over the entire bushfire season and provided all support requirements to ESA and the IMT for bushfire response. The placement of ACTAS paramedics directly into firefighting Strike Teams was considered a highly valuable innovation.

Further, the use of ACTAS paramedics in Strike Teams had positive impact on the mindset of other ESA services on the role paramedics can play in fire operations. ACTAS conducted multiple deployments to provide primary health care and emergency ambulance at remote firegrounds for extended periods. The inclusion of ADF medical teams and capability was considered a “force multiplier” (in particular the Ambulance variant of the Bushmaster Protected Mobility Vehicle (PMVA) and G Wagons)

The ACTAS was structured and tasked under the IMT Resources cell impacting leadership and management decisions as ACTAS itself had poor situational awareness of the fire incident and poor visibility of staff deployments and operational locations. This required ACTAS to develop secondary communications pathways to maintain contact with forward deployed crews.

The SES was a key enabler of support services and provided enhanced operational effectiveness to all phases of the bushfire response and the operation of the ESA IMT. Its largely independent management of support to the ACT community following three major storm events demonstrated its operational flexibility and ability to re-task back to its core responsibilities.

The integration of SES staff in multiple roles in the IMT support meant ESA members from other elements gained significant knowledge of and confidence in SES capabilities. This included not only the placement of SES Duty Officer and a supporting SES Operations Desk working to the IMT Resources cell (an arrangement similar to ACTAS), but also an SES Duty Executive (outside IMT structure) to support the IC and IMT Operations.

It would appear the EC had directed SES to run the storm response within the IMT by appointment of a Deputy IC for that event, but in reality this was not fully realised and in a practical sense SES staff ran a separate “L2 Storm IMT” on their own, duplicating Ops and Plans functions – and this was repeated for 10 February storm event, setting up an SES “IMT” in a different location in ESA Fairbairn.

## RECOMMENDATIONS:

- Training of specialist cadre of ACTAS personnel to support IMT on dedicated roster.
- Review of where Health function best sits in AIMS planning and IMT structures for Level 3 incidents.
- Consider standing SES Operations Desk or permanent staff officer inside IMT Operations Cell
- Consider IMT Operations and Plans representative forward inside the staging area to assist SES Staging Area Manager with RSOI.
- Development of contingency plans for SES support to fires to cover when additional/multiple tasks emerge in response to other hazards or emergencies within specific SES remit.

Overall, the review concluded that the performance of ESA and its services during the 2019/20 with regards to the conduct of its response to bushfires and storms in the ACT was rated as **NEEDING MINOR IMPROVEMENT**. This rating reflects the summative scores drawn from the Synergy Operational Performance Model.

The Review also notes the performance of ESA and its services when considered against the measures of operational success for emergency services put forward by the Australasian Fire and Emergency Service Authorities Council (AFAC).

AFAC defines the critical elements reflecting operational success during a response to be:

1. Primacy of life (of both community and emergency personnel);
2. Competence in delivery of response (considering standards, doctrine and best practice); and
3. Collaboration (integrated delivery of services, focus on common purpose and objectives).

There can be no doubt ESA and the services achieved resounding success during the response to fire and storm in the 2019/20 bushfire season when considered against these metrics.

## 2d. Recovery

Disasters can impact communities in profound, long lasting and life-changing ways. The ACT environment and community is still, in many aspects, “recovering” from the severe damage and loss of life experienced in the 2003 fires. The Australian Institute for Disaster Resilience (AIDR) defines recovery as a long-term, multi-layered social and developmental process.<sup>19</sup> Recovery involves coming to terms with the impacts of a disaster and managing the disruptions and changes caused, which can result for some people in a new way of living. More so, planning for recovery is integral to preparing for disasters. It is not solely a post disaster consideration. Ideally, recovery planning should occur in advance of a disaster concurrently with planning for any response.

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<sup>19</sup> <https://knowledge.aidr.org.au/media/7389/knowledge-into-action-introduction-recovery-web.pdf>

AIDR has developed National Principles for Disaster Recovery to provide guidelines for good practice:

1. Understand the context: successful recovery is based on an understanding of the community context, with each community having its own history, values and dynamics;
2. Recognise complexity: Successful recovery is responsive to the complex and dynamic nature of both emergencies and the community;
3. Use community-led approaches: Successful recovery is community-centred, responsive and flexible, engages with community and supports them to move forward;
4. Coordinate all activities: Successful recovery requires a planned, coordinated and adaptive approach, between community and partner agencies, based on continuing assessment of impacts and need;
5. Communicate effectively: Successful recovery is built on effective communication between the affected community and other partners; and
6. Recognise and build capacity: Successful recovery recognises, supports and builds on individual, community and organisational capacity and resilience.<sup>20</sup>

The Review acknowledges that the role of ESA and agencies in this regard was limited to the immediate recovery actions related to the various fire events (the major fire in Orroral Valley ultimately not having a direct impact on the urban interface of the ACT) and concurrent storm events. Long-term recovery from the severe storm events in January and February is still ongoing in the ACT and the Review appreciates these works are not the direct responsibility of the ESA.

However, the Review noted that the ACT Recovery Sub-Plan outlines broad recovery activities for the community, business, infrastructure and the environment. The plan:

- Outlines the framework that supports the planned, coordinated and flexible engagement of key stakeholders before, during and after emergencies,
- Enables scalable options to support the management of smaller incidents through to activities requiring cross-agency coordination,
- Sets out a measured transition plan to ensure the recovery effort is effectively coordinated, and
- Provides for the appointment of a Recovery Coordinator and Recovery Taskforce, if required.

The ACT Recovery sub-plan had been revised in 2019 and was briefed at the start of the season. There was no evidence of the ACT Recovery Committee being established however this did not prevent the activation of Disaster Recovery Funding Arrangements.

Whilst recovery starts as soon as possible after response (or concurrent to it) to any emergency incident, there is a gap in many response plans with a strong focus on the incident, at the expense of consequence management. The review considers that population protection measures within the response phase need to be strongly considered as a standard part of operational planning.

The opportunity exists to improve the way that active recovery arrangements are implemented during any emergency, particularly with funding arrangements. A capacity to assist affected parts of the community recover more quickly will build better levels of resilience interactively in multi-hazard emergencies spanning multiple months. A more strategic or whole-of-season approach to planning would include sub-plans to assist the quickest possible recovery at the local level.

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<sup>20</sup> <https://knowledge.aidr.org.au/media/7390/knowledge-into-action-recovery-principles-web.pdf>

The Royal Commission in National Natural Disaster Arrangements remit includes the responsibilities of, and coordination between, the Commonwealth and State, Territory and local Governments relating to recovery from natural disasters and provide an opportunity to improve these arrangements

**RECOMMENDATION:**

The ESA review the planning processes of the ECC to improve the way that active recovery arrangements are implemented during future emergencies.

The Review noted that the ACT SBMP (Section 12: Supported communities for bushfire recovery) describes the facilities and processes for supporting recovery from bushfires in the ACT. ESA's coordination of immediate post-fire and storm recovery through the pre-existing IMT located in Fairbairn helped quickly address much needed and complex work by multiple services (SES, ACTAS, RFS), the ADF and ACT authorities (PCS, etc) and ensured the ACT community was able to return to normality as quickly as possible.

In particular, the work undertaken by Dangerous Tree Assessment Teams (DTAT), assisted by the ADF, helped to clear priority roads as soon as practicable. Telstra, Icon, Evo Energy and other key utility providers also accessed the fire ground to conduct critical works in coordination with the IMT. In addition, the IMT coordinated the essential work of the post-fire recovery Rapid Risk Assessment Team (RRAT) team, including providing support to Heritage and Built Assets specialists. Necessary administrative and logistics operations were also undertaken in an effective and efficient manner during this critical period. For example, the closing down of the staging area and refurbishment of the Namadgi Visitors Centre was completed in three days, and the area handed back to PCS. This included coordination of contractors to remove toilets, refrigerated shippers, return of stock and equipment back to ESA Resource Centre and return of SES staging area equipment back to allocated units.

The review found all these tasks were assisted where required by ACTAS paramedic capabilities. And the RFS and SES were able to generate adequate volunteer capability to support ESA requirements in these immediate recovery operations.

The IMT was, however, quickly closed once the immediate threat of fire was contained with most ESA functions and services returning to BAU operations. This stand-down missed the potential benefit of more deliberate project closure opportunities and requirements (through demobilisation) in particular on necessary archival and finance requirements (e.g. invoicing and ICON entries for records). The review acknowledges the IMT had been operational for an extended period and the timing of its cessation was a natural and justifiable decision in that regard.

The review found that in the following weeks, ESA conducted a robust series of After Action Reviews (AAR) for all functional areas and services involved in the IMT, and developed significant internal insights and lessons derived from the long and destructive bushfire season. Post incident community surveys showed high levels of community satisfaction with ESA information during bushfire season. These processes provided valuable opportunities to capture and record the collective knowledge and experience of all ESA members, and is to be commended.

The review found that the reputation of both RFS and SES among the ACT community was significantly enhanced by their actions throughout the proceeding months, as post the 2019/20 bushfire season and storm events, these services received many hundreds of applications from potential new volunteer members.

Overall, the review concluded that the performance of ESA and its services during the 2019/20 with regards to the conduct of recovery actions to bushfires and storms in the ACT was rated as **NEEDING MINOR IMPROVEMENT**. This rating reflects the summative scores drawn from the Synergy Operational Performance Model.

#### **RECOMMENDATIONS:**

- After all major emergency incidents ESA should maintain IMT oversight for reasonable timeframe to ensure effective and efficient tasking of resources against known and anticipated requirements.
- RFS core skills and experience and knowledge of ACT firegrounds should continue to be exploited for recovery operations.
- RFS and SES reputation in ACT community and bushfire experience used by ESA to build volunteer support base and longer-term capability development.

# **SECTION 3: RECOMMENDATIONS**

## SECTION 3: RECOMMENDATIONS

The recommendations listed in the Review and included in Annex A are consolidated thematically below to aid decision making.

### Capability

1. The ACT SBCF should be complimented by a strategic approach to preparedness that incorporates capability planning for mutual aid, enhancing the capability to source, deploy and command at the sector level and above, and arrangements to routinely share resources across states and draw on commonwealth assets.
2. 'Other Resource Capability Activities' should be integrated into this approach in recognition of their significant enabling and inter-service capability.
3. The strategic approach to preparedness should also address developing the capacity to innovate around advanced capabilities and adapt them to firefighting in a coherent and safe manner.
4. Continue to develop a dedicated ACTAS cadre with specific training who can be extracted from BAU to support fire operations. **It is recommended that specific training occur across ESA to allow staff to be extracted from BAU to support fire operations.**
5. Review ESA Fairbairn facility for "fit-for-purpose" of concurrent ECC and L3 IMT (and identification of remedial or alternate facilities if required).
6. Enhanced training or familiarisation for ESA senior L3 and L2 qualified staff on specialist and emergent bushfire fighting strategies and capabilities, including aviation operations (air attack, air base operations, surveillance and transport).
7. Review RFS capability and ability to generate strike teams for bushfires in ACT and interstate, with a view to have more detailed standing deployment options for consideration by ESA IMT/ICs during Level 3 incidents.

### Collective Training and Exercise

1. ACT Government/EC/ECC/ICC/PICC interaction be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform annual emergency response exercises.
2. Conduct an exercise annually against predicted scenarios involving ESA and all agencies for L3 incident response and the IMT establishment to improve: all hazards response; cross agency relationships and interoperability; and capability and skills maintenance and development for all staff.
3. ESA conduct at least annual L3 incident exercises testing "non-standard" scenarios to develop contingencies and test SOP, including contractual support arrangements.
4. RFS and F&R should complete pre-season training and preparedness activities with ESA and other services, including combined interstate deployments for L3 qualified ICs.

### Preparedness

1. Review RFS hazard reduction task allocations (including from BOP tasks from PCS) to ensure adequate opportunities for professional development and skills maintenance.

## Personnel

1. Review fatigue management systems for ESA (including RFS), and other support arrangements for volunteer staff in the ACT.
2. RFS and SES reputation in ACT community and bushfire experience should be used by ESA to as a platform to build a volunteer support base and to provide a foundation for longer-term capability development.

## Planning

1. Review SES support to ESA/RFS incidents and further enhance deliberate preparations, planning and training for staging area development and IMT requirements in support of bushfires.
2. The annual planning review cycle be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform ECC response exercises.
3. The ESA adopt a campaign approach to future fire seasons.
4. Develop contingency plans for SES support to fires to cover when additional/multiple tasks emerge in response to other hazards or emergencies within specific SES remit.
5. The ESA review the planning processes of the ECC to improve the way that active recovery arrangements are implemented during future emergencies.

## Incident Management

1. Review of ESA approach to Level 3 IMT structures and internal processes (planning, operations, intelligence, logistics) under AIIMS for suitability for all-hazards and multi-agency approach.
2. Review all ESA and service level awards and different roster systems (including full time and volunteer staff conditions) to look for potential to align or combine during IMT operations.
3. Review the development and application of a more deliberate and coordinated intelligence cycle within IMT planning function under AIIMS.
4. Review AIIMS qualifications among F&R staff for IMT roles.
5. Continued integration and employment of both RFS and PCS officers into ESA IMT/IC roles and expanded opportunities for collaboration and combined leadership training between all ESA fire services (RFS, F&R) and ACT directorates with fire-fighting responsibilities (PCS).
6. Enhance opportunities for interagency collaboration and leadership, to further develop ability of senior ESA officers from non-bushfire trained backgrounds (F&R, SES) to support ESA IMT structures and leadership response.
7. Train a specialist cadre of ACTAS personnel to support IMT on dedicated roster.
8. Review where the Health function best sits in AIIMS planning and IMT structures for Level 3 incidents.
9. Consider a standing SES Operations Desk or permanent staff officer inside IMT Operations Cell.
10. Consider IMT Operations and Plans LO's forward inside the staging area to assist SES Staging Area Manager with RSOI.
11. After all major emergency incidents ESA should maintain IMT oversight for a reasonable timeframe to ensure effective and efficient tasking of resources against known and anticipated requirements.
12. RFS core skills and experience and knowledge of ACT firegrounds should continue to be used for recovery operations.

# **SECTION 4: ANNEX A**

# ANNEX A

## ACT EMERGENCY SERVICES AGENCY (ESA) OPERATIONAL REVIEW OF 2019/20 BUSHFIRE SEASON

### OPERATIONAL ANALYSIS MATRIX

#### 1. MASTER OPERATIONAL PERFORMANCE MATRIX

	Preparedness	Planning	Response (Operations)	Response (Management)	Recovery	Overall Agency
ACT/ECC	Rating: 16	Rating: 16	Rating: 16	Rating: 14	Rating: 11	Good
ESA/IMT	Rating: 12		Rating: 9	Rating: 9	Rating: 14	Minor Improvements
RFS	Rating: 9		Rating: 11	Rating: 11	Rating: 14	Minor Improvements
F&R	Rating: 16		Rating: 16	Rating: 14	Rating: NSTR	Good
ACTAS	Rating: 16		Rating: 14	Rating: 12	Rating: NSTR	Good
SES	Rating: 14		Rating: 16	Rating: 14	Rating: 14	Good
Overall Criteria	Minor Improvements	Good	Minor Improvements	Minor Improvements	Minor Improvements	

Criteria

				Outcome/Result			
				Outcome Not Achieved	Outcome Limited	Outcome Expected	Outcome Exceeded
				<30%	30-70%	71-100%	>100%
				1	2	3	4
Plan/Intent	<30%	Very poor	1	1	3	6	8
	30-70%	Less than Expected	2	2	5	10	13
	71-100%	Expected	3	4	9	12	15
	>100%	More than Expected	4	7	11	14	16

Rating
Poor
Major Improvement
Minor Improvements
Good

## 2. MASTER OPERATIONAL HEADLINE OBSERVATIONS MATRIX

	Preparedness	Planning	Response	Recovery
ACT/ECC	<p><b>Observation:</b></p> <p>The ACT was well placed to respond to a high level of demand for bushfire resources with skilled and motivated personnel, and the necessary equipment and resources to respond to and extinguish bushfires where this was operationally feasible. It also had the capacity to respond to significant weather and storm events. BAU emergency response remained largely unaffected throughout the season.</p>	<p><b>Observation:</b></p> <p>The planning framework is thorough and adequate for the management of emergencies and their consequences. Some clarification and recommendations for refinement of the established plans hierarchy has been proposed, such as recognising supporting sub-plans as part of the emergency management framework, but this reinforces the suitability of the extant framework of plans.</p>	<p><b>Observation:</b></p> <p>The ACT Government has a well-established and exercised governance structure with oversight of emergency planning, response and recovery coordination in order to coordinate a whole of government response to emergency management across the territory:</p> <ul style="list-style-type: none"> <li>• The Security and Emergency Management Committee of Cabinet provides general strategic direction of ACT government prevention and preparedness arrangements.</li> <li>• The Security and Emergency Management Senior Officials Group (SEMSOG) is the primary mechanism for ensuring cooperation and coordination between ACT Government agencies in planning for, responding to and recovering from emergencies.</li> <li>• The SEMOG is supported by the Security and Emergency Management Policy Group (SEMPG) which comprises officials from all relevant ACT Government directorates. It develops, implements and reviews specific security and emergency management matters including plans and sub-plans.</li> <li>• There are no known barriers to activities undertaken to protect identified critical assets and infrastructure.</li> </ul> <p>A State of Alert was declared on 2 January 2020 which showed good foresight, and this was followed by the declaration of a State of Emergency on 31 January 2020 to appoint the ESA Commissioner as the Emergency Controller. This was the first time since 2003 that an Emergency Controller had been appointed in the ACT. The Emergency Controller was appointed for a period of 39 consecutive days in January and February.</p>	<p><b>Observation:</b></p> <ul style="list-style-type: none"> <li>• The ACT Recovery sub-plan had been revised in 2019 and was briefed at the start of the season.</li> <li>• The ACT Recovery Committee was not established however this did not prevent the activation of Disaster Recovery Funding Arrangements.</li> </ul>

	Preparedness	Planning	Response	Recovery
	<p><b>Recommendation:</b></p> <ul style="list-style-type: none"> <li>The ACT SBCF should be complimented by a strategic approach to preparedness that incorporates capability planning for mutual aid, enhancing the capability to source, deploy and command at the sector level and above, and arrangements to routinely share resources across states and draw on commonwealth assets.</li> <li>'Other Resource Capability Activities' should be integrated into this approach in recognition of their significant enabling and inter-service capability.</li> <li>This strategic approach should also address developing the capacity to innovate around advanced capabilities and adapt them to firefighting in a coherent and safe manner.</li> </ul>	<p><b>Recommendation:</b></p> <p>The annual planning review cycle be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform ECC response exercises.</p> <p>The ESA adopt a campaign approach to future fire seasons.</p>	<p><b>Recommendation:</b></p> <p>ACT Government/EC/ECC/ICC/PICC interaction be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform annual emergency response exercises.</p>	<p><b>Recommendation:</b></p> <p>The ESA review the planning processes of the ECC to improve the way that active recovery arrangements are implemented during future emergencies.</p>

	Preparedness/Planning	Response Ops	Response Management	Recovery
ESA/IMT	<p><b>Observation:</b></p> <p>ESA support to other states through staff deployments and strong community engagement activity within the ACT resulted in high levels of preparedness for the 2019/20 bushfire season.</p>	<p><b>Observation:</b></p> <p>ESA was able to successfully conduct operations by establishment of an IMT to defend against a major fire and respond to concurrent unprecedented storm damage during the 2019/20 bushfire season.</p>	<p><b>Observation:</b></p> <p>The leadership, management and resilience of ESA staff during the conduct of operations and the establishment of an IMT was exceptional given then challenging circumstances and contributed to the overall success of the response to the threats facing the ACT.</p>	<p><b>Observation:</b></p> <p>ESA maintained sufficient management oversight of recovery activity from the bushfires and storm events to ensure the ACT community was able to return to normality as quickly as possible.</p>
	<p><b>Recommendation:</b></p> <p>Annual series of exercises involving ESA and all agencies for L3 incident response and IMT establishment to improve: all hazards response; cross agency relationships and interoperability; and capability and skills maintenance and development for all staff.</p>	<p><b>Recommendation:</b></p> <p>Review of ESA Fairbairn facility for “fit-for-purpose” of concurrent ECC and L3 IMT (and identification of remedial or alternate facilities if required).</p> <p>Review of ESA approach to Level 3 IMT structures and internal processes (planning, operations, intelligence, logistics) under AIMS for suitability for all-hazards and multi-agency approach.</p>	<p><b>Recommendation:</b></p> <p>ESA conduct at least annual L3 incident exercises testing “non-standard” scenarios to develop contingencies and test SOP, including contractual support arrangements.</p> <p>Review of all ESA and service level awards and different roster systems (including full time and volunteer staff conditions) to look for potential to align or combine during IMT operations.</p>	<p><b>Recommendation:</b></p> <p>After all major emergency incidents ESA should maintain IMT oversight for reasonable timeframe to ensure effective and efficient tasking of resources against known and anticipated requirements.</p>

	Preparedness/Planning	Response Ops	Response Management	Recovery
RFS	<p><b>Observation:</b></p> <p>RFS undertook detailed annual preparations for the 2019/20 bushfire season including vehicles and equipment maintenance and personnel training. RFS provided extensive support to interstate deployments in support of national emergencies, ensuring currency and exposure to major incident management. As a result, RFS was unable to conduct specific collective training for IMT Level 2. In 2019, RFS was not requested to conduct its usual quota of hazard reduction activities by PCS.</p>	<p><b>Observation:</b></p> <p>RFS underutilised as Strike Teams during response to major fires in ACT (Orroral Valley) and senior officers as a proportion underrepresented in IMT and as Divisional and Sector Commanders.</p>	<p><b>Observation:</b></p> <p>RFS experienced difficulties in engagement with the IMT and in obtaining adequate tactical information on planning. Perception that RFS underemployment impacted their ability to generate crews over time.</p>	<p><b>Observation:</b></p> <p>RFS were able to generate adequate capability to support ESA requirements in recovery operations</p>
	<p><b>Recommendation:</b></p> <p>Review of RFS hazard reduction task allocations (including from BOP tasks from PCS) to ensure adequate opportunities for professional development and skills maintenance.</p> <p>Review of fatigue management systems for ESA (including RFS), and other support arrangements for volunteer staff in the ACT.</p> <p>RFS pre-season training and preparedness activities with ESA and other services, including combined interstate deployments for L3 qualified ICs.</p>	<p><b>Recommendation:</b></p> <p>Review of RFS capability and ability to generate strike teams for bushfires in ACT and interstate, with a view to have more detailed standing deployment options for consideration by ESA IMT/ICs during Level 3 incidents.</p>	<p><b>Recommendation:</b></p> <p>Continued integration and employment of senior RFS officers into ESA IMT/IC roles and expanded opportunities for collaboration and combined leadership with other services (F&amp;R) and ACT directorates (PCS).</p>	<p><b>Recommendation:</b></p> <p>RFS core skills and experience and knowledge of ACT firegrounds should continue to be exploited for recovery operations.</p> <p>RFS reputation in ACT community and bushfire experience used by ESA to build volunteer support base and longer-term capability development.</p>

	Preparedness/Planning	Response Ops	Response Management	Recovery
<b>F&amp;R</b>	<p><b>Observation:</b></p> <p>The long-term investment in ACT building codes and regulations meant urban interface considered less risk in lead up to bushfire season. F&amp;R program of BAU preparedness and staff and equipment maintenance meant it was well prepared for tasking and demands of bushfire season.</p>	<p><b>Observation:</b></p> <p>F&amp;R was able to continue its mandated BAU coverage of ACT without impact over entire bushfire season and provide all support requirements to ESA/IMT for bushfire response.</p> <p>Use of F&amp;R communications staff in IMT significantly assisted IMT operations management.</p>	<p><b>Observation:</b></p> <p>Significant contributions to IMT made by senior F&amp;R staff.</p> <p>ACTAS core leadership remained largely outside IMT structures, allowing continued focus on BAU support to ACT.</p>	<p><b>Observation:</b></p> <p>NSTR</p>
	<p><b>Recommendations:</b></p> <p>Review of AIIMS qualifications among F&amp;R staff for IMT roles.</p> <p>F&amp;R active involvement in pre-season training and preparedness activity with ESA and other services, including combined interstate deployments for L3 qualified ICs.</p>	<p><b>Recommendation:</b></p> <p>Enhanced training or familiarisation for F&amp;R senior L3 qualified staff on specialist bushfire capabilities.</p>	<p><b>Recommendation:</b></p> <p>Enhanced opportunities for interagency collaboration and leadership, to further develop ability of senior F&amp;R officers to support ESA IMT structures and leadership response.</p>	<p><b>Recommendation:</b></p> <p>NSTR</p>

