TO CREATE A SAFER AND MORE BUSHFIRE RESILIENT SOUTH AUSTRALIA

Government of South Australia's response to the Independent Review into South Australia's 2019-2020 Bushfire Season.

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FOREWORD

South Australia is the driest state in the driest inhabited continent. We are familiar with the heat, the dry brown landscapes and the ever-present threat of bushfires.

Despite this familiarity, the impacts of the 2019-20 bushfire season have reminded us in a powerful way that this threat is not something we should be taking lightly or be complacent about. Images of the destructive force of bushfires in both our state and our neighbouring states remain etched in our memory.

In South Australia alone through the 2019-20 bushfire season, almost 279,000 hectares were burnt, 196 homes were destroyed and a further 104 damaged, 892 non-residential buildings were destroyed or damaged, 660 vehicles were destroyed or damaged, almost 68,000 livestock perished, and tragically, three people lost their lives.

The flow-on effects of these losses for our people, our economy and our biodiversity are difficult to measure.

This Government recognised early that it was critical to act quickly to Review the events of that season. We initiated an independent Review within weeks of the largest fires on Kangaroo Island being contained. Former Australian Federal Police Commissioner, Mick Keelty AO, was engaged to lead an independent Review of how the state responded and what lessons could be applied for future bushfire seasons (the Review).

The Review, released in early July 2020, found that across the emergency services sector, considering the conditions faced were the worst on record, the response was remarkable. The Review made 15 recommendations for improvements based on 68 individual findings. These improvements broadly fell under the following groupings:

- New trucks, support and equipment for volunteers,
- Better protection for our critical assets,
- Enhanced communications and technology,
- Improved information before and during bushfires, and
- Other governance and capability improvements.

The initial response to this Review consisted of an allocation of $20.3 million as part of a $48.5 million package for SA's Emergency Services. This additional funding underpins 27 actions to be undertaken for the next bushfire season. All of these actions have commenced and are progressing according to plan.

We are now pleased to deliver the details of our comprehensive response. This includes investment in increased capacity to conduct hazard reduction burning on public land and better support for private landholders with hazard reduction and native vegetation management. This action plan incorporates the initial actions plus a further 42 actions to be completed over the coming years. A further $49 million of additional funding has been approved to support these initiatives, bringing the total additional funding to create a safer and more bushfire resilient South Australia to $97.5 million.

A final progress report will be released in 12 months' time detailing the status of all actions.

South Australia was the first state to implement an independent review of its bushfire season and commence actions to prepare for the next season. Recommendations from interstate and national reviews (including the Royal Commission) are only just beginning to be released. SA will progressively monitor the relevance of these recommendations to the SA context.

Finally, it is appropriate to again acknowledge the extraordinary efforts of a large number of people who were instrumental in limiting the impacts of the bushfires. This includes the thousands of volunteers who make up our state's frontline bushfire response capability. Agencies who support response activities include CFS, MFS, SES, SA Police, Department for Environment and Water, Forestry SA, Farm Firefighting Units, the many local government organisations and the general community who contribute in a wide range of ways.

We are privileged to have these volunteers and staff who are dedicated to keeping our state and its communities, assets and infrastructure safe.

Hon. Steven Marshall MP
Premier of South Australia

Hon. Vincent Tarzia MP
Minister for Police, Emergency Services
and Correctional Services

Hon. David Speirs MP
Minister for Environment and Water

OVERVIEW OF THE 2019-20 BUSHFIRE SEASON

The devastation associated with South Australia's 2019-20 bushfire season was the result of drier and warmer weather conditions over the preceding 12-18 months, continuing through spring and into the 2019-20 summer. In combination, these factors resulted in accumulated fire danger index recordings, ranging from considerably above average to the highest on record, during the early part of the 2019-20 fire season.

The Fire Danger Season was declared on average, two weeks earlier than normal. The Independent Review into South Australia's 2019-20 Bushfire Season (the Review) notes that there were 31 days of Total Fire Bans over the season with catastrophic conditions forecast on 14 occasions.

Very significant fires followed at:
- Duck Ponds (lower Eyre Pen. – Nov 2019),
- Yorketown (Yorke Pen. – Nov 2019),
- Cudlee Creek (Adelaide Hills – Dec 2019),
- Duncan and Menzies (Kangaroo Is. – Dec 2019),
- Keilira (South East – Dec 2019),
- Miltalie (Eastern Eyre Pen. – Dec 2019) and
- Ravine Des Casoars (Kangaroo Is. – Dec 2019).

The resulting impacts on the state's communities, economy and environment were far reaching. The full extent of these impacts is yet to be realised as communities and businesses continue to recover.

The Review notes that *"The successful efforts of all those involved in fighting the fires is acknowledged by this Review."* Furthermore, *"The combined efforts … restricted the devastation in one of the worst bushfire seasons during one of the harshest summers on record."* Despite this, it is acknowledged that the State's emergency management arrangements were seriously tested through this period.

There are always opportunities for improvement and lessons that can be learned, particularly around preparing for and managing potentially larger and more complex disasters than previously experienced. The point of the Review was to identify the aspects that went well and those where improvement, or a different approach are required.

We must be better at recognising, communicating and proactively addressing risks. We must be better at protecting critical infrastructure. We need to improve communication and coordination during emergencies to ensure the resources available are utilised as safely and effectively as possible. We need to ensure that emergency services personnel have the best equipment and support we can.

