



ACT Bushfire Council

# Bushfire Preparedness 2020-21

Report to the Minister for Police and  
Emergency Services

10 November 2020

## Letter of Transmittal

10 November 2020

The Hon. Mick Gentleman MLA  
Minister for Police and Emergency Services ACT Legislative Assembly  
GPO Box 1020  
CANBERRA ACT 2601

Dear Minister

In accordance with the *Emergencies Act 2004* and the terms of reference for the ACT Bushfire Council, I am pleased to submit the Council's report, *Bushfire Preparedness (2020-21)*. This report reviews the ACT's preparedness for the coming bushfire season and makes recommendations for increasing the ACT's preparedness in the future.

Following the extreme conditions and widespread bushfires of last season, this report focuses on some persistent issues that Bushfire Council has brought to your attention in the past and that consequent reviews have in part identified as areas that still need more attention. We acknowledge that some areas for improvement are challenging and take time to implement but recalcitrant issues suggest to us that there are some fundamental barriers in the way and a wider range of solutions should be explored.

Council acknowledges that all the recommendations in last year's report were accepted and that work has advanced in most of them. It was a very challenging year for staff and we commend the efforts of all staff and volunteers in the ACT who contributed to the firefighting and recovery efforts here and interstate.

Council appreciates and would like to thank staff and officials from ESA, EPSDD and JACSD who prepared and presented papers on which Council has relied in preparing this report. Council also thanks Lynda Scanes and Kerri Clarke, the two staff members in ESA who have diligently provided Secretariat services to Council through the last year.

Yours sincerely



Dr Sarah Ryan  
Chair  
ACT Bushfire Council

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# 1 EXECUTIVE SUMMARY

## SEASONAL OUTLOOK

Following last summer's extreme weather conditions and devastating fires in southern Australia, the seasonal forecast for the 2020-21 season is considerably milder. A La Nina event has brought substantial rain to the region and the greatest fire risk in the summer will be fast moving fires in grasslands. Nevertheless, preparations must always take into account Canberra's vulnerability to bushfires from the west and north-west under extreme conditions. Council is satisfied that appropriate seasonal preparations are in place.

## RECOMMENDATIONS

This year's report carries more recommendations than usual but is perhaps not surprising given the significant fires of last season and a heightened concern nationally about the impact of climate change on bushfires. Council has reflected on its past recommendations in the light of those fires has considered which areas of bushfire preparedness seem to represent particularly persistent challenges and need more urgent attention than others. The report elaborates on those in Section 2.

Across those persistent challenges, and in the light of last year's fires, Council makes the following recommendations:

1. That all government mechanisms that contribute to difficulty in meeting planned burning targets be reviewed and streamlined so that, once the EPSDD BOP is approved, the nominated prescribed burns can be implemented in a more timely manner (p7).
2. That the ACT urgently engages appropriately qualified independent expertise to document and review the suppression strategies, responses and bushfire management lessons from the major 2020 bushfires in the ACT (p10).
3. That ESA adopts a longitudinal approach to evaluation of community education activities to ascertain their effectiveness over time – whether they cause a lasting change in community behaviour (p16).
4. That future bushfire emergency maps in the ACT include a scale and topographic contours, and an indication of which parts of the burnt area are actively burning (p16).
5. That the Capability Statement be reviewed as a component of Action 9.6 of SBMP4 to take into account a reducing capacity to rely on interstate assistance as the warming climate produces more widespread extreme bushfires (p17).
6. That an independent review be conducted to consider issues including, but not limited to: the role of ACT volunteer firefighters; the means by which ACT volunteer firefighters are represented and consulted; the effectiveness of communication between volunteer brigades and RFSHQ; and how best to utilise volunteer firefighter skills and experience in the ACT's unique operational environment (p17).
7. That a greater proportion of RFS and PCS personnel undertake IMT training so that they can effectively undertake significant fire management roles (p18).

8. That the response to major bushfires should always be directed by someone with significant bushfire fighting experience (p20).
9. That the long-planned prescribed burn (FB092) in the Pipeline Track area be given highest priority for implementation in Autumn of 2021 and that any further non-weather related impediments to the implementation of this burn be resolved by the end of January 2021 (p22).
10. That ESA ensures that the results of annual field audits of fuel management and road access activities completed by PCS are provided to Bushfire Council by the end of August each year, to inform Council's annual report to the Minister (p23).
11. That the Minister confirms that all development at Denman Prospect will meet or exceed the ACT's Fire Management Standards and arranges for Council to be briefed on the specific details of Asset Protection Zones and Edge Roads as well as for the agreed hazard mitigation for the red stringybark forest around Blackies Hill (p23).
12. That ESA undertakes a comprehensive analysis of all land management BOPs within the ACT to assess the existing risks and adequacy of planned treatments and presents the results to the Bushfire Council by August 2021 (p23).
13. That the ACT Government-agreed national standard for construction of buildings in bushfire prone areas be implemented urgently (p25).
14. That guidance to builders be updated to reflect the latest version of the relevant standard, AS3959:2018 (p25).
15. That funding be provided in 2020-21 for an independent assessment of bushfire risks to all urban and proposed urban areas on the western and northern sides of Canberra (p26).
16. That all relevant agencies clarify their responsibility for post-fire recovery for rural landholders in the ACT and address any critical outstanding issues arising from the 2020 fires. It is suggested the Rural Landholders Association be involved in these discussions (p28).
17. That priority be given to recommendation 33 of the Coordination Report which addresses the handover arrangements for short term and longer term recovery and ensures that protocols are in place for the appointment of a Recovery Coordinator for all Level 3 bushfire incidents and for Level 2 incidents when appropriate (p28).
18. That an Indigenous relief and recovery strategy be developed in consultation with relevant Indigenous bodies including the Aboriginal and Torres Strait Islander Elected Body and the United Ngunnawal Elders Council (p28).

## 2 FIVE PERSISTENT CHALLENGES

### 2.1 Introduction

Since Council's last report, devastating bushfires have burnt across Australia, including 5.5m ha in NSW and 87,500 ha in the ACT, mostly in Namadgi National Park. This represents nearly 40% of the area of the ACT. The ACT was fortunate in not losing lives or many buildings, but substantial damage was done to ecological values, water quality, public infrastructure and rural properties. Canberra also endured over 60 days of unhealthy levels of air quality due to bushfire smoke.

Council acknowledges with gratitude the substantial contributions of ACT firefighters and support staff across ACT government in both fighting bushfires in the ACT, Queensland and NSW in the last bushfire season, and then turning around and working on bushfire recovery in the ACT in challenging conditions due to the COVID-19 pandemic.

While Canberra escaped the damage to life and property that was experienced in NSW, the nature of the Orroral Valley fire in the ACT mirrored the pattern in NSW. The NSW Bushfire Inquiry concluded that the '2019-20 bushfire season was extreme, and extremely unusual. It showed us bushfires through forested regions on a scale that we have not seen in Australia in recorded history, and fire behaviour that took even experienced firefighters by surprise'<sup>1</sup>. A similar commentary is current in western USA as massive fires have been burning there on a scale never previously recorded.

Climate change projections of even hotter and drier weather will increase the risk of such extreme and unusual bushfire behaviour and Canberra remains very vulnerable to bushfire from the west and north-west, which was not burnt in the recent fires. Even in a generally mild summer, a sudden hot and dry period can produce dangerous bushfire conditions.

In this context, Council is concerned about some persistent shortcomings in bushfire preparedness in the ACT that seem to be intractable, but which must be better dealt with in order to be assured that Canberra can be adequately protected from growing bushfire threats. Council has formed this view from reviewing its own recommendations of the past five years and considering them in the context of the two completed reviews of the ACT fire season – the ACT ESA Operational Review<sup>2</sup> and the review of ACT Government coordination and response<sup>3</sup>. Council has not commented on cross-border issues as these are covered by the Royal Commission into National Disaster Arrangements whose report has only just been issued.

A review of 55 reviews and inquiries of major natural incidents since 2009 (34 were bushfire) found that a significant number of parallel recommendations were identified amongst the reviews and inquiries<sup>4</sup>. The following themes were those with the most frequent number of recommendations:

- doctrine, plans, standards and legislative reform (200 recommendations)

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<sup>1</sup> Final Report of the NSW Bushfire Inquiry. 31 July 2020

<sup>2</sup> ESA Operational Review of the Bushfire Season 2019-20

<sup>3</sup> Report to the Minister for Police and Emergency Services on ACT Government coordination and response during the 2019-20 Bushfire Season

<sup>4</sup> Lawson Cole, Stephen Dovers, Michael Eburn and Martijn Gough. Major Post-Event Inquiries and Reviews: Review of Recommendations. Bushfire and Natural Hazards CRC, 2017.