	Preparedness/Planning	Response Ops	Response Management	Recovery
<b>ACTAS</b>	<p><b>Observation:</b></p> <p>ACTAS had anticipated the requirements of medical support to remote bushfire operations and had adequate numbers of people with the correct levels of qualifications (driving and bushfire awareness).</p>	<p><b>Observation:</b></p> <p>ACTAS was able to continue its mandated BAU coverage of ACT for paramedic support without impact over entire bushfire season and provide all support requirements to ESA/IMT for bushfire response. The placement of ACTAS paramedics directly into Strike Teams was considered a highly valuable innovation.</p>	<p><b>Observation:</b></p> <p>Use of ACTAS paramedics in Strike Teams had positive impact on the mindset of ESA services on the role paramedics can play in fire operations. ACTAS core leadership remained outside IMT structures, allowing continued focus on BAU paramedic support to ACT.</p>	<p><b>Observation:</b></p> <p>NSTR</p>
	<p><b>Recommendation:</b></p> <p>Development of dedicated ACTAS cadre with specific training who can be extracted from BAU to support fire operations</p>	<p><b>Recommendation:</b></p> <p>Training of specialist cadre of ACTAS personnel to support IMT on dedicated roster.</p>	<p><b>Recommendation:</b></p> <p>Review of where Health function best sits in AIIMS planning and IMT structures for Level 3 incidents.</p>	<p><b>Recommendation:</b></p> <p>NSTR</p>

	Preparedness/Planning	Response Ops	Response Management	Recovery
SES	<p><b>Observation:</b></p> <p>SES were well prepared for the 2019/20 bushfire season and had conducted detailed vehicle and equipment servicing and personnel training at the individual level. SES had undertaken service-only planning, readiness and training activity.</p>	<p><b>Observation:</b></p> <p>Review SES support to ESA/RFS incidents and further enhance deliberate preparations and training for staging area development and IMT requirements</p>	<p><b>Observation:</b></p> <p>Integration of SES staff in multiple roles in the IMT support meant ESA members from other elements gained significant knowledge of and confidence in SES capabilities.</p>	<p><b>Observation:</b></p> <p>SES were able to generate adequate capability to support ESA requirements in recovery operations</p>
	<p><b>Recommendation:</b></p> <p>Review SES support to ESA/RFS incidents and further enhance deliberate preparations, planning and training for staging area development and IMT requirements in support of bushfires.</p>	<p><b>Recommendation:</b></p> <p>Consider standing SES Operations Desk or permanent staff officer inside IMT Operations Cell</p> <p>Consider IMT Operations and Plans representative forward inside the staging area to assist SES Staging Area Manager with RSOI</p>	<p><b>Recommendation:</b></p> <p>Development of contingency plans for SES support to fires to cover when additional/multiple tasks emerge in response to other hazards or emergencies within specific SES remit</p>	<p><b>Recommendation:</b></p> <p>N/A</p>

# **SECTION 5: ANNEX B**

## ANNEX B

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## 1. ACT GOVERNMENT

### 1.1 ACT Gov Planning

THEME: Planning		RATING: 16
LEVEL: ACT Gov		REF:
<p>HEADLINE OBSERVATION:</p> <p>ACT's coordination of the whole of government response is the subject of a separate Review. This operational review will focus on the whole of government issues relevant to the ESA response to the Bushfire Season 2019-2020.</p>		
<p>SUMMARY FINDINGS: The planning framework is thorough and adequate for the management of emergencies and their consequences. Some clarification and recommendations for refinement of the established plans hierarchy has been proposed, such as recognising supporting sub-plans as part of the emergency management framework, but this reinforces the suitability of the extant framework of plans.</p>		
WHAT WAS DONE WELL	<p>The hierarchy of plans detailing the responsibilities, authorities and mechanisms to prevent, or if they occur, manage emergencies and their consequences worked and allowed effective responses to fire and storm incidents.</p>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• A focus on managing and responding to bushfire risk, while appropriate in this last season, did consume planning effort and resources for other issues affecting the ACT such as heat, smoke (air quality) and storms that may have triggered the ACT Evacuation Plan. Planning must continue for other consequential, emergent or contingent risks.</li> <li>• Existing strategies, emergency and framework plans, and hazard-specific and supporting sub-plans (e.g. recovery, ECC, disaster victim identification plans) need to be understood by designated participants across whole of government. This builds clarity and coherence on responsibilities, authorities and mechanisms, and enhances pre-season preparation. Much of is achieved through the planning review cycle but can be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform ECC response exercises.</li> </ul>	
QUICK WINS	<p>The Security and Emergency Management Planning Group (SEMPG) enhance and exercise the deliberate planning cycle before bushfire season 2020-21 incorporating designated and relevant elements of the ACT Government. This could be aligned with the revision of the Territory Wide Risk Assessment (TWRA) due to be updated this year (2020) to inform government priorities, actions and investment in managing natural disaster risk.</p>	

1.1 ACT Gov Planning

<p><b>RECOMMENDATIONS:</b>                  The annual planning review cycle be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform ECC response exercises.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b>                  ACT Emergency Plan 2014                  ACT Strategic Bushfire Management Plan 2019-2024                  ACT Territory Wide Risk Assessment                  Sub Plan – Elevated Fire Danger                  Sub-Plan – Flood                  Sub Plan – Extreme Heat                  ACT Recovery Sub-Plan - 2019                  Emergency Coordination Centre Operations Plan                  ACT Bushfire Management Standards                  ACT Strategic Bushfire Capability Framework                  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines                  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p><b>RESEARCH METHODS:</b>                  Document review                  Interview</p>

## 1.2 ACT Gov Preparedness

THEME: Preparedness	RATING: 16
LEVEL: ACT Gov	REF:
<p>HEADLINE OBSERVATION: ACT's coordination of the whole of government response is the subject of a separate Review. This operational review will focus on the whole of government issues relevant to the ESA response to the Bushfire Season 2019-2020.</p>	
<p>SUMMARY FINDINGS: The ACT was well placed to respond to a high level of demand for bushfire resources with skilled and motivated personnel, and the necessary equipment and resources to respond to and extinguish bushfires where this was operationally feasible. It also had the capacity to respond to significant weather and storm events. BAU emergency response remained largely unaffected throughout the season. Of note is the size and expertise of the capability deployed from ACT to support fire management in other states. The recognised requirement for interstate resources in extreme situations was realised during the response to the Orrol Fire demonstrating the effectiveness of inter-state and state to commonwealth resource sharing mechanism.</p>	
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• The ACT Government coherent position on the risk presented to the ACT and to other states by the 2019-202 Bushfire Season.</li> <li>• Public communication to ensure Canberrans were ready to share responsibility of being bushfire ready.</li> <li>• The numerous examples of the utility of ACT's Emergency Services and the reciprocity that can be achieved through cooperation. <ul style="list-style-type: none"> <li>○ The ACT's highly regarded spatial capability was greatly sought after by other jurisdictions, with numerous deployments of ACT Mapping and Planning Support (MAPS) volunteers across NSW and Queensland.</li> <li>○ ESA Liaison Officers were deployed into various Regional Emergency Operations Centres in NSW.</li> <li>○ The ACT's Firebird 100 specialist intelligence gathering helicopter was extensively deployed interstate during the bushfire season.</li> <li>○ Firefighting personal, aviation resources, firefighting and support appliances, heavy plant, specialist technical roles. ICT services and incident intelligence were also shared between agencies.</li> <li>○ Aerial operations- The ESA utilised 58 personnel (18 employees and 40 volunteers) in aerial firefighting operations across two air bases (Hume Heli base and the Canberra LAT base) in support of firefighting activities across three states (ACT, NSW and VIC).</li> <li>○ Mechanical and paramedic support was also provided to all frontline firefighting teams deployed to firegrounds outside of the ACT.</li> </ul> </li> <li>• Deliberate preparedness gaps analysis and a plan to address priority shortfalls informed the ACT Strategic Bushfire Capability Framework published in Sep 2018. The additional steps taken to manage and prepare for 2018/2019 Bushfire season clearly benefited preparedness for the 2019/202 Bushfire Season</li> </ul>

1.2 ACT Gov Preparedness

<p>WHAT COULD BE IMPROVED</p>	<ul style="list-style-type: none"> <li>• The opportunity exists to take a strategic approach to capability planning that derives further benefit from significant advances in fire intelligence and situational awareness capability, networked communications technology and utility assets such as aerial operations.</li> <li>• Longer-term plans for forecasting, resourcing, prioritisation, basing and coordination of a national aerial fire-fighting capability is an example of improvements that have wider reaching benefit regionally and nationally. The ACT’s role as a strategic hub for south east Australia means it is well suited as a base for domestic aerial firefighting capability and associated fire intelligence and situational awareness development.</li> </ul>	
<p>QUICK WINS</p>	<p>A priority focus on inter-state capability between the ACT and NSW is an area of common interest.</p>	
<p>RECOMMENDATIONS: The ACT SBCF should be complimented by a strategic approach to preparedness that incorporates capability planning for mutual aid, enhancing the capability to source, deploy and command at the sector level and above, and arrangements to routinely share resources across states and draw on commonwealth assets. ‘Other Resource Capability Activities’ should be integrated into this approach in recognition of their significant enabling and inter-service capability. This strategic approach should also address developing the capacity to innovate around advanced capabilities and adapt them to firefighting in a coherent and safe manner.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES: ACT Emergency Plan 2014 ACT Strategic Bushfire Management Plan 2019-2024 ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger Sub-Plan – Flood Sub Plan – Extreme Heat ACT Recovery Sub-Plan - 2019 Emergency Coordination Centre Operations Plan ACT Bushfire Management Standards ACT Strategic Bushfire Capability Framework Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS: Document Review Interviews</p>

## 1.3 ACT Gov Recovery

THEME: Recovery	RATING: 16
LEVEL: ACT Gov	REF:
HEADLINE OBSERVATION:	
<p>ACT's coordination of the whole of government response is the subject of a separate Review. This operational review will focus on the whole of government issues relevant to the ESA response to the Bushfire Season 2019-2020.</p>	
SUMMARY FINDINGS:	
<p>The SBMP, Section 12: Supported communities for bushfire recovery, (pp64-67) describe the facilities and processes for supporting recovery from bushfires in the ACT.</p> <p>The ACT Recovery Sub-Plan outlines recovery activities for the community, business, infrastructure and the environment. The plan:</p> <ul style="list-style-type: none"> <li>• Outlines the framework that supports the planned, coordinated and flexible engagement of key stakeholders before, during and after emergencies</li> <li>• Enables scalable options to support the management of smaller incidents through to activities requiring cross-agency coordination</li> <li>• Set out a measured transition plan to ensure the recovery effort is effectively coordinated</li> <li>• Provide for the appointment of a Recovery Coordinator and Recovery Taskforce, if required.</li> </ul>	
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• The ACT Recovery sub-plan had been revised in 2019 and was briefed at the start of the season.</li> <li>• The ACT Recovery Committee was not established but this did not prevent the activation of Disaster Recovery Funding Arrangements.</li> </ul>
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Whilst recovery starts as soon as possible after response (or concurrent to it), there is a gap in many response plans with a strong focus on the incident, at the expense of consequence management. Population protection measures within the response phase need to be strongly considered as a standard part of operational planning.</li> <li>• The opportunity exists to improve the way that active recovery arrangements are implemented during the emergency, particularly with funding arrangements. A capacity to assist affected parts of the community recover more quickly will build better levels of resilience interactively in multi-hazard emergencies spanning multiple months. A more strategic or whole-of-season approach to planning would include sub-plans to assist the quickest possible recovery at the local level.</li> </ul>
QUICK WINS	<p>The Royal Commission in National Natural Disaster Arrangements remit includes the responsibilities of, and coordination between, the Commonwealth and State, Territory and local Governments relating to recovery from natural disasters and provide an opportunity to improve these arrangements.</p>

**1.3 ACT Gov Recovery**

<p><b>RECOMMENDATIONS:</b>                  The ESA review the planning processes of the ECC to improve the way that active recovery arrangements are implemented during future emergencies.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b>                  ACT Emergency Plan 2014                  ACT Strategic Bushfire Management Plan 2019-2024                  ACT Territory Wide Risk Assessment                  Sub Plan – Elevated Fire Danger                  Sub-Plan – Flood                  Sub Plan – Extreme Heat                  ACT Recovery Sub-Plan - 2019                  Emergency Coordination Centre Operations Plan                  ACT Bushfire Management Standards                  ACT Strategic Bushfire Capability Framework                  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines                  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p><b>RESEARCH METHODS:</b>                  Document Review                  Interviews</p>

1.4 ACT Gov Response

THEME: Response	RATING: 16
LEVEL: ACT Gov	REF:
<p>HEADLINE OBSERVATION:                  ACT's coordination of the whole of government response is the subject of a separate Review. This operational review will focus on the whole of government issues relevant to the ESA response to the Bushfire Season 2019-2020.</p>	
<p>SUMMARY FINDINGS:                  By the very nature of the ACT landscape all properties in the ACT, particularly those located in the Bushfire Prone Area (BPA), are recognised as assets at risk from bushfire. The ACT has long benefited from a multifaceted, comprehensive approach to managing bushfire risk in the Territory. Assigning precise consequences to critical infrastructure (particularly physical facilities, supply chains, information technology, communication networks and utilities in the ACT) is difficult and extremely varied because each category may impact on another (for example, a power outage may affect communications). The ACT Government has a well-established and exercised governance structure with oversight of emergency planning, response and recovery coordination in order to coordinate a whole of government response to emergency management across the territory:</p> <ul style="list-style-type: none"> <li>• The Security and Emergency Management Committee of Cabinet provides general strategic direction of ACT government prevention and preparedness arrangements.</li> <li>• The Security and Emergency Management Senior Officials Group (SEMSOG) is the primary mechanism for ensuring cooperation and coordination between ACT Government agencies in planning for, responding to and recovering from emergencies.</li> <li>• The SEMOG is supported by the Security and Emergency Management Policy Group (SEMPG) which comprises officials from all relevant ACT Government directorates. It develops, implements and reviews specific security and emergency management matters including plans and sub-plans.</li> </ul> <p>There are no known barriers to activities undertaken to protect identified critical assets and infrastructure.</p> <p>A State of Alert was declared on 2 January 2020 which showed good foresight, and this was followed by the declaration of a State of Emergency on 31 January 2020 to appoint the ESA Commissioner as the Emergency Controller. This was the first time since 2003 that an Emergency Controller had been appointed in the ACT. The Emergency Controller was appointed for a period of 39 consecutive days in January and February.</p>	
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• The declaration of a State of Alert and a State of Emergency to appoint the EC to exercise emergency powers, prioritise response action and resource allocation.</li> <li>• The use of on-line telecommunications to host secure, effective and convenient briefings and meetings.</li> <li>• The establishment of a Secretariat also proved effective in scheduling and preparing for meetings.</li> <li>• Communications from SEMSOG were timely and succinct.</li> </ul>

1.4 ACT Gov Response

<p>WHAT COULD BE IMPROVED</p>	<ul style="list-style-type: none"> <li>• There was no change in requirements or timeframes for Cabinet, Budget business cases and other business as usual processes during the period of State of Alert/Emergency. Fatigue management was required in both operational and supporting administration areas as staff had to accommodate emergency measures but were unable to deprioritise BAU activities.</li> <li>• There is no express power under the ACT Emergencies Act 2004 to appoint an acting or deputy Emergency Controller. Managing fatigue for lengthy periods of time will require some functions to be delegated, or for authorities to be temporarily transferred to an acting appointment.</li> <li>• The interaction between the EC, the management executive and SEMSOG (if separate) is critical to ensure that the full capacity of the government is available when needed in a rapidly evolving emergency. The Chief Minister and Minister must also be clear in what action is needed by Government and what information, warnings and advice need to be provided to the community. Clear and unambiguous arrangements that synchronise the ECC, ICC and PICC to this end will achieve significant benefit. Supporting the EC in managing the overall response and ensuring ECC and PICC support the ICC is, however, the primary focus of any effective emergency response. The tension between meeting the needs of Government and the community while also managing emergencies will test appointees and teams, particularly during intense periods of response. Ensuring that personnel understand and are prepared to manage and lead in this environment while also testing the facilities (particularly communications) needed to support effective leadership and management can be achieved through an annual cycle of briefings, training and exercise.</li> </ul>
<p>QUICK WINS</p>	<ul style="list-style-type: none"> <li>• Scenario based table-top exercises or discussion exercises designed to clarify the flow of information and the role and functions of the SEMSOG as the Management Executive to support the EC.</li> <li>• Adjustments to timings or resourcing of BAU activities, such as budget processes, to minimise conflict with ESA activity during the peak emergency period of the year.</li> </ul>

**1.4 ACT Gov Response**

<p><b>RECOMMENDATIONS:</b>                  ACT Government/EC/ECC/ICC/PICC interaction be enhanced through additional briefings and scenario based 'table-top' planning exercises that are linked to and inform annual emergency response exercises.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b>                  ACT Emergency Plan 2014                  ACT Strategic Bushfire Management Plan 2019-2024                  ACT Territory Wide Risk Assessment                  Sub Plan – Elevated Fire Danger                  Sub Plan – Extreme Heat                  ACT Recovery Sub-Plan - 2019                  Emergency Coordination Centre Operations Plan                  ACT Bushfire Management Standards                  ACT Strategic Bushfire Capability Framework                  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner's Guidelines                  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p><b>RESEARCH METHODS:</b>                  Document Review                  Interviews</p>

**2. ESA/IMT**  
**2.1 ESA Planning**

THEME: PLANNING		RATING:
LEVEL: ESA		REF:
HEADLINE OBSERVATION:  NOT ASSESSED INCLUDED WITH PREPAREDNESS		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL		
WHAT COULD BE IMPROVED		
QUICK WINS		
RECOMMENDATIONS:		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:

2.2 ESA Preparedness

THEME: PREPAREDNESS		RATING: 12
LEVEL: ESA		REF: OA_ESA_PREP
HEADLINE OBSERVATION:		
<p>ESA support to other states through staff deployments and strong community engagement activity within the ACT resulted in high levels of preparedness for the 2019/20 bushfire season</p>		
SUMMARY FINDINGS:		
<p>ESA had conducted extensive preparations for the 2019/20 bushfire season, including a comprehensive community safety and notification campaign, which given the gravity of bushfires underway in other states, significantly helped the ACT in its readiness. The long period of time prior to fire directly affecting the ACT was consumed by ESA-wide deployments to support other jurisdictions. This may have had a positive impact on staff currency and adding to individual experiences of value, but the level of fatigue and missed opportunities for collective training and rehearsals meant its own internal preparedness for a Level 3 incident was sub-optimal.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• ACT support for other states in lead up to bushfire season had positive impact on skills and experience of deployed ESA staff in many functional areas</li> <li>• Strong community safety campaigns and early pre-season fire notifications well received by ACT public</li> <li>• Funding for SIG and aircraft base in previous years meant ESA was well positioned with additional capability</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• ESA never established or trained for concurrent ECC and L3 IMT</li> <li>• ESA staff felt prepared for 2-3 day emergency, not six week campaign</li> <li>• Many ESA staff had qualifications (AIIMS and other skills) but never practiced</li> <li>• No detailed matching of people for IMT with right mix of qualifications/commitment/competency/availability</li> <li>• Long period of interstate deployments meant many staff were fatigued before bushfire season commenced</li> <li>• Pre-season logistics checking did not envisage scale of event and many contracts (e.g. catering) were not sufficient for the season that eventuated</li> <li>• Some logistics and resources planning based on assumptions not covered by MOU or formal support arrangements (**one interview said arrangements for helicopter support were only covered in emails, and did not stand-up when needed**)</li> <li>• No pre-planning or analysis completed prior to season on supply chain requirements and some supply relationships not “stress tested”</li> <li>• No ESA level operational support or “surge” plans in place for L3 IMT (e.g. no detailed plan associated with logistics for staging area establishment)</li> </ul>	

**2.2 ESA Preparedness**

<p>QUICK WINS</p>	<ul style="list-style-type: none"> <li>• Audit of all ESA staff AIIMS qualifications and development of IMT support matrix tool showing qualifications down to team member levels</li> <li>• Development of ESA level surge planning for support to IMT</li> </ul>	
<p>RECOMMENDATIONS:</p> <p>Annual series of exercises involving ESA and all agencies for L3 incident response and IMT establishment to improve: all hazards response; cross agency relationships and interoperability; and capability and skills maintenance and development for all staff.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014  ACT Strategic Bushfire Management Plan 2019-2024  ACT Territory Wide Risk Assessment  Sub Plan – Elevated Fire Danger  Sub-Plan – Flood  Sub Plan – Extreme Heat  ACT Recovery Sub-Plan - 2019  Emergency Coordination Centre Operations Plan  ACT Bushfire Management Standards  ACT Strategic Bushfire Capability Framework  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review  Interviews</p>

2.3 ESA Recovery

THEME: RECOVERY		RATING: 14
LEVEL: ESA		REF: OA_ESA_RECOVERY
<p>HEADLINE OBSERVATION:</p> <p>ESA maintained sufficient management oversight of recovery activity from the bushfires and storm events to ensure the ACT community was able to return to normality as quickly as possible.</p>		
<p>SUMMARY FINDINGS:</p> <p>ESA coordination of immediate post-fire and storm recovery helped quickly address much needed and complex work by multiple agencies (PCS, SES, ACTAS, RFS) and ensure the ACT community was able to return to normality as quickly as possible.</p> <p>ESA conducted a robust series of AAR for all functional areas involved in the IMT, and developed significant internal insights and lessons derived from the long bushfire season.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• IMT coordination of immediate post-fire and storm recovery helped quickly address much needed and complex work by multiple agencies (PCS, SES, ACTAS, RFS) and ensure ACT was able to return to normality as quickly as possible</li> <li>• Post incident surveys show high levels of community satisfaction with ESA information during bushfire season</li> <li>• Internal AAR process detailed and productive in drawing lessons and insights</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• IMT rapid stand-down missed potential benefit of project closure opportunities and requirements (demobilisation) in particular on necessary archival and finance requirements (e.g. invoicing and ICON entries for records))</li> <li>• Due to ACT government budget cycle, too late for input on funding for new initiatives in advance of 20/21 bushfire season (planning for 21/22 window only)</li> </ul>	
QUICK WINS		

<p><b>RECOMMENDATIONS:</b></p> <p>All major emergency incidents maintain IMT oversight for reasonable timeframe to ensure effective and efficient tasking of resources against known and anticipated requirements.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b></p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment            Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p><b>RESEARCH METHODS:</b></p> <p>Document Review            Interviews</p>

2.4 ESA Response Management

THEME: RESPONSE MANAGEMENT		RATING: 9
LEVEL: ESA		REF:
<p>HEADLINE OBSERVATION:</p> <p>The leadership, management and resilience of ESA staff during the conduct of operations and the establishment of an IMT was exceptional given the challenging circumstances, and contributed to the overall success of the response to the threats facing the ACT.</p>		
<p>SUMMARY FINDINGS:</p> <p>The leadership and adaptive management of ESA staff in responding to the unprecedented scale and duration of natural disasters significantly contributed to the effective operation of the IMT. Innovative management initiatives, internal to the IMT but also by ESA for its ongoing BAU responsibilities, helped overcome the demands of the bushfire season.</p> <p>It is acknowledged some procedural and policy settings were challenging to overcome (for example varying rosters of services due to different awards) and this made resourcing the IMT difficult at times. The AIIMS system proved robust and appropriate as the overall management architecture for ESA establishment of IMT. But more emphasis must be given to the development, distribution, communication and understanding of the Incident Action Plan (IAP), both internal to the IMT and outwards to Divisional Commanders and other key leaders (for example Staging Area Managers), regardless of the challenges faced by distance.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• Exceptional leadership under challenging circumstances by all levels of ESA staff</li> <li>• Innovative and adaptive management responses developed to cope with unprecedented scale and duration of emergency</li> <li>• Generally, AIIMS proven to be effective emergency response framework for ACT and ESA multi-agency structures</li> </ul>	

<p>WHAT COULD BE IMPROVED</p>	<ul style="list-style-type: none"> <li>• Some deviations from AIIIMs in IMT caused confusion on roles and responsibilities (e.g. appointment of numerous Deputy IC left sections heads unclear, air operations placed under logistics cell) and many staff felt “overwhelmed”</li> <li>• Strong perception among ESA staff that IMT briefing requirements overloaded senior IMT staff, in terms of duration and number (note: primary impact perceived to be functional teams were without leadership for extended periods)</li> <li>• In most key IMT roles, staff did not grasp the enormity of the situation and the wider consequence of L3 incident</li> <li>• IMT operations seriously impacted by vastly different shift patterns and awards of agencies and volunteers (**main impact planned IMT 5 Shift pattern often not completed**)</li> <li>• Challenge of fire considerable distance from ESA HQ/IMT created difficulties with briefing and debriefing Divisional Commanders (Div Comd) by IC. This had two-fold impact: the IAP was often not fully understood or executed; and the IMT was not receiving detailed information by way of feedback and situation updates on what has been achieved.</li> <li>• Similar concerns regarding Staging Area Managers (SAM) (**note see SES detailed assessments**)</li> <li>• No long-term planning conducted for staff rosters to identify people for key roles in advance, specialist capabilities became hard to source (including to NRSC): some capabilities were quickly exhausted (e.g. communications)</li> <li>• Many aspects of logistics support relied on informal arrangements which failed during the emergency response: both due to sheer competitive market (dominated by NSW requirements) and no prior “stress-testing” of contracts (**see preparedness**)</li> </ul>
<p>QUICK WINS</p>	<ul style="list-style-type: none"> <li>• Development of SOP options for command of fire (or other emergency incident) significant distance from ESA, including potential use of Forward Operations Posts and/or increased use of Staging Areas</li> <li>• Explore enhanced IAP format and distribution methods to aid electronic distribution and briefing requirements</li> </ul>