This recent bushfire season has challenged a number of our systems, processes and assumptions about how we deal with extreme weather conditions that are increasing in severity and frequency. While response to, and subsequent recovery from such events will always be critical, the importance of prevention and preparedness is increasing.

Responsibility for this involves all areas of our society including Commonwealth, state and local government organisations, businesses, communities and individuals.

This bushfire season has reminded us that the end goal of resilience requires an appropriate mix of prevention, preparedness, response and recovery. The actions outlined in this document together with the announced additional funding packages, will significantly assist in moving towards this goal.
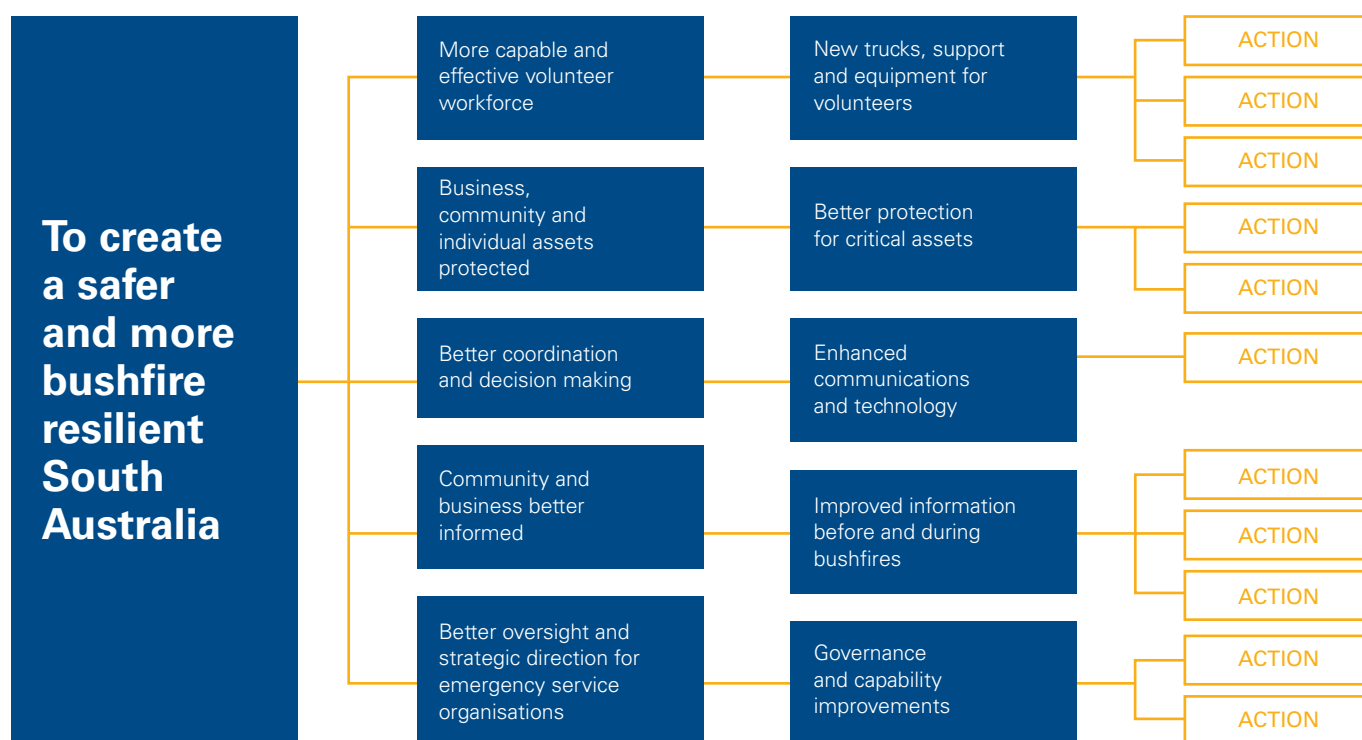
RESPONSE TO THE INDEPENDENT REVIEW

The Independent Review into South Australia's 2019-20 Bushfire Season was completed and provided to Government in late June 2020. The Review report contained a total of 15 recommendations arising from 68 findings.

The Government's response was coordinated by an across-government steering committee consisting of senior officers from CFS, MFS, SES, SAFECOM, SA Police, Department for the Premier and Cabinet, Department of Treasury and Finance and Department for Environment and Water.

The response involved two phases:

- An interim response incorporating funding and actions for the 2020-21 fire season, and
- A more comprehensive response containing further funding and actions scheduled for completion over future years.

The steering committee considered the recommendations and findings from the Review and agreed that the most appropriate way to address the full range of matters raised was to identify actions that would address the source findings. These actions can be summarised into five broad categories that each deliver clear public benefit and contribute to creating a safer and more bushfire resilient South Australia.

To create a safer and more bushfire resilient South Australia	More capable and effective volunteer workforce	New trucks, support and equipment for volunteers	ACTION
			ACTION
			ACTION
	Business, community and individual assets protected	Better protection for critical assets	ACTION
			ACTION
	Better coordination and decision making	Enhanced communications and technology	ACTION
	Community and business better informed	Improved information before and during bushfires	ACTION
			ACTION
			ACTION
	Better oversight and strategic direction for emergency service organisations	Governance and capability improvements	ACTION
			ACTION

The following pages provide details of the actions being undertaken in response to the Review recommendations and findings. All of the initial actions for this bushfire season have commenced and are progressing. Many of the longer-term actions have also commenced.