- land use planning/ development/ building codes/ regulation of building and refuges (81)
- community warnings and communication (76)
- EM agency organisation, management and authority (75)
- Incident Management Teams (73)
- training, skills and behaviours (68).

Council notes that there is a deal of overlap between this list and the recurrent recommendations that Council has made in recent years. It suggests to us that beyond other areas for improvement in the ACT, these are the ones where solutions have been difficult to achieve within the current arrangements for bushfire protection. Council considers that, given the wider recognition of the importance of these issues, the ACT Government should examine the constraints to their implementation and, if these cannot be readily overcome, identify other, more innovative approaches to achieving the desired outcomes.

## 2.2 Maintaining EPSDD BOP Effectiveness

Council made five recommendations about the planned program of PCS Bushfire Operation Plan (BOP) activities over four of the last five years (see [Appendix](#)). Four of those recommendations addressed the shortfall in achievement of planned burns but despite government generally accepting our recommendations, they appear to have had little impact. 2015-6 was the last year in which the prescribed burning target was essentially achieved (Table 1 in Section 5.7).

Reasons given to Council for the under-achievement have variously included unsuitable weather, decline in naturally damp burn edges, smoke restrictions, slow environmental approvals, and in the most recent year, restrictions due to the COVID-19 pandemic. Council particularly notes that slow approval of planned burns was the focus of Recommendation 6 in the 2003 McLeod Inquiry<sup>5</sup>: “The approval process for individual fuel-reduction burns that are consistent with the government-approved Bushfire Fuel Management Plan should be simplified so as to enable the limited time when the weather conditions are right to be used to maximum advantage.”

Nor can under-achievement of planned burns in one year be easily caught up in the following year(s), due to inflexible budgets, limitations in staff resources and lack of sufficient suitable burning windows. Council is concerned that a persistent inability to achieve the planned burn goal means that the degree of protection achievable from this BOP activity may be in decline. Council acknowledges that the general level of BOP achievement is high and that it significantly reduces the risk of bushfire damage in the ACT, but the signals of not being able to rely on past levels of planned burning are evident.

### **Recommendation 1:**

That all government mechanisms that contribute to difficulty in meeting planned burning targets be reviewed and streamlined so that, once the EPSDD BOP is approved, the nominated prescribed burns can be implemented in a more timely manner.

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<sup>5</sup> McLeod, R. (2003) Inquiry into the Operational Response to the January 2003 Bushfires in the ACT

## 2.3 RFS Training, Use and Retention

Council made four recommendations about the RFS in three of the last five years (Appendix). Two of these concerned the underachievement of RFS involvement in PCS prescribed burns. Plans for RFS involvement in PCS burns has been built into four of the BOPs over the last five years (see Table 1). In that period, 27 burns covering 310 ha were planned; 12 burns covering 238 ha were achieved. Council notes that none were planned in 2019-2020. This issue was again raised in the ESA Operational Review recommendation “Review RFS hazard reduction task allocations (including from BOP tasks from PCS) to ensure adequate opportunities for professional development and skills maintenance.” Council understands that mobilising RFS crews at short notice for burns is difficult because the decision to burn is often made at short notice on the basis of that day’s weather.

**Comment:**

Council maintains its view that RFS and PCS should enhance their collaboration to facilitate greater involvement of RFS volunteer crews in prescribed burning on public land.

The other two recommendations concerned the retention rate of volunteers.

## 2.4 Incident Management Team (IMT) Staffing and Training

Council has made five recommendations about IMTs in the last five years but some areas of concern to Council in this area persist. The ESA Operational Review does include 12 recommendations about IMTs but Council notes that none specifically refers to the issue that BFC has raised about Level 3 (L3) Incident Controllers. It remains a serious concern of Council that some L3 Incident Controllers for major bushfires in the ACT do not have to have substantial on-ground bushfire and bushfire management experience to command this type of L3 incident. More detail on this issue and a recommendation are in Section 4.4.

## 2.5 Building and Land Planning

Three recommendations in the last five years have addressed building regulations and land planning. The two relevant recommendations from last year have not been actioned and despite repeated requests, Council has not been able get a clear understanding of where responsibility lies for either actioning these or giving an adequate counter explanation. The main areas of concern are the application of the most recent national bushfire-related construction requirements in bushfire prone areas; the adequacy of dealing with bushfire risk during the staging of new developments, and whether risks to new developments on Canberra’s west and north have been adequately assessed in the light of more severe fires in a warming climate. These concerns and two recommendations are in Section 4.11.

## 2.6 Adaptive Management and Climate Change

Three Council recommendations over the last two years have addressed adapting to climate change.

There are many narratives about the role of the changing climate on the extent and ferocity of the 2019-2020 fires, and that even more intense fires can be expected as the impact of climate change intensifies. Council acknowledges that, in response to the recommendation it made last year, additional resources will now be applied to developing a capability in ESA to progress this work. There has, however, been very little progress on Actions 9.5 and 9.6 in SBMP4. Council reaffirms the importance of moving beyond studying and monitoring climate change and its impacts (Actions 9.3 and 9.4), to examining how the ACT intends to address the rising risk of more severe bushfires combined with a reduced capacity both to carry out planned burning and to put firefighters on the ground in extreme heat and fire danger.

Reviews following major bushfire events are crucial inputs to adaptive management, with or without climate change, as recognised by Action 9.1 in SBMP4. Council is concerned that there has not been a transparent account and review of the suppression operations of the 2019-20 fires in the ACT: the Pialligo-Beard fire and the Orroral fire. These two fires represent the two main types of bushfire that can threaten ACT communities: a fast-moving grassfire that threatens urban assets and a large forest-based bushfire that extends over a prolonged duration which impacts on ecological, catchment, cultural and heritage values and rural properties. The McLeod Inquiry<sup>6</sup> following the 2003 fires in the ACT represents a good example of a strategic review. It identified a range of strategic and operational recommendations; the strategic recommendations being used to formulate both the legislative and strategic planning aspects of the ACT's current approach to bushfire management.

Council acknowledges the substantial effort that ESA put into its integrated Operational Review as well as the findings of the Overall Government Co-ordination review undertaken by Deputy Commissioner Ray Johnson. However, neither of these has resulted in a substantive documentation of the suppression operations, nor reviewed the effectiveness of current fire management strategies in assisting control of these major bushfires in unprecedented conditions. Council considers that it is critical to use the opportunity presented by these large fires in the ACT to constructively re-examine the current bushfire management strategies, covering both pre-suppression and suppression strategies and, where necessary, adapt our strategies.

Council acknowledges the very significant efforts made by ESA and EPSDD to manage these bushfires and keep the community safe and very well informed of the situation and potential risks. However, Council stresses the importance of having a transparent record of the nature of the event itself, the suppression strategies used, and recommendations for the future.

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<sup>6</sup> McLeod, R. (2003) Inquiry into the Operational Response to the January 2003 Bushfires in the ACT

An appropriate independent review of bushfire operations would be consistent with the intent of Action 9.1 of SBMP4 and would examine the following aspects:

- the day by day development and strategic and operational responses to the bushfire;
- the effectiveness of initial suppression and subsequent indirect suppression operations;
- the effectiveness of aerial suppression operations; and
- the appropriateness of current bushfire preparedness strategies, including those related to broad area fuel reduction and fire access.

**Recommendation 2:**

That the ACT urgently engages appropriately qualified independent expertise to document and review the suppression strategies, responses and bushfire management lessons from the major 2020 bushfires in the ACT.

## 3 SEASONAL OUTLOOK AND PREPARATION

### 3.1 Seasonal Outlook

The seasonal bushfire outlook for Australia for September to November 2020 was released by AFAC in August<sup>7</sup>. In summary, this indicated that the outlook in eastern Australia is for a wetter than average spring as a La Niña event appeared likely. This was since declared and the current BOM outlook<sup>8</sup> in this area is for a summer that is wetter and warmer than usual.

In the ACT, the spring rainfall has been sufficient to remove the residual drought that could have posed a raised forest fire threat in the coming fire season. But there are very large areas of grassland to the west and north of Canberra, and in adjacent areas of NSW, and these are now carrying heavy fuel loads which will present significant grass fire risks to the ACT when they dry.

Nevertheless, Council repeats what was stated in the Introduction: “Canberra remains very vulnerable to bushfire from the west and north-west, which was not burnt in the recent fires. Even in a generally mild summer, a sudden hot and dry period can produce dangerous bushfire conditions.”

### 3.2 Seasonal Preparation

Due to above average rainfall over winter and autumn the declared 2020-21 fire season was delayed until 1 November 2020. The COVID-19 pandemic has not hindered preparation for the 2020-21 fire season and guidelines and protocols are already in place if ACT were to deploy interstate or need assistance from neighbouring jurisdictions.