<p><b>RECOMMENDATIONS:</b></p> <p>ESA conduct at least annual L3 incident exercises testing “non-standard” scenarios to develop contingencies and test SOP, including contractual support arrangements.</p> <p>Review of all ESA and service level awards and different roster systems (including full time and volunteer staff conditions) to look for potential to align or combine during IMT operations.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b></p> <ul style="list-style-type: none"> <li>ACT Emergency Plan 2014</li> <li>ACT Strategic Bushfire Management Plan 2019-2024</li> <li>ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger</li> <li>Sub-Plan – Flood</li> <li>Sub Plan – Extreme Heat</li> <li>ACT Recovery Sub-Plan - 2019</li> <li>Emergency Coordination Centre Operations Plan</li> <li>ACT Bushfire Management Standards</li> <li>ACT Strategic Bushfire Capability Framework</li> <li>Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines</li> <li>Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</li> </ul>	<p><b>RESEARCH METHODS:</b></p> <ul style="list-style-type: none"> <li>Document Review</li> <li>Interviews</li> </ul>

2.5 ESA Response Operations

THEME: RESPONSE OPERATIONS	RATING: 9
LEVEL: ESA	REF: OA_ESA_PLAN
<p>HEADLINE OBSERVATION:</p> <p>ESA was able to successfully conduct operations by establishment of an IMT to defend against a major fire and respond to concurrent unprecedented storm damage during the 2019/20 bushfire season.</p>	
<p>SUMMARY FINDINGS:</p> <p>The IMT arrangements set up by ESA to manage the protracted and serious threats faced during the 2019/20 bushfire season were extremely effective and helped lead to the ultimate successful mitigation of the fire threats facing the ACT. The scale of the IMT response (in combination with the ECC establishment – see comments under ACT/ECC) was unprecedented and it is acknowledged this caused some strain on both the ESA facility at Fairbairn, and the IMT structures.</p> <p>An increased focus on the technical skills required under the AIIMS system (for example greater expertise - or familiarity for senior staff - with air operations), and on internal processes (for example coordination between the operations and plans functional areas of the IMT) will improve overall effectiveness and efficiency of ESA in any future responses.</p> <p>The three storm events - which all occurred concurrent to the major fires - while managed exceptionally well from an operational perspective, demonstrated the need for greater focus on all hazards responses and IMT adaptability in terms of both scale and expertise.</p> <p>The public information and warning system established had extensive reach and impact in the community and contributed to the overall success of public safety and the reputation and visibility of ESA in the ACT. Investments in specialist capabilities such as the SIG helicopter provided very clear enhanced situational awareness for ESA and enabled quicker and more informed strategic decision making.</p>	

2.5 ESA Response Operations

<p>WHAT WAS DONE WELL</p>	<ul style="list-style-type: none"> <li>• ESA BAU able to be sustained and core functions operational during crisis (e.g. workshop maintenance)</li> <li>• Move of PIC into IMT enhanced communications response and messaging (clear delineation of emergency communications and government communications)</li> <li>• Clear utility of Single Point of Truth (SPoT) tool for public communications</li> <li>• Highly successful community outreach and public information campaigns including on social media (multiple platforms) and direct to public (community meetings, doorknocking) and employment of novel and innovative methods to reach target audience (eg community pop-ups, live FB conferences)</li> <li>• Very high levels of intelligence capability employed (SIG and MET) in support of ACT and surrounding NSW fires</li> <li>• Exceptional performance of COMCEN in supporting complex and extensive multi-hazard operations for IMT and ESA BAU: due to staff experience, continuity of operators and responsive resourcing</li> <li>• Evident success in air operations protecting critical assets within Namadgi and surrounding community</li> </ul>
<p>WHAT COULD BE IMPROVED</p>	<ul style="list-style-type: none"> <li>• ECC establishment put strain on ESA facility – with multiple competing task units looking for space, the building and both ECC/IMT facilities were compromised</li> <li>• ESA staff self-critical of poor transition from planning to operations need for better coordination within IMT in this critical aspect of incident response: core areas identified as: situational awareness and intelligence (see below comments); information flows and processes and templates; strategy development (in particular aviation strategy - see below comments); and prioritisation of tasks and allocation of resources (see below comments)</li> <li>• Perception air operations not effective because few expert staff, separation of air and ground planning and operations, and no strategic effect developed, leading to poor prioritisation and tasking</li> <li>• Perception strategic focused became asset protection (eg cultural assets) not fire containment</li> <li>• No separation of immediate response and longer-term planning resulted in IMT having very short planning horizon and impacted ability to consider contingencies or wider implications (eg evacuations)</li> <li>• IMT had no database to help plan for resources requirements and allocations</li> <li>• Clear disconnect in IMT between plans and resourcing: no capability estimate fed into planning (**one interview claimed many occasions resourcing could not deliver requirements to meet the IAP, with an unknown impact on fire operations**)</li> </ul>

WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• No dedicated communications planning conducted in IMT and hence no consideration of communications impact on operations (**one interview claimed firefighting and other plans developed on assumptions only TRN would support**)</li> <li>• Despite high levels of intelligence capability and information availability, appeared to be no specific process for intelligence collection, analysis and dissemination within the IMT, and IAP contained no priority information requirements (**one interview claimed information gathering was incidental, not directed**)</li> <li>• Key gap in IMT intelligence was lack of data analysis beyond fire mapping (eg for all storm events no GIS or data analysis conducted)</li> <li>• Some disconnect evident internal to ESA and within IMT on critical communications processes (e.g. Risk and Planning own the Emergency Alert tool, Digital Service own the ESA website, and CAD own the public facing incident map)</li> <li>• Issue of interjurisdictional updates and warnings seen to be controversial but effective (e.g. updates on NSW fires tailored to ACT residents likely to be impacted)</li> <li>• At no time did IMT have complete data on where every staff member at fire front was (**no ability to track people, only vehicles**) compounded by difficulty in confirming planned rosters versus actual deployments for volunteer workforce</li> <li>• ESA staff perception the ICON system was underutilised</li> <li>• All Tier One catering contracts fell over (**contract arrangements never “stress tested” see Preparedness section**)</li> </ul>
QUICK WINS	<ul style="list-style-type: none"> <li>• Development of resource management policies and supporting systems/templates to support IMT operations</li> <li>• More detailed breakdown of ESA support cells inside IMT (e.g. logistics, finance, catering, suppliers)</li> <li>• Specific aviation training to wider group of ESA staff, in particular those with IMT operational responsibilities</li> <li>• Development of SOP for ESA Community Engagement to ensure key innovations captured and practised (eg community pop-ups and doorknocks)</li> <li>• Consider intelligence fusion and analysis functions to extend development of existing predictive services (FBAN) and intelligence capabilities (SIG) within IMT structure</li> <li>• Reinforce ICON training and utility</li> <li>• Development of ESA specific IMT Planning Cycle for use within L2 and L3 incidents</li> </ul>

<p>RECOMMENDATIONS:</p> <p>Review of ESA Fairbairn facility for “fit-for-purpose” of concurrent ECC and L3 IMT (and identification of remedial or alternate facilities if required).</p> <p>Review of ESA approach to Level 3 IMT structures and internal processes (planning, operations, intelligence, logistics) under AIIMS for suitability for all-hazards and multi-agency approach.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <ul style="list-style-type: none"> <li>ACT Emergency Plan 2014</li> <li>ACT Strategic Bushfire Management Plan 2019-2024</li> <li>ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger</li> <li>Sub-Plan – Flood</li> <li>Sub Plan – Extreme Heat</li> <li>ACT Recovery Sub-Plan - 2019</li> <li>Emergency Coordination Centre Operations Plan</li> <li>ACT Bushfire Management Standards</li> <li>ACT Strategic Bushfire Capability Framework</li> <li>Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)</li> <li>Commissioner’s Guidelines</li> <li>Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</li> </ul>	<p>RESEARCH METHODS:</p> <ul style="list-style-type: none"> <li>Document Review</li> <li>Interviews</li> </ul>

**3. RFS**

**3.1 RFS Planning**

THEME: PLANNING		RATING:
UNIT: RFS		REF:
HEADLINE OBSERVATION:  NOT ASSESSED INCLUDED WITH PREPAREDNESS		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL		
WHAT COULD BE IMPROVED		
QUICK WINS		
RECOMMENDATIONS:		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:

3.2 RFS Preparedness

THEME: PREPAREDNESS		RATING: 9
UNIT: RFS		REF:
HEADLINE OBSERVATION:		
<p>RFS undertook extensive annual preparations for the 2019/20 bushfire season including vehicles and equipment maintenance and personnel training. RFS provided extensive support to interstate deployments in support of national emergencies, ensuring currency and exposure to major incident management. RFS was unable to conduct specific collective training for IMT Level 2. In 2019, RFS was not requested to conduct its usual quota of hazard reduction activities by PCS.</p>		
SUMMARY FINDINGS:		
<p>The RFS is the mandated service responsible for bush and grass fire response in the ACT, and it has a long history and significant experience in this role. The impact of bushfires in others states effectively meant the season started very early, and RFS was a strong contributor to interstate deployments for several months prior to the commencement of the formal season in the ACT. This provided significant exposure and experience to RFS crews and staff, but contributed also to fatigue as these deployments continued into the later months of 2019. As a result, RFS was not able to conduct exercises or collective training as planned, including any specific activity with ESA or with other services.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• Strong baseline facilities, equipment and personnel levels</li> <li>• High levels of coordination with NSW and extensive participation in inter-state deployments gave RFS strong understanding of requirements</li> <li>• High number of TOBAN days provided opportunity to test stand-up and ensure personnel and equipment readiness</li> <li>• Farm Fire Wise program extensive and had up to date coverage and assessments (**note these plans are reviewed every five years, or on change of lease**)</li> <li>• RFS had conducted schedule of hazard reduction burns with private landholders</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Variable BOP standards dependent on landowners</li> <li>• No specific IMT-level exercises conducted (IMX) in 2019 prior to the bushfire season</li> <li>• RFS not allocated any BOP hazard reduction burns in 2019 (**note these all managed by PCS, and in past RFS have been asked to support, benefit being for mandatory career assessments and training**)</li> <li>• RFS interview claimed PCS had not completed all required BOP burns due to weather</li> <li>• Early and extensive deployments interstate meant many volunteers were already fatigued (and constrained by release from employers) at start of bushfire season (**total numbers were 450 members, 1183 total deployments for total of 2212 days**)</li> <li>• Fatigue had impact on post-deployment vehicle and equipment maintenance</li> <li>• High turnover of RFS permanent staff (12 in total) in previous years meant lack of consistency and experience</li> </ul>	

<p>QUICK WINS</p>		
<p>RECOMMENDATIONS:</p> <p>Review of RFS hazard reduction task allocations (including from BOP tasks from PCS) to ensure adequate opportunities for professional development and skills maintenance.</p> <p>Review of fatigue management systems for ESA (including RFS), and other support arrangements for volunteer staff in the ACT.</p> <p>RFS pre-season training and preparedness activities with ESA and other services, including combined interstate deployments for L3 qualified ICs.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014</p> <p>ACT Strategic Bushfire Management Plan 2019-2024</p> <p>ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger</p> <p>Sub-Plan – Flood</p> <p>Sub Plan – Extreme Heat</p> <p>ACT Recovery Sub-Plan - 2019</p> <p>Emergency Coordination Centre Operations Plan</p> <p>ACT Bushfire Management Standards</p> <p>ACT Strategic Bushfire Capability Framework</p> <p>Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)</p> <p>Commissioner’s Guidelines</p> <p>Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review</p> <p>Interviews</p>

3.3 RFS Recovery

THEME: RECOVERY		RATING: 14
UNIT: RFS		REF:
<p>HEADLINE OBSERVATION:</p> <p>RFS were able to generate adequate capability to support ESA requirements in recovery operations.</p>		
<p>SUMMARY FINDINGS:</p> <p>While coming after an extremely long season and period of almost five months continuous operations (when considering inter-state deployments) the RFS was able to maintain sufficient personnel and equipment for the immediate post-fire recovery activity. It is noted the RFS reputation in the community following the fires was extremely strong and the organisation received many hundreds of new applications for volunteer service as a result.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>All support to IMT designated recovery tasks delivered IAW with IAP and resourcing requirements</li> <li>Collaboration with other services (ACTAS, SES) and ACT government (PCS) in immediate risk identification activity such as Dangerous Tree Assessments and other tasks,</li> </ul>	
WHAT COULD BE IMPROVED		
QUICK WINS		

<p><b>RECOMMENDATIONS:</b></p> <p>RFS core skills and experience and knowledge of ACT firegrounds should continue to be exploited for recovery operations.</p> <p>RFS reputation in ACT community and bushfire experience used by ESA to build volunteer support base and longer-term capability development.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b></p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment            Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p><b>RESEARCH METHODS:</b></p> <p>Document Review            Interviews</p>

3.4 RFS Response Management

THEME: RESPONSE MANAGEMENT		RATING: 11
UNIT: RFS		REF:
HEADLINE OBSERVATION:		
<p>RFS experienced difficulties in engagement with the IMT and in obtaining adequate tactical information on planning. Perception that RFS underemployment impacted their ability to generate crews over time.</p>		
SUMMARY FINDINGS:		
<p>After multiple inter-state deployments over many months, when fire hit the ACT, RFS senior staff perceived they were proportionately underemployed. While providing exceptional leadership to the brigades, and inside the IMT when required, this perception did impact the strategies of the fire response, and the ability of RFS to maintain its crew tempo.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>RFS leadership active participation in IMT and fire-fighting leadership positions as required by the IAP</li> <li>RFS leadership and oversight of RFS Brigades and crews throughout the season and on tactical fire response situations in demanding and hazardous conditions.</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>Continuous change in IC and senior IMT staff meant different strategies, approaches and personalities applied to fire response</li> <li>Over time, RFS station officers experienced difficulty in building crews (**note: one interview claimed this was direct result of underemployment or misuse of crews on tasking**)</li> <li>Fatigue management largely “self-regulated” and some staff considered “I am Safe” checklist not used correctly</li> <li>RFS perception observed “decision paralysis” in IMT</li> </ul>	
QUICK WINS		

<p>RECOMMENDATIONS:</p> <p>Continued integration and employment of senior RFS officers into ESA IMT/IC roles and expanded opportunities for collaboration and combined leadership with other services (F&amp;R) and ACT directorates (PCS).</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <ul style="list-style-type: none"> <li>ACT Emergency Plan 2014</li> <li>ACT Strategic Bushfire Management Plan 2019-2024</li> <li>ACT Territory Wide Risk Assessment</li> <li>Sub Plan – Elevated Fire Danger</li> <li>Sub-Plan – Flood</li> <li>Sub Plan – Extreme Heat</li> <li>ACT Recovery Sub-Plan - 2019</li> <li>Emergency Coordination Centre Operations Plan</li> <li>ACT Bushfire Management Standards</li> <li>ACT Strategic Bushfire Capability Framework</li> <li>Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines</li> <li>Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</li> </ul>	<p>RESEARCH METHODS:</p> <ul style="list-style-type: none"> <li>Document Review</li> <li>Interviews</li> </ul>

3.5 RFS Response Operations

THEME: RESPONSE OPERATIONS		RATING: 11
UNIT: RFS		REF:
HEADLINE OBSERVATION:		
<p>RFS underutilised as Strike Teams during response to major fires in ACT (Orroral Valley) and senior officers as a proportion underrepresented in IMT and as Divisional and Sector Commanders.</p>		
SUMMARY FINDINGS:		
<p>The review identified a perception that the RFS were underutilised as Strike Teams during response to major fires in the ACT - in particular the Orroral Valley fire – and that senior officers were proportionately underrepresented in the IMT and as Divisional and Sector Commanders. The majority of Divisional Commander and Sector Leader appointments were allocated to ACT Parks and Conservation Service (PCS) officers</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• RFS employment of app-based called out and tracking system</li> <li>• RFS met all response times for incidents</li> <li>• Harris UHF/VHF radio enhancements meant seamless tactical communications with all elements and NSW</li> <li>• High quality of intelligence from SIG</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• RFS as lead agency for grass and bushfires, was not able to or requested to maintain leadership of IMT in IC role</li> <li>• Perception of underemployment for ACT fires (**one interview claimed at no point more than 20% RFS committed**)</li> <li>• Some trained RFS staff omitted from IMT establishment and rosters, result was some “walked away” and not available for later employment</li> <li>• Majority Divisional Commanders and Sector Leaders allocated to PCS (**one interview claimed only 5-10% of Div Comd shifts went to RFS**)</li> <li>• Fire IAP issued by IMT was not considered credible because disconnected from reality of fireground. One interview claimed feedback was not incorporated into IAP iteration</li> <li>• Electronic IAP difficult to consume, ultimately IMT/IC hand delivered IAP to Staging Area</li> <li>• System of debriefing and reporting into the IMT was suboptimal or did not occur</li> <li>• SIG intelligence not fused with other intelligence nor “ground-truthed” so IAP had inappropriate strategies and tactics</li> </ul>	
QUICK WINS		

<p>RECOMMENDATIONS:</p> <p>Review of RFS capability and ability to generate strike teams for bushfires in ACT and interstate, with a view to have more detailed standing deployment options for consideration by ESA IMT/ICs during Level 3 incidents.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014  ACT Strategic Bushfire Management Plan 2019-2024  ACT Territory Wide Risk Assessment  Sub Plan – Elevated Fire Danger  Sub-Plan – Flood  Sub Plan – Extreme Heat  ACT Recovery Sub-Plan - 2019  Emergency Coordination Centre Operations Plan  ACT Bushfire Management Standards  ACT Strategic Bushfire Capability Framework  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review  Interviews</p>

**4. F&R**

**4.1 F&R Planning**

THEME: PLANNING		RATING:
UNIT: F&R		REF:
HEADLINE OBSERVATION:  NOT ASSESSED INCLUDED WITH PREPAREDNESS		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL		
WHAT COULD BE IMPROVED		
QUICK WINS		
RECOMMENDATIONS:		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:

4.2 F&R Preparedness

THEME: PREPAREDNESS		RATING: 16
UNIT: F&R		REF:
HEADLINE OBSERVATION:		
<p>The long-term investment in ACT building codes and regulations meant urban interface considered less risk in lead up to bushfire season. F&amp;R program of BAU preparedness and staff and equipment maintenance meant it was well prepared for tasking and demands of bushfire season</p>		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>As full-time emergency response agency, F&amp;R was well prepared in all aspects for the bushfire season, at the service and individual staff level for all mandated tasks required</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>The AIIMS qualifications of F&amp;R staff could be improved so as to ensure wider pool of senior officers and staff with L2 and L3 qualifications to contribute to ESA IMT operations for significant incidents.</li> </ul>	
QUICK WINS		

<p>RECOMMENDATIONS:</p> <p>Review of AIIMS qualifications among F&amp;R staff for IMT roles.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014  ACT Strategic Bushfire Management Plan 2019-2024  ACT Territory Wide Risk Assessment  Sub Plan – Elevated Fire Danger  Sub-Plan – Flood  Sub Plan – Extreme Heat  ACT Recovery Sub-Plan - 2019  Emergency Coordination Centre Operations Plan  ACT Bushfire Management Standards  ACT Strategic Bushfire Capability Framework  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review  Interviews</p>

**4.3 F&R Recovery**

THEME: RECOVERY		RATING:
UNIT: F&R		REF:
HEADLINE OBSERVATION:		
NOT ASSESSED AS F&R WERE NOT SIGNIFICANTLY INVOLVED IN RECOVERY OR PROPERTY OR OTHER ACTIVITY TO A SUFFICIENT LEVEL FOR A PERFORMANCE ASSESSMENT		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL		
WHAT COULD BE IMPROVED		
QUICK WINS		
RECOMMENDATIONS:		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:

4.4 F&R Response Management

THEME: RESPONSE MANAGEMENT		RATING: 14
UNIT: F&R		REF:
HEADLINE OBSERVATION:		
<p>Significant contributions to IMT made by senior F&amp;R staff. Core leadership remained largely outside IMT structures, allowing continued focus on BAU fire support to ACT</p>		
SUMMARY FINDINGS:		
<p>The contribution of senior F&amp;R officers to the ESA fire IMT was significant. The experience and local knowledge of F&amp;R officers was able to be applied inside the IMT construct, and the mature approach enabled collaborative relationships in leadership positions with other services.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• F&amp;R had clear understanding of EC intent and direction at level of ACT</li> <li>• F&amp;R roster and resource management system worked well, good support and management structures and processes (able to keep all stations open at minimum staffing levels)</li> <li>• F&amp;R senior officers personally briefing crews at F&amp;R stations worked well and helped keep all staff informed of situation and tasking in timely fashion</li> <li>• Collaborative relationships among senior ESA and service staff better than previous seasons</li> <li>• Good intelligence and historical knowledge and experience provided F&amp;R IC strong platform</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Long period of time IMT operational created fatigue and stress on that small pool of people</li> <li>• IC role in IMT was at time too tactical (fire front focussed)</li> <li>• IMT processes not clear, many aspects of response to the fire season developed ad hoc</li> <li>• Information flow between IMT planning and operations cells sub-optimal</li> <li>• Perception pressure on IC for media information detracted from core role in IMT</li> <li>• ESA facility struggled with scale of IMT</li> <li>• IMT did not have effective electronic or physical resource tracking systems meant there was never any comprehensive or accurate resource listing available at all times.</li> </ul>	
QUICK WINS		

<p>RECOMMENDATIONS:</p> <p>Enhanced opportunities for interagency collaboration and leadership, to further develop ability of senior F&amp;R officers to support ESA IMT structures and leadership response.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)            Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review            Interviews</p>

4.5 F&R Response Operations

THEME: RESPONSE OPERATIONS		RATING: 16
UNIT: F&R		REF:
HEADLINE OBSERVATION:		
<p>F&amp;R provided effective protection of urban edge IAW established tasks and responsibilities. There was no damage to the Urban area that required F&amp;R to fulfil its legislative responsibility operationally. F&amp;R was able to continue its mandated BAU coverage of ACT without impact over entire bushfire season and provide all support requirements to ESA/IMT for bushfire response. Use of F&amp;R communications staff in IMT significantly assisted IMT operations management</p>		
SUMMARY FINDINGS:		
<p>F&amp;R was able to support ESA fire response operations and maintain its mandated emergency response capabilities for the ACT throughout the bushfire season.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• F&amp;R was able to continue its mandated BAU coverage of ACT without impact over entire bushfire season and provide all support requirements to ESA/IMT for bushfire response.</li> <li>• F&amp;R effective protection of urban edge IAW established tasks and responsibilities</li> <li>• Urban Interface Plan developed as specific contingency</li> <li>• F&amp;R acting as IC for Pialligo fire able to quickly develop strategy and direct resources from IMT</li> <li>• IC ability to direct and have live feed on intelligence (SIG) provided superior situational awareness</li> <li>• Use of F&amp;R communications staff in IMT significantly assisted IMT operations management</li> <li>• CFU's stood up for a 3-day period towards the end of the campaign. They did not engage in any firefighting activity. They had concentrated efforts on Community engagement in their area and operational preparation. They had not been activated outside this period and was specific to the Banks area.</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• F&amp;R perception not enough staff with sufficient experience in specialist roles at minimum L2 (see F&amp;R Preparedness assessment)</li> <li>• F&amp;R perception greater need for collaborative efforts between ESA agencies</li> <li>• Knowledge of ADF and interoperability had low base</li> <li>• F&amp;R senior staff (IC) perception air assets were not used effectively (e.g. LAT containment lines used in dense forest) and lack of training and knowledge of air operations at all levels, including IC (**one interviewer stated perception LAT was used simply because it was on hand, not because of genuine strategic effect**)</li> </ul>	
QUICK WINS		

<p>RECOMMENDATIONS:</p> <p>Enhanced training or familiarisation for F&amp;R senior L3 qualified staff on specialist bushfire capabilities (for example air operations).</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014  ACT Strategic Bushfire Management Plan 2019-2024  ACT Territory Wide Risk Assessment  Sub Plan – Elevated Fire Danger  Sub-Plan – Flood  Sub Plan – Extreme Heat  ACT Recovery Sub-Plan - 2019  Emergency Coordination Centre Operations Plan  ACT Bushfire Management Standards  ACT Strategic Bushfire Capability Framework  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)  Commissioner’s Guidelines  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review  Interviews</p>

5. ACTAS

5.1 ACTAS Plan

THEME: PLANNING		RATING:
UNIT: ACTAS		REF:
HEADLINE OBSERVATION:		
NOT ASSESSED COMBINED WITH PREPAREDNESS		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL		
WHAT COULD BE IMPROVED		
QUICK WINS		
RECOMMENDATIONS:		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:

## 5.2 ACTAS Preparedness

THEME: PREPAREDNESS		RATING: 16
UNIT: ACTAS		REF: OA
HEADLINE OBSERVATION:		
<p>ACTAS had anticipated the requirements of medical support to remote bushfire operations, and had adequate numbers of people with the correct levels of qualifications (driving and bushfire awareness)</p>		
SUMMARY FINDINGS:		
<p>ACTAS was able to conduct deliberate selection of staff and conduct advance preparation before the bushfire season. But some ACTAS staff selected did not have the right qualifications for direct support to bushfire operations, and the lack of a 4WD capability organic to ACTAS limited the strike teams it was therefore able to support.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• Deliberate selection of staff for forward deployment to high risk locations</li> <li>• ACTAS BAU not impacted, well prepared from initial months of smoke haze health impact/demand</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Some ACTAS staff did not have minimum training requirements of Bushfire Awareness nor current 4WD qualifications, and many may have been therefore unsuitable for providing health support to strike teams in locations forward of staging areas (without dedicated escorts)</li> <li>• ACTAS only has one 4WD vehicle suitable for high risk area deployment (no other vehicles with off-road capability)</li> <li>• Development of guidelines for working with ADF</li> </ul>	
QUICK WINS	<ul style="list-style-type: none"> <li>• ACTAS increased budget for 2021 and 2022 to supplement 4WD capability</li> </ul>	

<p><b>RECOMMENDATIONS:</b></p> <p>Development of dedicated ACTAS cadre with specific training who can be extracted from BAU to support fire operations.</p>		
<p><b>SUPPORTING EVIDENCE:</b></p>	<p><b>SOURCES:</b></p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment            Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p><b>RESEARCH METHODS:</b></p> <p>Document Review            Interviews</p>

5.3 ACTAS Recovery

THEME: RECOVER		RATING: 14	
UNIT: ACTAS		REF:	
HEADLINE OBSERVATION:			
NOT ASSESSED ACTAS DID NOT PLAY SIGNIFICANT ROLE IN SPECIFIC RECOVERY ACTIVITY TO SUPPORT DETAILED PERFORMANCE ASSESSMENT			
SUMMARY FINDINGS:			
WHAT WAS DONE WELL			
WHAT COULD BE IMPROVED			
QUICK WINS			
RECOMMENDATIONS:			
SUPPORTING EVIDENCE:		SOURCES:	RESEARCH METHODS:

5.4 ACTAS Response Management

THEME: RESPONSE (MANAGEMENT)		RATING: 12
UNIT: ACTAS		REF:
HEADLINE OBSERVATION:		
<p>Use of ACTAS paramedics in Strike Teams had positive impact on the mindset of ESA services on the role paramedics can play in fire operations. ACTAS core leadership remained outside IMT structures, allowing continued focus on BAU paramedic support to ACT.</p>		
SUMMARY FINDINGS:		
<p>ACTAS internal management of its crews welfare and support was good. But the way they were integrated into the IMT meant ACTAS has limited visibility on the operational deployments of its staff. This is seen as an issue with the AIIMS set up and where medical support is considered and managed.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• Change in “mindset” about the role ACTAS can play in fire operations</li> <li>• CO able to focus on leadership and welfare issues of the organisation</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Management of fatigue and prolonged workload in addition to ACTAS BAU</li> <li>• Better direction and daily briefing for crews</li> <li>• ACTAS was structured under IMT Resources (see planning section for details) this had implications for leadership and management decisions as ACTAS had poor situational awareness of the incident</li> <li>• ACTAS had no visibility of staff deployments, secondary communications pathways were developed</li> </ul>	
QUICK WINS		

<p>RECOMMENDATIONS:</p> <p>Consideration where Health function sits in AIIMS planning and IMT structures (resources, ops or plans) for Level 3 incidents</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment            Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review            Interviews</p>

## 5.5 ACTAS Response Operations

THEME: RESPONSE (OPERATIONS)		RATING: 14
UNIT: ACTAS		REF:
HEADLINE OBSERVATION:		
<p>ACTAS was able to continue its mandated BAU coverage of ACT for paramedic support without impact over entire bushfire season and provide all support requirements to ESA/IMT for bushfire response. The placement of ACTAS paramedics directly into Strike Teams was considered a highly valuable innovation.</p>		
SUMMARY FINDINGS:		
<p>Over the bushfire season, ACTAS was able to support both direct bushfire operations with paramedic teams, and maintain sufficient crews for BAU coverage of the ACT. While the technical deployment of medics with strike teams was an innovative and positive development, medical support was not planned by the IMT as an operational requirement. This impacted the detailed tasking of crews and the ability of ACTAS to track and monitor deployment and staff safety.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• ACTAS BAU able to continue without impact over entire bushfire season and provide all support requirements to ESA/IMT for bushfire response</li> <li>• Multiple deployments to provide primary health care and emergency ambulance at remote firegrounds for extended periods</li> <li>• Activation of secondary site at Hume</li> <li>• Appropriate management of serious incidents</li> <li>• Integration with multiagency strike teams supporting active firefighting and clean-up operations</li> <li>• Inclusion of ADF medical teams and capability was considered a “force multiplier” (in particular PMVA and G Wagons)</li> </ul>	

5.5 ACTAS Response Operations

<p>WHAT COULD BE IMPROVED</p>	<ul style="list-style-type: none"> <li>• IMT Fire had no specific medical plan – was only considered as a logistics issue under AIIMS (**note eventually one staff was placed as assistant in Plans**)</li> <li>• Planning for deployment of ACTAS staff into bushfire response – recognised an organisation-wide lack of planning experience or methods</li> <li>• Better defined “trigger point” for request of ACTAS support</li> <li>• Clear direction for deployment of ACTAS resources in IAPs</li> <li>• Increased awareness of cross-border MOU with NSW and how to work during fire operations</li> <li>• Perceived over reliance on aero medical evacuation (AME) as an option in planning (despite not always being the ideal platform in circumstances)</li> <li>• Integration of AME into already busy airspace (unclear process) **note all AME in ACT tasked from NSW**</li> <li>• Rationalisation of radio reporting channels to avoid overloading and provide clear reporting lines (eg for SITREPs)</li> <li>• Align rostering arrangements with fire operations to avoid prolonged shifts</li> <li>• Better visibility for IMT of ACTAS crew locations</li> <li>• Need to assess ability of ACTAS to scale structure and operations in response to requests for health support</li> <li>• Familiarity with ADF medical capabilities (eg communications, equipment, scope of practice)</li> </ul>	
<p>QUICK WINS</p>	<ul style="list-style-type: none"> <li>• Investigate radios with increased range for ACTAS</li> <li>• Design of vehicle and equipment set-up for tailored fireground operations (to be pursued via the specialist capability working group)</li> </ul>	
<p>RECOMMENDATIONS:</p> <p>Training of specialist cadre of ACTAS personnel to support IMT on dedicated roster.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014  ACT Strategic Bushfire Management Plan 2019-2024  ACT Territory Wide Risk Assessment  Sub Plan – Elevated Fire Danger  Sub-Plan – Flood  Sub Plan – Extreme Heat  ACT Recovery Sub-Plan - 2019  Emergency Coordination Centre Operations Plan  ACT Bushfire Management Standards  ACT Strategic Bushfire Capability Framework  Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)  Commissioner’s Guidelines  Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review  Interviews</p>

6. SES

6.1 SES Plan

THEME: PLANNING		RATING:
UNIT: SES		REF:
HEADLINE OBSERVATION:  NOT ASSESSED INCLUDED WITH PREPAREDNESS		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL		
WHAT COULD BE IMPROVED		
QUICK WINS		
RECOMMENDATIONS:		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:

## 6.2 SES Preparedness

THEME: PREPAREDNESS		RATING: 14
UNIT: SES		REF:
HEADLINE OBSERVATION: SES were well prepared for the 2019/20 bushfire season and had conducted service-only readiness and training activity.		
SUMMARY FINDINGS: SES were well prepared for the 2019/20 bushfire season and had conducted service-only readiness and training activity. This had included specific preparations for staging areas in support of bushfire operations, albeit SES had not envisaged the scale or duration of that support requirement.		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• SES pre-season had conducted thorough readiness checks on all vehicles, equipment and volunteers (focus was seasonal storms)</li> <li>• Specialist elements pre-identified and trained in IMT support roles</li> <li>• SES had completed one staging area exercise in December as a single service</li> <li>• SES had exercised an IMT L2 storm event as a single service</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Engagement with ACT Housing to establish clear lines of communication with regards contract maintenance</li> <li>• Engagement with ACT Police to develop protocols and procedures for “door knock” planning and activation</li> <li>• Staging area exercise and training – while a positive learning experience – had only considered a small-scale area and did not envisage the size of major fire event, and did not take place with RFS or PCS staff</li> <li>• SES had never conducted training exercises or rehearsals for evacuations with ACT Police (historically police relationship has been with SAR)</li> </ul>	
QUICK WINS	<ul style="list-style-type: none"> <li>• Additional learning on AIIMS regards concurrent emergency events of different nature (fire and storm)</li> <li>• Cold storage for food as part of long-term capability preparations</li> <li>• Qualify ESA/SES staff for service in NRSC</li> <li>• Specific familiarisation training on RFS vehicles for SES drivers</li> <li>• SES involved in all pre-season fire planning as operational element (not just service provision)</li> <li>• Establish Staging Area SOPs, handover procedures and shift mandatory taskings to ensure that SAMs maintain effective and efficient procedures.</li> <li>• Redevelop the Staging Area training package to include roles and responsibilities, expectations, duties, sighting and AIIMS construct</li> <li>• Exercise staging area activities with RFS, F&amp;R and PCS to understand requirements and improve interoperability and familiarity of personnel</li> <li>• With all ESA elements, identify and pre-prepare set locations for staging areas (north/south for example)</li> </ul>	

<p>RECOMMENDATIONS:</p> <p>Review SES support to ESA/RFS incidents and further enhance deliberate preparations and training for staging area development and IMT requirements</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review            Interviews</p>

## 6.3 SES Recovery

THEME: RECOVERY		RATING: 14
UNIT: SES		REF:
HEADLINE OBSERVATION:		
SES were able to generate adequate capability to support ESA requirements in recovery operations		
SUMMARY FINDINGS:		
<p>The last main task for SES relation to 'Fire IMT' was closing down the staging area and refurbishment of the area at the Namadgi Visitors Centre and handing the area back to Parks and Conservation (P&amp;C). This included coordination of contractors to remove toilets, refrigerated shippers, return of stock and equipment back to ESA Resource Centre and return of SES staging area equipment back to allocated units. This was achieved over a period of three days.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• SES reputation among community significantly enhanced, post bushfire season and storm received plus of 300 volunteer applications</li> <li>• Tasking for SES chainsaw crews to support PCS route clearance tasks was included in IMT IAP (**see comments in operations and planning as this had not occurred up to this point**)</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Chainsaw crews deployed after fire need dedicated RFS escort (and suitable PPE) to accompany into fire zone</li> <li>• Significant exposure to COVID risk due to demographics of volunteer members reduced SES availability down to 60%</li> </ul>	
QUICK WINS		

RECOMMENDATIONS:		
N/A		
SUPPORTING EVIDENCE:	SOURCES:	RESEARCH METHODS:
	ACT Emergency Plan 2014 ACT Strategic Bushfire Management Plan 2019-2024 ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger Sub-Plan – Flood Sub Plan – Extreme Heat ACT Recovery Sub-Plan - 2019 Emergency Coordination Centre Operations Plan ACT Bushfire Management Standards ACT Strategic Bushfire Capability Framework Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory) Commissioner’s Guidelines Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions	Document Review Interviews

## 6.4 SES Response Management

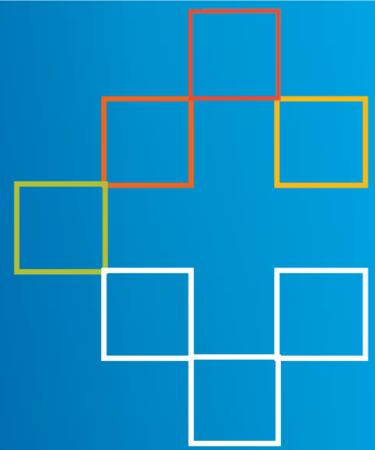
THEME: RESPONSE (MANAGEMENT)		RATING: 14
UNIT: SES		REF:
HEADLINE OBSERVATION:		
Integration of SES staff in multiple roles in the IMT support meant ESA members from other elements gained significant knowledge of and confidence in SES capabilities.		
SUMMARY FINDINGS:		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• Use of PCS Ranger from Namadgi always in location during staging area operations (local knowledge plus ad hoc support arrangements made possible)</li> <li>• Integration of SES staff in multiple roles and resource support meant ESA members from other elements gained significant knowledge of and confidence in SES</li> <li>• 10-day roster forecast allowed volunteers to maintain balance and sustain support</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Better alignment of shift timings and SES staff rotations in planning for future events</li> <li>• Suggestion of rosters being developed at least five days in advance to allow volunteers to plan commitments</li> <li>• Better alignment of shift timings and rotations to other ESA elements in IMT</li> <li>• Development of contingency workforce – or contingency plans – as SES support to fires drop off when additional/multiple tasks emerge</li> <li>• Improved information flow and clear responsibilities for the SAM and SES operations out of Staging Area</li> <li>• SAM had difficulty in getting attention of IMT Operations – and was initially not included in the IAP at all</li> <li>• Use of nine-hour shifts with one hour overlap to allow for adequate handover</li> <li>• Improved situational awareness for SAM on both crew rotations and incident intelligence – SAM became defacto channel for briefing and debriefing crews from fire front</li> <li>• No clear ownership of “volunteer” efforts meant SES became defacto task element (eg driver reviver stations)</li> <li>• **one interview claimed in real terms at no stage did the Fire IMT oversee or properly task SES operations, in reality SES ran their own concurrent “IMT” throughout and ensured their assets and people were tasked accordingly</li> </ul>	
QUICK WINS	<ul style="list-style-type: none"> <li>• Use of formal letter from Commanders or Commissioner for volunteers to present to employers</li> <li>• ACT Volunteers representative in ECC to assist better employment of resources</li> <li>• Need for IMT Operations and Plans representatives placed forward to the staging area</li> </ul>	

<p>RECOMMENDATIONS:</p> <p>Development of contingency workforce – or contingency plans – as SES support to fires drop off when additional/multiple tasks emerge in response to other hazards or emergencies within specific SES remit</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014            ACT Strategic Bushfire Management Plan 2019-2024            ACT Territory Wide Risk Assessment            Sub Plan – Elevated Fire Danger            Sub-Plan – Flood            Sub Plan – Extreme Heat            ACT Recovery Sub-Plan - 2019            Emergency Coordination Centre Operations Plan            ACT Bushfire Management Standards            ACT Strategic Bushfire Capability Framework            Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)            Commissioner’s Guidelines            Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review            Interviews</p>

6.5 SES Response Operations

THEME: RESPONSE (OPERATIONS)		RATING: 16
UNIT: SES		REF:
<p>HEADLINE OBSERVATION:</p> <p>SES was a key enabler of support services and operational effectiveness to all phases of the bushfire response and the operation of the ESA IMT. And its largely independent management of support to the ACT community following three major storm events demonstrated its operational flexibility and ability to re-task back to its core responsibilities.</p>		
<p>SUMMARY FINDINGS:</p> <p>SES was a key enabler of support services and operational effectiveness to all phases of the bushfire response.</p>		
WHAT WAS DONE WELL	<ul style="list-style-type: none"> <li>• Placement of SES Duty Officer working to the IMT Resources cell and SES Duty Executive (outside IMT structure) to support the IC and IMT Operations</li> <li>• Ad hoc establishment of SES Operations Desk to support the SES DO in the IMT allowed more effective management of resources and support requests</li> <li>• SES (independent of ESA) had done some contingency planning for staging area locations and other opportunities</li> </ul>	
WHAT COULD BE IMPROVED	<ul style="list-style-type: none"> <li>• Initial “fire” IMT struggled with multi-hazard situation</li> <li>• Assumptions SES could maintain concurrent tasking (fire and storm) – became resource for too many tasks (IMT roles, SES response, staging areas, search and rescue, doorknocking, etc)</li> <li>• EC had directed SES to run storm response within IMT (by appointment of a Deputy IC for the event) but in reality this never occurred and in practical sense SES ran separate “L2 Storm IMT” on their own, duplicating Ops and Plans functions – and this was repeated for 10 Feb storm event, setting up “IMT” in different location in ESA building</li> <li>• SES needed to “push” for mapping and logistics resources</li> <li>• Need for formal SES involvement in IMT Operations Cell</li> <li>• Coordination with police for “Door Knocking, including consideration of early SES LO in place with Police Command Post to ensure that SES Volunteers efficiently and effectively tasked (**one interview claimed this had caused significant confusion, as SES had view this was SES task up until actual evacuation ordered. Data collected by police and ADF was never made available to ECC/IMT or the EC**)</li> <li>• Over reliance on radio communications – electronic data tools not used/not fit for purpose</li> <li>• No electronic tracking system for staging area – SES used paper-based T-Card system, which IMT then requested scanned and emailed back or loaded into a spreadsheet</li> <li>• Staging Area and Forward Command Post were not co-located creating disconnect between Div Commander and the SAM</li> <li>• Data management of incoming jobs and improved decision making on efficient response planning</li> <li>• Fire IMT plans initially only looked 48 hours ahead which created difficulties for SES</li> </ul>	

<p>WHAT COULD BE IMPROVED</p>	<ul style="list-style-type: none"> <li>• Initial IAP from IMT had not included either staging area or SES tasking (**one interview claimed Fire IAP had at no stage included SES supporting element from operational perspective, all tasks came through resources cell in IMT Plans only**)</li> <li>• Need for mix of service experience in IMT planning, including SES professional and volunteer workforce</li> <li>• Early establishment of NRCS to assist accommodation and transport of interstate support – and RSOI better defined in SOP</li> <li>• Early and more detailed specific planning regarding support to Evacuation Centre vs Drop-in Centres (**see preparedness comments no prior training or exposure to ACT Community police functions on this**)</li> <li>• More detailed planning on the requirement details of taskings and support to EVAC Centres</li> <li>• More detailed planning for public “Pop-ups” including development of agreed Talking Points for participants</li> <li>• Time sensitive planning for allocation and deployment of chainsaw crews</li> <li>•</li> </ul>	
<p>QUICK WINS</p>		
<p>RECOMMENDATIONS:</p> <p>Consider standard SES Operations Desk or permanent staff officer inside IMT Operations Cell.</p> <p>Consider IMT Operations and Plans representative forward inside the staging area to assist the SAM and provide specific RSOI support.</p>		
<p>SUPPORTING EVIDENCE:</p>	<p>SOURCES:</p> <p>ACT Emergency Plan 2014</p> <p>ACT Strategic Bushfire Management Plan 2019-2024</p> <p>ACT Territory Wide Risk Assessment Sub Plan – Elevated Fire Danger</p> <p>Sub-Plan – Flood</p> <p>Sub Plan – Extreme Heat</p> <p>ACT Recovery Sub-Plan - 2019</p> <p>Emergency Coordination Centre Operations Plan</p> <p>ACT Bushfire Management Standards</p> <p>ACT Strategic Bushfire Capability Framework</p> <p>Emergencies (Concept of Operations for bush and grass fires in the Australian Capital Territory)</p> <p>Commissioner’s Guidelines</p> <p>Royal Commission in National Natural Disaster Arrangements Hearings and Public submissions</p>	<p>RESEARCH METHODS:</p> <p>Document Review</p> <p>Interviews</p>



# ACT ESA OPERATIONAL REVIEW

## BUSHFIRE SEASON 2019/20

The objective of this Review was to identify key observations, learning opportunities and good practice for ESA in preparation for the 2020/2021 Bushfire Season.



The Review employed an 'operational analysis' (OA) systems approach to reviewing the ACT 2019/20 bushfire season. Operational analysis is concerned with extracting information from a working system that is used to develop projections about the system's future operations.



The Review identified and examined specific Measures of Performance (MOP) for each phase of the 2019/20 Bushfire season. Establishing MOPs helped determine progress relative to ESA's mission objectives, and end states; and in shaping relevant recommendations/guidance for improvement.



This Review both accommodated and acknowledged the layers of governance and coordination required for emergency management in the ACT, and the various supporting capabilities, systems and processes in play.

Visit [esa.act.gov.au](https://esa.act.gov.au) for a copy of the full report



# ACT BUSHFIRE SEASON 2019/20

The 2019–20 bushfire and storm season produced some of the most unprecedented weather conditions in Australia’s history.

Australia was impacted by significant fires with unpredictable and dangerous fire behaviour fueled by hot and dry conditions.



## SINCE AUGUST 2019

Unprecedented fire activity impacted the East Coast. ACT Firefighters deployed to assist interstate

## 2 JAN 2020 STATE OF ALERT ISSUED

To assist community preparedness and organisational response

## DECLARATION OF A STATE OF EMERGENCY

On 31 January 2020 to appoint the ESA Commissioner as the Emergency Controller

## FROM LATE DEC 2019 TO JAN 2020

Thick smoke impacts ACT from Braidwood & NSW Coast Bushfires

## BETWEEN 1 OCT 2019 & 4 FEB 2020

ACT declared a record 24 Total Fire Ban days, the ACT on average sees 5–6 per bushfire season

## SEVERE & DAMAGING THUNDER-STORMS

Occurring on: 16 Jan, 20 Jan & 10 Feb

# INSIGHTS

The Operational Review analysed the effectiveness of the ESA's preparation, planning, response and recovery over the 2019/20 bushfire season. This Review reflects the ESA's culture of learning and continuous improvement across all phases of emergency management, encouraging the best use of resources and ensuring the best possible outcome for the protection of the Canberra community.



**ACT is well placed** to respond to high level demands for bushfire resources, and weather and storm events



**Planning framework proved adequate** for the management of emergencies and consequences



ESA was able to support other states due to **high levels of preparedness** for the 2019/20 bushfire season



The long term investment in **mitigating fire risk through material responses** and better capability contributed to success



**Resource sharing** between states and access to Commonwealth resources proved essential



**ESA successful at conducting operations** through the Incident Management Team

# RECOMMENDATIONS

The Operational Review identified 31 recommendations categorised under six key themes; Capability, Collective Training, Preparedness, Personnel, Planning, Incident Management. A summary of the recommendations is below. You can view the full list of recommendations on pages 52–53 of the Report



## CAPABILITY

The SBCF should be complimented by a strategic approach to preparedness that incorporates IMT planning arrangements and shared resources and assets. ESA's Fairbairn facility should be reviewed to check if "fit-for-purpose" for concurrent ECC and IMT.



## COLLECTIVE TRAINING

ACT Government interaction be enhanced through additional briefings and scenario based 'table-top' planning activities. ESA should conduct an annual exercise involving all services to improve all hazards response, interoperability and skills development. ESA should conduct at least annual L3 incident exercises



## PREPAREDNESS

Review RFS hazard reduction task allocations (including BOP tasks from PCS) to ensure adequate opportunities for professional development and skills maintenance.



## PERSONNEL

Review fatigue management systems for ESA, and other support arrangements for volunteer staff in the ACT. RFS and SES reputation in ACT community and bushfire experience should be used by ESA as a platform to build a volunteer support.



## PLANNING

The ESA should adopt a campaign approach to planning responses to future fire seasons. ESA should review how other services support RFS and further enhance deliberate preparations, planning and training. ESA should develop contingency plans for SES support to fires to cover when additional tasks arise.



## INCIDENT MANAGEMENT

ESA review its approach to Level 3 IMT structures and processes (planning, operations, intelligence, logistics) under AIIMS for suitability for all-hazards and multi-agency approach, including the development of a more deliberate and coordinated intelligence cycle within IMT planning function under AIIMS.

# LEARNING LESSONS

The ESA Commissioner has already taken proactive and strategic steps to make improvements and is committed to addressing each of the recommendations in the report. While some recommendations can be addressed immediately, others require long term planning and consultation with our workforce and other stakeholders or may be impacted by the outcomes of other reviews, including the Royal Commission into National Natural Disaster Arrangements, which is due to report on 28 October 2020.

## ACTIONS, INITIATIVES AND ACTIVITIES ALREADY UNDERWAY INCLUDE:

### Capability

- Additional appointments have been made for Senior Directors for both Planning and Preparedness, and Operations and Capability Development to provide assurance to the Commissioner and Chief Officers of the effective and efficient oversight of emergency planning and preparedness activities at an agency wide level.
- Continue to consolidate key relationships with external agencies to ensure future capability development opportunities for personnel.

### Collective Training

- Enhancing and increasing expertise in ESA's training capability through the appointment of additional trainers with specialist skills.
- Development of joint exercises to test interoperability across emergency management agencies (including our cross-border partners). Exercises will be designed to 'stress-test' our operational response capability.
- Investment in specialised training for niche skill sets, including fire behaviour analysts and aviation training.

### Preparedness

- Mapping of synergies between operational services and identifying opportunities for sharing of resources, knowledge and skills transfer.
- Development of a standardised availability/communications application (CIMARA) for the volunteer workforce that manages the notification and rostering of volunteers, enables the management of resources, and supports the improved wellbeing of the ESA workforce (including fatigue management).

### Personnel

- Recruitment for several specialist roles has commenced including Fire Behaviour Analyst, Air Operations personnel and Fire Tower Operators, all of which will aid fatigue management and bolster the existing specialist skills within the Agency.
- Ongoing delivery of 'Continuum of Wellness' framework to ensure a strong and resilient emergency services workforce that remains fit for task.

### Planning

- Planning for campaign fire seasons that takes an 'all-hazards' approach that recognises and utilises the complementary skills sets of operational services.
- Development of an ESA specific IMT planning cycle for use with Level 2 & 3 incidents
- Continue to enhance the intelligence gathering and distribution of information within the IMT to inform operational decisions.

