

NSW Bushfire Inquiry 2020 Progress Report

Implementation of the NSW Government's response to the
NSW Bushfire Inquiry.

Reporting Period
July to September 2021



Resilience
NSW

KEY HIGHLIGHTS

Protecting Frontline Firefighters

- 45 new compliant Light Tankers built and delivered to Rural Fire Brigades since 1 January 2021, including 8 Light Tankers delivered this quarter.
- 60 new compliant Medium Tankers and Heavy Tankers built and delivered to Rural Fire Brigades since 1 January 2021, including 12 Medium and Heavy tankers delivered this quarter.
- 13 Heavy Tankers refurbished with appropriate crew protection safety systems and returned to service this quarter.
- Rollout of radiant heat protection curtains for NPWS Category 9 vehicles was completed this quarter.
- Manufacture of 75,000LM of PPC material for NSW RFS fire fighters ongoing.

Hazard Reduction

- *Rural Boundary Clearing Code* gazetted in September 2021 to allow rural landowners to clear vegetation along the boundary of their land to reduce the potential spread of bush fires.
- Transport for NSW Vegetation Management framework developed in consultation with arborists and other vegetation management experts and published.
- 317 vendors have been on-boarded onto Arena Heavy Plant Register and 63 heavy plant taskings placed using the Arena HP platform.

Improving Operational Capability

- Local Weather Effects training delivered by NSW RFS to over 60 NSW RFS and interagency Fire Behaviour Analysts.
- Additional Fire Behaviour Analysts recruited and stationed in every NSW RFS Area Command.
- 2021 National Statement of Capability has been completed and published by AFAC.
- National Aerial Firefighting Strategy 2021-26 published by NAFC in July 2021.
- Predictive model embedded into NSW RFS systems to forecast ignition potential and identify areas expected to reach RART triggers up to four days in advance.

Increasing Community Resilience

- A set of guides published by Destination NSW for tourism businesses to bolster their resilience to bush fires and other natural disasters.
- Guide for Evacuation Centre Facility Managers produced and distributed to support LEMCs and Facility Managers.
- 221 sites in NSW national parks declared 'assets of intergenerational significance' (AIS) to protect important habitat for 93 threatened species within NSW.

Strengthening Research, Technology, Governance & Accountability

- Review of Bush Fire Coordination Committee members complete to ensure all members have appropriate seniority with sufficient discretion and authority.
- New air quality website to be launched by DPIE in October 2021 which will include enhanced air quality data, information, and warning system.
- New webpage launched by NSW RFS to hold approved Bush Fire Risk Management Plans, and support exhibition of draft plans for public consultation.
- Research to investigate the impact of the 2019-20 bushfires on NSW waterways initiated by DPIE Estuaries and Catchments Team.

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BACKGROUND

The Independent Bushfire Inquiry

The 2019-20 bush fire season was without a doubt one of the most catastrophic on record. The bush fire season lasted eight months, from 1 July 2019, with a total of 11,774 fire incidents throughout the season.

In NSW, 26 people lost their lives, including seven firefighters – three RFS contracted air crew and four RFS volunteers. Each one of these deaths was a tragedy and greatly affected the community.

The 2019-2020 bush fire season saw 2,476 homes destroyed, and 1,034 damaged. 5,559 outbuildings and 284 facilities were also destroyed in the fires.

Over 2.7 million hectares of national park was impacted by the fires. 55 national parks had more than 99% of their area affected by fire. The habitats of at least 293 threatened animals were affected by fire.

On 30 January 2020 the Premier announced an inquiry into the 2019-20 bush fire season to make recommendations in relation to bush fire preparedness and response.

The Independent Bushfire Inquiry was led by Dave Owens APM, former Deputy Commissioner of NSW Police Force and Professor Mary O’Kane AC, Independent Planning Commission Chair and former NSW Chief Scientist and Engineer.

The Inquiry report was released on 24 August 2020, with the NSW Government accepting all recommendations.

Reporting on Implementation of the Inquiry’s Recommendations

The NSW Government committed to providing regular reports against progress on the implementation of actions to address the recommendations in the Inquiry report. Resilience NSW has been assigned to coordinate and oversee the implementation of the Inquiry’s recommendations.

The NSW Parliament passed amendments to the *Rural Fires Act 1997* in late 2020 to require quarterly reporting to both houses of Parliament.

This is the third quarterly report produced in response to this amended legislation. The report captures the activities of the NSW Government agencies leading implementation of initiatives and projects to address the Inquiry’s recommendations and sub-recommendations.

METHODOLOGY

This section outlines the process which Resilience NSW has established to work with the other agencies to implement, monitor and report on the agreed actions to address the Inquiry's recommendations to improve how NSW plans and prepares for, and responds to, bush fires.

The process for assigning status to a recommendation is as follows.




- Step 1:** Recommendations/Sub-recommendations are referred by Resilience NSW to a nominated lead agency to prepare a Project Plan to implement an agreed action for the recommendation and submit this to Resilience NSW for review.
- Step 2:** The lead agency is responsible for working with nominated supporting agencies in implementing the agreed action. Resilience NSW then monitors progress of all accepted and allocated responses to track that the lead agency is meeting the agreed implementation timeframes.
- Step 3:** Once the lead agency has completed the required action it will submit to Resilience NSW a claim for closure of the recommendation. This application indicates that the lead agency believes it has completed the required action and/or ongoing work has been integrated into the lead agency's 'business as usual' operations.
The status of the recommendation is changed to "Completed".

This process will continue until all recommendations are closed.

It is acknowledged that many recommendations are contingent on collaboration with other jurisdictions, including the Commonwealth Government and other States and Territories.

The report will identify any change to target timeframes or to actions proposed to be taken to address the inquiry recommendations.

Schema for Quarterly Reporting

BEING SCOPED		A recommendation that has a project being scoped, or does not have an approved Project Plan yet.
IN-PROGRESS		A recommendation that has a project that is being progressed as at the end of the reporting period.
COMPLETED		A recommendation that has been delivered, including those incorporated into an ongoing program of work.

STATUS OF IMPLEMENTATION

The Inquiry makes 76 recommendations. 37 recommendations include a further 109 sub-recommendations which require implementation of discrete actions or projects.

Consequently, Resilience NSW is reporting against a total of 148 recommendations and sub-recommendations.

At the end of the reporting period, the implementation progress for all 148 recommendations was as follows:

- 50 recommendations completed (34%)
- 98 recommendation in progress (66%)

More than \$460 million allocated to respond to NSW Bushfire Inquiry recommendations

Since the release of the NSW Bushfire Inquiry Final Report in August 2020, the NSW Government has announced more than \$460 million across two funding packages to implement the recommendations of the Inquiry.




These funding packages include:



- \$50.9 million to support firefighting tanker replacement and safety retrofits for frontline NSW RFS, Fire and Rescue NSW, NSW National Parks and Wildlife Service and Forestry Corps NSW fleet, following an initial investment of \$17 million in 2020-21;
- \$45.7 million in additional personal protective clothing for frontline firefighters;
- \$36 million for a new first responder mental health strategy for emergency services;
- \$37.6 million for the continued funding of additional mitigation crews in the NSW RFS and NPWS to deliver greater hazard reduction;
- \$34.4 million to accelerate the state-wide delivery of strategic fire trails, following an initial \$9.5 million investment in 2020-21;
- \$19.9 million to upgrade the FRNSW dispatch systems, ensuring greater integration across the fire agencies;
- \$17.2 million to operationalise two black hawk helicopters to replace existing NSW RFS helicopters; and
- \$2.5 million improvements to NSW RFS's Fires Near Me app.







Further measures to address recommendations from the Inquiry will continue to be considered as part of future budget processes.