As with previous years, ESA has established a seasonal bushfire preparedness project with targeted deliverables considered necessary to be appropriately prepared for the predicted bushfire season ahead. All portable radios will now be able to track the location of the user for personal safety. Aviation arrangements, including aircraft, start dates, rosters, training currency and arrangements with Canberra Airport for the retardant mixing plant are being confirmed. Staff have attended and contributed to several seasonal briefings and training days. All RFS vehicles will have been serviced, audits of all station equipment and land management keys completed, and the fire towers will be staffed by RFS personnel. An additional eight new roadside electronic fire danger signs have been installed, bringing the ACT total to 19.

The RFS membership has remained consistent and members are completing their fitness and maintaining currency of qualifications. RFS will also host an ACT-NSW Interagency cross board meeting (NSW RFS, NSW Parks, PCS, ACTF&R) and attend the regular NSW Bushfire Management Committee meeting. Incident Management team lists are being updated. Staging area and base camp arrangements are being reviewed and arrangements for RFS Remote Area Fire Teams confirmed. Community preparation and engagement activities are being delivered mostly via online campaigns co-ordinated by ESA media. The ESA Open Day this year will be a virtual event displaying all areas of ESA operations and expertise.

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<sup>7</sup> Hazard Note Issue 77, August 2020 – Bushfire Natural Hazards CRC, AFAC. <https://www.bnhcrc.com.au/hazardnotes/77>  
<sup>8</sup> <http://www.bom.gov.au/climate/outlooks/#/overview/summary>. November 5

The Environment, Planning and Sustainable Development Directorate (EPSDD) has also been preparing for the season ahead. Eighteen seasonal firefighters in the Parks and Conservation Service (PCS) within EPSDD commenced on 2 September 2019 and completed their training by the end of September. All fire staff have had their fitness for firefighting tasks assessed and must attend the forthcoming bushfire preparedness annual refresher days. All fire vehicles and equipment checks have been completed, and rosters are already in place for all firefighting staff, vehicles, Duty Officers and Level 1 Officers. The contracts for additional seasonal heavy plant (two D4 bulldozers and one grader) have been completed and the heavy tanker replacement, Parks 17, was commissioned in September 2020. The tanker displays indigenous artwork by a local artist.

An Incident Management Exercise (IMX) was held over two days in September. Council regards these as critical for developing skills in emergency management and, at this time of the year, assist in building a sense of urgency for the bushfire season ahead.

## 4 STRATEGIC PREPAREDNESS

This section follows the structure of the main objectives in SBMP4.

### 4.1 Objective 1 – Reducing Unplanned Ignitions

A key objective in SBMP4 is to reduce the number of unplanned ignitions. This includes planning for fires started by lightning strikes as well as those caused by people. Human causes include ignitions from arson (deliberately lit fires), carelessness (such as unextinguished campfires) and accidents (such as power line and infrastructure failure or damage, or ignition by vehicles or machinery).

In its Bushfire Preparedness 2019-20 report, Council raised its concern about arson attacks, particularly those involving stolen and abandoned vehicles, which appeared to be becoming more frequent. Council acknowledges that in addressing this concern, ESA and ACT Policing have been collaborating on two important initiatives:

- The Juvenile Fire Awareness and Intervention Program (JFAIP) seeks to reduce deliberately lit fires and juvenile arson recidivism. The program provides education and support to children identified as having the potential to commit fire offences. ESA advised that there has been no repeat offence committed by a child who has participated in the JFAIP.
- ACTF&R, RFS and ACT Policing, in accordance with an MOU between the ESA and the Australian Federal Police, investigate all fires within the built-up area to determine their cause and origin. The objective of investigations is to reduce unplanned ignitions (including arson) through the identification of patterns and trends, and through targeted education campaigns.
  - Investigations are provided to the ACT Coroners Court and reported annually to be included in the JACSD Report on Government Services.
  - Suspicious fires and arson are referred to ACT Policing for investigation.

ESA and TCCSD have also worked together on whole-of-government processes to improve the speed with which abandoned vehicles are identified and removed, especially in areas of high bushfire risk.

Some of the actions in the EPSDD BOP (SBMP4 Objectives 7 and 8) also mitigate the risk of unplanned ignitions, for example, slashing on roadsides. PCS also actively manages the risk of fires starting from camp sites through, for example, appropriate safety signage.

SBMP4 requires the electricity provider to make and maintain a Vegetation Management (Bushfire & Environmental Works) Plan for vegetation clearances from powerlines on unleased Territory land. The provider is now also responsible for vegetation management and the assessment of power pole condition and replacement of poles (including privately-owned poles) on rural land. The Technical Regulator audits the provider's compliance with the plan, which includes an investigation of

solutions to reduce bushfire risk posed by powerlines. In 2019-20, Evoenergy was found to be non-compliant with plan requirements and has worked with the Technical Regulator during 2020 to achieve improvements.

**Comment:**

Council commends the recent developments in mitigating against unplanned ignitions.

## 4.2 Objective 2 – Planned Fire Management on all Private Rural Lands

Fire protection on rural lands in the ACT is addressed by the RFS Farm FireWise program, which prioritises those properties within the Bushfire Abatement Zone (BAZ). The program supports and assists the rural community in its prevention, preparedness, response and recovery actions and capabilities. It provides for an RFS staff member and a rural land holder, in consultation, to jointly develop a tailor-made plan to suit the individual landholder, their leasing arrangements and farming practices.

There are 180 rural leases in the ACT; 80 are within the BAZ. A works schedule has been developed for implementation of the Farm FireWise program over the next five years including the review of existing plans. There is also a mechanism for self-reporting amendments to a Farm FireWise plan as landholder priorities change. Changing priorities are communicated to RFS brigades to assist with reducing risk to properties. Currently, 96% of rural landholders in the ACT have a Farm FireWise plan, comprising 75 properties within the BAZ and 98 outside the BAZ. The five properties within the BAZ that are without a plan will have one by the start of the 2020-21 bushfire season.

The 2019-20 bushfire season was the first season with significant impact to rural landholders since the FFW program began. A review of FFW templates and supporting legislation and policy has been undertaken in conjunction with ESA's Manager Legal to ensure continued success of the program. RFS is currently reviewing requirements of the landholders and ESA, taking into account any relevant recommendations from the Land Management Agreement review, ESA's Operational Review, the Legislative Assembly Review and the current Royal Commission Into National Natural Disaster Arrangements with a view to further strengthening the program.

While the participation of rural landholders as official members of RFS brigades has not increased, their participation throughout the 2019-20 fire season, especially in the Orroral Valley fire campaign, was significant. Many landholders in the vicinity of the Orroral Valley fire provided knowledge and information about their land and surrounds, how to best access it and where crews had the best chance on minimising the spread of fire. To build on the significant contribution of landholders' local area knowledge, RFS has encouraged brigades to visit the landholders in their brigade areas and encourage membership of brigades.

There has been an increase in landholders seeking assistance from RFS volunteers to undertake planned hazard reduction and agricultural burns on private rural lands. As of September 2020, RFS had planned three private landholder burns ranging from 5 to 36 ha, pending favourable weather. Over the past 12 months RFS has assisted private landholders with four hazard reduction burns, with a further two on TCCSD land at Birrigai and Suburban Land Agency land at Glenloch.

Due to the impact of COVID-19 restrictions, RFS proposes to produce short videos to inform landholders about the outlook for the fire season and how to update their Farm FireWise plan to be published leading into the 2020-21 fire season.

**Comment:**

Council is very satisfied with the progress of the Farm FireWise Program, and with the commencement, completion and review of Farm FireWise plans.

### 4.3 Objective 3 – A Community that is Prepared for Bushfires

During the 2019-20 bushfire season, ESA was highly active in community engagement. A total of 7464 houses and 16 multi-unit complexes were doorknocked, and 153 vulnerable people were identified. Two community meetings were held at each of Tharwa, Uriarra and Lanyon, and at ‘pop-ups’ at eight different shopping centres, where an estimated 18,000 bushfire survival plans were handed out. The online presence of ESA appears to have been well received with thousands of ‘hits’, and a total of \$43,000 was spent on advertising in cinemas and various media. ESA warnings and alerts issued during the period 27 December 2019 to 27 February 2020 included (for fire) 50 emergency alerts, 55 ‘watch and act’ alerts, and 49 advices.

Following the bushfires, the ACT Government conducted a community survey of 823 people to evaluate the reach and effectiveness of its communications messaging in the lead up to, and during, the bushfire emergency of January 2020 in, and adjacent to, the ACT. The results were weighted to reflect relative population proportions. Of those surveyed, 98% had been aware that the ACT had been in a state of emergency or on alert due to the bushfire situation in and near our border, and 93% felt well-informed. 78% had made some preparation to make their home safer, and 99% had done at least one thing to improve their personal safety. 89% knew what they would do if a bushfire threatened, and 50% had a written or prepared bushfire survival plan.