### Incident Management

- Review of resource management policies and supporting systems to support IMT operations
- Foster a coordinated and collaborative approach to incident management (through training and exercising), and including a review of the current policy regarding pre-formed IMT and stand-up requirements.

**2020**

**THE LEGISLATIVE ASSEMBLY FOR THE  
AUSTRALIAN CAPITAL TERRITORY**

**PAPER FOR TABLING**

**REPORT TO THE MINISTER FOR POLICE AND EMERGENCY SERVICES  
ON ACT GOVERNMENT COORDINATION AND RESPONSE DURING THE  
2019-20 BUSHFIRE SEASON**

**Presented by  
Mick Gentleman MLA  
Minister for Police and Emergency Services**



## FINAL REPORT

Report to the Minister for Police and Emergency Services  
on ACT Government coordination and response during the  
2019-20 Bushfire Season

August 2020



**ACT**  
Government



Mr Mick Gentleman MLA  
Minister for Police and Emergency Services  
GPO Box 1020  
Canberra, ACT 2601

Dear Minister,

In accordance with the Terms Of Reference agreed by the Chief Minister on 15 June 2020, I present a report which provides observations and insights about the 'Whole of ACT Government' coordination and response as it relates to the 2019-20 bushfire season.

As directed, I consulted with all Security and Emergency Management Senior Officials Group members, ACT Government Service Directorates, relevant ACT utilities providers, local and Commonwealth agencies as well as representatives from the Rural Landholders Association.

The review focused on the period between 2 January and 9 February 2020, when a State of Alert or State of Emergency had been declared for parts or all of the ACT. The review looked at the effectiveness of the whole of Government response and provides advice on recommended legislative changes, operational emergency management arrangements and coordination across the ACT Emergency Services Agency and across the ACT Government, local, state and Commonwealth agencies.

All invited participants provided collaborative, considered observations and recommendations aimed at ensuring that the ACT community is prepared, protected and able to recover when emergency situations arise.

The observations, insights and recommendations in this review build on the sound framework currently in place in the ACT and aim to enable the continuous improvement of this to ensure continued success in the future.

I would like to take this opportunity to thank all those people across directorates and agencies who provided support and assistance to me in gathering information and providing constructive suggestions and feedback. It demonstrates the desire across all people involved in emergency management to actively seek out ways to continuously improve how we protect our community. Their input made this report a product I can confidently present to you for your consideration.

Yours sincerely

  
Ray Johnson APM  
Deputy Commissioner  
ACT Emergency Services Agency

7 August 2020

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# 1 Introduction

1.1 The 2019-20 bushfire and storm season produced some of the most extraordinary weather conditions in Australia's history. Large parts of Australia were impacted by significant fires with unpredictable and dangerous fire behaviours fuelled by hot, dry and windy conditions. The conditions meant fires started easily and were difficult to contain.

1.2 The ACT was not exempt from these conditions and subsequently felt the impact both within Territory borders and across the surrounding regions. From August 2019 until the end of the bushfire season on 31 March 2020, the ACT:

- supported other States (Queensland, NSW) in their emergency responses;
- assisted displaced persons as a result of losses interstate;
- responded to severe weather events (extreme heat, storms and poor air quality due to regional bushfires);
- managed potential fire threats (24 Total Fire Ban days); and
- responded to bushfires within Territory boundaries.

1.3 In the ACT no lives were lost, no houses destroyed and comparatively minimal infrastructure lost which is quite an achievement considering the fire situation faced during this year's season. We achieved this, not by accident or by chance but through good preparation and a concerted effort through a Whole of Government delivery of a well-coordinated response.

1.4 That said, for the rural landholders who bore the brunt of the lost infrastructure along with the impact on income providing vegetation and pasture, the impact was significant to them and is likely to have long reaching effects. Namadji National Park has also seen a significant swath of destruction including the loss of \$10.2 million of insurable assets. This will require detailed and considered rehabilitation to address both the immediate impact and the long term recovery of this important ecological and cultural area.

1.5 The ACT *Emergencies Act 2004* and supporting *ACT Emergency Plan 2014* provide the ACT Government and Government agencies the framework and authority to undertake prevention, preparation, response and recovery activities before, during and after an emergency. As identified in the *ACT Emergency Plan 2014*, a valuable component of this is to:

*“analyse the response to and impacts of emergencies for future learning and adjust strategies where this new information and knowledge will result in improved outcomes.”<sup>1</sup>*

1.6 In progressing this review it is important to note that in emergencies such as bushfires, many good, capable and dedicated people step up and take responsibility for dealing with the

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<sup>1</sup> ACT Emergency Plan (2014) 3.4.3.4

emergency on behalf of their community. They may be paid or unpaid; they might be on a fire appliance, in an ambulance, engaging with the public or holding a leadership role. This is no small matter and must be accounted for. Those decent and capable people who make decisions and act in good faith almost never have the same luxury of time afforded to those of us undertaking a review. Their decisions and actions are often progressed in difficult and unfamiliar situations, when working in uncertain environments and often without the benefit of full situational awareness.

1.7 As such, it would be a mistake to examine any deficiency observed through the lens of individual fault and blame. Good decisions come from wisdom, knowledge and experience. It is reasonable to accept that decision makers and action takers in an emergency do so in good faith and to the best of their abilities. It is also reasonable for them to expect that when they do so, their professional reputation and self-worth are not at risk should things not go precisely to plan. Deficiencies in a response or identified areas of improvement should be examined in the context of improving the emergency management system, unless there is objective evidence of negligence. There needs to be an acknowledgement that there will always be opportunities for improvement and the importance of an organisational culture of continuous improvement and review, facilitated by open and honest dialogue about how we can do better.

## 2 Review process

2.1 On 29 April 2020, the ACT Government announced a whole of ACT Government review of the bushfire season to be focused on the effectiveness of the Whole of Government (WHoG) response. The appointment of myself as ESA Deputy Commissioner and the commission of this review was also announced by the Minister for Police and Emergency Services (MPES) in an issued media release on that day. The Terms of Reference (ToR) are included in Appendix A. The ToR provided the opportunity to submit an interim report about matters that required more immediate Government action. An Interim Report was provided to the Minister on 2 July and is attached at Appendix B.

2.2 Each member of the Security and Emergency Management Senior Officials Group (SEMSOG) was asked in writing to contribute to the review. Other stakeholders identified were asked to contribute as they related to the points covered in the ToR. Interviews were conducted with relevant stakeholders and various written documents were provided in support of the review.

## 3 Whole of Government coordination - supporting the response

3.1 Emergency Management (EM) is a term and concept to describe the range of measures used to manage risks to communities and the environment. This encompasses the spectrum of emergency needs including preparedness, prevention, response and recovery. Importantly, EM encompasses Government, voluntary and non-Government agencies to ensure a comprehensive and coordinated series of mechanisms. Within a framework, these mechanisms are delivered through a cascading set of legislation, plans, structures and formalised arrangements, established to bring together the endeavours of the whole community.

3.2 The delivery of these processes naturally relies on a high level of trust and cooperation between and across the different components (individuals, business, Government agencies, non-Government agencies and beyond) to ensure the system works effectively. It is the Government's responsibility to lead the development of robust legislation and supporting mechanisms to facilitate high levels of cooperation. Any EM system needs to incorporate a process for regular review and evaluation to learn from the shared experiences of all. To be effective, this process also must capture the good as well as the opportunities for improvement.

3.3 From the range of input and discussions held during the review, the overall view of stakeholders was that the legislative framework was generally sound, and the *ACT Emergencies Act* fulfilled its functions during the 2019-20 bushfire season. However, stakeholders did identify some areas for possible reform and for more detailed examination.

3.4 The Interim Report recommended amendments to the *Emergencies Act*, which were assessed as needing action before the next bushfire season. The *Emergencies Act* is due for a five-year review which provided the opportunity to more fully examine improvements to the EM legislation. This review has also noted the need to clarify some technical and definitional commonalities across plans and sub-plans. Any amendment of the *Emergencies Act* and any further reforms arising from the five-year review of the *Emergencies Act* would benefit from a system and process that also reviews and updates the Emergency Plan, supporting sub-plans, policies, processes and procedures across the current emergency management framework to ensure consistency.

3.5 Several recommendations are beyond the scope of the review and should have a subsequent implementation plan developed to identify a realistic and achievable environment for these to be delivered.

## Recommendations

Recommendation 1: That Justice and Community Safety Directorate (JACS) lead a working group from across relevant organisations to undertake the five year review of the *Emergencies Act* in conjunction with a wholistic review of the Emergency Plan and relevant sub-plans; and recommendations from this review, to the extent they are accepted by Government. Bringing together a small Taskforce of staff from across government for a set period would assist the working group in delivering the work needed to address these and other recommendations.

Recommendation 2: The working group should report to SEMSOG on progress.

## *Emergency Management processes (Legislative Framework)*

3.6 On 2 Jan 2020 the ESA Commissioner stood up the Emergency Coordination Centre (ECC) and established an Incident Management Team (IMT) led by an Incident Controller (IC), in accordance with the *Emergencies Act* and Emergency Plan. ACT Government Directorates and relevant agencies commenced their supporting processes as required by this activation.

3.7 Also on 2 January 2020 the ACT Chief Minister, acting on advice from the MPES, declared a State of Alert under the provisions of Section 151 of the *Emergencies Act* and appointed the ESA Commissioner as the Emergency Controller (EC). At that point in time there were no active fires in the ACT; however, there were fires in surrounding NSW regions. Smoke from those fires were impacting on the ACT by reducing air quality and raising levels of anxiety within the ACT community. The anxiety was evident through the monitoring of social and traditional media and was associated with the trauma that many Canberrans experienced in the 2003 ACT bushfires. This was the first time a State of Alert had been declared in the ACT under the provisions of the *Emergencies Act*.

3.8 Under the *Emergencies Act* the State of Alert may be activated if:

- a. *the Minister is satisfied that an emergency is likely to happen; and*
- b. *the Chief Minister has not declared that a state of emergency exists in relation to the emergency*

3.9 There is no specified requirement for an EC to be appointed when a State of Alert is declared. The appointment of an EC where no State of Emergency exists (which arguably but not definitively, encompasses a State of Alert) is done contingent with Section 150 of the *Emergencies Act*. In accordance with the *Emergencies Act*, the appointment of an EC when no State of Emergency exists is to be done by the Chief Minister for the following reasons:

- a. *an emergency has happened, is happening or is likely to happen; however*
- b. *it is not necessary to declare a State of Emergency.*

3.10 This reasoning is relatively imprecise and allows wide discretion to the Chief Minister and relevant Minister. There is also an introduction of administrative risk with the difference in authorities for the declaration of a State of Alert and appointment of an EC.

3.11 The Emergency Plan provides a little more direction regarding a State of Alert by stating that:

*'State of Alert should be considered where it is identified as appropriate for the Minister to directly provide information, advice and warnings to the community for an actual or impending emergency. The effect of the State of Alert is to emphasise the significance of the actual or impending emergency and its potential impact on life and property in the ACT.'*

3.12 Several stakeholders noted that the purpose for calling the State of Alert on 2 January 2020 was somewhat vague. Whilst it was agreed that this was intuitively a logical decision under the circumstances, it was mostly understood to be primarily intended for raising public awareness and lifting focus on the unfolding situation; however, lacked a clear call to action.

3.13 The State of Alert stood for 29 days until the State of Emergency was declared on 31 January 2020. There were mixed views about the length of the State of Alert with some believing that the extended period risked losing public focus whilst giving rise to complacency. Some considered the timing appropriate under the circumstances; however, were not sure what the triggers were for the removal or wind back of the declaration.

3.14 A number of stakeholders commented on the value of mechanisms designed to determine when to reduce or adjust business as usual to enable a focus on supporting the emergency management. It was also noted that a number of employees across all involved organisations were, or could have been, impacted by the fires due to where they live. Front line agencies and Directorates would have needed and will need to consider how to address service delivery requirements whilst also supporting the emergency management arrangements. This is relevant not only in support to the ECC but also to the Public Information Communication Centre, and to a degree the Incident Control Centre being stood up.

3.15 The changes to the *Emergencies Act* to effectively re-cast the EC powers under a single section and decouple them from the relevant State of Alert/Emergency will simplify the mechanisms to appoint an EC. At the same time, the basis for declaring a State of Alert would become more imprecise as it would no longer be linked to EC powers.

## *State of Alert and State of Emergency – calls to action*

3.16 There are examples of alert systems where the activation or change of alert states are triggered based on objective tests that lead to subsequent prompting of actions and decision points. Examples include the Cyclone alert system used in Australia and the Typhoon warning system as used in Hong Kong.

3.17 The *Emergencies Act* and supporting documents do specify certain objective triggers for activation of such things as the declaration of commencement of the fire season and the activation of a Total Fire Ban (TOBAN). The activation of either status triggers legislated actions or decision points by Government, relevant agencies and the community.

3.18 Developing similar objective triggers for States of Alert and Emergency would:

- help clarify why one is activated (and subsequently deescalated);
- articulate what outcomes are to be achieved;
- orient Government toward preparing for a response; and
- assist businesses and entities such as aged care / residential facilities to act in a timely fashion.

3.19 Such an arrangement would also provide decision points to guide the movement between alert states when those conditions change. This is not to suggest that the Minister be limited in discretion when declaring a State of Alert or the Chief Minister in declaring a State of Emergency. The declaration should remain a decision by the relevant Minister or Chief Minister based on advice from relevant officials and guided by the Emergency Plan to allow the reasonable discretion to consider all relevant information. It would assist in the identification of a clear delineation of the responses required by Directorates and decisions delegated to Directors-General when a State of Alert is declared and a State of Emergency is declared.

3.20 As an example, a decision to declare a State of Alert (or not) may be triggered by such things as when a TOBAN is declared for more than a certain consecutive number of days; or at the point that a bushfire in the ACT or surrounds is of a certain size or subject to certain predicted weather conditions. Equally, the decision to wind back from State of Alert and/or Emergency can be triggered by predicted weather events providing a reduced risk profile.

3.21 Once a State of Alert or Emergency is declared, the Emergency Plan should reflect certain actions to be taken and decisions to be made as a consequence of that decision. This might include such things as:

- the stand up of the ECC (in whole or part);
- triggering the holding of a SEMSOG and or/SEMC meeting;

- guiding the activation of relevant and defined public messaging;
- guiding decisions regarding priority setting for service delivery organisations;
- prompting advanced decisions on closing Parks, the Arboretum, Mt Stromlo etc;
- causing facilities such as aged care and residential homes to activate their equivalent of bushfire plans; and
- activating volunteer employment protections etc.

#### Recommendations

Recommendation 3: That the Emergency Plan be amended to include considerations for declaring a State of Alert or Emergency (and also wind back from these) and guidance as to what actions and decisions at a minimum should be taken as a consequence of such a declaration.

Recommendation 4: The working group (Rec 1) should include relevant stakeholders deciding collectively what the declaration might mean for such things as sub and supporting plans and the relevant community messages and calls to action.

Recommendation 5: The five year review of the *Emergencies Act* examine amendments to better define the rationale for a State of Alert / State of Emergency whilst ensuring that the relevant Minister / Chief Minister still has sufficient discretion to make a declaration based on advice from relevant Government officials and committees.

### *Emergency Management structures*

3.22 There was general consensus across those interviewed that the activation of the various elements of the Emergency Plan and relevant emergency management components across WHoG worked and delivered the required effect. Individual agencies identified that their supporting plans, sub-plans or internal mechanisms were also reviewed, activated and implemented as required. All stakeholders acknowledged the collaborative approach provided a constructive environment for matters to be resolved as and when they arose.

3.23 There were several initiatives that proved to be of great value to the firefighting effort. One initiative that drew positive commentary was the embedding of a 'Values Officer' into the IMT to support the IC in developing plans that considered protecting locations of cultural and environmental significance. The use of the Rapid Risk Assessment Teams to quickly assess the work needed by the land manager to mitigate immediate risks also proved to be a very worthwhile undertaking. 27 key risks were identified across the burn area, nine (9) of which were considered extreme. The process allowed recovery efforts to be made for best effect. These roles are drawn almost exclusively from across Economic, Planning and Sustainable Development Directorate (EPSDD) staff.

3.24 Other jurisdictions have embedded these roles and practices in fire management for over a decade; however, the roles and functions are not officially recognised in the Australasian Inter-Service Incident Management System (AIIMS) structure. ACT, working with other jurisdictions and on the back of the Royal Commission, could provide national leadership in this area.

#### Recommendations

Recommendation 6: In collaboration with other jurisdictions the ACT share the learnings for this bushfire event and work to officially embed values officers and RRATs as key elements of bushfire response.

Recommendation 7: EPSDD and ESA work together to develop values officer training and accreditation.

3.25 The review focused attention on the operation of SEMSOG and Security and Emergency Management Committee of Cabinet (SEMC) and how they interacted with each other and the EC during the event. This is an important subject noting that all formal committees met at least once and sometimes twice a day during the height of the bushfire season and are key to effective strategic Government level decision making.

3.26 SEMSOG met regularly during the bushfire season and for key time periods acted as the Management Executive (Mgt Exec) in support of the EC, as required by the *Emergencies Act*. In discussion, several people felt that given the extended period of EC appointment, using the entirety of SEMSOG as the Mgt Exec became difficult to sustain. There were also a range of observations about the operation of SEMSOG as a strategically focused mechanism aimed at advising Government on consequential policy issues that arise during such events and its role as the Mgt Exec.

3.27 Under the *Emergencies Act*, SEMSOG is primarily directed to provide a forum for liaison between entities for emergency management. It is specifically tasked to:

- a. *enhance emergency management capabilities;*
- b. *reduce community vulnerability to the effects of emergencies; and*
- c. *improve emergency management awareness and training.*

SEMSOG is to advise the relevant Minister and Chief Minister on security and emergency management; and support the ESA Commissioner in security and EM, specifically the preparation of the Emergency Plan. Of note, the *Emergencies Act* does not direct SEMSOG to provide support to the EC in the conduct of response or recovery operations.

3.28 Under S161 of the *Emergencies Act*, the EC must nominate a Mgt Exec as soon as possible after appointment, with discretion as to who might form part of their Mgt Exec. The only guidance provided with respect to Mgt Exec membership is S161(2), which states:

*'the management executive consists of people nominated by the emergency controller and may include member of the SEMSOG'.*

Under the provisions of Sec 161(3) of the *Emergencies Act*, the Mgt Exec:

*'must provide support to the emergency controller in the exercise of the EC's functions'.*

3.29 Conversely, the Emergency Plan implies that SEMSOG, as the Mgt Exec, is responsible for supporting the EC in the conduct of this obligation, although it does not provide any more detailed guidance on the role of the Mgt Exec. In terms of its membership the Emergency Plan states that:

*'it is expected that the members of SEMSOG will form the [...] Management Executive for most emergencies'.*

3.30 On review of extant sub-plans the situation becomes even more ill-defined. A number of sub-plans either dictate or imply that SEMSOG should adopt the role of the Mgt Exec (Counter Terrorism Sub Plan, Biosecurity Sub Plan and CBRN Sub-Plan. A number of plans direct the use of an Operational Advisor Group (Elevated Fire Risk Plan and Flood Plan) when no EC has been appointed.

3.31 Although in the 2019-2020 bushfire season the need for more clarity between the *Emergencies Act*, Emergency Plan and Sub-Plans did not result in a failure of the EM processes, it is of relevance when addressing the question of best practice. It is the case that some SEMSOG members and associated officials highlighted that there were some points of friction that arose over the extended period of EC appointment due to SEMSOG's role as the Mgt Exec.

3.32 It was observed that at certain times, SEMSOG needed to deal with matters subsequent to and beyond the emergency events themselves. During these times, the EC needed also to assume the role as a substantive member of SEMSOG as well perform as the EC role. This situation had the potential to blur the two roles of SEMSOG, that of undertaking the role of Mgt Exec and of dealing with the consequential operation of the ACT Public Service. In this event, the ESA Commissioner had dual responsibilities as the EC on one hand and as a SEMSOG member representing the interests of ESA on the other. With no other ESA representative present, a tension was created between the two roles. To address this at the time, the Directors-General daily hook up was constituted to free SEMSOG from dealing with the business as usual operation of ACT Government. This did not fully relieve the tension on the EC in undertaking two roles; however, it provided a better separation of committee / strategic forums.

3.33 It was observed by some that in the early days of the State of Alert declaration, the SEMSOG that met was comprised of a smaller number of members. This was due to several factors including that the issues for the ACT at that point were less complex and a

number of representatives were initially unavailable due to the holiday season. The observation made by some was that the process seemed to be more aligned to the role of a Mgt Exec. However, as the full SEMSOG membership formed and met as the Mgt Exec over an extended number of weeks, the wider issues became more complex and the normal business of various Directorates had to also be juggled, it become less effective as the Mgt Exec.

3.34 In comparative arrangements in other jurisdictions the EC acts as the Chair for the Mgt Exec equivalent as it is established as a specific committee under the emergency management arrangements. This would be appropriate for the ACT, also noting its core purpose in supporting the EC. The Emergency Plan should articulate the role of the Mgt Exec more clearly and as a separate entity to SEMSOG. This would better focus the efforts of the Mgt Exec in supporting the EC and allow SEMSOG to operate as needed. There would be overlap in representation between the two entities; however, the purpose of each should be more defined.

3.35 This would require close connections between Director-General JACS as Chair of SEMSOG and the EC as Chair of the Mgt Exec to ensure coordination of decisions and actions. At a minimum the EC should consider including Director-General JACS and Public Information Coordinator (PIC) in the Mgt Exec, particularly when the emergency might be for an extended period of more than a couple of days. The key role of Director-General JACS would be to assist the EC with addressing wider Government policy matters tangential to but impacted by the emergency through the SEMSOG mechanism.

3.36 These arrangements will need to remain flexible depending on the emergency and its likely length. Discretion should remain for the EC and DE JACS to determine the best way to adapt the Territory emergency management mechanisms to suit the situation. For example, that may include such things as simultaneous meetings of SEMSOG, SEMC and/or Mgt Exec to ensure efficient decision making in shorter term emergencies.

3.37 The current direction within the *Emergencies Act* allowing the EC to determine membership of the Mgt Exec is considered appropriate. The roles of the two bodies and recommendations on membership should be clarified in the Emergency Plan.

3.38 The broad, WHoG focus of the EC means that the incumbent is less able to concurrently discharge their normal duties. This is not such an issue for shorter events; however, once their appointment extends beyond a few days this issue becomes more critical. At the time of the bushfire season the ESA Commissioner had limited options for handing over the day to day running of the ESA nor receiving strategic support and advice, nor an option for respite. For all these reasons the appointment of a Deputy ESA Commissioner will assist in providing a better framework for separation of the role of the EC and ESA Commissioner. It will also provide a logical option for the appointment of a Deputy EC and someone to represent ESA at SEMSOG, noting that there currently is no legislative coverage for a Deputy ESA Commissioner. It is noted that the attached bill as a

result of the Interim Report has provided legislative changes to enable the appointment of a Deputy EC.

#### Recommendations

Recommendation 8: The Emergency Plan be amended to better reflect the intent of the *Emergencies Act* in the establishment of a Management Executive, separate to SEMSOG, on the appointment of an EC. It should describe the role of SEMSOG and the Management Executive as distinct in the emergency management architecture.

Recommendation 9: That when determining their Management Executive, at a minimum the EC should consider appointing Director-General JACS and the PIC as standing members.

Recommendation 10: An opportunity to exercise and test the formation and functioning of a Management Executive through desktop and/or limited scenario-based exercises be provided.

Recommendation 11: The Government consider amendments to the *Emergencies Act* to include provision for a Deputy ESA Commissioner.

### *Emergency Management Planning Framework – currency and consistency*

3.39 In other jurisdictions the equivalent role to the EC has a clear strategic WHOG coordination within a 'State Crisis Centre' construct which includes the equivalent bodies as SEMC and SEMSOG. Within the South Australian (SA) EM Framework, the State Crisis Centre (SCC) is identified as *the central liaison point for the Premier and Executive Government and provides a focal point for dealing with State Government policy matters*. It is noted that in this framework the EC equivalent is clearly removed from the operational implementation and management of the emergency response mechanisms.

OVERVIEW OF ARRANGEMENTS

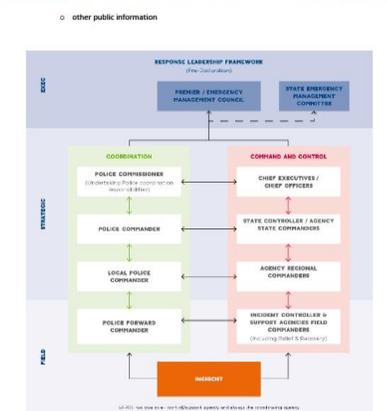
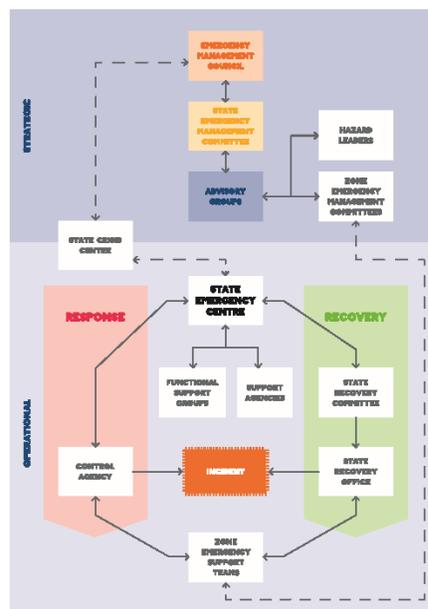


Figure 3a: Command and Coordination arrangements prior to a declaration



3.40 When reviewing the EM structure within the *Emergencies Act* and Emergency Plan and in comparison to other jurisdictions, the EC is placed into the role usually allocated to the IC at times when no EC is appointed, with the IC consequently being pushed down a level. The role therefore becomes the equivalent of an IC rather than providing a bridge between the delivery of an operational effect and the strategic management of the emergency. This also means that if the ECC is stood up and an IC appointed prior to the appointment of an EC, the emergency management arrangements would need to be reorganised to make way for the EC; an undesirable outcome.