RECOMMENDATIONS

1. Implement previous review recommendations for bushfire management including those relating to the 2009 amendments to the Fire and Emergency Services Act 2005, State Bushfire Coordination Committee operation, State Bushfire Management Plan, as well as urgent completion of Codes of Practice for fuel hazard reduction on all land tenures, and redevelopment of Bushfire Management Area Plans accompanied by effective community engagement to build an understanding of risk.

   RESPONSE: Actions 3, 8, 9, 11 & 17

2. Align risk assessment tools and processes to Risk Management Standard ISO 31000 and the National Emergency Risk Assessment Guidelines (NERAG) and communicate these on public-facing platforms. Make Bushfire Management Area Plans (BMAP) accountable for managing and reporting on region-specific risk and identifying critical infrastructure such as mobile phone towers as key risks.

   RESPONSE: Actions 10, 12, 13, 28 & 29

3. Consider amending the Fire and Emergency Services Act 2005 to align SAFECOM Board operations with accepted governance standards with the Minister appointing an Independent Chair of the SAFECOM Board.

   The SAFECOM Chief Executive (CE) should report to the Board and maintain SAFECOM's role at the direction of the Board. Alternatively, SAFECOM could be abolished, moving to a model of a Department of Fire and Emergency Services where the departmental head reports to the Minister but the value proposition of any such machinery of government change would need to be thoroughly examined.

   RESPONSE: Actions 4 & 5

4. Invest in upgrading and integrating ICT platforms to eliminate manual data transfers, and ensure IT and radio communication interoperability across the agencies, together with a dedicated focus on the development of a coordinated risk intelligence capability to provide all stakeholders with a common operating picture and rapid damage assessments.

   RESPONSE: Actions 20, 21, 42, 43, 44, 45, 54 & 64

5. Clarify and streamline processes and educate the community about their roles and responsibilities in managing native vegetation to improve hazard reduction on both public and private land. Provide additional resources to manage fuel in a shorter off fire season and develop a risk reduction target linked to prioritised objectives.

   RESPONSE: Actions 1, 14, 15, 16, 18, 19, 22 & 25

6. Consider removing stamp duty from home insurance to encourage a wider section of the community to take out insurance. South Australian government agencies should share their risk modelling data with the Insurance Council of Australia.

   RESPONSE: Action 24

7. Prepare to 'scale up' capability during major bushfire events with senior representatives (including BoM staff) in the SEC 24/7, ensure adequate facilities for IMTs, base camps (e.g. Humanihuts) and recovery centres. Consider the resource implications of providing firefighters to interstate operations.

   RESPONSE: Actions 2, 6, 7, 26, 30, 37, 49, 50 & 55

8. Engage with the Australian Defence Force (ADF) once or twice a year to understand the capabilities that could potentially be deployed. Educate IMTs about how to deploy ADF assistance effectively and develop a streamlined 'call out' procedure.

   RESPONSE: Actions 31 & 32

9. Invest in fireground leadership and incident management training for CFS, SES and MFS personnel to improve safety on the fireground. Invest in greater technological interoperability such as AVL, Thermal Imagery, Burnover Protection Systems (BOPS), lightning tracking and appropriate vehicle fleets for bushfire conditions including at the peri-urban interface.

RESPONSE: Actions 33, 34, 35, 36, 38, 40, 41 & 67

10. Incorporate Farm Firefighting Units (FFUs) into the Australasian Inter Service Incident Management System (AIIMS) so that IMTs are aware of their presence on the fireground and their welfare and risks are understood.

RESPONSE: Actions 47, 48, & 62

11. Develop and practice procedures for the CFS, DEW and local governments to access and deploy heavy plant and machinery for fuel reduction operations both before and during bushfires.

RESPONSE: Actions 56 & 57

12. Review the use of aviation assets, including facilities to operate them given the increased pressure from extended fire seasons on northern and southern hemisphere resources.

Review line scanning capability with a view to providing real time data to the IMTs on where fires are burning using aviation assets as an intelligence tool rather than just a fire suppression capability.

RESPONSE: Actions 39, 51, 52, & 53

13. Better coordinate public information and warnings, including evacuation plans and provide a single source of information about: the location and direction of fires, how and when to use Safer Places, Places of Last Resort, relief and recovery centres and directed evacuations.

RESPONSE: Actions 23, 27, 46, 58, 59, 60 & 61

14. Clarify business continuity and restoration of critical infrastructure in the planning and response phases to facilitate water replenishment, fireground remediation and access to businesses (including farming properties).

RESPONSE: Actions 63 & 65

15. Collate data and research the impact of bushfires upon communities, firefighters and animals (both native and domestic) to identify appropriate medium and long-term welfare and support requirements.