NSW BUSHFIRE INQUIRY ACTION PLAN





QUARTERLY PROGRESS REPORT: JULY – SEPTEMBER 2021

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R1 That, in order to ensure recommendations accepted by the Government are implemented in a timely and transparent manner, Government establish a central accountability mechanism to track implementation of recommendations from bush fire-related reviews and inquiries and consider expanding this to other policy areas.	Assign Resilience NSW to oversee recommendations from the NSW Bushfire Inquiry and bush fire related reviews. NSW Government to establish a legislative function for the SEMC to oversee lessons arising from emergencies.	Resilience NSW	Q4 2021	Completed 	Recommendation completed in Q1 2021. The NSW Government assigned Resilience NSW to track the implementation of recommendations from the NSW Bushfire Inquiry, and develop a public reporting framework for the Inquiry and related reviews. Legislation was passed in November 2020 to establish an explicit statutory function for the SEMC to promote the continuous improvement in the NSW emergency management sector, including through consideration of reviews and inquiries and their recommendations.
R2 That at the start of each fire season, based on advice from the Bush Fire Coordinating Committee (BFCC), Government provide a public statement with an evaluation of the likely fire season risk and the effectiveness of the planning and preparation for the upcoming season. This should be based on sophisticated monitoring of the key risk factors and signals for an extreme fire season. It should form the basis for clear public communication about these risks on a regional basis and the actions that Government proposes in preparation.	NSW RFS Commissioner (Chair of BFCC) will prepare a report outlining the State's preparedness for the upcoming season, which is endorsed by the BFCC and presented to the Minister.	NSW RFS	Ongoing	Completed 	Recommendation completed in Q1 2021. The inaugural Fire Season Public Statement was tabled in Parliament on 17 November 2020. The 2021-22 Fire Season Statement was tabled in Parliament on 13 October 2021. This will continue to be completed annually as part of agency BAU.
R3 That the NSW Government, along with other Australian governments, ask AFAC to establish a national bush fire database. This database would enable: <ul style="list-style-type: none"> monitoring of trends in bush fire activity and impacts, including timing, cause, extent and intensity across all land tenures and vegetation types tracking trends and identifying patterns in associated weather and climate signals that contribute to severe bush fires evaluation of the cost and effectiveness of risk mitigation efforts, including hazard reduction, and fire suppression activities so we have a better understanding of what works. 	NSW RFS will collaborate with AFAC and the Disaster Research Centre (announced by the Commonwealth Government 23 July 2020) to ensure a national repository for bush fire history including those elements listed within the recommendation.	NSW RFS	Q2 2023*	In Progress 	The NSW RFS is incorporating new technology into its fire history mapping. This includes the use of satellite derived information to determine fire intensity. The RFS is also participating in an EMSINA lead project to create national fire history maps and data.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R4 That, in order to improve capability to detect ignitions and monitor accurately all fire edge intensity and progression automatically across the State in near real time, Government establish a spatial technology acceleration program to maximise the information available from the various remote sensing technologies currently in use and to plan for inclusion of new remote sensing systems that can sense precisely and rapidly through heavy smoke, cloud, fog and dust. This will require work within the State and with partners nationally and internationally.</p>	<p>NSW RFS will develop a project to trial new NSW RFS Citation aircraft for early detection by increasing surveillance flights during and before heightened fire dangers.</p> <p>NSW RFS will also, working with other agencies, examine the feasibility and trial an integrated detection and monitoring camera surveillance network across high risk bush fire areas area of the state.</p>	NSW RFS	Q2 2022	In Progress 	<p>The Overwatch system is now operational and continues to be used for trial purposes, testing scanning and detection capabilities. These trials have primarily focused on operating settings to ensure optimal image production for fire and other incidents. Trials will continue to be undertaken during the 2021/22 bush fire season.</p> <p>The second NSW RFS Cessna Citation Jet continues to undergo airframe modification installation works for installation of the Overwatch system. This aircraft is expected to come online over coming months after which time it will undergo testing.</p> <p>NSW RFS continues to work with Forestry Corporation of NSW (FCNSW) on camera detection technology which will be trialed during the 2021/22 bush fire season.</p>
<p>R5 That Government establish NSW as a major world centre of bush fire research, and technology development and commercialisation. This should include:</p> <p>a) establishing a Bush Fire Technology Fund, modelled on the Medical Devices Fund, to assist with the rapid development of technologies and services to sense, fight, mop up after and protect from bush fires</p> <p>b) commissioning further research into extreme fire behaviour and building up the research and research training capacity in this field. This will improve our ability to understand, model and predict the likelihood of extreme fire behaviour in the landscape and enable targeting of fire fighting resources to areas where fires are likely to become most damaging.</p>	<p>Resilience NSW in collaboration with relevant agencies will scope the potential establishment of a Bushfire and Natural Hazards Research and Technology Acceleration Program. It is proposed to consider proposals to address this recommendation in detail in mid-2021.</p>	Resilience NSW	Q3 2022	Completed 	<p>Recommendation completed in Q2 2021.</p> <p>The NSW Government has committed \$69.8 million over four years for the establishment of a Bushfire and Natural Hazards Research and Technology Program, and Bushfire Response R&D Mission, to accelerate research and development and promote new and emerging industries and technology to better prepare the state for future bush fires.</p> <p>This funding includes \$16 million over four years to establish an early-stage Bushfire Technology Fund, to enable small and medium enterprises to develop and commercialise products related to bush fire technologies.</p> <p>Resilience NSW and Investment NSW will be responsible for administering this funding over the next four years.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R6 That Government support training initiatives to increase the capacity of fire authorities to fight the kind of megafires seen in the 2019-20 season. The training initiatives should include:					
a) targeted training in local weather effects for fire behaviour analysts who are embedded in Incident Management Teams	NSW RFS to enhance existing multiagency Fire Behaviour Analyst training programs, to improve knowledge of local weather effects.	NSW RFS	Q3 2021	Completed 	The NSW RFS has developed and delivered Local Weather Effects training to over 60 NSW RFS and interagency Fire Behaviour Analysts. This training has enhanced their knowledge and ability to consider local weather effects and their influence on bush fires.
b) an increase in the number of trained fire behaviour analysts so that, should there be a repeat of the scale of these fires, all Incident Management Teams can have an embedded analyst and there is some redundancy under more normal conditions	NSW RFS to recruit additional fire behaviour analysts and trainers in regional NSW.	NSW RFS	Q4 2021	Completed 	The NSW RFS continues to increase its Fire Behaviour Analyst capacity. Additional Fire Behaviour Analysts have been recruited, meaning each Area Command has this specialised capacity. The NSW RFS also conducted a Fire Behaviour Analyst Training course during this quarter, further increasing capacity.
c) training of more meteorologists in fire behaviour so there are more expert resources available to embed within the NSW RFS State Operations Centre	NSW RFS to develop a specific training package to enhance the knowledge of embedded BOM meteorologists within the NSW RFS State Operations Centre.	NSW RFS	Q4 2021	In Progress 	The NSW RFS in partnership with the BoM continues to build greater capacity for meteorologists to provide assistance at the RFS State Operations Centre.
d) dedicated training for firefighters in extreme fire behaviour	NSW RFS to develop an extreme fire behaviour training module and online training package, incorporated into existing foundational training frameworks.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q2 2021. Extreme fire behaviour content has been included in all mainstream firefighting training packages. This includes Bush Firefighter, Advanced Firefighter and Crew Leader training packages.
e) support for research training in challenging firefighting problems.	NSW RFS will work with RFS to develop annual scholarship program for RFS volunteer members.	NSW RFS	Ongoing	In Progress 	Consultation with key stakeholders is underway to inform the development of a scholarship program focused on researching challenging firefighting problems.
R7 That the NSW RFS Commissioner consult with the Fire and Rescue NSW Commissioner and other emergency services to develop a protocol in the event that simultaneous emergency events necessitate the re-allocation of resources while a Section 44 declaration is in place.	The NSW RFS Commissioner to consult with the Fire and Rescue NSW Commissioner, to establish an agreed position on minimum standards of fire protection to be afforded to Communities within a declared Section 44 area.	NSW RFS FRNSW	Q2 2022	In Progress 	Deputy Commissioners from NSW RFS and FRNSW have consulted with senior operational staff on the draft protocol for re-allocation of resources during simultaneous emergency events and are updating it for final consultation with agency Commissioners in Q4 2021.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R8 That, to strengthen cross-agency accountability and deliver improved bush fire risk management outcomes:					
a) Bush Fire Coordinating Committee (BFCC) members from NSW government agencies are at the level of Coordinator General/Deputy Secretary/Agency Head/Deputy Commissioner (or equivalent)	NSW RFS will review BFCC membership and make appropriate recommendations for appointment by the Minister.	NSW RFS	Q3 2021	Completed ■	A review of BFCC members has been completed. This resulted in one representative change. The remaining BFCC representatives are at an appropriate level of seniority.
b) the BFCC ensures all Bush Fire Risk Management Plans (BFRMPs), Operation Coordination Plans and Fire Access and Fire Trail (FAFT) Plans are compliant with the timeframes outlined in section 52 of the <i>Rural Fires Act</i> as soon as practicable	This recommendation will be addressed in conjunction with Recommendation 19.	NSW RFS	Q2 2022	In Progress ■	Next Generation Bush Fire Risk Management Plans have been created and will be rolled out over a three year period. All Bush Fire Management Committees have a valid Bush Fire Risk Management Plan and Section 52 Operations Plan.
c) the BFCC develops a risk-based performance auditing cycle to ensure Bush Fire Risk Management Plans, Operation Coordination Plans and FAFT Plans are fit-for-purpose and any opportunities for improvement are identified and actioned	This recommendation will be addressed in conjunction with Recommendation 19.	NSW RFS	Q4 2021	In Progress ■	This recommendation is addressed in conjunction with Recommendation 19.
d) the NSW RFS considers the best way of enhancing the transparency of BFCC decision-making, for example by publishing BFCC membership and minutes on its website	NSW RFS will enhance its website to provide BFCC content.	NSW RFS	Q4 2021	In Progress ■	The NSW RFS has created and launched a webpage dedicated to existing and draft Bush Fire Risk Management Plans. They can be accessed at https://www.rfs.nsw.gov.au/plan-and-prepare/managing-bush-fire-risk . Content for two BFMCs has been created to support Bush Fire Risk Management Plan Public Exhibition and is currently in review.
e) the BFCC endorses the annual statement to Parliament on the likely fire risk and the effectiveness of planning and preparation	This recommendation will be addressed in conjunction with Recommendation 2.	NSW RFS	Ongoing	Completed ■	Recommendation completed in Q1 2021. This recommendation has been addressed in conjunction with Recommendation 2.
f) relevant agencies review Bush Fire Management Committee (BFMC) membership and confirm to the NSW RFS that members have sufficient discretion and authority to agree and implement risk mitigation activities at the local level	NSW RFS in collaboration with BFCC to update BFMC Policy and Handbook, the BFCC secretariat to provide a report to Commissioner NSW RFS regarding agency endorsement of all BFMC members in alignment to this recommendation.	NSW RFS	Q3 2021	Completed ■	All BFMC Executive Officers have reviewed their membership and ensured representatives are of appropriate level of seniority.



Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
g) the NSW RFS Commissioner amends the BFMC Policy to require BFMCs to refer unresolved issues to the BFCC for resolution.	NSW RFS in collaboration with BFCC will update the BFMC Policy and Handbook.	NSW RFS	Q1 2022	In Progress 	The BFMC Policy and Handbook is being reviewed to address key reforms arising from this recommendation. While the policy is under review, the Chair of the BFCC has written to all BFMCs to reinforce that unresolved matters must be escalated to the BFCC. All BFMC Executive Officers are aware of the interim resolution pathway.
R9 That the NSW RFS work with AFAC to analyse the impact of changing fire seasons on inter-jurisdictional resource sharing agreements, both domestic and international, and determine any flow-on effects for NSW firefighting personnel capacity.	NSW RFS to work with NRSC to update policies and plans, and to undertake annual resource analysis between jurisdictions.	NSW RFS	Q4 2021	Completed 	The 2021 National Statement of Capability has been completed and published by AFAC. The Bush Fires Amendment Bill passed by Parliament in 2020 did not include changes relating to industry based brigades. The NSW RFS continues to work with industry stakeholders including private forestry landowners/managers who operate their own firefighters to comply with their responsibilities under the <i>Rural Fires Act 1997</i> .
R10 That, in order to expand NSW's specialist aviation personnel safety and capacity, Government expand simulator capabilities at the NSW RFS Training Academy.	NSW RFS will install an aviation simulator and engage additional trainers at RFS Academy.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q2 2021. The NSW RFS Aviation Simulator is now integrated into aviation training courses, including the interstate Air Attack Course conducted in June 2021 at the NSW RFS Dubbo Training Academy.
R11 That, in order to strengthen the capability of local councils in future emergency events:					
a) Resilience NSW, in consultation with local government, develop specific training that focuses on the role, responsibilities and expected functions of the Local Emergency Management Officer (LEMO), including regular 'refresher' components	Resilience NSW will expand the Regional Disaster Preparedness Program, with modules on local council emergency management capability development.	Resilience NSW	Q4 2021	Completed 	Recommendation completed in Q2 2021. LEMC online training package has been re-developed and released including guidance on the role and responsibility of Local Emergency Management Officers.


Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
b) Councils support their staff to participate in LEMO training on an ongoing basis, and ensure that staff who are LEMOs are appropriately senior and have the authority to commit resources.	Local Council Capability Development Program	Resilience NSW	Ongoing	Completed ■	Recommendation completed in Q1 2021. The Regional Disaster Preparedness Program, piloted in four regions, is being transitioned into core business for Resilience NSW through its regional teams. Resilience NSW regional teams will enhance and expand work from this program across NSW such as the Local Recovery and Regional Recovery Planning and capacity building, and the Disaster Dashboards. Findings from the recent evaluation of the program will also be embedded into Resilience NSW's core business.
R12 That Government work with other Australian governments to provide long-term funding certainty to AFAC, including the National Resource Sharing Centre (NRSC) and the National Aerial Firefighting Centre (NAFC).	This will be progressed by national forums to also address related recommendations from the Royal Commission into National Natural Disaster Arrangements.	Resilience NSW	Ongoing	Completed ■	Recommendation completed in Q1 2021. NSW continues to support the AFAC arrangements through existing national forums including the National Emergency Management Minister's Meeting (NEMMM) and Australia-New Zealand Emergency Management Committee (ANZEMC).
R13 That, to ensure updated resource-sharing arrangements are in place, the NSW and Victorian Governments progress and finalise a multi-agency Memorandum of Understanding before the 2020-21 fire season commences.	NSW RFS to review all Memoranda of Understanding including Victoria ahead of the 2020/21 bush fire season.	NSW RFS	Q2 2021	Completed ■	Recommendation completed in Q1 2021. All Memorandums of Understanding (MOUs) were reviewed ahead of the 2020-21 bush fire season. MoUs will be reviewed annually.
R14 That in order to provide greater consistency in public information and warnings, especially in border areas: a) the finalisation of the Australian Warning System be prioritised to provide greater consistency in public information and warnings b) the NSW State Emergency Management Committee, including the Public Information and Warnings Sub-Committee, prioritise the implementation of the Australian Warning System and data standards for relevant hazards within NSW.	NSW RFS will continue to work with the National Warnings Group to finalise the National Warning System framework and engage with SEMC to implement the system.	NSW RFS	Q2 2021	Completed ■	Recommendation completed in Q1 2021. On 19 March 2021, ANZEMC endorsed the adoption of the Australian Warning System across multiple hazards. In advance of this, the nationally agreed bush fire warning icons were implemented and displayed on NSW RFS systems from December 2020.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R15 That Government commit to:</p> <p>a) evaluating existing bush fire preparedness programs to determine the most effective and efficient approach given increased frequency of extreme fire seasons, and develop outcomes-based measures to monitor programs' impact over time</p> <p>b) post-evaluation roll out the most effective bush fire preparedness programs to all communities and at-risk cohorts in bush fire prone areas across NSW.</p>	<p>NSW RFS will establish a comprehensive review of all preparedness programs, to identify and prioritise those programs that provide better outcomes for communities.</p>	<p>NSW RFS</p>	<p>Q1 2022</p>	<p>In Progress</p>	<p>NSW RFS has been collecting and collating data on the effectiveness and efficiency of 23 community preparedness programs.</p> <p>A Working Group has been established comprising NSW RFS staff and volunteers from each Area Command to provide input and feedback on the evaluation. Three workshops with the Working Group have been held in October to provide input and feedback on the evaluation.</p>
<p>R16 That, in order to ensure tourism businesses are prepared for natural disasters including bush fires, Resilience NSW work with NSW RFS and Destination NSW to develop bush fire preparedness support for tourism businesses, based on research into existing models. Over time, this support could be expanded to include other natural hazards.</p>	<p>Resilience NSW will review Get Ready materials, and other appropriate business disaster preparedness tools, and tailor for the tourism market using behavioural insights and testing with tourism businesses to ensure effectiveness of message delivery.</p>	<p>Resilience NSW SBC</p>	<p>Q4 2022</p>	<p>Completed</p>	<p>On 9 September 2021, NSW Government launched a set of new guides to bolster tourism businesses resilience to bush fires and other natural disasters. The guides were developed by Destination NSW, working closely with Resilience NSW and NSW RFS. They address tourism industry needs and provide straightforward and practical advice to help tourism businesses keep everyone safe and informed.</p> <p>Emergency management training materials have also been made available to industry to support their knowledge and understanding.</p>
<p>R17 That the NSW RFS identifies remote bush fire prone areas that do not already have an indoor Neighbourhood Safer Place (NSP) and upgrades the relevant NSW RFS Stations to meet NSP guidelines. These stations would require adequate Asset Protection Zones and active/passive protection systems to provide short-term protection.</p>	<p>NSW RFS will undertake analysis of how many remote locations do not have an indoor NSP and a NSW RFS station is in the same locality. NSW RFS will trial the upgrade of three remote RFS stations in areas that do not have an indoor NSP.</p>	<p>NSW RFS</p>	<p>Ongoing</p>	<p>In Progress</p>	<p>The NSW and Commonwealth Government have allocated \$5 million to trial the upgrade of NSW RFS stations in remote areas to support an indoor Neighbourhood Safer Place (NSP) to be co-located at these stations.</p> <p>The NSW RFS has commenced a trial of enhancing infrastructure at one rural fire brigade station to meet NSP requirements. The NSW RFS is continuing to work with local stakeholders to identify two further rural fire brigade stations to participate in the NSP infrastructure enhancement trial.</p>




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R18 That, in order to equip NSW RFS with comprehensive information on all structures and assets at risk of bush fire, Government ensures that:</p> <ul style="list-style-type: none"> there is a single whole-of-government procurement and acquisition program for imagery and LiDAR and that Government accelerate the building of the State Digital Twin and associated Digital Workbench owners/managers of assets (apart from private home owners whose information will be provided through local councils) in bush fire prone land are required to provide to the Digital Twin at least the following information/metadata with quality control certification on an annual basis (with annual census at least two months before the start of the fire season): precise geolocation; description of asset including picture; value level; fire treatment on asset; Asset Protection Zone (APZ) details and how it is maintained; access details; what redundancy is available if relevant; any metadata requirements specific to the asset class; emergency contact and instructions on how to access where more information is held; and any restrictions on data access and sharing. <p>The Digital Twin must also be able to incorporate:</p> <ul style="list-style-type: none"> information about the hazard reduction results for road verges, fire trails, APZs and other defendable space local information supplied by organisations such as local NSW RFS brigades. 	<p>Department of Customer Service (DCS) Spatial Services to coordinate whole-of-government option for procurement and acquisition of imagery and LiDAR. NSW government agencies to engage with current activity of the Commonwealth Government to deliver significant reforms in this area.</p>	<p>Resilience NSW DCS</p>	<p>Q4 2024</p>	<p>In Progress</p> <p>■</p>	<p>DCS continues to progress LIDAR and imagery capabilities, in cooperation with NSW SES, Public Works Advisory and NSW RFS.</p> <p>DCS has also expanded capacity of the ReSSE Imagery Panel to assist with imagery procurement.</p> <p>For the digital workbench, DCS has expanded data sourcing capacity and is working with data custodians across government to create data pipelines into State Digital Twin and Emergency Services Spatial Information Library (ESSIL).</p> <p>DCS has secured additional infrastructure data from Utilities and Telco companies during this period, and continues to work with peak industry groups, Commonwealth Government and NSW agencies on critical infrastructure data.</p> <p>DCS has released the Spatial Information Mapping System v2 on the State Digital Twin infrastructure, providing Local and Regional emergency managers and Functional areas access to reporting on structures, assets and other relevant information held in the ESSIL database.</p> <p>In 2021-22, DCS commenced a 'Proof-Of-Concept' (POC) project, proving data pipeline and visualisation technology for the Digital Twin. Infrastructure data continues to be sourced and provided to RFS and other NSW agencies.</p>




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R19 That Government re-commit to the current, regionally based approach to planning and coordinating hazard reduction activities across all tenures through Bush Fire Management Committees but ensure that it is actually being implemented at a high-level of quality across NSW. Getting it to a high-level of quality requires:					
a) implementing the Inquiry's recommendation about performance auditing of Bush Fire Risk Management Plans	<p>The Government to introduce legislation to expand NSW RFS Commissioner's existing powers to audit the implementation of bush fire risk management plans, and provide for the specific power to audit 'Fire Access and Fire Trail Plans' and 'Plans of Operations'.</p> <p>NSW RFS Commissioner to establish a performance, audit and implementation unit to undertake ongoing review of BFCC and BFMC functions, plans and outcomes.</p>	NSW RFS	Q2 2022	In Progress ■	<p>The <i>Rural Fires Act 1997</i> was amended in November 2020 to provide new powers for the Commissioner to audit implementation of Bush Fire Risk Management Plans.</p> <p>The NSW Government has invested \$24.9 million over five years (commenced in 2020-21) to establish new, regionally based Community Safety Teams within NSW RFS responsible for auditing compliance with bush fire plans and taking regulatory action to ensure land managers address bush fire hazards.</p> <p>The NSW RFS has commenced development of a qualitative audit program for Bush Fire Management Plans defined by S52 of the <i>Rural Fires Act 1997</i>. It is expected the rollout will occur and audits will commence in 2022.</p>
b) prioritising implementation of revised processes for bush fire risk management planning that incorporate new modelling and methods for quantifying risk and the residual risk profile as a result of proposed hazard reduction works	<p>A new Bush Fire Risk Management Planning process to be created which incorporates new modelling and methods of quantifying risk and the residual risk profile as a result of proposed hazard reduction works.</p> <p>Relevant policies to be updated to support new BFRMP and implementation plan for roll out created.</p>	NSW RFS	Q2 2022*	In Progress ■	<p>The NSW RFS is facilitating workshops and volunteer engagement for ten BFMC areas across Phase 1 and Phase 2 of the Next Generation Bush Fire Risk Management Plan rollout. This rollout is a three year project.</p> <p>The second round of modelling and risk treatment workshops have occurred in five BFMC areas in Northern Sydney. Two Bush Fire Risk Management Plans have been endorsed and will be released for public exhibition in Q4 2021.</p> <p>NPWS Bushfire Risk and Evaluation Team is supporting this work and has delivered cultural and environmental risk information coupled with treatment advice to BFMCs in the Hunter and Northern Sydney. Work has commenced on the analysis of cultural and environmental risks for Committees in the south west and north west regions of the state.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
c) ensuring regional priorities for hazard reduction, and how they are determined, are communicated clearly to the community, and their implementation is reported on transparently. This will include being very clear about the objectives of hazard reduction activities and communicating that hazard reduction does not eliminate the risk of fire affecting properties	NSW RFS will collaborate with the BFCC to update the BFMC handbook and Policy to require that regional annual risk plans are communicated to all agency members and the community.	NSW RFS	Q1 2022*	In Progress 	This recommendation will be delivered in conjunction with recommendation 19(a) and 19(b). Refer to updates on recommendation 8(g) regarding the review of the BFMC Handbook.
d) the methodology for assessing and planning for risk reduction becomes an ongoing area of research and the frameworks are formally reviewed every three years.	This recommendation will be addressed through recommendation R3 and R5(b).	NSW RFS	Ongoing	In Progress 	Next Generation Bush Fire Risk Management Plans are still in the initial rollout phase which will take place over a three-year period. The review of the methodology for assessing and planning for risk reduction will commence in the final year of rollout. Risk reduction remains a key priority area of current research efforts.