3.41 In other jurisdictions, even in Level 3 events, the IC equivalent is separated from the EC equivalent and is designed to provide advice and support to the EC; however, not to be the EC. The effect of the ACT framework observed throughout the 2019-20 bushfire season was that the EC responsibilities were stretched between the need to advise and support the strategic emergency management arrangements and the operational delivery of the response to the emergency.

3.42 Across other jurisdictions the State Emergency Centre / State Operations Centre equivalent is effectively the ACT ECC with a designated person in command. Within the NT, the Territory Controller uses the Territory EOC (Emergency Operations Centre) as a facility to support the oversight and delivery of emergency management. The Territory Plan (TEP) articulates how the NT use the term emergency management and describes a distinction between the delivery of emergency management and the delivery of response operations (the delivery of a designated emergency plan). This can be summarised by the following paragraph from the TEP around the delivery of emergency management:

*Integrated approach: ensuring that the effort of governments, all relevant organisations and agencies, and the community, as a prepared community, are coordinated.*

By articulating a distinction between the management of an emergency and the delivering of an effect through the Emergency Plan it can be seen how this follows through the WHOg coordination and command and control structures used with the NT.

3.43 The final jurisdiction to provide some guidance is the Tasmania Emergency Management arrangements. In the below extract, terminology aside, it can be seen that there is a clear separation between the roles and responsibilities within the State structures to support an emergency management effect vs the delivery of an emergency plan.

INCIDENT CONTROL CENTRE (ICC) EMERGENCY OPERATIONS CENTRE (EOC) POLICE OPERATIONS CENTRE (POC)	EMERGENCY COORDINATION CENTRE (ECC)
Sets objectives, determines strategies and tactics to <b>resolve the incident</b> or certain aspects of it.	Sets objectives, determines strategies and tactics to resolve <b>consequences</b> of the emergency (can be agency-specific, multi-hazard or whole-of-government / community focused).
Allocates, deploys and manages resources for <b>tactical/operational response</b> to the incident.	Allocates, deploys and manages resources to address <b>consequences</b> of the emergency.
Usually agency-specific (the RMA will establish the ICC and support agencies establish their own EOC).	Staffed by an Emergency Management Team (EMT) and a range of <b>agency Liaison Officers/Advisors</b> .
Provides the public and media with <b>operational information</b> about the incident.	Coordinates and disseminates public information about the <b>consequences</b> of the emergency and transition to recovery.

3.44 The ECC Operations sub-plan identified an ECC Coordinator and designates them as responsible for the overall command of all activities and personnel within the ECC. However, this plan is not clear on whether the ECC is intended to support the delivery of emergency management or delivery of a designated emergency plan. It was also noted that there are some differing descriptions for the role of the ECC, from describing it only as the group of ECC liaison officers to more correctly describing the full emergency response mechanisms of plans, logistics, public information etc.

3.45 Using the example of the national security architecture, the Police Operations Centre (POC) manages one or more incidents with a Police Operations Commander appointed. The Police Forward Command Post, which is usually closer to the event or incident has the Forward Commander with the equivalent of an IMT established in support. The Ops Commander is the senior officer and ultimately responsible for delivering on the plan in a similar way to the IC in a level 3 incident. Should an EC be appointed in such a circumstance, the EC does not take the role of the Ops Commander nor does it

necessitate a change in the existing reporting arrangements. The EC steps in above to coordinate the disposition of all resources across Government to address the emergency and associated impacts, support and advise Ministers on the emergency and be the public face of the response. Appendix C provides some initial concepts that could be considered by the relevant working group to provide a better understanding of the command and control framework within the ACT emergency management framework. It is noted that these concepts still require detailed consideration by relevant agencies across WHoG.

3.46 The Emergency Plan should be amended to reflect an emergency management architecture that more appropriately describes the hierarchy of command and control when there is and when there is not an EC appointed. These changes should avoid making a response to shorter events too cumbersome. The intent being to ensure that the EC is kept focused at a strategic, WHoG response level whilst being supported by the appropriate level of operational command.

#### Recommendation

Recommendation 12: The Emergency Plan and ECC Ops Plan be amended to better articulate the delivery of emergency management vs the delivery of the emergency plan. The Plan should facilitate principles for emergency management and clear role delineations whilst allowing flexibility in how the mechanisms are structured.

3.47 It was also observed that there was a lack of clarity in the role of the ECC and consequently the IMT among stakeholders, with varied views on how they should and did work together. A number felt that the role of an ECC Liaison Officer (LO) was not defined well enough and therefore agencies may not have identified the most appropriate level / role / person to fulfil that position. It was generally thought that LO's need to be senior enough to 'get things done' and have access to their senior executive though not so senior that there is a limited supply or overlap with SEMSOG. It was also apparent that the ECC Coordinator role held the same level of uncertainty in the minds of many.

3.48 In the ESA Operational Review of the bushfire season, Synergy (independent review team) observed that across the ESA there was limited trained and experienced staff in undertaking Level 3 operations within the ECC and/or IMT. The capacity to deliver during the bushfire response was reinforced by a number of PCS staff who hold relevant qualifications and experience. It was noted that involvement and exposure of ECC / IMT operations over the January period provided significant experience and exposure of these requirements for staff within the ESA as well as across the WHoG.

3.49 It is good practice to have two LO's in the ECC from each organisation present, one focused on directly engaging within the ECC and the other engaged into their own organisation managing the delivery of outcomes. To meet this level of commitment a considerable number more will need to be trained and be involved in regular exercising to build and maintain skills and allow sustainability. It was noted that there should not be a

minimum number set to determine the effectiveness of the operational agency involved. Each agency should make its own assessment on the staff, skills, knowledge and experience required for those roles and the emergency. This should include consideration of requirements for physical presence for LO's and alternate technology options for agency inputs.

3.50 This highlights the overall capacity of the systems, mechanisms and supporting administration within an extended activation of the EM framework. It was observed that there should be regular review and assessment of these to ensure that they are fit for purpose. This should include systems (EMOS, ICON), mechanisms to support alternate to face to face committee meetings, as well as training to increase the cadre of qualified and practiced personnel across WHoG.

3.51 It was noted that there are extant mechanisms within the ACT Public Service Enterprise Agreement to provide support and relief to staff during high tempo periods. During the bushfire emergency these were activated and utilised to support staff over the period of the emergency. In addition to the provision of support over the specified period, general welfare mechanisms were activated and methods of accessing these provided to staff. This included support for childcare where parents were involved in response operations. As a great initiative it should be continued during future emergencies. Not all Directorates were aware of the opportunity and so communications around such support services should be enhanced.

#### Recommendations

Recommendation 13: The role, level, requirements and expectations of an ECC LO be clarified in the Emergency Plan and ECC Ops Sub-plan.

Recommendation 14: All organisations who have a role in the ECC should review their existing arrangements to ensure there is a sufficient cohort of staff to maintain a presence in the ECC at a level and with an imprimatur sufficient to make decisions and allocate resources and have access to senior executive levels if needed.

Recommendation 15: Any changes to the ECC structure and role be exercised both within ESA and across a WHoG exercise and testing program.

## 4 Preparedness

### *Cross border relationships*

4.1 The ACT is a unique Australian jurisdiction in that it is wholly bordered by New South Wales. A number of NSW townships rely on the ACT as the nearest provider of health and other supporting services and with nearly 80% being a National Park (Namadgi), cross border relationships with New South Wales Government agencies and non-Government entities are of particular importance. It was identified that several stakeholders interviewed have well established relationships with their NSW counter parts. Of note is the relationship between Canberra Health Service (CHS) and the NSW Southern Area Health Services and the ACT's role in a hub and spoke health service model across both. Formal mechanisms exist for such entities as EvoEnergy within the national energy framework, and the ACT-NSW Memorandum of Understanding (MOU) for Regional Collaboration.

4.2 It was also recognised that good working relationships with NSW counterparts assisted very strong active preparation and planning as well as understanding cross jurisdictional needs throughout the bushfire season. Canberra Health Services noted that numerous ACT health practitioners volunteered and supported Hospitals and health facilities on the South Coast throughout the December and January period, with no detrimental impact on the ability to support the Canberran community.

4.3 Four agencies identified that they have critical cross jurisdictional/shared responsibilities related to bushfire response: Evoenergy and Icon Water (responsible for assets in the Queanbeyan-Pelerang Region), CHS and Environment, Planning and Sustainable Development Directorate (EPSDD). All felt that the formal nature of their relationship as well as strong habitual engagement processes meant that balancing and understanding potentially competing priorities were understood across both jurisdictions and they were well placed to support Canberran's.

4.4 It was identified that on several occasions the use of existing officer level and bi-lateral networks outside of the ECC process provided efficient and timely information exchange. EPSDD Parks and Conversation Service (PCS) has a cross border MOU with NSW. This is used extensively in the preparation and consideration of the Territory Wide Risk Assessment which by nature of our surrounds must consider the neighbouring NSW environment. The ongoing formal relationship provides a level of access that, during the response event, enhanced and assisted situational awareness.

4.5 The ESA has also invested in cross border relationships over considerable time. This investment proved its worth through facilitating the exchange of liaison officers between operations centres around the NSW region including Queanbeyan, Tumut and Cooma. These embedded liaison roles were invaluable in linking operational planning and sharing of knowledge to the benefit of both the NSW and ACT firefighting efforts.

4.6 Although there was positive and effective cross border relationships and engagement during the bushfire season, it is noted that there was still locational data or situation data that was not easily transferred between varying software systems. During the 2019-20 bushfire season the ESA encouraged the download and use of the NSW “Fires Near Me” mobile app as ESA has partnered with the NSW RFS to enable ACT alerts to appear on this platform. Under legacy arrangements, alerts also appear on the Australian ‘Fires Near Me’ mobile app not to be confused with the NSW Rural Fire Service ‘Fires Near Me’ app. When information is populated to both platforms, this can result in variances in geographic location of incidents and incident information.

4.7 Furthermore, in the recently released **Independent review into the South Australia’s 2019-20 Bushfire Season** it was noted that South Australia currently uses an app (Alert SA) based around the ‘Fires Near Me’ app. The key limitation identified in the Alert SA is the currency of information and the limited functionality. This review recommended that the proposed app update be completed before the 2020-21 bushfire season.

4.8 The use of mobile apps for emergency alerts has been a consideration at the Royal Commission on National Natural Disaster Arrangements (RC). It has looked at the functionality and need for these systems to provide sufficient current information to allow community decision making to be informed and timely.

4.9 The ESA has researched the options for a standalone All-Hazards emergency warnings mobile app as an alternative to relying on the Fires Near Me app. There is also an opportunity to support a national approach to the design, development and delivery of such a platform that would provide greater affordability to smaller jurisdictions such as the ACT.

4.10 It is noted that work is underway via the Australian Data and Digital Council at the direction of Council of Australian Governments in consultation with the Ministerial Council for Police and Emergency Management, to improve national natural hazard data and intelligence to enable the development of new information products such as a national fire map’ and that the ACT is contributing to this work which includes consideration of current apps used for fire reporting.

4.11 In a review of current systems employed around Australia, the Victorian Government (VicEmergency) app and WA Government App (EmergencyWA) are considered standout. Both these sites combine alerts and warnings across the spectrum of the EM framework, enable users to register location specific push notifications and provide linkage to a central website with additional information directed at supporting the community during an emergency.

## Recommendations

Recommendation 16: ACT Government continues to develop the concept for an ACT specific emergency app whilst also using national coordination mechanisms to support an affordable nationally standard all-hazards mobile app.

Recommendation 17: Continue to explore options in the short term to improve the functionality and relationship with NSW RFS 'Fires Near Me' with respect to ACT specific information before the 2020-21 bushfire season.

4.12 Evoenergy noted that the Australia Energy Market Operator (AEMO) grouping of NSW / ACT as one jurisdiction resulted in ACT receiving multiple alerts for Lack of Reserve (LOR) events alerts, declarations and revocations that actually had no impact within the ACT. A LOR announcement prompts Evoenergy to monitor and manage load and demand within the ACT network. A LOR event also requires Evoenergy to advise the Jurisdictional System Security Co-ordinator (within EPSDD) of any load issues requiring customer load shedding. This coordination is important as it is possible to avoid widespread messages prompting customers to minimise power usage when Evoenergy is able to manage demand by first working closely with its major customers to curtail loads. Evoenergy advised that during the 2019-20 bushfire season that it was operating well within the normal network load and capable of managing demand without impact to customers.

4.13 Following the 2019-20 bushfires, Evoenergy and EPSDD held a meeting to share lessons learned regarding this function. As a result, both Evoenergy and the EPSSD have updated processes to provide clarity and refine the instructions regarding coordination of LOR response and public messaging. Evoenergy also raised this issue through their submission to the RC. Although a recommendation of refinement of notifications/ regional groups from the AEMO is beyond the scope of this review, it is noted that the consequential impact of this does need to be managed within the ACT. The post season review and update of processes by Evoenergy and EPSDD to address this is commended

4.14 During extreme heat conditions there are times when AEMO forecasts an electricity supply shortfall. The energy supply emergency risk in these circumstances is of importance to the ACT and should be a matter of concern for an IC. Noting the concurrent activation of the ACT Extreme Heat Plan during last summer, the real potential for a supply shortfall at the same time as there is an active fire highlights the risk of concurrent emergency events driven by a warming climate for which the ACT must be prepared.

4.15 It was noted by Evoenergy that the inclusion of the utilities providers within the strategic environment (SEMSOG) and formal arrangements such as the one listed above were enhanced at the desk officer level during the operational response. The opportunity

for a stronger bilateral relationship between these partners and ESA would support planning and preparation across the EM spectrum. It is proposed that ESA hold bi-lateral executive level meetings with the utility providers on a regular basis; potentially before and after the bushfire season with an option to extend to quarterly. Existing mechanisms facilitate bi-lateral relationships within Government agencies and that this should be continued in the future.

Recommendation

Recommendation 18: The ESA hold bi-lateral executive level meetings with the utility providers on a regular basis in consultation with other relevant Government stakeholders.

Recommendation 19: Concurrent and/or non-standard emergencies such as energy supply impacts be included in future exercise programs.

4.16 A key driver for a successful outcome during a bushfire season is the overarching land management strategies employed across the ACT region. Under the *Emergencies Act* the ESA Commissioner is responsible for the development and subsequent delivery of the Strategic Bushfire Management Plan (SBMP). As part of the delivery of the SBMP the *Emergencies Act* states that:

*The commission may establish a committee to help the commissioner prepare the draft strategic bushfire management plan and monitor the scope and effectiveness of the plan.*

4.17 The Commissioner has established the Bushfire Management Plan Steering Committee (BMPSC) in accordance with the above section. It is noted that within the SBMP there are a significant number of other Government agencies and non-Government entities, beyond ESA, that have responsibilities to achieve the outcome. The members of the last BMPSC are reflective of these organisations. During the development of the SBMP the BMPSC undertook a series of community consultative meetings across the ACT that were well attended by rural land holders.

4.18 Section 6 of the *Emergencies Act* directs the establishment and functions of the ACT Bushfire Council (BFC). The key function of the BFC within the *Emergencies Act* is to provide the mechanisms through which the community can advise the Minister on matters relating to bushfires. The current BFC Terms of Reference (ToR) provides a more detailed synopsis of what this advice around bushfire management should encompass:

- a) *The level of preparedness;*
- b) *Prevention activities;*
- c) *The response capability of fire services; and*
- d) *The implementation of recommendations from the inquiries into the 2003 Canberra bushfires, and other major bushfire events.*

4.19 Whilst the *Emergencies Act* established the BFC to advise the Minister, the BFC does have a legitimate role in providing strategic advice to the ESA Commissioner, using the committee members range of specialist knowledge and skills as the *Emergencies Act* requires the members to have. In the conduct of the BFC meetings, in accordance with the BFC ToR, attendance is focused around the council members, ESA and EPSDD.

4.20 It is observed that the inclusion of the broader agencies and entities that hold responsibilities under the SBMP at the BFC meeting would provide an opportunity for the ESA Commissioner and other stakeholder agencies to provide relevant advice and updates. This also aligns with the intent of the *Emergencies Act* to enable the BFC to support the Minister with advice across all things related to bushfires. In any case the ToR were last reviewed in 2016 so it is timely to review them to ensure the BFC remains contemporary.

#### Recommendation

Recommendation 20: The BFC Terms of Reference be reviewed to ensure they are contemporary and reflect learnings from this and recent bushfire seasons.

4.21 The SBMP, as part of the ACT EM framework, outlines the shared responsibility between ESA and EPSDD in delivering the strategies to reduce bushfire risk for the ACT. Responsibilities are articulated in a variety of documents such as Inter-Directorate MOUs, directions within the SMBP (including those within the Regional Fire Management Plan (RFMP) and Bushfire Operational Plans (BOP)) for the conduct of joint training and operations. These directions encompass both the preparedness environment and response operations. Of note is the EPSDD PCS responsibilities in the development of and delivery of the BOP and that it is also a Brigade under the Rural Fire Service during bushfire response and suppression operations.

4.22 It was observed across stakeholders that much progress has been made over the years to ensure unified effort across PCS and ESA. The greater role played by PCS staff within the IMT and as the IC on occasions was a positive example of the unified effort. However, there is still work to be done.

4.23 The ESA Operational Review of the bushfire season undertaken by Synergy (independent review team), identified that there was a perception of imbalance within the operational environment between RFS and PCS. This gap was recorded as allocation of senior positions (Divisional and Sector Commanders) and considered under-utilisation of RFS crews, in favour of PCS. On review of the various governing documentation it has been identified that there is a lack of clarity in the area of coordinated command and control for RFS/PCS operations.

4.24 The Synergy Review also commented on fire intelligence and situational awareness and the importance of an ability to deploy aerial firefighting assets. PCS has access to

certain specialist capability as does RFS. However, several people noted that the capacity of these more specialist and technical capabilities were strained due to the extended State of Alert. With evidence pointing to longer bushfire seasons and more regular, more intense bushfire events, there will be a subsequent need for more of these specialist capabilities. Thus, it is timely to examine the need for a greater investment in expanding the availability of such professional specialities as fire behaviour analysts, airbase managers, aerial firefighting technical specialists etc for the RFS.

4.25 As the land managers for Namadgi National Park, PCS has a particular combination of knowledge and skill in reducing the fire risk in the park and understanding the land such that they are best placed to make high quality decisions regarding fire suppression. This is achieved in part through maintaining a seasonal paid firefighting workforce and also continuous involvement with the land as land managers. However, there is significant skill and local knowledge within RFS, albeit delivered through the mechanism of committed and training volunteer firefighting capability.

4.26 Within the ACT, there are also a number of private landholders who abut parts of the Namadgi National Park (NNP). The rural landholders have knowledge and understanding of the land they manage and the interface between this farmland and the NNP. As part of the SBMP, rural landholders are required to deliver reasonable measures to manage bushfire risk on their holdings and are key stakeholders in both the operational and strategic management of bushfire risk.

4.27 The RFS as an entity is established under the *Emergencies Act* with specific intent to combat rural fires. The RFS work closely with Rural Land Holders in developing, implementing and governing programs such as Farm FireWise program and Fire and Emergency Service Training Activities (FESTA). This builds a connected and resilient rural community. It is intended that the RFS deliver high quality decisions within the rural environment which should complement the work of PCS. The two Government agencies, in conjunction with rural landholders, have an interdependent relationship when it comes to bushfire prevention, planning, response and recovery across the ACT environment.

4.28 Both services indicate a willingness to look for ways to continually improve how they work together. The review of the 2003 fires recommended secondments between the two agencies and for PCS and RFS to undertake joint hazard reduction work. Undertaking these activities would go a long way in building common trust and developing joint operational doctrine. Whilst both these activities may have occurred over the intervening years, it would be useful to increase these efforts. Joint working arrangements will be best strengthened and refined outside of the bushfire season to ensure that in times of emergency they operate smoothly. Whatever the approach, it is imperative that as a small jurisdiction, the two services with bushfire fighting capability within the ACT must work together seamlessly.

## Recommendations

Recommendation 21: Efforts be increased to build trust, confidence and a common operating picture across PCS and RFS and seek mechanisms that identifies RFS and PCS as equitable partners in delivery of fire management across the territory.

Recommendation 22: Review, refine and implement the joint ESA/EPSSD Arrangement for Fire Management in the ACT with the previous recommendation in mind.

Recommendation 23: Government give consideration to investment in professional specialities such as fire behaviour analysts, airbase managers, aerial firefighting technical specialists etc for the RFS.

## *Contingency planning*

4.29 During the bushfire season the ESA website experienced two outage periods. The first was due to a global systems failure with the website host (Amazon Web Services) and the second was attributed to the unprecedented load on the ESA website database. The actual time that the website was offline was a short period, and delivery of emergency messages during that time were replicated onto other ACT Government websites; however, links to the ESA website would not work. It should be noted that the ESA is modifying its redundancy systems and boosting capacity to meet expected future demand.

4.30 Although the outage was not for a significant period of time it did impact on the Government's ability to keep the community informed at critical points in time. This resulted in two considerations being discussed, firstly a need for detailed contingency planning for short term alternatives should another Black Swan event occur and secondly on considerations for an assurance review of community facing Government websites in light of the issues faced by the ESA site.

## Recommendation

Recommendation 24: Consideration be given to developing alternate website contingency in the event of a critical failure and an assurance review across all community facing Government websites.

## 5 Preparing the community – engagement and resilience

5.1 The *Inquiry into the 2003 Canberra Bushfires* found that there were numerous areas of concern regarding information for the community. The areas for concern can be summarised as firstly community preparedness and secondly the community's ability to respond appropriately. Community education, articulation of individual responsibilities and guided support was identified as significantly lacking. During the emergency period community information on the threat, actions required by the community and the options available, especially around evacuation options, was confusing, contradictory and poorly distributed. The resultant recommendations and adoption of several programs within the ACT has contributed to a significant change in public sentiment.

5.2 When asked about what had gone well during the season, the majority of those spoken to reflected on the positive, regular and effective public communications. The strength of the communications is further evidenced through the result of community surveys which showed that the vast majority of Canberrans felt well informed and knew what to do if a bushfire threatened them. It was clear that the regular routine of media conferences and the detailed briefing on fire behaviour and location helped in comforting the community. The consistent appearance of the EC, Chief Minister, Minister and Chief Police Officer also provided a great deal of comfort to the community.

### *Public Information*

5.3 All stakeholders identified that the successful outcomes were achieved in terms of getting the message to the public about the emergency. However, there were also several areas identified where there are opportunities to strengthen public information operations during an emergency.

5.4 The PICC was activated on 2 January in accordance with the Emergency Plan and Community Communication and Information Plan (CCIP). Under the Emergency Plan the PICC is led by the Public Information Coordinator (PIC) who reports directly to the EC. According to the CCIP the PICC is focused on:

*the effective management and coordination of information by ACT Government Directorates during emergencies in the ACT.*

5.5 However, in an emergency there is also a need for direct support to the delivery of an operational effect. During the early part of the State of Alert, the EC directed ESA Public Information and Engagement (PIE) staff to provide direct operational support to the IC and to the EC in communicating key operational level information and tactical warnings. Whilst the decision was reasonable under the circumstances it had the effect of disconnecting the

PICC from the operational messaging. On identification of this disconnect, the PIC and ESA staff created a system to ensure the flow of information between the operational and strategic communications.

5.6 There was a perception stated by a number of stakeholders, that the EC operated outside of the PICC processes for emergency alerts and community messaging as a result of this decision. On the strategic communications level, the key observation for agencies outside of the ESA was the bottleneck that was created as a result of all agency communications requiring PICC approval.

5.7 In late January, the PIC implemented an approval matrix which provided relief to this bottleneck. This innovation allowed routine agency communications to be authorised within agencies with due consideration for the emergency situation.

5.8 The Emergency Plan and the CCIP do not delineate between strategic communications and the tactical communication requirements of emergency alerts and messaging. This lack of separation is further confused by the structural reporting of the PICC to the EC when one is appointed but to the IC when and EC is not appointed.

5.9 It has been observed that the CCIP have been effective, but the CCIP, as currently drafted is better geared for short term emergencies. In comparison to similar plans from other jurisdictions, the CCIP provides a significant level of detailed guidance and structure. In comparison, the NSW equivalent provides a much broader guidance that allows a better separation of the strategic communication function from the tactical level emergency alerts and messaging. A number of stakeholders noted a willingness to be involved in supporting work to revisit the CCIP. This is such an important element of emergency management that it may require the establishment of its own working group.