RESPONSE: Actions 66, 68 & 69

Independent Review into South Australia's 2019-2020 Bushfire Season

TARGET #1 - New trucks, support and equipment for volunteers

INTERIM RESPONSE ACTIONS:

Finding		Actions		Lead Agency
6.8.1	There is an urgent need to review the age and appropriateness of the bushfire vehicle fleet in CFS, MFS, SES and DEW, ensuring all vehicles are fitted with Burnover Protection Systems (BOPS).	34	(a) Fire Truck Safety Retrofit System, CFS vehicles - 49 trucks fitted before this fire season and (b) Accelerated replacement of CFS Heavy Fire trucks - 25 new trucks before this fire season.	CFS
6.9.2	More training is required for 'mopping up' activities supported by ready access to handheld thermal imagery technology.	36	Provide thermal imaging cameras for each of the 55 CFS Groups.	CFS

LONGER TERM ACTIONS:

Finding		Actions		Lead Agency
6.3.1	Facilities for IMTs in a campaign event do not meet accepted guidelines and impede the teams' effectiveness in delivering SEC directions and operational demands.	26	Review current facilities for Incident Management coordination and establish a State ICC Facilities Plan and budget requirements.	CFS
6.6.1	There is insufficient understanding of when and how the ADF can assist the civilian authorities.	31	(a) Improve understanding of when and how Australian Defence Force (ADF) can assist civilian authorities and (b) Seek a review of COMDISPLAN and DACC arrangements via ANZEMC.	DPC/ SAFECOM
6.6.2	While there was widespread community appreciation for the morale boosting efforts of the ADF, their assistance had mixed reactions. Some saw advantages while others did not know how to use defence personnel without displacing local tradespeople/contractors.	32	Ensure practices are in place so that when the ADF personnel are used, it does not automatically displace local tradespeople or contractors.	SAPOL
6.9.1	Better succession planning and recruitment is required as well as additional training and development for leaders who are often given just-in-time training for key roles.	35	Develop IMT and fireground: (a) succession planning (b) recruitment strategy (c) additional training and development for leaders (d) training for key roles.	CFS
6.11.2	Pre-planning is required to deploy early aerial reconnaissance, specialist remote ground crews for inaccessible terrain and heavy plant where dry lightning is forecast.	39	Develop plans for: (a) early aerial reconnaissance deployment (b) remote ground deployment (c) heavy plant deployment, when dry lightning is forecast for remote areas.	CFS
6.12.2	Standard equipment between agencies needs to be interoperable —there are differences and incompatibility between MFS and CFS radios, radio frequencies, Personal Protective Equipment (PPE), masks, trucks, maps, training, helmets, hose couplings and breathing apparatus.	41	Identify if any operational enhancements are required in terms of standardisation of MFS and CFS radios and radio frequencies; PPE, masks, trucks, maps, training, helmets, hose couplings, and BA.	MFS

continued

TARGET #1 - **New trucks, support and equipment for volunteers** *(cont)*

LONGER TERM ACTIONS:

Finding			Actions	Lead Agency
7.1.1	Deployment of Farm Firefighting Units (FFU) is inconsistent and are not properly recorded. This makes resource management difficult and creates liability exposure should death or injury occur.	47	CFS engage with relevant stakeholders to develop minimum standards of PPE and equipment for Farm Firefighting Units. Information on accredited FFUs will be incorporated into the CFS database.	CFS
7.2.1	There was insufficient space to accommodate the number of responders brought in to deal with the fires, which needs to be addressed for future emergencies.	49	Increase accommodation for responders when operating in remote areas.	SES
7.2.2	One Humanihut was insufficient to accommodate the response operations on Kangaroo Island.	50	Increase accommodation capability for operations in remote areas.	SES
7.3.1	The landing strip at Turkey Lane on Kangaroo Island is not fit for purpose during emergencies, causing damage to SA Water infrastructure and some propeller aircraft.	51	Review the use of Turkey Lane airstrip.	CFS
7.6.1	Access to plant and equipment during a crisis was ambiguous, as were the risks associated with engaging untrained personnel to enter the fireground (e.g. road construction bulldozers requisitioned to build fire breaks).	56	Develop plant and equipment asset management system.	CFS
7.6.2	The CFS should consider how to deploy heavy machinery with adequate protection for plant operators in planning for severe, extreme, or catastrophic fire danger days.	57	Implement a pre-deployment plan integrated with ROMPs and GOMPs to utilise the asset management system.	CFS
8.4.1	The psychological impacts of the 2019-20 fire season on fire and incident management crews resulted in the highest recorded levels since 2005 of access to psychological support services.	66	Improve access to psychological support services during large bushfire seasons.	SAFECOM
8.4.2	The number of burnover incidents reported during the 2019-20 fire season is the highest recorded.	67	Review burnover incidents and implement approved recommendations to reduce likelihood.	CFS

TARGET #2 - Better protection for our critical assets

INTERIM RESPONSE ACTIONS:

Finding			Actions	Lead Agency
4.5.1	The State Emergency Planning Framework is effective if it is followed and agencies do not improvise or cut corners.	06	Commence a review of the State Emergency Management Plan.	DPC / SEMC
4.5.2	The SEC's decision making was impeded by having less senior staff rostered overnight who were not authorised to make decisions on behalf of their agency.	07	Roster senior staff on SEC overnight during emergencies.	SAPOL
5.1.1	2009 amendments to the Fire and Emergency Services Act 2005 introducing a bushfire management framework for prevention and mitigation have not been fully implemented. For example the SBMP 2010 is incomplete, outdated and has no lawful force or effect.	08	Implement a new State Bushfire Management Plan.	CFS
5.1.2	The State Bushfire Management Committee should have a statutory requirement to report annually to State Parliament and its membership should have an appropriate level of expertise and authority.	09	Amend legislation to require State Bushfire Management Committee to report to State Parliament.	SAFECOM
6.1.1	SAPOL's Operation Nomad is an effective strategy to minimise risk during periods of high fire danger but additional public information is needed about high-risk activities.	22	Provide additional public education on high risk activities during periods of high fire danger.	CFS
		23	Implement the agreed outcomes of the 2019 NOMAD Review.	SAPOL