A project to replace the remaining manual Fire Danger Rating (FDR) signs has been completed. All signs are now LED displays with the message panel for displaying the FDR as text, or additional text for Total Fire Bans. These signs are automatically updated just after midnight with the forecast FDR for the day. This enables consistent messaging on all signs and avoids the misinformation that occurred when manual signs could not be simultaneously updated. RFS Duty Officers can change displays or messaging via a mobile phone application. The signs will be activated at the start of the bushfire season on 1 November 2020.

**Comment:**

Council notes that the abbreviation “TOBAN” is not well understood in the broader community as meaning “total fire ban”. The full text is preferred.

The RFS team has recently engaged with several embassies who requested bushfire awareness information and preparation strategies. The focus included providing them with knowledge of the alerts and messaging. There was also a focus on having staff consider their own homes and how their lifestyle would be impacted by bushfire. The presentations were well received, and feedback was very constructive.

In addition to engagement with embassies, a partnership has been being developed with Mingle, within the Suburban Land Agency. This has involved working with communities that are in the

bushfire prone area to aid understanding of bushfire preparedness activities. It is an ongoing project and a valuable partnership coming into the bushfire season.

The impact of COVID-19 has meant that much of the community education campaign has had to be changed to comply with social distancing requirements. Key projects include: reviewing the bushfire survival plan; developing a new bushfire awareness campaign; upgrading the ESA Media Room; updating the Bush and Grass Fire Messaging Protocol; accrediting more ACT Public Information Officers; developing a new media accreditation package and developing a bushfire warnings application for the ACT similar to the NSW Fires Near Me application.

Key community engagement changes since Council's last report include a review of the ACT bushfire warnings templates, an upgrade of the ESA website, and increased use of social media. ESA has steadily increased the use of digital platforms to engage with the community as well as to complement face-to-face engagement. ESA has also maintained MOUs with all media partners, and they were all re-signed in the 2019-20 financial year.

**Comment**

Despite some problems with mobile phone text alerts and a lack of continuity of bushfire maps during the 2019-20 bushfire season, Council is satisfied with the community awareness program and applauds the March 2020 bushfire preparedness survey that assessed the effectiveness of community engagement activities. The community's use of the various social media information sources during the fires was also good.

**Recommendation 3:**

That ESA adopts a longitudinal approach to evaluation of community education activities to ascertain their effectiveness over time – whether they cause a lasting change in community behaviour.

**Recommendation 4:**

That future bushfire emergency maps in the ACT include a scale and topographic contours, and an indication of which parts of the burnt area are actively burning.

#### 4.4 Objective 4 – Effective Firefighting Operations by Skilled and Supported Personnel

The types and numbers of plant and firefighting, incident management and support personnel required to adequately protect the ACT from bushfire are determined by considering what would be needed to mount the initial attack on three scenarios of contrasting combinations of fires. These scenarios are described in the ACT Bushfire Strategic Capability Statement. Briefly, Scenario 1 is of the type and magnitude of the Christmas 2001 bushfires (Stromlo); Scenario 2 involves multiple remote fires requiring specialist RAFT teams and aerial firefighting; and Scenario 3 is multiple fires in extreme conditions, similar to the 2003 fires.

Current firefighting capacity in the ACT is about 400 volunteers and 15 staff in RFS, 200 firefighters including seasonal firefighters, incident controllers and fire behaviour analysts in EPSDD, and 340 firefighters in ACTF&R. They are supported by some 40 mapping and planning volunteers in ESA and 850 CFU volunteers in ACTF&R. Additional staff in ESA and EPSDD provide essential support in emergencies. The number of volunteers in RFS is nearly at capacity with a great deal of interest being expressed in joining the service after the 2019-20 season.

Along with the plant and equipment described below [4.4], this gives the ACT the capacity to be able to appropriately mount an *initial* attack on any of the three scenarios described. Whether the attack can be sustained depends on subsequent conditions and the number of shifts required. The Capability Statement refers to the need to depend on resources from outside the ACT in conditions when fires extend over many shifts. As the 2020 bushfires revealed, little of this assistance was available, and the ESA Operational Review identified that fatigue and the need to draw on less well-trained staff was a significant issue. This is an important lesson for the ACT.

**Recommendation 5:**

That the Capability Statement be reviewed as a component of Action 9.6 of SBMP4 to take into account a reducing capacity to rely on interstate assistance as the warming climate produces more widespread extreme bushfires.

Council has previously advised that the morale at some volunteer brigades is low, and that the relationship with some brigades and the RFSHQ has been strained at times. After some positive progress, these relationships and the morale of volunteers appear to have deteriorated significantly during the last bushfire season. Some volunteers publicly stated that they were not given the opportunity to contribute to the response to the Orroral Valley fire and the use of resources was not appropriate to the situation. These issues and others were raised during the conduct of the Orroral Valley fire ESA Operational Review. The review report was, however, relatively silent on these matters, which may cause further erosion of volunteer morale.

Council believes that the low morale of volunteers and the relationship with RFSHQ is a significant concern. Council is concerned that there are several significant issues raised by volunteers in the ESA Operational Review and in the ACT Assembly Committee Inquiry process, which have not been resolved and are contributing to the ongoing low morale of volunteers. At the time of this report, Council has not been advised of any measures planned or in place to address this issue.

**Recommendation 6:**

That an independent review be conducted to consider issues including, but not limited to: the role of ACT volunteer firefighters; the means by which ACT volunteer firefighters are represented and consulted; the effectiveness of communication between volunteer brigades and RFSHQ; and how best to utilise volunteer firefighter skills and experience in the ACT's unique operational environment.

Access to training for operational bushfire fighting personnel has been a strength of RFS and PCS despite COVID-19 related challenges. Council notes with approval that RFS plans to conduct a second recruitment course for volunteers this year.

Council has for some time been concerned about the number, and experience, of personnel available to support Incident Management Teams (IMT). While the number of people available to support IMTs is sufficient, Council believes that these teams would benefit from having more

bushfire management experience. This would help to ensure that the commitment of resources during large scale bushfires best reflects the risk posed by the potential behaviour of a fire.

**Recommendation 7:**

That a greater proportion of RFS and PCS personnel undertake IMT training so that they can effectively undertake significant fire management roles.

Council welcomes the recent increases in staff positions at ESA. The addition of roles, which include a Deputy Commissioner and RFS Planning Officer, represent increases in well-resourced teams. Council notes that the key position of the RFS Chief Officer has recently been advertised. This position contributes significantly to the bushfire preparedness of the ACT, and Council is of the view that priority should be given to the recruitment of a person with significant proven experience in the management of large forest-based bushfires as well as effective management of volunteers.

#### 4.5 Objective 5 – The Necessary Equipment and Resources to Respond to and Extinguish Bushfires

The ACT's bushfire response capability includes heavy tankers, compressed air foam tankers, medium tankers, light units, contracted helicopters, fire spotting towers, and heavy earth moving equipment for use in the upcoming bushfire season. The ACT also has access to helicopters and the large air tankers through the National Aerial Firefighting Centre (NAFC).

RFS maintains 13 light units, 15 medium units, 25 heavy tankers, 1 bulk water truck, 18 command units, 6 portable pump trailers and 1 fire retardant batching trailer. This equipment is distributed between the various volunteer brigades within the ACT. The (NAFC) makes available 2 medium helicopters with winching and water bombing capabilities and a smaller helicopter with specialist intelligence gathering equipment based at Hume helipad throughout the season. RFS has access to two bulldozers and a grader, through its MoU with EPSDD. A large air tanker mixing plant is based at the Canberra Airport to service the large air tankers working in the area. RFS also has several trailers set up to support the volunteer remote area firefighting teams.

PCS has access to six heavy tankers, three medium tankers, seven light units and eight command vehicles. It also maintains buoy wall tank trailers to support water bombing activities in remote areas, quick fill pump trailers, a trailer set up with sprinklers for asset protection in non-urban areas and a remote area support trailer.

ACTF&R's capability to respond to bush and grass fires includes four compressed air foam tankers, three water tankers, three light units and command vehicles for deployment as required. In addition, there are 14 pumpers that can be used for structure protection as needed. ACTF&R also operates several PODs (Platform on Demand assets – shipping containers converted for a special function) that can be used for incident control, welfare, decontamination and other uses in a bushfire event. ACTF&R also oversees the 50 community fire units located around the urban edge and operated by volunteers.

Several vehicle replacements are planned for the 2020-21 period and with all these resources available and cross-border arrangements in place, Council considers that the ACT is sufficiently equipped for the upcoming fire season.