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R20 That Government, noting that hazard reduction targeted in proximity to assets is on balance more likely to provide help than hinder, should:					
a) support local councils and partner agencies to implement more comprehensive hazard reduction at a local level around towns/cities, communities and local infrastructure assets, and provide incentives for communities to organise themselves to prioritise and implement local hazard reduction initiatives. This will involve a suite of hazard reduction techniques depending on the landscape including prescribed burning, clearing, mowing, and mechanical treatments, and easy disposal of green waste into processors turning it into bioenergy or biofuels	NSW RFS to increase access to mitigation resources to support local government and land managers with implementation of Asset Protection Zone (APZ) and Strategic Fire Advantage Zone (SFAZ) works.	NSW RFS	Ongoing	In Progress 	<p>In June 2021, the NSW Government allocated an additional \$37.6 million to extend the mitigation crew programs for NSW RFS and NPWS for a further year. The additional mitigation crews employed across NSW continue to provide enhanced protection for communities.</p> <p>An example of work undertaken is the creation of an Asset Protection Zone adjacent to Coolah Hospital and nearby residential properties. NSW RFS partnered with Warrumbungle Shire Council to identify, plan and complete mitigation works which will provide significant protection for important and vulnerable assets such as the Coolah Hospital. NSW RFS will continue to work with Warrumbungle Shire Council to maintain this important community protection and identify further opportunities to protect the community.</p> <p>During Q3, NSW RFS Mitigation Crews mitigated the bush fire risk and provided protection to 8,925 properties, completed 146km of APZ work, constructed 281km of control lines and completed 78 Assist Infirm, Disabled and Elderly Residents (AIDER) mitigation jobs.</p> <p>During Q3, NPWS has undertaken 20,718 ha of hazard reduction, including 7,458 ha within SFAZ and 289 ha of APZ.</p> <p>Extensive planning work has also been delivered to ensure that NSW RFS and NPWS are positioned to take full advantage of any favourable weather conditions for burning.</p> <p>In 2021-22, over \$7.3M in mitigation grants is being provided to local councils. All mitigation grant applications were circulated to all BFMC's for endorsement.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>b) beyond the local level priorities for hazard reduction, prioritise prescribed burning in parts of the landscape where fuel treatment may help reduce probability of fires escalating quickly and where terrain and potential atmospheric interactions are likely to escalate fires into fire-generated thunderstorms. This will likely involve a proactive program of treating ridge tops that are prone to dry lightning where reduced fuels may help reduce speed of spread when the fire first starts, or particular windward or lee-slopes that are susceptible to generating extreme fire behaviour and drive fire towards towns.</p>	<p>NSW RFS and NPWS to extend mitigation programs, with the addition of increased resource capabilities to focus on areas of potential bush fire ignition.</p>	<p>NSW RFS DPIE</p>	<p>Q2 2022</p>	<p>In Progress ■</p>	<p>This recommendation is being addressed through recommendation 21(a).</p>
<p>R21 That, in order to improve understanding of optimal hazard reduction techniques and their application in the landscape:</p>					
<p>a) Government extend the recently introduced program of mitigation crews so that hazard reduction activities can be undertaken when conditions are optimal (throughout the week and potentially at night)</p>	<p>The Government will extend the existing 12-month funding for NSW RFS and NPWS mitigation programs, including extension of NPWS fire fighter roles to undertake additional hazard reduction activities and enhance rapid bush fire response capacity.</p>	<p>NSW RFS DPIE</p>	<p>Ongoing</p>	<p>In Progress ■</p>	<p>In June 2021, the NSW Government allocated an additional \$37.6 million to extend the mitigation crew programs for NSW RFS and NPWS for a further year, and to purchase machinery to assist with hazard reduction works.</p> <p>This is in addition to the \$71.1 million allocated in 2020-21, delivering a total increased investment of \$108.7 million.</p> <p>During Q3, NSW RFS Mitigation Crews mitigated the bush fire risk and provided protection to 8,925 properties, completed 146km of APZ work, constructed 281km of control lines and completed 78 Assist Infirm, Disabled and Elderly Residents (AIDER) mitigation jobs.</p> <p>During Q3, NPWS has undertaken 20,718 ha of hazard reduction, including 7,458 ha within SFAZ and 289 ha of APZ.</p> <p>Extensive planning work has also been delivered to ensure that NSW RFS and NPWS are positioned to take full advantage of any favourable weather conditions for burning.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
b) all fire authorities review prescribed burning techniques and their implementation, and commission further research into optimal prescribed burning regimes and techniques. This should include research to understand critical thresholds that, when breached, may render fuel treatment ineffective (i.e. fuel moisture thresholds), and the short, medium and long-term outcomes of hazard reduction burning regimes	All fire agencies to review and ensure that the prescribed burn plans clearly identify the outcome that the Hazard Reduction activity is to deliver, and that those undertaking Hazard Reduction activities are appropriately trained.	NSW RFS	Q1 2022*	In Progress 	The NSW RFS is progressing with upgrades to prescribed burn training packages to deliver improved training for prescribed burn planners and supervisors. The completion of these upgrades are expected to be delivered by early 2022.
c) Government commission research into a range of other hazard reduction techniques to understand better the cost versus benefit and effectiveness of different practices in various circumstances, including grazing.	The NSW RFS in collaboration with BFCC and universities to research initiatives for hazard reduction practices, techniques, and technologies.	NSW RFS	Q2 2023	In Progress 	<p>The NSW Government has committed \$69.8 million over four years for the establishment of a Bushfire and Natural Hazards Research and Technology Program, and Bushfire Response R&D Mission, to accelerate research and development and promote new and emerging industries and technology to better prepare the state for future bush fires.</p> <p>The NSW RFS is working with the newly formed Natural Hazards Research Australia to identify priority areas for research. This includes advocating for research into hazard reduction techniques and their cost effectiveness.</p> <p>Additionally, the NSW RFS commenced a goat grazing trial and is evaluating the benefits of using goats to manage fuel loads in Asset Protection Zones and Strategic Fire Advantage Zones, as an alternative to burning which is heavily reliant on favourable weather.</p>
R22 That, as part of the spatial technology acceleration program, Government support deployment of remote sensing and picture processing technologies to monitor and audit how well Asset Protection Zones and defendable space are being maintained, especially around towns.	<p>The NSW RFS will develop project to trial use of its owned Cessna Citation jets fitted with remote sensing technology to monitor APZs.</p> <p>The NSW RFS will work with NSW Spatial Services to develop emerging technologies and methods for monitoring APZs.</p>	NSW RFS	Q2 2023	In Progress 	<p>The Overwatch system is now operational and continues to be used for trial purposes, testing scanning and detection capabilities. These trials have primarily focused on operating settings to ensure optimal image production for fire and other incidents. Trials will continue to be undertaken during the 2021-22 bush fire season.</p> <p>The second NSW RFS Cessna Citation Jet continues to undergo airframe modification works for installation of the Overwatch system. This aircraft is expected to come online over coming months after which time it will undergo testing. NSW RFS continues to work with Forestry Corporation of NSW (FCNSW) on camera detection technology which will be trialed during the 2021-22 bush fire season.</p>



Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R23 That Government amend the <i>Rural Fires Act 1997</i> so that all public land management agencies be required to forward complaints received about bush fire hazards to the Commissioner of the NSW RFS. As an interim measure, heads of agencies should commence this practice immediately.	The Government will amend the <i>Rural Fires Act 1997</i> to require all public land managers to provide any hazard complaints they receive to the NSW RFS Commissioner within 14 days consistent with requirements already placed upon local authorities, and ensure that public and private land holders are treated consistently.	NSW RFS	Q4 2020	Completed 	Recommendation completed in Q1 2021. The <i>Rural Fires Act 1997</i> was amended in November 2020 to require public land managers to report complaints on bush fire hazards to the NSW RFS.
R24 That government agencies managing land (at all levels and through all agencies) be the best neighbours possible by considering their neighbours when undertaking activities related to bush fire preparation and having clear, two-way communication about these activities, with the aspiration that government landholders will be seen as highly desirable neighbours.	The Government will amend the <i>Rural Fires Act 1997</i> to remove the capacity for certain land (including those managed by public authorities) to be exempted from the requirements for land managers to repair and replace any dividing fences damaged by bush fire.	NSW RFS	Q4 2020	Completed 	Recommendation completed in Q1 2021. The <i>Rural Fires Act 1997</i> was amended in November 2020 to remove the capacity for certain land (including those managed by public authorities) to be exempted from the requirements for land managers to repair and replace any dividing fences damaged by bush fire.
R25 That Government adopt the principle that cultural burning is one component of a broader practice of traditional Aboriginal land management and is an important cultural practice, not simply another technique of hazard reduction burning.	DPIE and AANSW to develop a long term Cultural Fire Management Strategy working in partnership with Aboriginal communities.	DPIE AANSW	Q2 2022	In Progress 	The NSW Government has committed \$1.29 million over two years to enable the commencement of a community driven, co-design process, leading to the development of a long-term Cultural Fire Management (CFM) Strategy and business model. The CFM Unit was established by DPIE, AANSW and Department of Regional NSW to coordinate, explore wider implementation, and preserve and promote the cultural integrity of cultural fire as a component of Aboriginal land management.


Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R26 That, in order to increase the respectful, collaborative and effective use of Aboriginal land management practices in planning and preparing for bush fire, Government commit to pursuing greater application of Aboriginal land management, including cultural burning, through a program to be coordinated by Aboriginal Affairs and Department of Planning, Industry and Environment working in partnership with Aboriginal communities. This should be accompanied by a program of evaluation alongside the scaled-up application of these techniques.</p>	<p>DPIE will measure benefits of Aboriginal land management (cultural burning) to conservation, soil properties, and community wellbeing, and to work with Aboriginal communities to foster and deliver cultural burning.</p>	<p>DPIE AANSW</p>	<p>Ongoing</p>	<p>In Progress ■</p>	<p>This recommendation is being addressed in conjunction with Recommendation 25. DPIE has been funded through the Commonwealth Disaster Risk Reduction Funding Package to develop a framework to assess the vulnerability of Cultural Heritage to fire and determine how key management actions, such as prescribed burning and fire suppression, can mitigate fire risk to Cultural Heritage.</p>
<p>R27 That Government commit to shifting to a strategic approach to planning for bush fire, and develop a new NSW Bush Fire Policy similar to the NSW Flood Prone Land Policy in order to accommodate changing climate conditions and the increasing likelihood of catastrophic bush fire conditions; to build greater resilience into both existing and future communities; and to decrease costs associated with recovery and rebuilding.</p>	<p>NSW RFS will work with DPIE designing and establishing a new bush fire planning framework incorporating a new strategic planning approach and how that would fit into the existing Planning for Bush Fire Protection regulatory scheme. The SEMC will consider the development of a new NSW Bush Fire Planning Policy to support this new approach as part of the work program of its land use advisory group.</p>	<p>NSW RFS Resilience NSW</p>	<p>Q4 2021</p>	<p>In Progress ■</p>	<p>NSW RFS continues to work with key stakeholders including DPIE on identified Growth Areas and proposed developments to design, establish and implement new bush fire planning frameworks that incorporate new strategic planning and assessment approaches. A two-year staged works plan is due to commence in 2022.</p>



Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R28 That Government, acknowledging that a strategic approach to planning for bush fire will take time, and in order to protect, prepare and build resilience into existing communities better, should immediately:					
<ul style="list-style-type: none"> prepare, in association with the insurance sector, a model framework and statutory basis for the establishment of an enforcement, compliance and education program which adopts a risk-based approach to routine inspection of local bush fire prone developments to ensure that every local development on bush fire prone land is prepared for future bush fire seasons in accordance with bush fire protection standards of the day, that account for worsening conditions 	The Government to introduce legislation to expand NSW RFS Commissioner's existing powers to audit the implementation of bush fire risk management plans, and resource a new implementation unit to undertake ongoing review of risk plans, including Asset Protection Zones (APZ) and Strategic Fire Advantage Zones (SFAZ).	NSW RFS	Q4 2024	Completed 	Recommendation completed in Q1 2021. The <i>Rural Fires Act 1997</i> was amended in November 2020 to provide new powers for the Commissioner to audit implementation of Bush Fire Risk Management Plans. The NSW Government has invested \$24.9 million over five years commencing in 2020-21 to establish new, regionally-based Community Safety Teams within NSW RFS responsible for auditing compliance with bush fire plans and taking regulatory action (including issuing notices and fines) to ensure land managers (including public land managers) address bush fire hazards.
<ul style="list-style-type: none"> ensure local government is resourced to enable effective audit, enforcement and compliance powers in respect of local developments and assets on bush fire land 	Consider potential strategies to increase local government capability to undertake audit, enforcement and compliance activities in accordance with existing powers.	Resilience NSW	Ongoing	In Progress 	The SEMC Capability Development Sub-Committee is progressing the development of strategies to increase local emergency management capability.
<ul style="list-style-type: none"> consider the introduction of subsidies for property owners to undertake site mitigation works to reduce bush fire risk and work with the Insurance Council of Australia to develop an agreed set of measures to insure against with a view to risk reductions resulting in lower insurance premiums 	Partner with Insurance Council of Australia (ICA) to investigate a Household Resilience Program for NSW	Resilience NSW	Q4 2024	In Progress 	A multi-agency project working group has been established with representatives from Bega Valley Council, Canberra Region Joint Organisation (JO), Resilience NSW, Insurance Council of Australia and Minderoo Foundation to conduct a pilot program to develop tools for homeowners, councils and industry to improve their climate resilience. The Climate Resilient Housing Toolkit has reached a mid-way point with literature review, insights report and model housing archetypes complete. Workshops with Council staff, industry and government stakeholders were undertaken to further inform the settings for a pilot of the toolkit. Benchmarking research has also been completed as part of the Get Ready baseline risk and preparedness project and provides a state-wide baseline measure of household preparedness for bushfire at the JO level.





Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<ul style="list-style-type: none"> review vegetation clearing policies to ensure that the processes are clear and easy to navigate for the community, and that they enable appropriate bush fire risk management by individual landowners without undue cost or complexity. 	<p>The Government will implement legislation to empower rural landholders to clear their property boundaries in accordance with a code of practice but otherwise without further approval.</p>	NSW RFS	Q4 2021	Completed ■	<p>The <i>Rural Fires Act 1997</i> was amended in November 2020 to simplify vegetation management for rural land holders and allow the clearing of vegetation within 25 metres of their property boundary to reduce the potential for the spread of bush fires. The supporting Rural Boundary Clearing Code was gazetted on 11 September 2021.</p> <p>This clearing work may be carried out without the need for a licence, approval, consent or other authorisation under the <i>Biodiversity Conservation Act 2016</i> or the <i>Environmental Planning and Assessment Act 1979</i> or any other Act or instrument, provided it is consistent with the Code.</p> <p>The NSW RFS has released an online assessment tool on its website which allows landowners to conduct a self-assessment to determine whether their land falls within the rural boundary clearing area.</p>
<p>R29 That, in order to maximise the protection of critical infrastructure in a bush fire, Australian governments revise the regulatory framework for the provision to government authorities of information about all critical infrastructure (public and private) including a possible change to compel the owners of critical assets to provide all needed metadata, updated annually, for appropriate planning, preparation and response for bush fire. This would include information about location, ownership, access, details of service the infrastructure supports, and fire treatments of building and surrounding zones.</p>	<p>This recommendation will be addressed in conjunction with recommendation 18.</p>	Resilience NSW NSW RFS	Ongoing	In Progress ■	<p>This recommendation will be addressed in conjunction with recommendation 18.</p> <p>The NSW Government is engaging collaboratively with the Commonwealth Government on critical infrastructure reporting requirements.</p> <p>The Commonwealth Government is considering legislation to expand the identification of critical infrastructure assets. The Federal Parliamentary Joint Committee on Intelligence and Security published 14 recommendations regarding the <i>Security Legislation Amendment (Critical Infrastructure) Bill 2020</i> on 29 September 2021 for the Commonwealth Government's consideration.</p> <p>Where action by the Commonwealth does not deliver required enhancements, NSW will examine the potential for NSW based legislative options.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R30 That, in order to minimise communication outages and extend basic communication coverage during bush fires, the NSW Government work directly, or together with other Australian governments and/or their relevant power and telecommunications regulatory, policy and market bodies, to:</p>					
<ul style="list-style-type: none"> ensure there are sufficient redundancy options available (e.g. backup diesel generators, deployed temporary telecommunications facilities, etc.) to supply power to essential telecommunication infrastructure or alternative telecommunications infrastructure 	<p>NSW Telco will continue to deliver against the NSW Operational Communications Strategy 2020.</p>	<p>NSW Telco Authority</p>	<p>Q2 2024</p>	<p>In Progress</p> <p>■</p>	<p>NSW Telco Authority continues to procure services and solutions to provide sufficient redundancy options for the Public Safety Network (PSN). Increasing battery backup on selected sites has commenced with site analysis. Manufacturing has commenced to increase the mobile radio asset pool of cell-on-wheels and generators. This will provide additional redundancy options to maintain telecommunications coverage during unplanned outages.</p>
<ul style="list-style-type: none"> ensure that the telecommunication entities' and electricity network providers' Bush Fire Risk Management Plans are updated annually and reported on in the NSW RFS Commissioner's annual statement to Parliament on the upcoming bush fire season and include details of all actions taken to mitigate those risks including maintenance of APZs and access roads 	<p>This recommendation will be addressed in conjunction with recommendation 2. NSW Telco Authority will liaise with carriers.</p>	<p>NSW Telco Authority</p>	<p>Q2 2024</p>	<p>In Progress</p> <p>■</p>	<p>Engagement with commercial carriers on information required for monitoring of coverage, risk plans and auditing of such is continuing through multiple forums such as Digital Twin implementation via TELCOFAC, Spatial Services and EUSFAC. Information received is fed into Bush Fire Risk Management Plan and NSW RFS Commissioner's annual statement. Plans are being put in place to deal with any lack of information from commercial carriers.</p>
<ul style="list-style-type: none"> ensure there is appropriate auditing of distributors' preparedness for risks arising from network assets being affected by bush fire, as well as the risk of networks initiating a bush fire 	<p>This recommendation will be addressed in conjunction with recommendation 2.</p>	<p>NSW Telco Authority</p>	<p>Q2 2024</p>	<p>In Progress</p> <p>■</p>	<p>This recommendation will be addressed in conjunction with recommendation 2. An upgraded 'Practice Note - Telecommunication Towers in Bush Fire Prone Areas' is being developed in consultation with the Telco providers and Commonwealth agency partners to provide improved guidance for protection measures for telecommunications facilities using performance based modelling.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<ul style="list-style-type: none"> facilitate cross-carrier roaming arrangements between carriers and the public for basic text, voice and data during the period of emergency in areas directly affected by fire 	<p>Implementation of this recommendation is affected by Commonwealth regulations. NSW Telco Authority will engage with the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications (DITRDC).</p>	NSW Telco Authority	Q2 2024	In Progress 	<p>As the telecommunications sector is regulated by the Commonwealth, primarily operating under to the <i>Telecommunications Act 1997</i>, the implementation of this recommendation is reliant upon Commonwealth intent and action, promoted by the NSW Telco Authority.</p> <p>The recommendation was the subject of initial discussion at the Communications Sector Group (CSG) Trusted Information Sharing Network (TISN) meeting, hosted by the DITRDC in September 2020. NSW Telco Authority briefed DITRDC and the carriers on the recommendation, however some carriers considered there would be operational and technical difficulties in implementing emergency cross-carrier roaming. Further consultation will continue through the CSG TISN.</p>
<ul style="list-style-type: none"> enable NSW RFS to require carriers to provide regular information on the status of outages and areas affected by fire. 	<p>Implementation of this recommendation is affected by Commonwealth regulations.</p>	NSW Telco Authority	Q2 2024	In Progress 	<p>NSW continues to promote the sharing of further information by carriers, essential to government agencies for emergency management purposes, that is not currently provided to them.</p> <p>Consultation will continue with carriers, their industry groups and the Commonwealth as the telecommunications industry regulator.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R31 That, in order to improve bush fire planning and protection of road infrastructure and to ensure communities, freight movers and firefighting agencies have appropriate access and egress in a bush fire event, Government, working with local government as needed:</p>					
<ul style="list-style-type: none"> ▪ develop a formal bush fire risk assessment process for all State roads and bridges, to identify: <ul style="list-style-type: none"> • ‘high-risk’ communities where access and egress in the event of a fire will be affected, for example rural communities connected by a single road surrounded by bushland, and ensure community bush fire planning processes (i.e. Bush Fire Risk Management Plans (BFRMPs) or Community Protection Plans) include plans to ‘leave early’ or enforce mandatory evacuation orders • how waterways can be integrated better into the transport network as evacuation routes or places of shelter when road and rail transport is unavailable – waterways should be included in regional emergency management plans • route options for rapid identification of needed road closures in the event of fire • key sections of the State’s road network for future upgrade to ensure whole corridors are resilient to fire impacts, regardless of who manages the asset 	<p>TfNSW and NSW RFS will work with key partners to include critical transport networks in BFRMPs prepared by BFMCs and LEMCs across the State, and develop a formal bush fire risk assessment process for all State roads and bridges. TfNSW will roll out the Bushfire Corridor Resilience Program (see recommendation 32). The program comprises a prioritised program of works to identify and apply risk assessment processes for State roads and bridges.</p>	<p>TfNSW NSW RFS</p>	<p>Q2 2022</p>	<p>In Progress</p> <div style="text-align: center;">  </div>	<p>As part of the NSW RFS Bush Fire Risk Management Plan methodology, high-risk communities with limited access routes/egress have been identified to assist bush fire and evacuation planning.</p> <p>TfNSW’s multi-modal emergency management plans are tested and reviewed regularly, including practical scenario testing and full-scale simulated emergency exercises. Incident Response plans to natural disasters (fires and floods) have been reviewed.</p> <p>The Bushfire Corridor Resilience Program is being progressively rolled out across eight key corridors, in line with recommendation 32. This work includes bushfire risk assessment of roads and bridges.</p> <p>Work has commenced on the development of Journey Resilience Plans to reduce the impact of unplanned events that cause major disruptions to customer journeys. The Plans facilitate a genuine “one network” approach where TfNSW works closely with local government, first response agencies and bus, rail and freight operators to shift focus from single corridors to the wider multi-modal network that supports connectivity across regions. Consultation on the first Plan in the New England-North West region is on track to commence before the end of 2021.</p> <p>A program to complete all remaining plans will be finalised in Q4 2021.</p>