LONGER TERM ACTIONS:

Finding			Actions	Lead Agency
5.1.3	The CFS is not adequately resourced at central or regional levels to manage and implement the bushfire management planning framework.	10	Improve regional and central CFS staffing to implement the bushfire management planning framework.	DTF
5.2.1	The State Bushfire Management Plan is intended to provide strategic coordination and guidance on all elements of bushfire management across PPRR but this does not appear to be its function in South Australia.	11	CFS to deliver a State Bushfire Management Plan providing strategic coordination and guidance across PPRR for SA.	CFS
5.3.1	Fire management plans in the CFS and state land management agencies have different risk assessment processes and these plans are not integrated.	12	Standardise risk assessment processes between CFS and State land management agencies under the State Bushfire Management Plan.	CFS
5.3.2	Risk assessments in existing Bushfire Management Area Plans do not comply with the international standard for risk management (ISO 31000) or NERAG and there are no clear lines of accountability for mitigating risks.	13	Fund development and implementation of reporting on mitigation strategies listed in BMAP's to meet ISO 31000.	CFS

TARGET #2 - **Better protection for our critical assets** *(cont)*

LONGER TERM ACTIONS:

Finding			Actions	Lead Agency
5.3.3	DEW has developed an excellent spatial tool, which can assist stakeholders to understand the relationship between fuel hazard and fire behaviour, and property and landscape risk.	14	CFS and DEW to jointly develop the current pilot DEW tool (for landscape bushfire risk modelling) to fully support: (a) CFS BMAP planning (b) Fire management planning for public land agencies (c) Reporting on residual risk profiles (d) Community engagement on landscape fire risk.	DEW/ CFS
5.4.2	The processes involved in seeking approvals for fuel reduction strategies are confusing and poorly understood by the community and the CFS needs greater capacity to support native vegetation management.	16	Increase CFS resources to support native vegetation management.	CFS
5.5.1	The level of fuel reduction permitted on private land is unclear and there is an inconsistent approach to compliance action (Section 105 Notices) to reduce fuel hazards.	17	Develop a Code of Practice for Private Land Fuel Management to remedy an inconsistent approach to compliance actions (S105 Notices).	CFS
6.4.2	There is insufficient preparation around evacuations, including assessment of suitable routes to designated locations to reduce risks.	28	Improve preparation and planning of suitable routes to designated locations to reduce risk.	SAFECOM/ SAPOL
6.4.3	Asset protection priorities must be made clear to reduce the loss of critical infrastructure, such as telephone towers, with memoranda of understanding (MOUs) between EM agencies and providers.	29	Prioritise asset protection to support strategic infrastructure in mitigation and response planning.	CFS/ SAPOL
6.5.1	Kangaroo Island burns differently to mainland firegrounds, which needs to be reflected in logistics and resilience planning and preparation.	30	Improve logistics and resilience planning to support KI.	CFS
6.12.1	The call rate to all hazards continues to grow in peri-urban areas of townships, raising the need to review the principles for deploying fire and rescue services.	40	Review principles for deploying fire and rescue services into peri-urban areas.	MFS
7.4.2	The use of northern hemisphere-based firefighting aircraft is becoming problematic as the bushfire season is extending in both hemispheres, making it difficult to call on additional resources from overseas.	53	Improve access to national capability through NAFC contracts.	CFS

TARGET #3 - Enhanced communication and technology

INTERIM RESPONSE ACTIONS:

Finding		Actions		Lead Agency
6.7.1	AVL capability is urgently needed for both the vehicle fleet and the portable radios used by CFS, MFS, DEW and SES crews.	33	Commence implementation of Automatic Vehicle Location (AVL) capability of the vehicle fleet.	SAFECOM
6.11.1	Real time access to lightning tracking is needed to assist with early detection and rapid response to lightning strike ignitions.	38	Develop a lightning tracking system and implement into the common operating picture.	CFS
6.13.4	A common operating picture was difficult to obtain and it is not supported by integrated ICT systems across agencies.	45	Create a monitoring system to capture real-time data from a range of systems onto a common picture, to assist the State Emergency Centre with decision-making during emergencies.	DPC
7.5.1	The SEC did not receive the best information about the location and direction of the fires because of an oversight in not sharing fire prediction maps.	54	Improve systems through the common operating picture to ensure SEC has fire prediction maps.	SAPOL
8.2.1	Rapid Damage Assessment (RDA) is not providing a level of accuracy or consistency to help decision makers or government officials inform the community about the impacts of an event.	64	Improve speed and accuracy of Rapid Damage Assessment.	SAPOL