## 4.6 Objective 6 – Extinguish Bushfires when they Occur

Early detection of bushfires is essential to ensure rapid suppression. After detection, a quick response to bushfires by firefighting units is important for maximising the chances of extinguishing the fire while it is still relatively small. The staging of PCS units in different parts of the ACT based on fire danger risk; the ready availability of ACTF&R units; and established practices to activate volunteer brigades at short notice, are a diligent approach to ensure rapid suppression. ESA reports that, with the collaboration of PCS and ACTF&R, response timeframes and containment targets were met last season, except for the Orroral Valley fire. Response data will continue to be reviewed by ESA at the end of each bushfire season.

If a fire is not contained within target times and weather conditions cause its rapid spread, the strategies used to fight the fire are critical. Once an Incident Management Team is formed for a bushfire, its performance is crucial. Council has regularly stressed the importance of IMTs being led by an experienced bushfire firefighter and has regularly asked about the bushfire management experience of personnel with IMT qualifications. This information has not usually been supplied and Council remained concerned about the capability to operate a full IMT “for the first two shifts” (as in Action 6.3 in SBMP4). In response to this, the ESA advises that it proposes to review IMT capability and preparedness prior to the 2020-21 bushfire season and will maintain an IMT qualification register.

Other IMT issues identified in the ESA Operational Review<sup>9</sup>(p.41) acknowledged the need for better coordination within the IMT during critical periods of time, concluding that:

“these shortcomings in IMT operations were likely caused as much by relative lack of experience in Level 3 multi-hazard emergency responses ..... 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 ... 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.”

Remote area firefighting (RAF) teams are an important strategy for reaching remote fires quickly (Action 6.4 of SBMP4). Council notes that, leading into the 2020/2021 season, ESA intends to emphasise the provision of more opportunities for training and qualification of Remote Area Firefighting Teams. Deployment of teams was limited in the last bushfire season due to the size and behaviour of the fires.

Further, it is evident from the apparent under-utilisation of some volunteer brigades in the 2019-20 bushfires that there may be some longer-term benefit in reviewing the way in which volunteer firefighters are trained, located and deployed. If available personnel are not required to perform ‘boots on the ground’ roles they should have the ability, and an opportunity, to contribute in other ways.

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<sup>9</sup> ESA Operational Review of the Bushfire Season 2019-20

**Comment:**

Given the difficulties recently experienced in achieving rapid bushfire suppression in the Orroral Valley fire in 2019-20, finalisation of the proposed review of IMT capability should be given priority.

**Recommendation 8:**

That the response to major bushfires should always be directed by someone with significant bushfire fighting experience.

#### **4.7 Objective 7 – Broad Area Bushfire Fuel Reduction Across the Natural and Rural Landscape of the ACT, &**

#### **4.8 Objective 8 – Access for Vehicles and Firefighters to Undertake Bushfire Fighting and Fuel Reduction**

Firstly, Bushfire Council welcomes the establishment of the Duhawara Ngunnawal Committee and commends PCS for facilitating this initiative. Under Action 7.7 in SBMP4, agencies are to 'recognise and use the cultural expertise of traditional custodians in the sustainable management of country'. In Council's opinion, the Duhawara Ngunnawal Committee is a significant step in fulfilling the intent of this important Action. Council looks forward to monitoring increased application of cultural burning within the PCS burning program, under the guidance of this new Committee.

The EPSDD BOP covers the majority of public land where fire management activities are conducted, and Council has a specified role in advising the Commissioner on the proposed EPSDD BOP and also receives quarterly reports on its implementation. The ACT Parks and Conservation Service (PCS) has a strong overall record of achievement of its planned fire management activities, although the actual level of prescribed burning achieved each year varies according to the prevailing weather conditions and other factors.

Council has not been regularly consulted on the proposed BOPs for other land owners, despite its term of reference that states "ESA will present BOPs from other land managers for consideration by Council". Nor is Council regularly briefed on their implementation. Council encourages a tenure-blind approach to mitigating bushfire risk across ACT as a whole and will next year request that BOPs from other land managers be also presented to Council.

In 2019-20, PCS achieved 89.6% of the overall planned BOP actions. Details and comparisons with the previous four years are in Table 1.

PCS completed most of its planned fuel management activities, which includes grazing, slashing, physical removal of fuel, chemical treatment and prescribed burning. Due to constraints related to the Orroral Valley bushfire and the COVID-19 pandemic, only 80% of the planned physical removal activities and 72% of the planned burning activities were completed. The 2019-20 EPSDD BOP identified 35 burns, totalling 7,287 hectares. Only seven of the planned burns were completed

TABLE 1 – Achievements under EPSDD BOPs over the past 5 years

ACTIVITY	2015-16		2016-17		2017-18		2018-19		2019-20	
<b>Fuel management</b>	Area (ha)	Completion (%) <sup>†</sup>	Area (ha)	Completion (%) <sup>†</sup>	Area (ha)	Completion (%) <sup>†</sup>	Area (ha)	Completion (%) <sup>†</sup>	Area (ha)	Completion (%) <sup>†</sup>
Grazing	6044	100	6041	100	6041	100	5672	100	5588	100
Physical removal	397	86	550	99	312	75	456	67	761	80
Prescribed burning	49/54 burns	91	9/24 burns	37	37/45 burns	82	25/41 burns	61	9/35 burns	26
	6663/6781 ha	98	504/7379 ha	7	2004/8259 ha	24	5082/6465 ha	79	5289/7298 ha	72
RFS burns	7/8 burns	88	1/6 burns	17	4/7 burns	57	0/3 burns	0	Nil RFS burns in 19/20	Nil RFS burns in 19/20
	143/148 ha	97	50/107 ha	47	45/55 ha	82	0/91 ha	0		
Slashing	5511	100	4733	100	4705	100	4502	100	4473	100
Chemical application	56	100	154	100	372	58	132	100	153/153 ha 135/217 km	100 62
<b>Access management</b>	Length (km)	Completion (%)	Length (km)	Completion (%)	Length (km)	Completion (%)	Length (km)	Completion (%)	Length (km)	Completion (%)
Routine fire trail maintenance	120/169	71	258/272	95	206	99	229	85	53	35
Vegetation management	224/324	70	179/202	89	273	100	58	50	204	94
Upgrading trails	1/73	1	2/2	100	35	97	0.5	1	44	92
<b>Infrastructure</b>	Projects	Completion (%)	Projects	Completion (%)	Projects	Completion (%)	Projects	Completion (%)	Projects	Completion (%)
Signposting, fencing etc.	16	89	19	95	15	100	14	100	11	79
<b>Training</b>	Courses	Completion (%)	Courses	Completion (%)	Courses	Completion (%)	Courses	Completion (%)	Courses	Completion (%)
TAMS personnel	73	65	88	88	62	90	66	97	64	91
<b>Audit &amp; monitoring</b>	Activities	Completion (%)	Activities	Completion (%)	Activities	Completion (%)	Activities	Completion (%)	Activities	Completion (%)
Audit activities	20	100	25	96	23	91	22	96	21	95

covering an area of 444 hectares; however, a further 4844 hectares of two planned burns in southern Namadgi National Park were burnt in the Orroral Valley bushfire, thereby achieving the fuel management treatment. No planned prescribed burning, other than removal of pine debris heaps at Pierces Creek, could be achieved in the autumn of 2020 due to COVID-19 restrictions. This meant that 26 planned burns were not achieved, of which 10 burns covering 1,820 hectares were for fuel management purposes. In this past year, no prescribed burns from the EPSDD BOP were allocated to RFS volunteer brigades, due to low levels of achievement in previous years.

The ability to complete the planned road maintenance activities was significantly affected by redeployment of PCS crews to bushfire recovery activities and by COVID-19 restrictions. Only 35% of the planned road maintenance was achieved, with 53km of the planned 153km treated. However, most (204km of 216km) of the planned roadside vegetation control activities, and 44km of the planned 48 km of road construction activities were completed.

Overall, Council considers that the status of fire preparedness on EPSDD-controlled public land is generally acceptable in the lead-up to the 2020-21 bushfire season. However, recent risk analysis modelling undertaken by PCS shows that the level of residual risk associated with public land north of the 2020 Orroral Valley bushfire has increased from last year and it is therefore imperative that fuel management and access activities planned in the 2020-21 BOP are implemented, particularly the outstanding planned prescribed burns. In addition, Council considers that there are significant issues associated with fuel levels on Blackies Hill, west of Denman Prospect, and in the northern end of the Bullen Range. This advice was provided to the ESA Commissioner during the approval process for the 2020-21 EPSDD BOP.