5.10 The review of the Emergency Plan should consider a structure that supports both the delivery of strategic communications (as delivered by PICC) and tactical emergency alerts and messages (as delivered by ESA PIE) with a common link to the PIC. It is also recommended that the proposed CMTEDD review of the CCIP should proceed.

5.11 A Communications Working Group (CWG) with representatives from across key Directorates (CMTEDD, ESA, ACT Policing, Health, CHS, EPSDD for example) would complement the Emergency Plan WG with a focus on the CCIP. The CWG could further identify how the CCIP can be best implemented and utilised. The CWG should report its progress through SEMSOG and coordinate with other WG's. A CWG would play an ongoing role in times where the PICC is activated and provide advice to the PIC to help ensure consistent operational and WHoG communication efforts occur.

## Recommendations

Recommendation 25: The CCIP be reviewed in conjunction with the review of the Emergency Plan and the two synchronised. A workable approach to delivering operational emergency communications and strategic WhoG communications is developed with simple and clear reporting arrangements.

Recommendation 26: Establish a Communications Working Group (CWG) with representatives from across key Directorates (CMTEDD, ESA, ACT Policing, Health, CHS, EPSDD for example) to review the CCIP and to further identify how the CCIP can be best implemented and utilised. The CWG should report its progress through SEMSOG and coordinate with other WG's. Bringing together a small Taskforce of staff from across government for a set period would assist the working group in delivering the work needed to address these and other recommendations

Recommendation 27: The PICC be exercised in conjunction with any and all Emergency Plan exercises to test and refine strengthened arrangements.

## *Community engagement*

5.12 It was noted by the Rural Land Holders Association (RLHA) in both their interview and written submission that community engagement since the 2003 fires has improved immensely. The overall sentiment from both the RLHA and public feedback through the *Your Say Panel* survey conducted by CMTEDD in March 2020, was that there were very successful programs and engagement strategies across the EM spectrum (Preparedness Planning Response Recovery) in the ACT.

5.13 The RLHA felt that the multiple strategies used during the response phase (community meetings, door knocks, specific and targeted messaging for Rural Landholders, use of RFS community liaison officers) demonstrated a clear commitment from Government to keep all members of the community engaged. A suggested area for improvement was ensuring that a broader inclusion of advisors be present at community meetings to be able to answer specific questions. This was also reflected by several agencies included in those community meetings. It was observed that the weight of information provided during these meetings was focused on response activities and expected outcomes within the Namadji National Park.

5.14 Across the urban environment, the *Your Say panel* survey recorded that the community felt well informed and with 823 Community members responding highlighted the following:

- 93 % felt that they were well informed during the 2019-20 bushfire season

- Nearly 90% indicated they knew what they would do if a bushfire threatened
- 70% indicated they had identified a safe place to go if threatened by a bushfire
- Over 50% undertook actions to make their home safer
- 50% have a prepared or written bushfire plan

5.15 The community feedback and agency comments on areas for improvement observed that although engagement was successful and contributed to the community feeling well prepared and well supported, there were opportunities for enhanced and targeted community engagement in preparation for the bushfire season.

5.16 The value of preseason and proactive engagement was supported by the RLHA. The landholders generally thought that that the program of liaison, engagement and advice that occurred with the land holders before the bushfire season was a good model. It built a two-way communications path and allowed the building of trusted relationships whilst allowing good advice on bushfire preparation to be delivered in tailored way.

5.17 In examination of other models used, the Victoria CFA framework provides an approach directed towards regional consideration for education and preparation which utilises their volunteer cohort. Local CFA Brigades and Regions identify which programs best suit their community. The CFA framework involves volunteers supporting public information, relationship building and engagement with community, particularly land holders, communities and vulnerable groups at risk from bushfires.

5.18 There is an opportunity for the ACT to build on the very effective engagement already occurring. An expanded program could include opportunities to provide proactive assistance to, say, the development of Bushfire survival plans or equivalent for vulnerable, individuals, groups and institutions. This process would provide the added advantage of giving the RFS better visibility about who the vulnerable are and what actions they plan to take themselves in the event of a bushfire and what role Government might need to take to assist.

#### Recommendation

Recommendation 28: The ESA Community Education and Engagement program be adapted to include an expanded role for RFS volunteers and include a wider set of stakeholders who are more vulnerable to the impact of bushfire. A plan would require wider involvement across stakeholder organisations such as Directorates who have existing relationships with vulnerable groups.

## 6 Relocating - supporting the community

6.1 As the Orroral Valley fire progressed, it closed in on the southern urban areas of the ACT and on the ACT rural village of Tharwa. There had already been plans developed as events unfolded to consider the evacuation/relocation of people by that time which included recognising the vulnerable as a risk group and plans made on how to deal with them specifically. The fire progressed slowly towards the urban area, ultimately closing to within 5km. The fire's progress and increasing anxiety within the community led to a concerted effort to plan the evacuation/relocation of people from the fire risk. The Chief Police Officer and ACT Emergency Management and Planning team took the lead in this endeavour with support from ESA Risk and Planning, the Australian Defence Force and the Deputy Incident Controller who was leading the ECC. It was observed by some that the strong working relationship between the ESA and ACT Policing resulted in a united approach with clear responsibilities.

6.2 Finalised plans were refined over several days as more information came to hand and tactical options explored. From the interviews conducted it was generally believed that the plan would have been effective had it needed to be activated fully. The pre-existing strong collaboration, particularly between Community Services Directorate (CSD) and Education Directorate (EDU) reinforces this comfort. However, it was clear from stakeholders that execution did and would have required a good deal of extra attention to ensure coordination of effort across what was a large number of stakeholders. Areas of tension during the evacuation planning can be summarised as:

- Who are the vulnerable?
- Who supports the vulnerable?
- How to support the whole community?

6.3 Involved agencies identified that appreciating the situation of those considered vulnerable in the community required considerable cross organisational coordination and information sharing at a time when time was of the essence. There was also debate on the definition of "vulnerable", specifically in relation to those individuals or communities that would need specified assistance from Government agencies.

6.4 On closer examination, significant planning challenges exist in gaining information on who these vulnerable people were, what their requirements were and their location and contact information. It was identified that multiple Government agencies held this information (Health, Police, ESA, CSD, National Disability Insurance Agency (NDIA)) as well as non-Government agencies (EVO Energy, not-for-profit sector). Whilst the NDIA holds information that would have been relevant should the need have arisen to evacuate, it was recognised that as a Commonwealth agency, information sharing may have proven even more complex noting that ACT legislation would have had limited effect.

6.5 Again, whilst the experience on the ground was that all organisations worked to assist in accessing and collating the required information during the ‘heat of battle’, it is clear that there would be great benefits in planning for the best way to identify, communicate with and assist those in the community who may be vulnerable to the hazard being faced.

6.6 It was identified in the Interim Report that the legislative mechanisms to provide a centralised repository of this information for use during an emergency could be clarified under the powers of the EC to remove any legislative barriers. The supporting bill has recommended that this occur through explanatory notes rather than a change to the powers of the EC. Regardless, this does not cover events where there is no EC appointed and in any case information sharing blocks are often not based on legislative barriers at all but rather cultural ones.

6.7 Stakeholder discussion also encompassed considerations of what this support to the vulnerable, and broader community needs, should and could look like. Of note, there was a detailed examination of the term “evacuation” and what that means. Overall, it was agreed that the ability to facilitate individuals not sleeping in their normal location due to the emergency to a safe, secure alternate location and then a safe return was a reasonable approach. The question of how people move from point A to point B and who provides the alternate at point B was widely debated. The use of the term evacuation, specifically in the establishment of an Evacuation Centres, was felt to be misleading for intent of Government services provided in this process. It was identified that a more appropriate term was “relocation”, allowing a focus on community and individual responsibilities in this process to be highlighted.

6.8 Several agencies identified that within the broader community there were gaps in relocation planning with a heavy reliance on Government service to provide transport, relocation accommodation options and ongoing support during relocation. These concerns focused around facilities such as aged care where the majority of individuals requiring relocation did not require medical support for transport or ongoing medical support during relocation. It was identified that many facility’s relocation plans were reliant on TCCS support and access to hospital beds at TCH. All agencies recognised that future options should not be reliant on Government services, and that the ACT Government was best placed to coordinate a better engagement and support framework to facilitate more appropriate relocation plans.

6.9 Throughout the 2020 January and February period, ACT Government and non-Government agencies provided extensive support to the heavily affected NSW South Coast community. A Relief Centre was opened at the Dickson College, primarily to support people transiting through ACT from the South Coast. The Relief Centre remained functional from 2 – 16 January. Staffing was primarily provided by CSD and EDU and heavily supported by other not for profit community partners. This support subsequently

extended to opening the Hall and Queanbeyan Showgrounds as shelter/camp facilities. On a national level, HMAS Harman was also opened as a relief site for NSW evacuees, with 19 people using this facility.

6.10 From 28 Jan – 7 Feb an Evacuation Centre was established at Erindale College and staffed primarily by CSD and EDU, with support from community partners. During its operation, approximately 183 people were provided with support and 14 provided with temporary accommodation. The Evacuation Centre was designed to support residents of ACT and immediate surrounds with support during the height of the Orroral Fire threat.

6.11 In broad terms, all agencies involved in the establishment and management of the Relief and Evacuation Centres felt that the community was well supported and provided with a level of assurance as to what options were available should they need to relocate. Agencies identified that there was some community confusion regarding what services and support mechanisms would be provided by these centres. The provision of an alternate accommodation option at the Evacuation Centre was the most quoted public query and misconception.

6.12 There was a lack of clarity around what services could or should be provided noting that over time both the Evacuation Centre and Relief Centre also became a location providing community information. Consensus across stakeholders was that the length of time that these centres were open contributed to staff fatigue, particularly considering that these were open for 24/7 operations. It was noted that there was discussion and consideration for reducing hours or closure with no clear decision made as to what may trigger this.

6.13 Across Australia there are varied approaches to evacuation planning and guidelines from State and Territory Governments. In locations where cyclone risk is realised on a routine basis there are quite prescriptive directions for evacuation processes and establishment of evacuation centres. Within NSW and Tasmania, the approach was more broad brush with a differentiation between community/individual responsibilities and Government actions. The Tasmania Emergency Evacuation Framework provides a very detailed guide and understanding of actions that will primarily be undertaken in a directed evacuation with a focus on support to those who are unable to complete all the elements of a relocation by themselves. Included within the NSW EM Plans framework is a guide for aged care and other residential facilities to support their planning and evacuation decisions. It is identified that, like the ACT Fire FarmWise program, it incorporates a level of engagement between the community facility and supporting Government agencies.

6.14 The ACT has an Evacuation Policy document that was reviewed in late 2019; however, there is no current Territory wide plan or legislative framework for activation and decision making around evacuations and relocations. There is no clarity around the definition of a respite or evacuation centre. In both NSW and QLD, the evacuation / relocation framework is addressed through clearly identifying specified assistance to be

provided by Government agencies, with supporting agency specific sub-plans. There are then strong community guidelines to support individuals and organisations in the development and implementation of their own plans.

6.15 The general consensus was that the ACT would benefit from a deliberate planning/ workshop activity to consider what would be the most beneficial approach to be used within the ACT concluding with a more formal legislative framework around this.

Participants representing all relevant Directorates, Agencies and service providers could establish:

- identification of locations, consideration of options other than schools, hospitals or hotels;
- identification of triggers, what is expected to deliver and when;
- a need for larger pool of trained and/or suitable people to assist in set up / ongoing management – already implemented within CSD;
- enhanced articulation to community about what these centres are for and what services they can deliver;
- better engagement with community partners who support these;
- cross-border engagement to better understand number of displaced persons, where coming from and their needs;
- a welfare support framework to support front line workers, in addition to emergency workers;
- what options for transport for those in need of Government assistance; and
- to determine lead agency for delivering the Evacuation/Relocations Plan should it be activated and by whom it is activated;
- To determine mechanisms for the lead agency to coordinate across the range of stakeholders;
- develop resourcing and wellbeing plans; and
- develop cross border engagement protocols and a community communication strategy.

#### Recommendations

Recommendation 29: ACT Government undertake a detailed legislative review to ensure that information regarding vulnerable community members can be appropriately accessed, provided and used during an emergency event.

Recommendation 30: NDIA be engaged in regard to information sharing in emergencies as part of the above actions.

Recommendation 31: A Relocation and Evacuation working group be established from stakeholder organisations to consider and develop an Evacuation and Relocations Sub-Plan. The Sub-Plan should consider the lessons learned this year and address principles, lead agency, WHoG coordination, trigger points etc. This could be the same working group formed for reviewing the Emergencies Act, Plan and sub-plans

Recommendation 32: WHoG desktop exercise should be conducted to test and support relocation and evacuation planning.

## 7 Transition to recovery

7.1 The *Emergencies Act* specifies that the ESA Commissioner is responsible for directing recovery operations, with the Emergency Plan providing a more detailed differential between Initial Recovery (focused on addressing the immediate consequences of the event) and Longer Term Recovery (coordinated effort to repair damage, restore services and support the community). Within the Emergency Plan, the responsibility for recovery operations remains with the Emergency Controller, whilst appointed, or a Recovery Taskforce or ACT Recovery Coordinator subsequently appointed by SEMSOG. There is a lack of clarity within the Act and Plan around recovery operations (initial and longer term) and responsible and accountable agencies.

7.2 In the aftermath of the 2019-20 bushfire season the ACT Government has activated recovery funding arrangements. Discussions have been held through the forum of SEMSOG, but no Recovery Coordinator or Taskforce were formally established to take over from the EC as the ACT rolled from response into recovery. Agencies have indicated that Recovery sub-plans have been activated but without the overarching mechanisms in place. The RLA noted that some landholders were not able to access certain support mechanisms. It is not clear if this was because they did not qualify or were not clear on what was available. In any case, a more proactive mechanism to support the community to access recovery mechanisms would be of benefit.

7.3 Cross jurisdictional reviews have identified that a number of States better articulate the roles and responsibilities of appointed recovery mechanisms such as Recovery Coordinator or Recovery Taskforce. Of value is those Acts that provide a clear direction for handover of recovery operations from the immediate (responsibility of State Controller or equivalent) to the long term. Of note is the Tasmanian *Emergency Management Act 2006*, which provides for the opportunity for the State Controller to identify an appropriate person or agency to hand over the responsibility of the long-term recovery operations.

#### Recommendation

Recommendation 33: Emergency Plan and Recovery sub-plans should be amended to better define recovery mechanisms and responsibilities, including hand over points to recovery authorities and community engagement for the delivery of long term recovery mechanisms.

### *Cost to Government*

7.4 The processes and mechanisms across ACT Government for management of costs incurred during an emergency deserve consideration. The combat agencies carry the risk of bearing the cost of delivering operations, such as the unprecedented events as this year's bushfires, will occur at the expense of investment in and maintenance of capability.

7.5 Furthermore, the process of invoicing costs associated with certain costs borne by Directorates to other Directorates when costs relate to such an extraordinary emergency would appear on the surface to be inefficient noting that some costs are not within budgets and will be borne by the Government as a whole in any case.

7.6 It might be that some form of 'no win no loss' arrangements be activated at the point that a State of Alert or State of Emergency is declared. These arrangements should cover procurement, contract management and invoicing and relate only to costs over and above what is expected to be included in existing budgets such as existing salary and overtime.

7.7 The NSW Emergency Management Plan (EMPLAN) provides broad guidance for both Expenditure and Recovery of Funds during emergency response or recovery operations. The overarching framework is based around absorption of costs within departments. Costs above and beyond normal operating budgets may be reimbursed through NSW Treasury with the Office of Emergency Management responsible for the reimbursement of agreed items where expenditure is occurred during an emergency. Currently within the ACT, reimbursement of agreed costs occurs across Directorates.

#### Recommendations

Recommendation 34: Government consider an alternative funding arrangement for extraordinary costs borne by Government agencies in combating emergencies such as bushfires.

Recommendation 35: Government consider adopting a similar model to NSW for the management of emergency costs and reimbursements within ACT Government agencies.

## 8 Sustainability in the new normal

8.1 As noted at the start of this review, the extraordinary 2019- 20 bushfire season challenged the ACT's capability and capacity to respond. To some degree the results speak for themselves with no lives lost and no houses lost. However, as pointed out by the RLHA, the loss of rural pasture and bushland does have an impact on the lives and livelihoods of those who are in the primary producer business. The loss of significant vegetation from Namadgi will also have an impact on the flora and fauna and the community's ability to enjoy the natural habitat offered by the park.

8.2 Whilst the 2019-20 bushfire season was extraordinary and it may be some time before a similar event occurs, predictions are that the bushfire risk will increase over time. The bushfire seasons will become longer, fires harder to control, and firefighting operations will need to be sustained for longer period of time.

8.3 The ACT also experienced the impact of multiple and concurrent hazard events with more than one significant storm event occurring at the same time as the bushfire emergency. Overlay this with the issues of air quality arising from the many large fires burning along Australia's east and it is not hard to understand the impact that concurrent events have on our communities.

8.4 With multiple emergency events during the 2019-20 bushfire season the economic costs to the ACT Community was extensive. Estimated costs for the insurance claims post the 20 January hailstorm is likely to exceed \$320 million alone. The rehabilitation and recovery of Namadgi National Park is forecast to extend over a three to five year period at a significant cost. The operational costs to ACT Government for the delivery of the response operations currently are estimated to be at over \$15 million, with much of this absorbed by Agency budgets.

8.5 With the impact of COVID-19 likely to last for some time, we are facing future interconnected and compounding risks and the occurrence of compounding and consecutive disasters will be more likely. Community multi-risk resilience across multiple hazards and extended times will be key to preparedness. This will require coordinated Government, community and non-Government efforts to build resilience.

8.6 Best practice dictates that we review regularly, with considered reflection on what occurred in an emergency event and always with a mind to ensuring that the community is prepared, protected and able to recover when the circumstances require. Within the bounds of the ToR, this report seeks to draw out a number of key strategic and WHoG lessons with the view to improving how we as a community respond to future emergencies. This review and its recommendations are designed to provide the ACT community with the opportunity to reflect and ensure that we are as prepared as possible for the future.

# Appendices

- A. Terms of Reference
- B. Interim Report
- C. Concepts for consideration: ACT emergency management framework – command, control and coordination structure

## **TERMS OF REFERENCE REVIEW OF THE ACT 2019/20 BUSHFIRE SEASON<sup>1</sup>**

### **Purpose**

The review is to consider and report to the Minister for Police and Emergency Services by 7 August 2020 on the ACT's coordination, response and recovery as it relates to the 2019/20 bushfire season.

The review will consider the effectiveness of:

- the coordination of the whole of government response, including the operational alignment of, and communication between:
  - the Security and Emergency Management Senior Officers Group (SEMSOG) particularly in relation to its role as the Management Executive in support of the Emergency Controller.
  - the Emergency Controller
  - the Incident Controller
  - the Emergency Coordination Centre including the role of Public Service Directorates and utility providers.
  - the Public Information Coordination Centre, and
  - individual Emergency services
- adherence to ACT Government emergency plans, procedures and protocols
- the legislative framework for emergency management in the ACT
- measures taken to alert and inform the community of bushfire risk and the whole of government response, including use of the emergency alert system and government websites
- measures taken to inform and support ACT rural land holders during the bushfire response
- measures taken to provide relief and recovery to ACT residents and persons displaced by bushfires in NSW during the bushfire response, including the planning for and activation of ACT Evacuation Centres
- cooperation and coordination with local, state and Commonwealth governments and agencies
- measures taken to protect the safety and wellbeing of first responders, and
- any related matter.

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<sup>1</sup> Inputs to this review include the after action reviews and an independent technical operational review of the ESA management of the incident.

The review may make recommendations concerning opportunities to enhance the ACT Government's:

- operational emergency management arrangements (including bushfire operational response, incident management capabilities, communications and community recovery)
- emergency management coordination within the ESA, on a whole of government basis and with external stakeholders
- cooperation and partnerships with local, state and Commonwealth governments and agencies, and
- emergency management legislative and planning framework.

### **Process**

The review must consult with relevant ACT Government Ministers, SEMSOG members, ACT Public Service Directorates and agencies, ACT utilities providers and relevant local, state and Commonwealth agencies.

The review may take into account and/or coordinate with:

- any after action or technical operational reviews commissioned by the Emergency Services Agency following with 2019-20 bushfire season, and
- any internal reviews or lessons learnt assessment prepared by other ACT Public Service Directorates and ACT utilities providers following the 2019-20 Bushfire season.

If the review forms the view that legislative change is required prior to the 2020-21 bushfire season it may provide an interim report to the Minister for Police and Emergency Services by 30 June 2020.

### **Background**

The 2019-20 bushfire and storm season produced some of the most unprecedented weather conditions in Australia's history. Large parts of Australia were impacted by significant fires with unpredictable and dangerous fire behaviour fuelled by hot, dry and windy conditions. These conditions meant fires started easily and were difficult to contain.

Since August 2019, unprecedented fire activity heavily impacted large areas along the East Coast of Australia. The ACT Rural Fire Service (ACTRFS) and ESA deployed firefighters and specialist emergency management personnel to Queensland and Northern NSW through September, October and November of 2019 to assist with the fires interstate.

Bushfires to the east of the ACT at Braidwood and on the NSW South Coast caused thick smoke in the ACT and region for a continuous period from late December 2019 through January 2020.

A State of Alert was declared for the ACT on 2 January 2020 to assist community preparedness and organisational response and coordination with fires burning near our borders and forecast extreme weather.

Between 1 October 2019 and 4 February 2020, the ACT declared a record 24 Total Fire Ban (TOBAN) days. To put this into context, the ACT on average sees 5 – 6 TOBANs per bushfire season.

Following the hot and dry conditions the ACT experienced severe thunderstorms on 16 January, 20 January and 10 February. The storm event on 20 January produced large hail stones and caused significant damage resulting in the ACT State Emergency Service receiving approximately 2,500 calls for assistance, a record for the ESA.

Three days later, on 23 January 2020, the ACT then experienced its first significant bush and grass fire of the season. This fire started at the Pialligo Redwood Forest and quickly spread across to Beard, threatening Oaks Estate and Queanbeyan. An additional fire started in Pialligo the following day that joined with the first, eventually taking the fire to 424 hectares. The fire was deemed out on 29 January 2020.

On 27 January 2020, the Orroral Valley fire commenced. This fire threatened the southern rural areas of the ACT, most notably Tharwa, and the southern suburbs of Canberra. The Orroral Valley fire remained 'out of control' until 8 February 2020, when, after receiving some much needed rainfall, the status of the fire was downgraded to 'being controlled'. The Orroral Valley burned over 86,000 hectares of land and approximately 30% of the ACT.

With the ACT facing its worst bushfire threat since the 2003 bushfires and a combination of extreme heat, wind and a very dry landscape, a State of Emergency was declared for the ACT on 31 January 2020. The ACT Extreme Heat Plan was also activated.

# INTERIM REPORT

Report to the Minister for Police and Emergency Services on  
Whole of ACT Government coordination and response during the  
2019-20 Bushfire Season

July 2020

# 1 Introduction

1.1 The 2019-20 bushfire and storm season produced some of the most unprecedented weather conditions in Australia's history. Large parts of Australia were impacted by significant fires with unpredictable and dangerous fire behaviours fuelled by hot, dry and windy conditions. The conditions meant fires started easily and were difficult to contain.

1.2 The ACT was not exempt from these conditions and subsequently felt the impact both within Territory borders and across the surrounding regions. From August 2019 until the end of the bushfire season on 31 March 2020, The ACT:

- supported other states (Queensland, NSW) in their emergency responses
- assisted displaced persons as a result of losses interstate
- responded to severe weather events (extreme heat, storms and poor air quality due to regional bushfires)
- managed potential fire threats (24 Total Fire Ban days) and
- responded to bushfires within Territory boundaries.

1.3 The ACT *Emergencies Act 2004* and supporting *ACT Emergency Plan 2014* provide the ACT Government and Government agencies the framework and authority to undertake prevention, preparation, response and recovery activities before, during and after an emergency. As identified in the *ACT Emergency Plan 2014*, a valuable component of this is to “analyse the response to and impacts of emergencies for future learning and adjust strategies where this new information and knowledge will result in improved outcomes.”<sup>1</sup>

1.4 On 29 April 2020, the ACT Government announced a whole of ACT Government review of the bushfire season to be focused on the effectiveness of the whole of Government response. I, as Deputy Commissioner, ACT Emergency Services Agency (ESA), was commissioned to undertake the review with direction to provide recommendations concerning opportunity to enhance and inform ACT Government's future response. The terms of reference (TOR) are included in Appendix A. This Interim Report is delivered in accordance with those TOR to deliver recommendations for legislative changes prior to the 2020-21 Bushfire.

## 2 Recommendations – Legislative amendments

2.1 Prior to the commission of this review, the Justice and Community Safety Directorate (JaCS), Security and Emergency Management Branch (SEMB) had undertaken an initial review of the *Emergencies Act 2004*. This was done both as a follow on from the bushfire

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<sup>1</sup> ACT Emergency Plan (2014) 3.4.3.4

season and to review the effectiveness of the operation of previous amendments to the *Emergencies Act 2004* that were passed by the Assembly at the end of 2018. This work also served to prepare for the mandated five-year review (due to commence October 2020) of the *Emergencies Act 2004* pursuant to s203 of the Act. Also incorporated were initial lessons learned provided through the Security and Emergency Senior Officials Group (SEMSOG) as a result of the 2019-20 Bushfire Season.