TARGET #3 - **Enhanced communication and technology** *(cont)*

Finding		Actions		Lead Agency
5.6.1	Better systems are needed to share data across emergency and land management agencies to support the flow of information to IMTs and the SEC.	20	Implement data and network infrastructure for State Control Centre.	SAFECOM
5.6.2	Existing risk intelligence data for bushfire prone land is not in real time whereas other governments have risk data readily available to the public.	21	Implement risk data into common operating picture.	SAFECOM
6.13.1	Limited telecommunications connectivity and Government Radio Network data capability impedes CFS, Forest Industry Brigades and FFU communications and community messaging.	42	(a) Continue proof of concept exercise with SAPOL around use of GRN based location (AVL) services and (b) Liaise with user agencies to identify additional use cases for GRN based data capability.	AGD
6.13.2	ICT systems are inconsistent across the CFS — some volunteers are successfully using brigade management systems like BART but it has not been officially endorsed by the CFS or accepted service-wide.	43	Consider standardisation of brigade management deployment systems such as BART.	CFS
6.13.3	Information from the CFS CRIIMSON database had to be manually extracted and uploaded onto the systems used by other emergency management agencies, delaying information transfers.	44	Automate information from CRIIMSON database into common operating picture.	DPC
7.1.2	FFUs are a valuable resource but those who operate them are at as much risk of being seriously injured or killed as other emergency responders and their assistance to the community could be better managed using AIIMS.	48	Farm Firefighting Unit roles in Incident Management Teams with supporting documentation for operational response.	CFS
7.4.1	Aviation line scanning and tactical firefighting resources are inadequate to meet contemporary demands.	52	Increase aviation line scanning and tactical firefighting resources.	CFS

TARGET #4 - Improved information before and after bushfires

INTERIM RESPONSE ACTIONS:

Finding		Actions		Lead Agency
4.1.1	No level of hazard reduction would have prevented the fires experienced during the 2019-20 summer. However, a risk reduction target linked to prioritised objectives is still needed to minimise the impact upon individual communities.	01	Educate community to clarify expectations on limitations of hazard reduction.	CFS
5.4.1	The Native Vegetation Council (NVC) is criticised for being slow to respond to hazard reduction applications but the problem appears to be with the community's understanding of the process.	15	Improve education with the community to understand hazard reduction application processes on their own lands.	CFS
5.5.2	Fuel reduction strategies, such as prescribed burns tend to be short term and are incorrectly viewed as the panacea for reducing bushfire risks.	18	Educate agencies and the community on the practicalities and effectiveness of fuel reduction strategies.	CFS
5.5.3	The community does not appear to understand that public land management agencies are only responsible for part of the total fuel hazard in South Australia (e.g. 39% in Mount Lofty Ranges) and prescribed burns are needed on both public and private land to reduce risks.	19	Educate the community that the majority of the state is held in private ownership and build better understanding of landscape risk and shared responsibility for bushfire prevention and preparedness.	CFS
6.2.1	Many properties and businesses were not insured — the reasons for which are not yet determined. Stamp duty concessions on insurance could be provided to reduce costs.	24	Educate community to improve levels of non and under insurance.	CFS
6.2.2	Agencies should reinforce the message that individuals must take responsibility for preparing their own homes and having a bushfire plan, and that assistance through the '000' emergency call centre may be limited during a crisis.	25	Reinforce messaging for individuals to prepare their homes and have a bushfire plan.	CFS
6.4.1	Places of last resort are not well understood by the community in terms of what possessions (including pets) should be taken to these locations.	27	Improve understanding of the role of places of last resort.	CFS
6.13.5	Given the Australian Broadcasting Corporation (ABC) is the emergency broadcaster, any move to a new location for emergency management operations needs to include a position for ABC management.	46	Design ABC emergency broadcaster function into new State Control Centre design.	SAFECOM
7.7.2	Alert SA was initiated using the NSW government 'Fires Near Me' App however the benefits of the app were not fully translated.	59	Enhance Alert SA app to ensure benefits are fully utilised.	SAFECOM

TARGET #4 - **Improved information before and after bushfires** *(cont)*

LONGER TERM ACTIONS:

Finding			Actions	Lead Agency
7.5.2	Arrangements need to be made with the BoM to provide 24/7 capability to advise SEC decision makers about the prevailing risk.	55	Investigate better use of technology to support access by the BoM to the SEC within their resources (e.g. permanent video conferencing).	SAPOL
7.7.1	There was confusion about emergency messaging whereby 'emergency' was interpreted as a message to evacuate.	58	Continue to clarify and educate the community on language between emergency and evacuation.	CFS
7.7.3	The community received insufficient information on the location of fires, direction of travel and estimated time of when the fire would reach specific locations.	60	Enhance systems to provide community information on: (a) fire locations (b) direction of travel (c) estimated time of impact on specific locations.	CFS
7.7.4	The CFS website mapping was inadequate to advise the public about the location and direction of the fires and the 'warning message' polygon was reportedly mistaken as the fire boundary.	61	Improve CFS website to better distinguish between the warning message polygon and the fire boundary.	CFS
7.7.5	IMTs and fireground leaders need access to people with local knowledge, including suitably trained and qualified forest industry professionals to assist with decision making.	62	Incorporate Industry Brigades into Incident Management Teams.	CFS
8.3.1	More needs to be done to clarify the process for replenishing water and other aspects of business continuity in the recovery process.	65	Clarify processes for replenishing water to assist business continuity in the recovery process.	DPC
8.4.3	The impact of bushfire on wildlife is not well understood and requires a leadership role by DEW.	68	A Wildlife and Habitat Bushfire Recovery Taskforce was established in March 2020 and a recovery framework is under development, which will be used to inform bushfire recovery and response actions in the future.	DEW
8.4.4	The State Recovery Office has an excellent initiative to record community experiences to help the recovery process and prepare the community for the next disaster.	69	Ensure the community is involved in emergency and recovery planning and in debriefs to record their experiences and help prepare for future disasters.	DPC