Council has identified four issues of concern related to fuel management and access, three of which were previously raised in Council's 2019 preparedness report and remain either unresolved or partially addressed. The fourth issue was raised in Council's 2017 report but has not yet been adequately addressed.

Council is now very concerned about the ongoing delays in implementing a strategic burn in the Pipeline Track area (FB092) within Namadgi National Park. This proposed burn, which has been scheduled but not implemented in the past four EPSDD BOPs, covers 1251 hectares and addresses a critical fuel risk in the relevant Strategic Firefighting Advantage Zone. Given its strategic importance, Council considers that this burn must be given priority for implementation in autumn 2021.

**Recommendation 9:**

That the long-planned prescribed burn (FB092) in the Pipeline Track area be given highest priority for implementation in Autumn of 2021 and that any further non-weather related impediments to the implementation of this burn be resolved by the end of January 2021.

As with last year, Council has not been given access to the results from the ESA site audits of the PCS 2019-20 prescribed burning program. This means that Council is not able to provide definitive advice on the effectiveness of the prescribed burning program.

**Recommendation 10:**

That ESA ensures that the results of annual field audits of fuel management and road access activities completed by PCS are provided to Bushfire Council by the end of August each year, to inform Council's annual report to the Minister.

Council has for some years been concerned about the adequacy of fire protection for new suburbs on the western and northern sides of the city. Recent risk modelling work undertaken by PCS at Council's request, shows that bushfires under catastrophic conditions would result in some existing Denman Prospect houses being destroyed and that these risks increase in the currently undeveloped areas to the west and north of Stage 1.

**Comment:**

Council is very concerned about the bushfire risks for the new suburb of Denman Prospect and its inability to obtain factual information about the agreed application of fire protection standards and forest thinning treatments within and adjacent to the planned development zones at Denman Prospect.

**Recommendation 11:**

That the Minister confirms that all development at Denman Prospect will meet or exceed the ACT's Fire Management Standards and arranges for Council to be briefed on the specific details of Asset Protection Zones and Edge Roads as well as for the agreed hazard mitigation for the red stringybark forest around Blackies Hill.

Finally, Council remains concerned about its inability to understand whether there are any significant bushfire risks to Canberra on lands that are not covered by the EPSDD BOP and that may not be adequately treated. This includes public land managed by the Suburban Land Agency within CMTEDD, ACT Health and JACSD, for which current BOPs have not been presented. It also includes leased land within the Bushfire Abatement Zone that are subject to Farm Firewise Plans, as there is currently no equivalent overarching strategic risk analysis for these rural properties.

**Recommendation 12:**

That ESA undertakes a comprehensive analysis of all land management BOPs within the ACT to assess the existing risks and adequacy of planned treatments and presents the results to the Bushfire Council by August 2021.

## 4.9 Objective 9 – Adaptive Management of Current and Future Bushfire Risks

One of the impacts of climate change is the increasing risk of more severe bushfires in countries like Australia. Set in a bushfire-prone landscape, the ACT is particularly exposed to this increasing risk. In response, SBMP4 sets out a clear process of continuous improvement based on sound research, modelling, monitoring, evaluation and pro-active modification of actions to mitigate or suppress bushfire. However, because staff were occupied during the 2019-20 bushfire season with bushfires in Queensland and NSW and then with the massive Orroral Valley fire in the ACT, which

was quickly followed by the impacts of COVID-19, the ability of ESA to progress its actions in this objective of SBMP4 has been hampered. Additional resources are now being allocated to this objective.

Nevertheless, two areas of research and monitoring have provided useful results. The Orroral Valley fire provided an opportunity to evaluate the impact of prescribed burns in recent years on the progress of the 2020 bushfire. Preliminary results of an analysis by PCS with the ANU indicate that prescribed burns conducted in Namadgi National Park in the previous two to seven years had a measurable impact on slowing down the intensity and rate of spread of the fire. Key conclusions were that prescribed burns less than two years old had a marked impact on reducing the spread of bushfire; burns between two and four years old reduced the severity of the bushfire, while those older than four years had significantly less impact. The impact of prescribed burning was not restricted to the area burnt. Bushfire severity was also reduced in areas adjacent to previous hazard reduction burns. Results from this work will influence the Regional Fire Management Plan, currently under development, and the EPSDD BOP from 2021 forwards.

The Conservation Research Branch within EPSDD conducts research focussing on the ecological impacts of prescribed burning in riparian zones and in forests and woodlands. The results of four years of riparian zone monitoring after burns will be published in a draft technical report Aquatic and Riparian Ecosystem Condition Monitoring Plan on the EPSDD web page later this year. Some other study sites were burnt in the Orroral Valley fire and their future is currently being re-evaluated.

Action 9.8 in this Objective refers to developing a governance plan to monitor delivery of all the actions in SBMP4. Council notes the formal establishment of the SBMP Governance Committee and a comprehensive database to support its work.

However, Council notes the paucity of progress in actions in this Objective in the last year, and in particular the absence of planned work on: 1) understanding the impacts of climate change in the ACT; and 2) exploring options for better meeting the increased bushfire risk.

#### **4.10 Objective 10 – Land Use Policy and Planning that Reduces Bushfire Risk, &**

#### **4.11 Objective 11 – Integrated Bushfire Protection at the Urban Edge**

Action 11.4 of SBMP4 states “New or substantially altered residential properties in the BPA must apply the bushfire related construction requirements in the *Building Code of Australia*.”

There are two issues of concern to Council relating to the application of bushfire related construction standards in bushfire prone areas. The first and most important one relates to the ACT Government decision in December 2018, when it was agreed to apply bushfire-related construction requirements to all residential dwellings in the Bushfire Prone Area (BPA), including dwellings on the urban fringe that are not currently subject to those requirements. It is now almost two years since this decision was taken, yet it has still not been implemented. Council is perplexed that it is unable to establish when this change will be implemented.

The second issue relates to the currency of the bushfire construction standards that apply to buildings in new bushfire prone areas. The current applicable national standard is the National

Construction Code (NCC), which came into effect on 1 May 2019. It references AS3959:2018, a standard updated from the 2009 version addressing “Construction of Buildings in Bushfire Prone Areas”. The NCC is adopted in the ACT through the *Building Act 2004* in which development within the ACT’s Bushfire Prone Areas is required to meet the provisions of the NCC and, therefore, AS3959.2018. The current ACT Government document that provides guidance to builders still shows that the applicable standard is AS3959.2009<sup>10</sup>. The reason for Council’s concern is that the expected life of new residential buildings reaches well beyond the years that will see the full impact of climate change, even with optimistic projections of reducing carbon emissions.

**Recommendation 13:**

That the ACT Government-agreed decision to apply bushfire-related construction requirements to all residential dwellings in bushfire prone areas be implemented urgently.

**Recommendation 14:**

That guidance to builders be updated to reflect the latest version of the relevant standard, AS3959:2018.

Other planning issues that are included as actions in SBMP4 are listed below.

EPSSD is working on scoping the review of the bushfire general code in the Territory Plan (Action 10.2) this financial year and will be working on the documentation. The review will be done in consultation with ESA. Council will be advised on the timeframe for delivery in due course.

The fourth Annual Planning Forum (Action 10.7) is to be held later in 2020. This provides an opportunity for ACT Directorates, Utility representatives and private stakeholders to discuss plans and opportunities for works that may affect or compromise bushfire mitigation works. It is unfortunate that this forum has been delayed, as holding the Forum before the bushfire season would normally be desirable.

Council notes that National Land (Action 10.9) data has now been included in the ACT bushfire management tenure blind map.

**Comment:**

Work is still required to improve links to currency of bushfire management plans on National Land. This will be completed once the current bushfire management zone mapping project is completed in October.

A range of measures is used to achieve integrated bushfire risk reduction on the urban edge, including development planning, physical works, community education and inspection. BOPs describe the Asset Protection Zones, which are crucial to the protection of property and infrastructure at the urban edge. These are discussed in more detail under Objective 8.

Actions 11.5-11.7 apply to new developments. Under the *Planning for Bushfire Risk Minimisation Code*, adopted in March 2008, a bushfire risk assessment is required at the Structure Planning or Concept Planning stage for any land development mapped as being “bushfire prone”. This

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<sup>10</sup> Requirements for building approvals in bushfire prone areas. Certification Note 1601. Access Canberra. 31/10/2020

assessment and its recommendations are required to be endorsed by ACTPLA, ESA and any other relevant agency.

ESA works closely with the Land Strategy and Planning staff within EPSDD in providing advice on development applications (DAs). For example, ACTF&R provides advice on emergency appliance access, water supplies and street furniture & landscaping. Certain identified development (be it greenfield, estate development or infill development) within the Bushfire Prone Area triggers further assessment and the provision of advice by the RFS in relation to bushfire protective measures, such as construction requirements, asset protection zones, water supply, emergency vehicle access and landscaping. In 2019, ESA commented on approximately 252 DAs, with individual services' comments being collated into one response. In all cases, ESA's advice was followed, and recommended conditions were included in any approvals granted.