2.2. On commission of this review, further consultations were undertaken across ACT Government Directorates and Agencies and external stakeholders. During this period additional observations allowed identification of further changes recommended for implementation prior to the 2020-21 Bushfire Season. There was also considered discussion regarding important but less immediate legislative amendments to be included as part of the previously mentioned mandatory review of the Act. Areas for potential future legislative reform beyond those immediately identified in this report will be explored and will be presented in more detail in the final report.

### 3 Immediate Recommendations

#### *Emergency Controller and supporting administrative processes*

3.1 In January/February 2020 the ACT ESA Commissioner was appointed as the Emergency Controller (EC). Due to the extended nature of the emergency, the appointment ultimately lasted for 39 consecutive days. Currently under the Act, the EC may be appointed for up to seven (7) days. The Act also requires the Chief Minister to review the appointment within 48 hours of appointment. As a result, and due to the extended time period, the review and reappointment of the EC occurred multiple times. Whilst all legislative and time requirements were met in this instance, in the case of extended emergencies the current process raises the risk of administrative error in the appointment process.

3.2 Whilst the EC is vested with significant powers and authorities that warrant appropriate oversight, the experience of managing the lengthy appointment over the fire season demonstrated that some flexibility to these short timeframes would be reasonable. It is timely to consider an amendment to the Act to enable a more principle-based approach to the EC appointment. Each emergency event is different, and it is reasonable to assume that prior to the appointment of an EC there will be an assessment of the likely minimum duration of an event. Enabling the pertinent authority (Chief Minister) the flexibility to select a longer timeframe both for the initial review and the overall appointment period, based on considered advice from SEMSOG or other appropriate agencies/committees, will facilitate less administrative risk during a time of emergency.

3.3 At present no other jurisdiction places a legislated timeframe on the appointment of the equivalent role where it exists. Most jurisdictions are silent on the time period and/or do not address the question of appointment period in the 'instrument of appointment'. If a time limit is to be imposed, it is reasonable to provide for a higher maximum limit of up to 28 days (four weeks) to enable judicious, directed but practical consideration of the appointment and subsequent reappointment on an EC.

3.4 In terms of reviewing the appointment, the ACT is the only jurisdiction within Australia where legislation requires an express review of the appointment of an EC equivalent. The *Emergencies Act* is not specific as to the purpose for the mandated review. Logically it is either to ensure that the EC appointment is still required or to review the performance of the EC. It should be noted that under the Act, the Chief Minister currently may exercise a discretion to amend the period of appointment or revoke the appointment at any time. In practice EC role works closely with Security and Emergency Management Cabinet (SEMC), SEMSOG and relevant ministers during a period of appointment, thus providing a high-level of consequent oversight. Thus the existence of further mandated review mechanisms may be redundant and introduce unnecessary legal risk. Consideration should be given to removing the requirement to review an EC appointment all together.

3.5 If removing a review requirement from the Act is not agreed, it is reasonable that a review of the EC appointment be at the discretion of the Chief Minister. Consideration should be given to extending the minimum review period from the current 48 hours to a period of up to seven (7) days. As a guide the following could be considered; if an EC appointment is for up to three (3) days, there is no requirement for a review. Should the EC appointment be for a period up to and including 14 days then the review may default to three (3) days. For an appointment of more than 14 days, then the review should occur on or before seven (7) days following appointment. To simplify counting rules, the appointment is deemed to include the day of appointment as a whole day and the review be completed by midnight on the last whole day since appointment.

Recommendation 1:

The *Emergencies Act 2004* be amended to allow for the appointment of the EC to be made for a discretionary time period of up to 28 days with the requirement for a legislated review of the appointment to be removed. Alternatively, a period of review should fall within the Chief Ministers discretion for up to seven (7) days following appointment.

*Appointment of a Deputy Emergency Controller*

3.6 On the occasion of this fire season, and the appointment of the EC for a protracted period, it was clear that such a situation potentially places significant stress on the

individual EC. Vesting EC responsibilities in a single person for an extended period creates a vulnerability, regardless of the capability and suitability of the person appointed. Additionally, it does not account for the incumbent EC's need for periods of rest, absence for illness or other reasons.

3.7 Emergency management legislation across several other Australian jurisdictions allows for the appointment of an acting, deputy or assistant EC. In most jurisdictions, this position may only exercise the functions of the EC in the absence of the EC. One of the outcomes of the *Inquiry into the 2003 Canberra Bushfires* was the intentional exclusion of the ability to appoint an Alternate Emergency Controller. This was a deliberate decision to prevent the problematic outcomes of the 2003 event where there was substantial confusion over the relationship between the Emergency Controller and the Alternate Controller.

3.8 To avoid the concerns raised during the 2003 review, if provisions are made under the Act to appoint a Deputy EC, it should be clear that they exercise the powers and accountabilities of the EC only when the substantive EC is absent. However, the Deputy EC should be similarly qualified to undertake the role as the substantive EC and will need to be across the progress of the emergency in support of the EC to ensure consistency.

3.9 In drafting legislation it should be recognised that, the need for a Deputy EC may not be apparent at the initial appointment of the EC. There may be any number of periods where the appointment of an EC will be of short duration (such as an extreme weather event) and there will be no expected requirement for a deputy EC to be available. The Act therefore needs to remain agile around the appointment of a Deputy EC to allow this to occur independent of the appointment of the EC, but should not be for a period longer than the specified cessation date of the EC. Regardless of when a Deputy EC is appointed, this appointment should be able to exercise any authorities and powers already granted to the EC when directed to undertake the role of EC.

3.10 It is proposed that an amendment be made to allow for the provision for a Deputy EC to be appointed, independent of the initial appointment of an EC. It should be the case that the Chief Minister consults with the EC, if one is already appointed, regarding the appointment of a Deputy. In cases where both roles are to be appointed at the same time, then the Chief Minister should consult the relevant Minister and/or committee (SEMSOG / SEMC). The instrument of appointment for the Deputy should mirror that for the EC in terms of any requirement for review and limitations to the period of appointment. Practically the review and appointment processes should be able to legally occur simultaneously in order to minimise the administrative burden. The powers and functions of the appointment of a Deputy should be contingent on the absence of the EC.

As an example, note the following excerpt from the *Tasmanian Emergency Management Act 2006*.

#### **10. State Emergency Management Controller and Deputy**

(4) The State Controller and Deputy State Controller appointed by the Minister each holds office for the period, and on the terms and conditions, specified in his or her instrument of appointment.

(5) The Deputy State Controller may act in the office of State Emergency Management Controller if –

(a) the State Controller is absent from Tasmania or from duty as State Controller; or

(b) the State Controller is otherwise unable to perform the functions of the office of State Emergency Management Controller; or

(c) the State Controller has died, resigned or been removed from office and a new State Controller has not been appointed.

(6) While the Deputy State Controller is acting in the office of State Emergency Management Controller he or she –

(a) is taken to be the State Controller;

#### **Recommendation 2:**

The *Emergencies Act 2004* be amended to allow for the provision for a Deputy Emergency Controller to be appointed, independent of the initial appointment of an EC. The powers and functions of this appointment to be contingent on the absence of the EC.

#### *Alignment and delegation of EC powers*

3.11 Within the Act there are two relevant sections (s. 150C and 160A) that provide powers to an EC. The enactment of this sections is reliant on; firstly, appointment of an EC and secondly, whether or not a State of Emergency is declared. Regardless, for a specified event, the powers that can be delegated on escalation from S150C to S160A (i.e. the declaration of a State of Emergency for a specified event) remain the same.

3.10 It is reasonable to foresee that the powers required under a State of Alert would also be required in a State of Emergency relating to the same event. The powers under Section 150C are identical to those powers described under Section 160A. However, should the EC wish to delegate these powers to a chief officer, say the Chief Police Officer (CPO), the delegations need to be reissued each time there is a change in the alert state as the power shifts between the two sections of the Act. This re-issue on change in alert state must be done in writing and then subsequently further delegated, in writing, by the CPO or other delegated chief officer, to police officers or other relevant authorised officers.

3.12 The changes in alert state in January 2020 resulted in small periods of time where ACT Police Officers were without delegated powers as a result of the need to reissue legal instruments. The lack of delegated powers at a critical juncture in time (transition of State of Alert to State of Emergency) could introduce unnecessary risk to the community and to the authorised officers undertaking activities in support of the community.

3.13 It is recommended that as the powers available to an EC should be aligned with the appointment of the EC rather than the relevant alert state. This effectively will compress Sections 150C and 160A of the Act providing a simplification of the Act and better clarity around the powers and authorities granted to an EC.

Recommendation 3:

The *Emergencies Act 2004* be amended so that the powers, including delegations, available to an EC be granted on their appointment and remain in place under the same section of the Act for the duration of their appointment rather than being drawn from different sections of the Act that are dependent on the existing alert state for the specified event.

*Sharing of Information*

3.14 During January 2020, due consideration was given to supporting potential evacuation of nursing homes, aged care facilities and other vulnerable members of the community. Information about those community members was held across multiple agencies, including at the Federal level. The legislative framework within ACT to enable the sharing of information regarding the vulnerable is incorporated within several Acts.

3.15 During interviews across directorates and organisations, it was raised that the timely and effective sharing and management of this information was an issue warranting further consideration. There was broad support that this information was important to be shared with appropriate agencies (such as Police and SES) in order to support vulnerable people

in the event of an evacuation/relocation and in the context of the broader emergency. There was also consensus that this would need to be managed with due consideration for the ACT as a Human Rights jurisdiction and ensuring that all appropriate systems were in place to protect this information. Although the mechanisms to better facilitate the collation and exchange of this information is by no means solved by legislation alone, it was broadly agreed that clarity regarding the legal basis for sharing information, particularly in an emergency when an EC is appointed, would assist.

3.16 Currently under Sections 150C and 160A the EC has the power to:

*Direct a person to give information, answer questions or produce documents or anything else, reasonably needed.*

Whilst the above section does imply that such a direction would include directing a person to give information that they can access as a result of their official duties, it is not as clear as it might be. Noting the criticality of appropriate sharing of information held by organisations in an emergency, It is recommended that an amendment be made to clarify that the power of the EC to direct a person also includes directing them to provide information they can access as an employee of an organisation or entity. This would provide the EC with the levers to direct the collation and sharing of this information in support of the vulnerable members of the community in an emergency. It is noted that this provision will need due consideration to ensure that these powers can only be enacted in alignment with the rights and protections of the individuals whose information is shared. It is also recognised that more work will be required on the mechanics of information sharing in emergencies when evacuations or relocations are being considered. This will be addressed more fully in the final report and should also be considered in more detail during the upcoming five (5) year review of the *Emergencies Act*.

Recommendation 4:

The *ACT Emergencies Act 2004* be amended to clarify that the powers of the EC encompass the power to direct agencies and directorates to share personal information for the preservation of life and protection of Canberrans.

For example: *Direct a person to give information, answer questions or produce documents or anything else, reasonably needed. To remove any doubt, a direction to provide information that is given to a person includes information that person has access to on behalf of an organisation or entity that holds relevant information.*

## 4. ACT Legislative Architecture

4.1 Section 203 of *Emergencies Act 2004* requires a review of the Act as soon as practicable after the end of every five years. This five-year review is due as soon as practicable after August 2020. This work is due to commence in October 2020. A number of other proposed changes have been identified but are judged as not requiring urgent/immediate implementation before the 2020-21 Bushfire Season and/or that will require a more comprehensive examination. The Final report will further address these legislative reforms noting that any other areas of legislative reform can be dealt with as part of the *Emergencies Act* five-year review. To introduce currently identified broad areas for consideration are included in Appendix B.

4.2 In the conduct of this review it was identified that the structure and architecture of the *Emergencies Act 2004*, the *ACT Emergency Plan 2014* and supporting sub-plans were reflective of the then contemporary experience with shorter term emergencies. Whilst shorter term emergencies will remain the most likely; recent experience and forecasted future environmental trends indicate longer and hotter summer seasons that will likely generate an increased number of extreme weather events. The five-year review will provide the opportunity to ensure that the *Emergencies Act* is fit for any and all similar longer term, multiple hazard emergencies as was witnessed this fire and storm season.

## 5 Conclusion

5.1 The overall view of stakeholders was that the legislative framework was sound, and the *ACT Emergencies Act* fulfilled its functions during the 2019-20 Bushfire Season. There was a clear understanding of the intent of architecture of government operations in the lead up to and through the declaration of State of Alert and State of Emergency (2 January – 9 February 2020). General opinion was that there are areas and opportunities for improvement with no significant areas of concern. It is noted that this whole of government review and the overarching *Emergencies Act 2004* review are both ideal opportunities to review and update supporting sub-plans, policies, processes and procedures across the current Emergency Management Framework.

## Appendix A

### TERMS OF REFERENCE REVIEW OF THE ACT 2019/20 BUSHFIRE SEASON

#### **Purpose**

The review is to consider and report to the Minister for Police and Emergency Services by 7 August 2020 on the ACT's coordination, response and recovery as it relates to the 2019/20 bushfire season.

The review will consider the effectiveness of:

- the coordination of the whole of government response, including the operational alignment of, and communication between:
  - the Security and Emergency Management Senior Officers Group (SEMSOG) particularly in relation to its role as the Management Executive in support of the Emergency Controller
  - the Emergency Controller
  - the Incident Controller
  - the Emergency Coordination Centre including the role of Public Service Directorates and utility providers
  - the Public Information Coordination Centre, and
  - individual Emergency Services
- adherence to ACT Government emergency plans, procedures and protocols
- the legislative framework for emergency management in the ACT
- measures taken to alert and inform the community of bushfire risk and the whole of government response, including use of the emergency alert system and government websites
- measures taken to inform and support ACT rural land holders during the bushfire response

- measures taken to provide relief and recovery to ACT residents and persons displaced by bushfires in NSW during the bushfire response, including the planning for and activation of ACT Evacuation Centres
- cooperation and coordination with local, state and Commonwealth governments and agencies
- measures taken to protect the safety and wellbeing of first responders, and
- any related matter.

The review may make recommendations concerning opportunities to enhance the ACT Government's:

- operational emergency management arrangements (including bushfire operational response, incident management capabilities, communications and community recovery)
- emergency management coordination within the ESA, on a whole of government basis and with external stakeholders
- cooperation and partnerships with local, state and Commonwealth governments and agencies, and
- emergency management legislative and planning framework.

Inputs to this review include the After Action reviews and an independent technical operational review of the ESA management of the incident.

## **Process**

The review must consult with relevant ACT Government Ministers, SEMSOG members, ACT Public Service Directorates and agencies, ACT utilities providers and relevant local, state and Commonwealth agencies.

The review may consider and/or coordinate with:

- any after action or technical operational reviews commissioned by the Emergency Services Agency following with 2019-20 bushfire season, and
- any internal reviews or lessons learnt assessment prepared by other ACT Public Service Directorates and ACT utilities providers following the 2019-20 Bushfire season.

If the review forms the view that legislative change is required prior to the 2020-21 bushfire season it may provide an interim report to the Minister for Police and Emergency Services by 30 June 2020.

## Background

The 2019-20 bushfire and storm season produced some of the most unprecedented weather conditions in Australia's history. Large parts of Australia were impacted by significant fires with unpredictable and dangerous fire behaviour fuelled by hot, dry and windy conditions. These conditions meant fires started easily and were difficult to contain.

Since August 2019, unprecedented fire activity heavily impacted large areas along the East Coast of Australia. The ACT Rural Fire Service (ACTRFS) and ESA deployed firefighters and specialist emergency management personnel to Queensland and Northern NSW through September, October and November of 2019 to assist with the fires interstate.

Bushfires to the east of the ACT at Braidwood and on the NSW South Coast caused thick smoke in the ACT and region for a continuous period from late December 2019 through January 2020.

A State of Alert was declared for the ACT on 2 January 2020 to assist community preparedness and organisational response and coordination with fires burning near our borders and forecast extreme weather.

Between 1 October 2019 and 4 February 2020, the ACT declared a record 24 Total Fire Ban (TOBAN) days. To put this into context, the ACT on average sees 5 – 6 TOBANs per bushfire season.

Following the hot and dry conditions the ACT experienced severe thunderstorms on 16 January, 20 January and 10 February. The storm event on 20 January produced large hail stones and caused significant damage resulting in the ACT State Emergency Service receiving approximately 2,500 calls for assistance, a record for the ESA.

Three days later, on 23 January 2020, the ACT then experienced its first significant bush and grass fire of the season. This fire started at the Pialligo Redwood Forest and quickly spread across to Beard, threatening Oaks Estate and Queanbeyan. An additional fire started in Pialligo the following day that joined with the first, eventually taking the fire to 424 hectares. The fire was deemed out on 29 January 2020.

On 27 January 2020, the Orroral Valley fire commenced. This fire threatened the southern rural areas of the ACT, most notably Tharwa, and the southern suburbs of Canberra. The Orroral Valley fire remained 'out of control' until 8 February 2020, when, after receiving some much needed rainfall, the status of the fire was downgraded to 'being controlled'. The Orroral Valley burned over 86,000 hectares of land and approximately 30% of the ACT.

With the ACT facing its worst bushfire threat since the 2003 bushfires and a combination of extreme heat, wind and a very dry landscape, a State of Emergency was declared for the ACT on 31 January 2020. The ACT Extreme Heat Plan was also activated.

## Appendix B

### Initial consideration for further legislative review

#### *SEMSOG amendment*

B.1 The SEMSOG agreed on 30 October 2019 to progress a case for SEMC to consider the proposal that 143(3) (b) of the Act to be amended to clarify that SEMSOG is responsible for supporting the relevant SEMSOG member in security and emergency management. Currently this section provides that SEMSOG is responsible for supporting the ESA Commissioner in security and emergency management. This does not account for periods where the Chief Police Officer (responsible for security management) or an emergency controller other than the Commissioner is appointed.

B.2 This amendment was proposed as part of the *Justice and Community Safety Legislation Amendment Bill 2020*, that was due to be introduced in May 2020. This amendment will provide clarity in SEMSOG administrative management and support for emergencies other than one where the ACT ESA Commission is appointed as the Emergency Controller.

B.3 Within the Act is the provision to create hazard specific sub-plans with a 2018 amendment to include these as a formal part of the emergency management framework. Although it is apparent in the Explanatory Statement for that the 2018 amendment was intended to include both hazard-specific (flood, bushfire) sub-plans and supporting (ie recovery and fatality management) sub-plans, this was not fully translated into Section 148 of the Act. It is recommended that this amendment be included in the upcoming review as it is not deemed critical to be introduced prior to the 2020-21 Bushfire season.

#### *Relationship of State of Emergency and State of Alert*

B.4 Section 155 of the Act provides that a State of Alert ceases automatically when a State of Emergency is declared. This assumes that the State of Emergency is the same event related to that which caused the original State of Alert. Should the events be of a differing nature, the State of Emergency will then override the original State of Alert. The current situation with COVID-19 highlights the inability of the Act to have a State of Alert relating to a potential Bushfire event whilst the COVID related State of Emergency is enacted. With the recommendation relating to delinking of the appointment of a EC to the emergency state, further consideration needs to be undertaken to better understand the drivers and intent of these. This consideration and recommendation for change to Section 155 should occur as part of the more wholistic five-year review.

### *Powers granted to Emergency Controller (EC)*

B.5 Whilst this review does not deal with the COVID-19 response, there are some evident differences between the *Public Health Act 1997* and the *Emergencies Act 2004*. Noting that there is ongoing consideration and examination of the powers granted to the Chief Health Officer (CHO) as a result of the COVID-19 pandemic. It is therefore timely to consider a review of the powers available to the EC vis a vis the powers available to the Chief Health Officer in a Health Emergency. A detailed review of the powers granted to an EC could be undertaken to ensure that they are contemporary and match the expected nature of modern emergencies.

# Concepts for Consideration

## ACT emergency management framework – command, control and coordination structure

The Report to the Minister for Police and Emergency Services on ACT Government coordination and response during the 2019-20 Bushfire Season included the following recommendation:

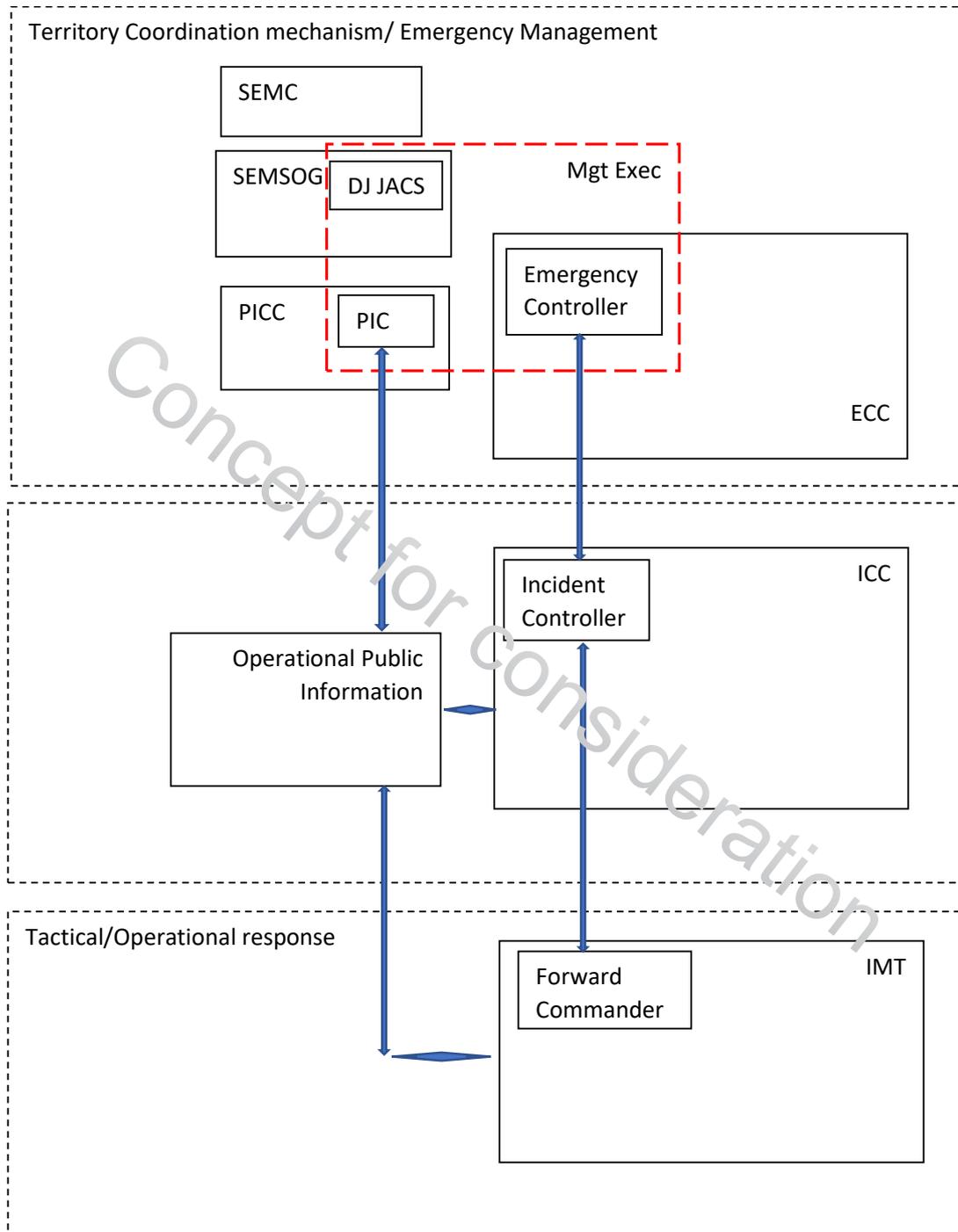
*Recommendation 12: The Emergency Plan and ECC Ops Plan be amended to better articulate the delivery of emergency management vs the delivery of the emergency plan. The Plan should facilitate principles for emergency management and clear role delineations whilst allowing flexibility in how the mechanisms are structured.*

The following two diagrams are initial concepts that could be considered by the relevant working group to provide a better understanding of the command and control framework within the Territory emergency management framework. A number of terms and concepts identified in these structures are based around the current framework identified within the Emergency Plan and supporting sub-plans and cross jurisdictional frameworks. It is not suggested that this must be the final descriptors or models and are only described in terms of the EM effect to be delivered. It is noted that these concepts still require detailed consideration by relevant agencies across ACT WHoG.

These concepts should be provided to the relevant mechanisms established as a result of the following recommendation in the review:

*Recommendation 1: That Justice and Community Safety Directorate (JACS) lead a working group from across relevant organisations to undertake the five year review of the Emergencies Act in conjunction with a wholistic review of the Emergency Plan and relevant sub-plans; and recommendations from this review, to the extent they are accepted by Government. Bringing together a small Taskforce of staff from across government for a set period would assist the working group in delivering the work needed to address these and other recommendations.*

Concept for ACT Emergency Management/ strategic command, control coordination arrangements – EC appointed



Concept for ACT Emergency Management/ strategic command, control coordination arrangements – No EC appointed level 3 response