TARGET #5 - Other governance and capability improvements
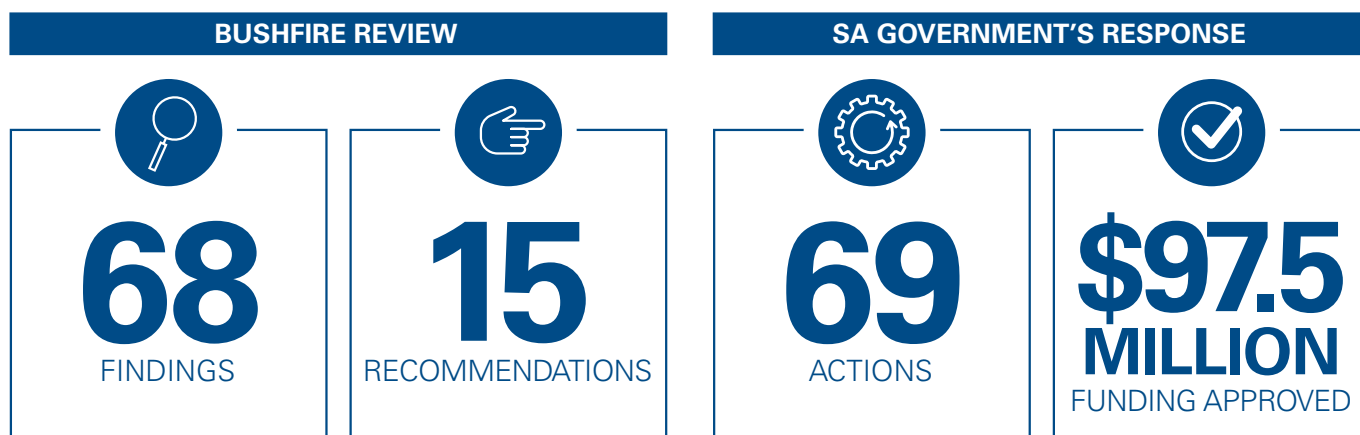
INTERIM RESPONSE ACTIONS:

Finding		Actions		Lead Agency
4.1.2	Overnight conditions during these fires meant that, unlike previous occasions, there was no respite for firefighters and decision makers.	02	Consider and report upon the staffing and WHS implications of adjusting to 24/7 operations during large bushfires.	CFS
4.2.1	Not all accepted recommendations from previous reviews have been implemented.	03	Commence consultation, review and implementation of previous accepted recommendations.	SAFECOM
4.3.1	The Review heard that SAFECOM's role is unclear and there are concerns about 'mission creep' beyond its legislated function of enabling the Emergency Services sector under the Board's direction.	04	Clarify SAFECOM's role as an enabling function and commence consultation on a department model.	DPC
4.4.1	Contrary to accepted governance conventions, the SAFECOM CE chairs the SAFECOM Board, which raises questions about whether it delivers the best outcomes.	05	Amend legislation to appoint an independent chair of SAFECOM Board.	SAFECOM
6.10.1	Deploying personnel to interstate fires through the AFAC arrangements resulted in organisational fatigue during the 2019-20 bushfire season, which was characterised by campaign fires.	37	Update doctrine regarding the internal implications of meeting requests for assistance in future years.	CFS

LONGER TERM ACTIONS:

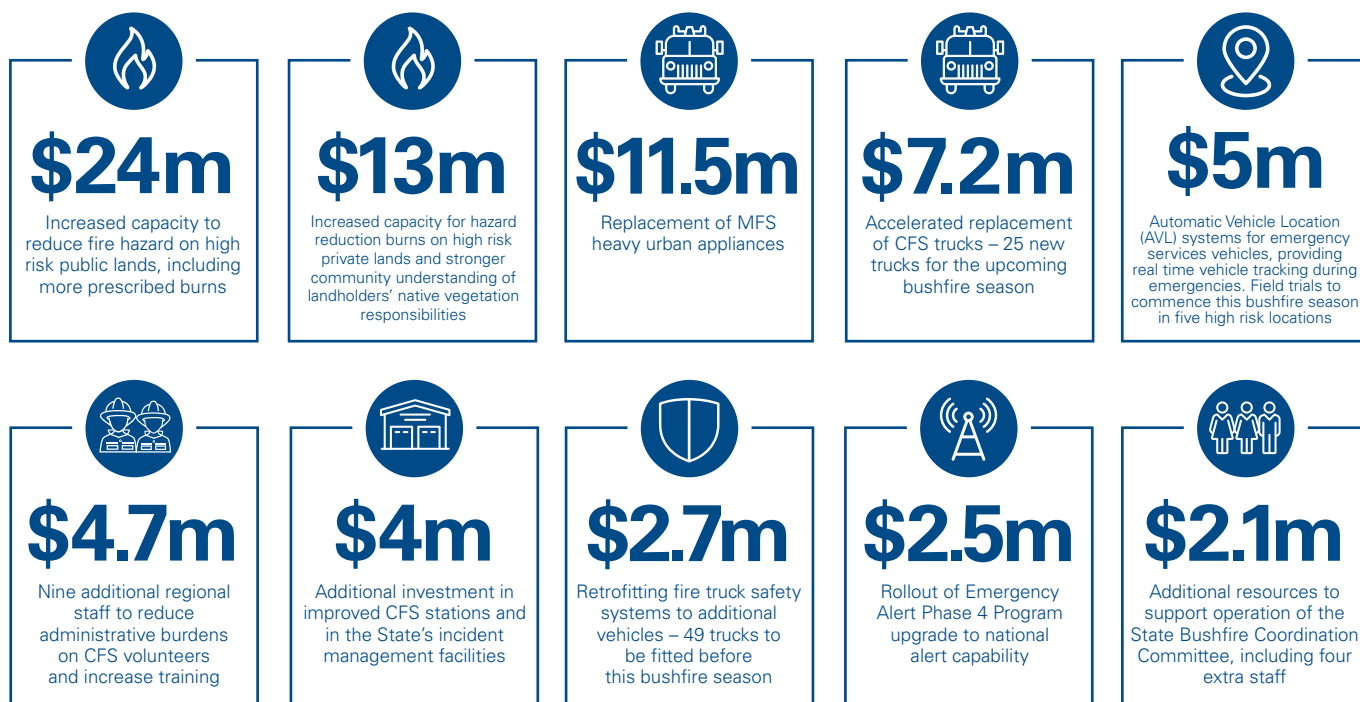| Finding		Actions		Lead Agency
8.1.1	The transition from operational response to recovery was considered too slow.	63	As part of the SEMP Review, enhance the transition arrangements between response and recovery to ensure it is timely, efficient and responsibilities are clarified.	DPC

TO CREATE A SAFER AND MORE BUSHFIRE RESILIENT SOUTH AUSTRALIA

BUSHFIRE REVIEW		SA GOVERNMENT'S RESPONSE	
68 FINDINGS	**15** RECOMMENDATIONS	**69** ACTIONS	**$97.5 MILLION** FUNDING APPROVED

MAJOR FUNDED INITIATIVES INCLUDE:

$24m
Increased capacity to reduce fire hazard on high risk public lands, including more prescribed burns

$13m
Increased capacity for hazard reduction burns on high risk private lands and stronger community understanding of landholders' native vegetation responsibilities

$11.5m
Replacement of MFS heavy urban appliances

$7.2m
Accelerated replacement of CFS trucks – 25 new trucks for the upcoming bushfire season

$5m
Automatic Vehicle Location (AVL) systems for emergency services vehicles, providing real time vehicle tracking during emergencies. Field trials to commence this bushfire season in five high risk locations

$4.7m
Nine additional regional staff to reduce administrative burdens on CFS volunteers and increase training

$4m
Additional investment in improved CFS stations and in the State's incident management facilities

$2.7m
Retrofitting fire truck safety systems to additional vehicles – 49 trucks to be fitted before this bushfire season

$2.5m
Rollout of Emergency Alert Phase 4 Program upgrade to national alert capability

$2.1m
Additional resources to support operation of the State Bushfire Coordination Committee, including four extra staff

Other significant actions include:

- Better protection for critical assets, improved risk assessment methodology and improved information before and during bushfires ($16.7m – National Partnership Agreement funding).
- Increased mental health support.
- Implementation of the Australia Fire Danger Rating System.
- Improved ICT integration for better decision making.
- Independent chair for the SAFECOM Board.

ABBREVIATIONS

ABC	Australian Broadcasting Corporation
ADF	Australian Defence Force
AFAC	Australasian Fire and Emergency Service Authorities Council
AGD	Attorney General's Department
ANZEMC	Australia - New Zealand Emergency Management Committee
AVL	Automatic Vehicle Location
BA	Breathing Apparatus
BoM	Bureau of Meteorology
BOPS	Burnover Protection Systems
BMAP	Bushfire Management Area Plan
CE	Chief Executive
CFS	Country Fire Service
COMDISPLAN	Commonwealth Government Disaster Response Plan
DACC	Defence Assistance to the Civil Community
DEW	Department for Environment and Water
DPC	Department for the Premier and Cabinet
DTF	Department of Treasury and Finance
EM	Emergency Management
FFU	Farm Firefighting Unit
GOMP	Group Operations Management Plan
GRN	Government Radio Network
ICT	Information and Communications Technology
ICC	Incident Control Centre
IMT	Incident Management Team
ISO	International Organization for Standardization
KI	Kangaroo Island
MFS	Metropolitan Fire Service
MOU	Memorandum of Understanding
NAFC	National Aerial Firefighting Centre
NERAG	National Emergency Risk Assessment Guidelines
NVC	Native Vegetation Council
PPE	Personal Protective Equipment
PPRR	Prevention, Preparedness, Response and Recovery
RDA	Rapid Damage Assessment
ROMP	Regional Operations Management Plan
SAFECOM	South Australian Fire and Emergency Services Commission
SAPOL	South Australia Police
SBMP	State Bushfire Management Plan
SEC	State Emergency Centre
SEMC	State Emergency Management Committee
SEMP	State Emergency Management Plan
SES	State Emergency Service
WHS	Work Health and Safety