**Comment:**

It has been adequately demonstrated to Council that appropriate referral processes are in place between the ESA and ACTPLA for development in bushfire prone areas.

However, as development proceeds in stages, Council has reservations about the adequacy of protection at each stage. Following its concerns expressed last year about fire risk to the second stage of Denman Prospect, Council requested PCS to use its Phoenix Rapidfire modelling capacity to evaluate the risk of bushfire entering the suburb. Following a presentation on the possible outcomes based on this model, Council maintains its strong concern about the appropriateness and adequacy of bushfire protection measures for the new suburb of Denman Prospect and in particular, that multiple existing houses at Denman Prospect could be destroyed in the event of a bushfire under catastrophic conditions. The modelling also showed that other development areas around Denman Prospect would also be subject to significant ember attack under the same conditions. Staged developments on the northern edge of Gungahlin could also be vulnerable.

**Recommendation 15:**

That funding be provided in 2020-21 for an independent assessment of bushfire risks to all urban and proposed urban areas on the western and northern sides of Canberra.

## 4.12 Objective 12 – Supported Communities for Bushfire Recovery

The 2019 ACT Recovery Sub Plan supports the ACT Emergency Plan and incorporates the Community, Infrastructure, Environmental and Economic recovery annexures. Development of the plan is led by JACSD.

On review, Council is satisfied the targeted, bushfire-related recovery actions under SBMP4 are aligned with broader, whole-of-government arrangements for recovery under the Recovery Sub Plan. Objective 12 in SBMP4 identifies the social, economic and environment aspects of recovery and Action 12.2 specifically references the ACT Recovery Plan. SBMP4 also sets out two explicit actions dealing with the operations of recovery:

- 12.1: providing targeted support to bushfire affected communities, including rapid damage assessment and to assist them to re-build and in doing so, strengthen future resilience, and

- 12.4: providing continued support to the rapid environmental risk assessment through the Burned Area Assessment Teams.

The recovery from the 2019-20 bushfires has provided an opportunity to assess the effectiveness of SBMP4 and the Recovery Sub Plan, and to identify any potential issues or concerns as the 2020-21 bushfire season approaches. In recognition of the work undertaken after the 2019-20 bushfires, Council notes:

- EPSDD has well-established and well-practised programs for environmental and heritage recovery. The Directorate clearly articulated the risk and significant scope of work being undertaken; that will need to continue in future years. Program governance and delivery is well defined, and priorities are appropriately determined.
- The response by JACSD was immediate and effective, activating the Social Recovery Committee and evacuation guidelines.
- Disaster Recovery Funding Arrangements were activated, with concessional loans totalling \$633,000 approved. Sound governance was employed by contracting the Queensland

Rural Investment & Development Authority to administer the loans and establish a dedicated recovery support position.

Council has, however, noted some common concerns across the reports and identifies three key areas where there are opportunities for improvement as the ACT prepares for the 2020-21 bushfire season:

- engagement with rural landholders
- activation of recovery processes, and
- support for recovery planning.

Findings from the Coordination Report included:

“[the] Rural Landholders Association 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.”

In reviewing the structure, liaison and implementation actions outlined by EPSDD, its association with rural landholders is not clearly established. Many rural landholders are neighbours to national parks, and all have a Land Management Agreement overseen by EPSDD.

Council acknowledges that briefings provided by EPSDD focused on environmental and heritage recovery. However, EPSDD has a critical role not only in managing the relationship between National Parks and rural lands, but also in policy and operational roles in relation to rural leases. It was not apparent in the information provided how rural landholders who border national parks, or who were affected by the 2019-20 bushfires, should engage with public land managers or rural liaison officers.

The information provided by JACSD further highlighted these concerns, identifying the need for ongoing engagement with bushfire-affected rural individuals and businesses about recovery grants.

**Recommendation 16:**

That all relevant agencies clarify their responsibility for post-fire recovery for rural landholders in the ACT and address any critical outstanding issues arising from the 2020 fires. It is suggested the Rural Landholders Association be involved in these discussions.

The ESA Operational Review commented that:

“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”.

The Coordination Report commented that:

“There is a lack of clarity within the Act and Plan around recovery operations (initial and longer term) and responsible and accountable agencies. .... and Agencies have indicated that Recovery sub-plans have been activated but without the overarching mechanisms in place”

Council understands that neither the Recovery Coordinator nor the Taskforce was appointed. While individual agencies have effectively undertaken their role in recovery, it is Council’s view that the Recovery Coordinator role is critical in providing clarity during the transition from initial to ongoing recovery, as well as ensuring all aspects of recovery are addressed and coordinated.

**Recommendation 17:**

That priority be given to recommendation 33 of the Coordination Report which addresses the handover arrangements for short term and longer term recovery and ensures that protocols are in place for the appointment of a Recovery Coordinator for all Level 3 bushfire incidents and for Level 2 incidents when appropriate.

Action 12.3 in SBMP4 directs agencies to “identify lessons learned through the recovery process in the ACT and from other jurisdictions and use them to inform managers of future recovery processes.” Council notes that in the *Final Report of the NSW Bushfire Inquiry* published on 31 July 2020, item 5.10.1.6 (pp. 379-80) highlights that “Aboriginal peoples were not well-supported during evacuation in some communities”. We also draw attention to Recommendation 72 in the report.

Council notes that in the ACT the Indigenous population continues to steadily increase, both in numbers and as a proportion of the population. We also note the fact that the highest proportion of Indigenous people in the ACT live in the regions of Belconnen and Tuggeranong (see *ACT Aboriginal and Torres Strait Islander Population: A Demographic Analysis*) which have higher threat of impacts from large bushfires. In noting these observations, and being cognisant of the observations outlined in the NSW Inquiry, Council believes that a specific relief and recovery strategy be developed, responding to the needs of Indigenous peoples in the ACT to ensure that, in the event of a large bushfire, they are supported in a culturally safe and proper manner.

**Recommendation 18:**

That an Indigenous relief and recovery strategy be developed in consultation with relevant Indigenous bodies including the Aboriginal and Torres Strait Islander Elected Body and the United Ngunnawal Elders Council.

Regarding long-term recovery, JACSD also highlighted the value of having a policy support or planning officer role. Council sees the value of this role in the broader coordination of recovery arrangements, access to agencies and the fine-tuning of existing frameworks.

**Comment:**

Recovery is a fundamental component of the emergency framework and it is important to ensure that adequate and ongoing planning and policy capability is supported.

In reviewing recovery after the 2019-20 bushfires, Council has reflected on the key findings of the Bushfire Recovery Taskforce established after the 2003 fires (Box 1, p 196, McLeod report<sup>11</sup>). Council observes that all these findings have been addressed in one form or another since then, with the broadening of the recovery framework, the development of the Infrastructure Recovery Annex, clearer cross-government liaison and leadership, the development of financial recovery arrangements, the Elevated Fire Danger Plan and better communications technology. However, over time, there can be changes in circumstances and there is a need for ongoing review and testing of recovery arrangements.

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<sup>11</sup> McLeod, R. (2003) Inquiry into the Operational Response to the January 2003 Bushfires in the ACT

## 5 LAST YEAR'S RECOMMENDATIONS AND STATUS OF GOVERNMENT RESPONSES

This table sets out Council's recommendations in its *Bushfire Season Preparedness (2019-20)* Report, the Minister's responses to those recommendations and the status of progress against those recommendations at the time this report is prepared.

**Comment:**

Council is satisfied that its recommendations in last year's report have largely been agreed and will review the progress of incomplete and ongoing actions in next year's report.

BFC Recommendations 2019-20 (24 October 2019)	Minister's response (18 April 2020, revised 4 August 2020)	Status (October 2020)
1. That the ACT Government speed up the rate of its planning and implementation of measures to proactively adapt to the altering climate. (SBMP Objective 9)	<b>Agreed-in-principle</b>	<b>Ongoing.</b> The Minister advised that "the ACT Government is focusing on and undertaking extensive work in the area of fire and climate change. This is a complex area and whilst the work is a crucially important factor as we adapt to a changing climate, it is currently being undertaken as fast as possible."
2. That additional, dedicated resources be applied to Actions 9.5, 9.6 and 9.7 of SBMP4 with a view to completing the reviews and modifications of strategies and forward actions within the next two years. (SBMP Objective 9)	<b>Agreed-in-principle</b>	<b>Incomplete.</b> The Minister advised that "the addition of sufficient resources to achieve this will require Whole of Government support and coordination. This may not be achievable within the timeframe specified in the recommendation."
3. That a set of performance indicators (benchmarks) for determining success in mitigating bushfire impact in the ACT be established, tracked annually and reported against the completion of successive SBMPs. (SBMP Objective 9)	<b>Agreed-in-principle</b>	<b>Partially complete.</b> ESA has existing performance measures which utilise AIIRS Data (nationally recognised and categorised) and reported through Cabinet. EPSDD currently utilises several performance indicators to measure bushfire risk and the impact that preparedness has on this risk. These indicators have been developed in discussions with Council and will continue to be adapted and improved based on feedback and discussion. The use of measuring 'residual risk' after treatment has already been agreed between EPSDD and BFC and will form a future indicator which is currently being developed and costed.
4. That efforts continue to understand and address why volunteers discontinue their service.	<b>Agreed</b>	<b>Incomplete, ongoing.</b> Measures employed by ESA include:

<b>BFC Recommendations 2019-20</b> <b>(24 October 2019)</b>	<b>Minister's response</b> <b>(18 April 2020,</b> <b>revised</b> <b>4 August 2020)</b>	<b>Status</b> <b>(October 2020)</b>
(SBMP Objective 4)		<ol style="list-style-type: none"> <li>1. exit surveys for departing volunteers</li> <li>2. a recognition plan for employers</li> <li>3. diverse recruitment practices</li> <li>4. workforce planning via AFAC</li> <li>5. involvement in prescribed burns to develop skills</li> </ol>
5. That ESA and the relevant land managers urgently review the risks to urban assets in Denman Prospect and take immediate action to reduce those risks. (SBMP Objectives 7 & 10)	<b>Agreed</b>	<b>Partially complete.</b> The specific concern raised prior to 19-20 bushfire season (adequacy of temporary buffer zone west of Stage 1) was addressed by early January. The broader concern about the adequacy of fire protection for the whole of Denman Prospect, remains current.
6. That the ACT Government conducts a review of the adequacy of the budget allocated to PCS for fire management activities, taking into account cost increases and the additional bushfire risks associated with both an expanding urban footprint and climate change. (SBMP Objectives 7 & 8))	<b>Agreed-in-principle</b>	<b>Incomplete.</b> ESA has explained the principles underpinning the Government's consideration of funding for PCS but this is not equivalent to Council's recommendation.
7. That, in future years, ESA complete its audit of the completed fire activities in the PCS annual BOP and make the data available to Council by the start of September so that it can be used to inform Council's annual report to the Minister. (SBMP Objectives 7 & 8)	<b>Agreed</b>	<b>Not achieved.</b>
8. That ESA and EPSDD management review the approvals processes for road upgrade activities identified in an approved Regional Fire Management Plan and BOP to ensure they can be implemented in a timely manner. (SBMP Objective 8)	<b>Agreed</b>	<b>Complete.</b> Approval processes have been reviewed. PCS agreed to finalise the development of a Code of Sustainable Land Management Practices.
9. That relevant planning codes and standards be updated to reflect the most recent national standards for development and construction in bushfire-prone areas. (SBMP Objective 10)	<b>Agreed</b>	<b>Incomplete, in progress.</b> New dwellings, knock-downs or rebuilds and other substantial extensions or alterations within the bushfire prone area will be required to comply with the bushfire-related construction requirements in the Building Code of Australia.

## 6 GLOSSARY OF TERMS

<b>ACTPLA</b>	ACT Planning and Land Authority
<b>AFAC</b>	Australasian Fire & Emergency Services Authorities Council
<b>BAZ</b>	Bushfire Abatement Zone
<b>BOP</b>	Bushfire Operations Plan
<b>CMTEDD</b>	ACT Chief Minister, Treasury and Economic Develop Directorate
<b>EPSDD</b>	ACT Environment, Planning and Sustainable Development Directorate
<b>ESA</b>	ACT Emergency Services Agency
<b>ACTF&amp;R</b>	ACT Fire and Rescue Service
<b>IMX</b>	Incident Management Exercise
<b>JACSD</b>	ACT Justice & Community Safety Directorate
<b>NCA</b>	National Capital Authority
<b>PCS</b>	ACT Parks and Conservation Service within EPSDD
<b>POD</b>	Platform on Demand
<b>RFS</b>	Rural Fire Service within ESA
<b>RFSHQ</b>	RFS Headquarters
<b>SEMB</b>	Security and Emergency Management Branch within JACSD
<b>SBMP3</b>	Strategic Bushfire Management Plan Version 3 2014 made under the <i>Emergencies Act 2004</i>
<b>SBMP4</b>	Strategic Bushfire Management Plan Version 4 2019-2025 made under the <i>Emergencies Act 2004</i>
<b>TCCSD</b>	ACT Transport Canberra and City Services Directorate
<b>TOBAN</b>	Total Fire Ban, declared by the Emergency Services Commissioner under the <i>Emergencies Act 2004</i>

## APPENDIX – FIVE RECURRENT ISSUES IN PAST BFC REPORTS

### Five recurrent issues in BFC recommendations 2015-2019

In order of frequency of mention, the following topics occurred in:

**4/5 years** - Maintaining EPSDD BOP activity levels

**3/5 years** - RFS training, use and retention

**3/5 years** - IMT staffing and training

**2/5 years** - Adapting to climate change

**2/5 years** - Building and land planning

### The specific recommendations

#### Maintaining EPSDD BOP activity levels

2019	Rec. 6	That the ACT Government conducts a review of the adequacy of the budget allocated to PCS for fire management activities, taking into account cost increases and the additional bushfire risks associated with both an expanding urban footprint and climate change.
	Rec. 8	That ESA and EPSDD management review the approvals processes for road upgrade activities identified in an approved Regional Fire Management Plan and BOP to ensure they can be implemented in a timely manner.
2017	Rec. 5	That a permanent mechanism be developed that recognises the inter-year variability in suitability for prescribed burning and ensures, to the fullest extent possible, that the agreed area for treatment in the term of each SBMP is achieved.
2016	Rec. 6	That funds allocated for prescribed burns which cannot be completed due to weather constraints be carried over to following years so that the implementation of strategic prescribed burning, which is essentially a long term process, is not compromised.
2015	Rec. 7	That the funding arrangements for TAMS hazard reduction burning work be changed to enable funding to be carried over to following years if weather prevents completion of planned programs.

#### RFS training, use and retention

2019	Rec. 4	That efforts continue to understand and address why volunteers discontinue their service
2017	Rec. 7	That ESA and PCS continue to seek opportunities for RFS brigades to conduct prescribed burns.
	Rec. 8	That efforts to retain newer volunteer bushfire fighter recruits be enhanced.
2016	Rec. 8	That ESA and PCS develop a strategy to further increase the involvement of RFS brigades in achieving BOP prescribed burning objectives.

#### IMT staffing and training

2017	Rec. 2	That as part of last year's agreed commitment to the 2017/18 season and future seasons, ACT Fire & Rescue planning for operational bushfire response at the built urban/rural interface be collaboratively reviewed with the ACT RFS and then used as the basis for whole-of-ESA exercises with ACT F&R, CFU and RFS.
	Rec. 3	That further efforts be made to improve IMT capability across ESA, including facilitating the provision of suitable training and fire-ground experience for ESA volunteers across all services.

(cont'd)

2016	Rec. 1	That prior to the 2017/18 season, ACT Fire & Rescue planning for operational bushfire response at the built urban/rural interface be collaboratively reviewed with the RFS and then used as the basis for whole-of-ESA exercises with ACTF&R, CFU and RFS brigades and other relevant ESA service elements as required.
	Rec. 3	That further efforts be made to improve IMT capability across ESA, including the provision of suitable experience for ESA career and volunteer personnel across all services.
2015	Rec. 1	That the ESA continues to implement its strategy to ensure that there are sufficient trained and suitably experienced people to enable two Level 3 Incident Management Teams to operate on a two shift basis.

### Adapting to climate change

2019	Rec. 1	That the ACT Government speed up the rate of its planning and implementation of measures to proactively adapt to the altering climate.
	Rec. 2	That additional, dedicated resources be applied to Actions 9.5, 9.6 and 9.7 of SBMP4 with a view to completing the reviews and modifications of strategies and forward actions within the next two years.
2018	Rec. 2	That the coming revision of the SBMP address the need for a changed approach to bushfire preparedness, given the new risks presented by the ACT's altered climate.

### Building and land planning

2019	Rec. 5	That ESA and the relevant land managers urgently review the risks to urban assets in Denman Prospect and take immediate action to reduce those risks.
	Rec. 9	That relevant planning codes and standards be updated to reflect the most recent national standards for development and construction in bushfire-prone areas.
2015	Rec. 9	That the ESA continues to monitor and provide briefings for Council on the level of protection for new development in the western part of the ACT.