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<ul style="list-style-type: none"> audit, through the NSW RFS Audit Unit (to be established) the inclusion of critical road infrastructure in BFRMPs prepared by Bush Fire Management Committees (ensuring that appropriate transport representation is provided to BFMCs) and Local Emergency Management Committees across the State. 	<p>NSW RFS and TfNSW to review the 62 NSW BFRMPs to verify that appropriate State road infrastructure is identified, and for BFMCs to consider any unidentified State road infrastructure for inclusion in the BRMPs.</p> <p>TfNSW will work with NSW RFS to ensure appropriate representation from TfNSW on BFMCs.</p>	NSW RFS TfNSW	Q2 2022	In Progress 	<p>An audit of State road infrastructure identified in BFRMP's will be included in the risk-based performance auditing program (see recommendation 8c).</p> <p>TfNSW is included in BFMC memberships under the <i>Rural Fires Regulation 2013</i>.</p> <p>BFRMPs and Transport incident response plans have been updated across the State. This includes identification of critical road infrastructure and alternative route options in the event of critical road closures.</p>
<p>R32 That, in order to ensure outcomes-based roadside vegetation management to reduce roadside tree fall and grass ignitions in planning and preparing for bush fire, Transport for NSW, working with local government and NSW RFS, establish a consistent framework for roadside vegetation management that analyses road priority, utility, amenity, strategic value and risk. The framework should:</p> <ul style="list-style-type: none"> take into consideration landscape characteristics like distance, slope, set back, vegetation maturity and type. Acceptable outcomes under this framework could include clear verges, or alternatives such as safe zones/pull-outs. tie in formally with other strategic land use and biodiversity processes. 	<p>TfNSW will roll out the Bushfire Corridor Resilience Program, designed to improve the resilience of evacuation and emergency services access routes and increase the speed of return to service post a fire event. The program comprises a prioritised program of works to identify and apply risk assessment processes for State roads and bridges.</p>	TfNSW	Q4 2021	Completed 	<p>The TfNSW Vegetation Management framework is operational, and was developed in consultation with arborists and other vegetation management experts.</p> <p>The NSW Government has allocated \$28 million over three years to deliver TfNSW's Bushfire Corridor Resilience Program, which is designed to improve the resilience of evacuation and emergency services access routes and increase the speed of return to service post a fire event.</p> <p>The roll out of the Bushfire Corridor Resilience Program is continuing progressively across eight key corridors. RFS and local councils have been consulted in this work.</p> <p>TfNSW has also commenced investigations on a framework for Aboriginal Cultural Landscape Management initiatives and pilot locations to trial outcomes based agreements. This will supplement the Vegetation Management framework.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R33 That as a matter of urgency, in order to accelerate and finalise a State-wide strategic fire trail network, the NSW RFS Commissioner and Bush Fire Coordinating Committee (BFCC):	NSW RFS to lead acceleration of strategic fire trail network.	NSW RFS	Q2 2029	In Progress 	In June 2021, the NSW Government allocated a further \$34.5 million to the NSW RFS to expand the delivery of a strategic fire trail network. This is in addition to the \$9.5 million allocated in 2020-21, delivering a total investment to date of \$44 million.
<ul style="list-style-type: none"> set a deadline for Bush Fire Management Committees to complete all outstanding Fire Access and Fire Trail (FAFT) Plans for submission to BFCC for approval, and a related deadline for BFCC consideration of these 	NSW RFS to lead acceleration to complete FAFT plans. NPWS to support NSW RFS response through continuation and acceleration of the delivery of the NPWS fire road and trail upgrade project.	NSW RFS	Q4 2020	Completed 	Recommendation completed in Q1 2021. All BFMCs have prepared draft FAFT plans for approval.
<ul style="list-style-type: none"> assess the completed suite of FAFT Plans to identify high-priority trails of relative strategic importance across the State for urgent construction or upgrades with particular reference to the needs of upcoming fire seasons 	NSW RFS to review all draft FAFT plans for endorsement by BFCC including identification of priority strategic trails and develop a risk based construction and upgrade program.	NSW RFS	Ongoing	In Progress 	In 2020-21 and 2021-22 FY, a total of 107 NSW RFS priority projects were being worked at various stages ranging from scoping to environmental reviews to quoting and onto construction. \$24 million was committed across 2020-21 and 2021-22. Construction works are underway on 7 projects with a further 9 projects completed. In 2020-21, NPWS delivered \$30 million of fire trail upgrades and maintenance resulting in 618km and 20 bridges upgraded to the FAFT standard with a further 2110km maintained to ensure open and safe access. Since the start of the 2021-22 financial year, a further 5 bridges have been constructed to standard as part of the fire trail program. Planning for \$24.5 million of priority trail upgrades is also well underway while the delivery of \$21.1 million of priority fire trail maintenance has commenced.
<ul style="list-style-type: none"> enforce completion of annual fire trail condition assessment reporting by relevant landholders. Following this, the BFCC should, as part of its standard business, undertake an audit of all FAFT Plans and annual fire trail condition assessment reports 	NSW RFS to implement annual audit and reporting requirement to be overseen by audit unit established under recommendation 19(a).	NSW RFS	Ongoing	In Progress 	The NSW RFS has commenced development of a qualitative audit program for Bush Fire Management Plans defined by Section 52 of the <i>Rural Fires Act 1997</i> . Once developed, the Bush Fire Coordinating Committee will have an opportunity to comment before it is finalised. Recruitment is ongoing for Fire Trail Specialists and Community Safety Specialists to assist with the roll out of the fire trail project and compliance.





Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<ul style="list-style-type: none"> develop a single asset management system to capture the outcomes of annual fire trail condition assessment reporting on a tenure-blind basis to support BFCC strategic and budgetary prioritisation and inform funding allocation to agencies for capital works programs 	NSW RFS to upgrade the Guardian mitigation management system to include fire trail mapping and management including provision for the annual fire trail condition assessment reporting.	NSW RFS	Q2 2022	In Progress ■	The NSW RFS has rolled out phase 1 of the online Guardian mitigation platform. Guardian replaced the Bush Fire Risk Information Management System (BRIMS) and will significantly improve the way all Bush Fire Risk Mitigation activities are undertaken. Additionally, the fire trail program as of September 2021, has identified 107 strategic priority trails from local FAFT Plans for treatment, with a value of \$24.4 million with planning and upgrade works underway.
<ul style="list-style-type: none"> commission a review of FAFT Plans, with particular assessment of containment line potential, following a significant bush fire event in their area, as part of the planned review of BFCC Policy and NSW RFS Standards in 2020-21. 	NSW RFS to review fire trail standards and BFCC policy to ensure fit for role.	NSW RFS	Q4 2022	In Progress ■	Standards to which fire trails are being constructed are currently being reviewed by the NSW RFS to ensure lessons learned in the 2019-20 fire season become part of the fire trail network in the future, with a particular focus on improved effectiveness as an operational asset.
<p>R34 That, in order to capture and understand the impacts of bush fire smoke better, Government invest in operational air quality forecasting and alert systems, and public health research and policy development. This would involve investment to:</p> <ul style="list-style-type: none"> develop a comprehensive system of forecasting and alerts for air quality incidents and all pollutants of concern, including but not limited to bush fire smoke, ozone and dust, and which is ideally nationally consistent investigate further the health impacts of bush fire smoke, based on improved data collection and including research on the long-term health impacts of poor air quality as a result of sustained exposure to severe bush fire smoke, particularly for vulnerable and at-risk segments of the community (children, elderly, firefighters, etc). 	Enhancements to the NSW Air Quality Forecasting Framework, to improve smoke emissions modelling and better forecast smoke impacts. DPIE to increase capacity for Emergency Air Quality Monitoring, to provide additional air quality monitoring pods and sensors to ensure sufficient air monitoring during emergencies.	DPIE NSW RFS	Q4 2022	In Progress ■	The NSW Government has invested \$4.1 million over five years, (commencing 2020-21) and \$0.85 million ongoing for enhancements to the NSW Air Quality Forecasting Framework, further deployable air quality monitoring pods and other monitoring resources, and targeted information campaigns. The air quality forecasting system has been expanded to the whole of NSW with beta testing occurring throughout this summer including modelling smoke from bush fires. NSW continues to work with other jurisdictions to align national capabilities in line with overlapping recommendations from the Royal Commission into National Natural Disaster Arrangements.





Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R35 That, in order to improve the provision of evidence-based public health messaging about air quality during bush fire events, Government develop a public education campaign and supporting systems before the next bush fire season. This should include:</p> <ul style="list-style-type: none"> ▪ a public education campaign (like sun exposure), to help people make their own decisions about exposure to bush fire smoke tailored messaging to target: smoke-vulnerable cohorts of the community; general practitioners, particularly in rural and regional areas, so they can advise patients with relevant, susceptible comorbidities; and employers, to support development of appropriate workplace health and safety guidance for outdoor workers ▪ an improved air quality alert system such as an enhanced Air Rater app. 	<p>DPIE will work with NSW Health to develop key messaging which will align with the Clean Air Strategy, and a targeted information campaign.</p>	<p>DPIE</p>	<p>Ongoing</p>	<p>In Progress</p>	<p>DPIE have launched a new air quality website www.airquality.nsw.gov.au in October 2021. The enhanced website and data delivery project (EWADD) tender has been awarded and system build has commenced. When completed, the project will deliver enhanced air quality data, information, and warning system. The new website will also provide improved user access and mobility.</p> <p>NSW has partnered with Asthma Australia in their AirSmart campaign to test effective messaging on air quality alerts, warnings, and information within the community. DPIE will use the outcomes of this pilot to guide air quality advice and services.</p>

<p>R36 That Government invest in long-term ecosystem and land management monitoring, modelling, forecasting, research and evaluation, and harness citizen science in this effort. This will include, among other things:</p> <ul style="list-style-type: none"> ▪ tracking and trying to forecast what is happening to ecosystems over decades under projected changes to climate extremes, including fire regime change ▪ better understanding interaction of fire with other disturbances, e.g. drought, hydrological changes in the landscape ▪ commissioning experiments and feasibility studies for ecosystem adaptation experiments – for example, facilitating shift of high conservation-value rainforest vegetation communities further south as climatic conditions change ▪ better understanding the influence of different land management practices on landscape flammability (in different landscapes) over the short, medium and long-term, and enabling an adaptive management approach. 	<p>DPIE to enhance capability to assess priority at-risk species and ecosystems and identify long term recovery actions.</p>	<p>DPIE</p>	<p>Q4 2023</p>	<p>In Progress</p>	<p>The NSW Government has committed \$2 million over three years to support DPIE projects to examine the effect bush fires have on NSW water quality objectives, and assess and mitigate the risk to soil health during hazard reduction activities.</p> <p>To research the impact of hazard reduction activities on the soil and the associated impacts to the landscape, DPIE Science, Economics and Insights has appointed a lead researcher. Project planning is underway to determine study locations; identify project milestones, risks and actions; develop sampling protocols; and enable access to firegrounds to undertake fieldwork.</p> <p>To investigate the impacts of the 2019-20 bush fires on NSW waterways, the DPIE Estuaries and Catchments Team has recruited two researchers to manage and implement the project. Five telemetered, multi-depth water quality monitoring buoys are ready for deployment in key estuaries as part of an early warning system for waterway managers and local communities. A centralised web portal is being developed to be a repository for live-stream water quality data from loggers as well as datasets from targeted sub-projects.</p> <p>Collaborations are being established with research teams within DPIE, Macquarie University, Southern Cross University, DPI Fisheries, Local Land Services, and numerous local councils. In collaboration with Southern Cross University, DPIE are also reviving a citizen science program on the Macleay River. A dedicated team of citizen scientists will continue to collect water quality samples to monitor aquatic ecosystem recovery after the 2019-20 fires.</p> <p>In November 2020, the <i>National Parks and Wildlife Services Act 1974</i> was amended to allow the Minister for Energy and the Environment to declare land in a national park an 'asset of intergenerational significance' (AIS). On 7 September 2021, the Minister declared 221 sites to protect important habitat for 93 threatened species as AIS. The 221 sites include the habitat surrounding the Wollemi pine, which was the first AIS declared in January 2021. The declarations for AIS will cover 301,843 hectares or 3.89 per cent of the national park estate. Following declaration, regulations require NPWS to develop detailed conservation action plans within 90 days. Work has commenced this quarter to develop these plans for the declared AIS.</p>
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Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R37 That, in order to ensure all firefighters understand how local situational awareness reflects (or may not reflect) the broader scale situation presented by a large/extreme bush fire and the implications this may have on asset protection and fire suppression strategies, the NSW RFS:					
a) develops information packages for all types of operating environments to improve out-of-area crews' understanding of the local terrain and fuels, and distributes information to out-of-area crew members from all fire authorities	NSW RFS will update the Firefighter Pocketbook App to make available information to out of area crews including information such as topography, vegetation, fuels and firefighting matters unique to each RFS District.	NSW RFS	Q2 2022	In Progress 	A NSW RFS District operating environment template was trialed within the quarter. Feedback has been incorporated into the final template, which is proposed to be rolled out to all Districts in Q4 2021. Once the template is finalised by the District, it will be uploaded into the NSW RFS Firefighter Pocketbook App.
b) accelerates the roll out of Mobile Data Terminals into all fire fighting vehicles to improve delivery of briefings and incident information/intelligence to field commanders.	NSW RFS to implement 'Mobile Data Terminal' technology and solutions across firefighting fleet.	NSW RFS	Q2 2023	In Progress 	Mobile Data Terminal tender negotiations are underway with the preferred tenderer.
R38 That, in order to ensure the safety of local landholders on firegrounds, the NSW RFS emphasises the importance of local landholders using protective clothing while firefighting as part of the RFS' 'Farm Fire Unit Integration' priority for 2020-21.	NSW RFS to finalise the Farm Fire Unit Initiative, and to facilitate safe and effective communication between local landholders and NSW RFS at fires, UHF radios will be installed in all relevant appliances.	NSW RFS	Q4 2021	In Progress 	The NSW Government has allocated \$1.5 million over four years for the installation of UHF radios in all relevant NSW RFS appliances. Stakeholder engagement has been completed. A focus group workshop was undertaken in Dubbo alongside engagement workshops in Armidale and Wagga Wagga. COVID-19 restrictions have impacted the ability to install UHF radios, however with NSW Health Public Orders easing, a program of works is being implemented to accelerate installs throughout Q4.





Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R39 That, in order to ensure frontline personnel have appropriate personal protective clothing during bush fires:</p> <p>a) FRNSW review the current design of its bush fire jacket, noting improvements that have been made since 2002 that meet AS/NZS4824:2006 Protective clothing for firefighters, and increase the allocation of bush fire coats to two jackets per member</p> <p>b) NSW RFS issue two sets of personal protective clothing to operational members, and others as appropriate.</p>	<p>The NSW RFS and FRNSW will update personal protective clothing (PPC) allocation to facilitate two sets of PPC to be issued to firefighters.</p>	<p>NSW RFS FRNSW</p>	<p>Ongoing</p>	<p>In Progress ■</p>	<p>The NSW Government has allocated \$22.7 million to deliver the replacement of PPC for FRNSW firefighters.</p> <p>This is in addition to the \$23 million allocated in 2020-21 over five years to deliver additional required PPC to NSW RFS and FRNSW members, delivering a total enhancement of more than \$45 million.</p> <p>NSW RFS PPC supplier is continuing to manufacture 75,000LM of material at their domestic facility in Victoria with a large allocation of this designated specifically for second set availability.</p> <p>FRNSW has undertaken an extensive trial on a new bushfire jacket across a variety of stations. A new jacket has been chosen that meets the requirements of AS/NZS4824.2006 Protective clothing for firefighters.</p>
<p>R40 That, in order to improve firefighter safety, Government fire authorities:</p>					
<p>a) ensure all light tankers used as part of active frontline bush firefighting operations are fitted with a single point crew protection safety spray system and radiant heat protection blankets as a minimum standard across all NSW fire authorities</p>	<p>Multi-agency Fleet Retrofit and Tanker Replacement Program.</p> <p>Additional equipment to be fitted to light and medium / heavy tankers to enhance crew protection.</p>	<p>NSW RFS DPIE</p>	<p>Q2 2024</p>	<p>In Progress ■</p>	<p>In June 2021, the NSW Government allocated a further \$50.9 million to support firefighting tanker replacements and safety retrofits for frontline NSW RFS, FRNSW, NPWS and Forestry Corp NSW fleet. This is in addition to \$17 million allocated in 2020-21, delivering a total enhancement of \$67.9 million to date.</p> <p>Within this quarter, 8 new compliant Light Tankers (Category 9) have been built and handed over to Rural Fire Brigades to replace existing non-compliant vehicles, with an additional 22 Light Tankers (Category 9) at various stages of production.</p> <p>In total, 45 new compliant Light Tankers have been built and delivered to Rural Fire Brigades since 1 January 2021.</p> <p>The rollout of radiant heat protection curtains for NPWS Category 9 vehicles was completed in September 2021. The installation of cabin protection sprinklers for Category 9 vehicles will commence in February 2022.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
b) ensure all medium/heavy tankers are fitted with radiant heat protection blankets, wheel and 'halo' sprays fitted as a minimum standard across all NSW fire authorities	This recommendation will be addressed in conjunction with recommendation 40(a).	NSW RFS DPIE	Q2 2024	In Progress 	<p>Within this quarter, 12 new compliant Medium Tankers (Category 7) and Heavy Tankers (Category 1) have been built and handed over to Rural Fire Brigades, and 13 in service Heavy Tankers (Category 1) were refurbished with appropriate crew protection safety systems and returned to service.</p> <p>In total, 60 new compliant Medium tankers and Heavy tankers have been built and delivered to Rural Fire Brigades, and 53 existing Heavy Tankers refurbished and returned to Rural Fire Brigades since 1 January 2021.</p> <p>Scoping and design of cabin protection systems on medium and heavy firefighting appliances for NPWS has commenced in October 2021.</p>
c) undertake additional research to determine the most appropriate cabin protection for the different frontline vehicles.	NSW RFS will work with Monash University to determine the feasibility of fitting FOPS to new and existing fleet. Additionally, the NSW RFS will seek industry engagement next financial year to look for a new generation fire tankers.	NSW RFS	Q2 2022	In Progress 	<p>Research and collaboration with Monash University Accident Research Centre is ongoing to better understand and determine the most appropriate cabin protection for different frontline tankers.</p> <p>A summary of initial findings is expected to be provided by the end of 2021.</p>
d) provide ongoing investment for NSW RFS fleet upgrades.	This recommendation will be delivered in conjunction with recommendation 40(a) and 40(b).	NSW RFS	Ongoing	In Progress 	This recommendation will be delivered in conjunction with recommendation 40(a) and 40(b).
R41 That, in order to ensure all NSW RFS members can access the mental health support they need, the NSW RFS expands in-house mental health support for members.	NSW RFS to provide additional frontline access to direct clinical care as part of a Board of Commissioner's endorsed Emergency Services Mental Health Strategy.	NSW RFS	Ongoing	Completed 	<p>Recommendation completed in Q1 2021.</p> <p>The NSW Government allocated \$36 million over five years (commencing 2020-21) and \$7.65 million ongoing to support the implementation of a new mental health strategy for emergency services (including the NSW RFS, FRNSW, NSW SES and Resilience NSW).</p> <p>This investment has supported a significant scaling of services for personnel, including additional psychologists across the three fire and emergency services agencies to provide direct clinical care.</p>





Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R42 That, to ensure firefighters can access mental health support through GPs, Government work with the Commonwealth Government to: a) provide a free mental health screen to firefighters post-fire event and waive any gap payments if additional treatment is required b) create a new Medicare Benefits Scheme item number to enable Governments to track demand for mental health services from firefighters over time and ensure an appropriate level of support is available.	NSW will collaborate with the Department of Home Affairs on the National Mental Health Review and will pursue this recommendation through the Commonwealth Taskforce.	Resilience NSW	Ongoing	In Progress 	Resilience NSW is continuing to advocate for access to mental health screening through GPs, and for additional work to explore the creation of a dedicated Medicare Benefits Scheme number to be included as priority actions in the Commonwealth's National Action Plan, as issues of national importance. The National Action Plan remains in development.
R43 That, in order to ensure firefighter sustenance is of sufficient volume and quality, the NSW RFS reviews food standards and procedures in consultation with volunteers. The review should include catering service standards, including food safety, as well as the viability of sourcing commercial contracts and providing 12-hour food packs to firefighters.	NSW RFS to review food standards and procedures in consultation with volunteers to ensure firefighter sustenance is of sufficient volume and quality. The review should include catering service standards, including food safety. NSW RFS to provide meal packs to all appliances to provide initial sustenance to all firefighters.	NSW RFS	Q2 2022	In Progress 	The NSW Government allocated \$500,000 to NSW RFS to undertake a review of different food and ration pack options for volunteers. The Catering Service Standard and associated handbook have been developed and released for consultation to the broader NSW RFS membership.
R44 That, in order to ensure suitably skilled and experienced personnel operate as Divisional Commanders during major fire incidents, Bush Fire Management Committees identify appropriate personnel as part of their plan of operations.	The NSW RFS augment existing IMT personnel listing within the Operations Coordination Plan to include Divisional Commanders.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q1 2021. A new S52 Operations Coordination Plan has been finalised which includes the pre-identification of Divisional Commanders.
R45 That, in order to prioritise early suppression and keep fires small: a) Government set a KPI for NPWS regarding the percentage of fires that start on-park and are contained within 10 hectares, and consider whether 70% is an appropriate KPI for the NSW RFS and NPWS	NSW RFS will update the state-wide target KPI of keeping fires within 10 hectares or less, to 80% of the time.	NSW RFS	Q4 2020	Completed 	Recommendation completed in Q1 2021. NSW RFS has adopted this target and will report annually.





Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>b) NSW fire authorities deploy remote area firefighting resources based on enhanced research and predictive modelling. In some circumstances, this may require prioritising the deployment of RART to enable rapid initial attack of new remote area ignitions over ongoing suppression operations, where supported by a relative risk assessment.</p>	<p>NSW RFS will develop a predictive model for prioritised deployment of Rapid Aerial Response Teams (RART) for rapid initial attack in remote areas.</p>	<p>NSW RFS</p>	<p>Q2 2022</p>	<p>Completed ■</p>	<p>The NSW RFS has embedded a predictive model into its systems that forecast ignition potential and identifies areas expected to reach (and exceed) RART triggers up to four days in advance.</p>
<p>R46 That, in order to improve early fire suppression, the NSW RFS trial initial aerial dispatch in areas of high bush fire risk. The trial should identify the most appropriate and cost-effective mix of aircraft, and any associated infrastructure improvements that would be required.</p>	<p>NSW RFS will develop a trial for the 2020-21 fire season, to automatically dispatch Single Engine Air Tractor (SEAT) and reconnaissance Aircraft concurrently with land based firefighting resources.</p>	<p>NSW RFS</p>	<p>Q2 2021</p>	<p>Completed ■</p>	<p>Recommendation completed in Q2 2021. Pre-determined Dispatch Trial was conducted between December 2020 and February 2021 in Wagga Wagga, Cowra and Sydney. In addition to the three areas trialed during the 2020-21 season, Pre-Determined Dispatch is being expanded for the 2021-22 fire season to include Narrabri, Armidale, Kempsey and Scone.</p>
<p>R47 That, in order to enhance firefighting strategies in severe conditions, the NSW RFS implements the following in respect to backburning:</p> <p>a) establish protocols for each category (tactical and strategic) within their operational and training doctrine. These protocols should include lessons learnt from the 2019-20 season</p> <p>b) modify 'ICON' to implement the capability to record all backburns, including whether or not they break containment lines</p> <p>c) when fire conditions are approaching Severe or above, an independent review must be undertaken at State Operations Level before strategic backburns are implemented</p> <p>d) where there is significant concern within a community regarding a backburn, the NSW RFS should undertake a community engagement session with affected residents to discuss the backburn, including any investigation and relevant findings.</p>	<p>The NSW RFS will develop operational doctrine to ensure strategic back burns are independently reviewed and affected communities are advised of back burns, this will include defining what is strategic and what is tactical. In addition our operational system (ICON) will be upgraded to enable recording of back burns.</p>	<p>NSW RFS</p>	<p>Q4 2020</p>	<p>Completed ■</p>	<p>Recommendation completed in Q1 2021. Operational Protocol Backburning released on 26 February 2021 to all fire authorities. Backburning can be recorded in ICON intel module.</p>




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R48 That Government commission further research on the potential risks and benefits of backburning during severe, extreme and catastrophic conditions and/or in particular terrain, and that the NSW RFS use this research to inform future backburning protocols and training.	NSW RFS and DPIE to continue support for the University of Wollongong's NSW Bush Fire Risk Management Research Hub and include back burning into the research program.	NSW RFS	Q2 2022	In Progress 	The RFS has commenced research with the University of Wollongong to investigate potential risk factors and benefits of back burning during times of severe or higher fire danger ratings.
R49 That, in order to maximise the efficiency and effectiveness of heavy plant used in dry firefighting techniques, the NSW RFS expand and introduce the following in respect to heavy plant: a) increase the number of trained Heavy Plant Supervisors and Managers to ensure an appropriate level of supervision in future significant fire seasons b) expand ARENA software to include the Heavy Plant Register, including the introduction of GPS tracking for all agency and contracted plant, to improve contractual compliance and to facilitate better the identification and tasking of appropriate localised heavy plant contractors; and review the feasibility of linkage to the SAP system for invoicing improvements. This should be introduced prior to the 2020-21 fire season. c) review the existing contractual process to ensure all heavy plant is categorized into types, size and functionality along with exploring potential for a standardised hourly rate for that category of equipment d) work with Soil Conservation Service to ensure appropriate standards for the engagement and management of heavy plant to deliver safe and effective heavy plant service, including the delivery of standards and auditing.	The NSW RFS to review existing training, streamline delivery and engage trainer to increase capacity and trial ARENA aviation system for HP Management and tracking. The NSW RFS in partnership with other agencies including SoilCon to review existing Heavy Plant engagement process.	NSW RFS	Q1 2024	In Progress 	The NSW Government has allocated \$6.7 million over four years to enhance firefighter safety through fire ground tracking, training and accreditation of heavy plant machinery over four years. The NSW RFS has commenced recruitment for three heavy plant positions which will continue into Q4 2021. The NSW RFS has commenced phase 2 of the Arena implementation process. Phase 2 focuses on the integration of Arena HP into NSW RFS software and programs, identification and utilisation of GPS tracking of heavy plant deployed to fire grounds, as well as better contractor performance management. Vendors are continuing to be on-boarded through Arena HP. As at end of Q3, 317 vendors have been on-boarded onto Arena HP and 63 heavy plant taskings have been placed using the Arena HP platform. Heavy Plant Supervisor pilot course has been developed and expected to be conducted in Q4 2021.



Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R50 That, in order to ensure Australia's firefighting aerial capacity capitalises on existing assets and is made up of the right mix, Government:					
a) request the Commonwealth to conduct a trial with NSW RFS on the feasibility of retrofitting RAAF C130 aircraft with modular airborne firefighting systems to provide the Australian Defence Force with the capacity to augment aerial firefighting during major disasters	NSW RFS will request NAFC to initiate a RAAF C-130 trial of the Modular Airborne Fire Fighting System (MAFFS).	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q1 2021. Emergency Management Australia (EMA) has advised that the Department of Defence will make available previous research and trial outcomes.
b) work with states and territories through the National Aerial Firefighting Centre to review the current mix of aviation assets and determine whether it is fit-for-purpose, noting the current lack of mid-sized firefighting aircraft.	NSW RFS will work with NAFC on the preparation of a strategic review of the provision of aerial firefighting capability across Australia.	NSW RFS	Q4 2022	Completed 	Recommendation completed in Q2 2021. The NAFC published the National Aerial Firefighting Strategy 2021-26 in July 2021.
R51 That, in order to enhance NSW's ability to improve situational awareness, Government expand FRNSW's Remotely Piloted Aerial Systems (RPAS) capability (both capital assets and trained operators) to major regional centres and ensure the NSW RFS and other NSW government agencies can access this capability as required.	FRNSW to explore expansion of existing RPAS capability in accordance with the FRNSW Plus Plan.	FRNSW	Q2 2022	In Progress 	The NSW Government has allocated \$5.2 million over five years, from 2021-22, to acquire additional RPAS capability for FRNSW. Under the Fire and Rescue Plus Plan, RPAS capability supports operations in Fire, Urban Search and Rescue, Counter Terrorism, Hazmat, Protection of the Environment, Natural Disaster and Humanitarian. The RPAS project team is well established and making good progress to expand FRNSW RPAS capability. Procurement and evaluation is underway.
R52 That, in order to enhance NSW's firefighting capacity, Government trial aerial firefighting at night in the 2020-21 season with a view to full implementation if successful.	The NSW RFS will ensure that its aircraft (RFS Owned) are night firefighting capable (aerial attack, supervision, insertion and extraction, and ignition), and where appropriate suitable fixed wing contracted machines that deliver effective night firefighting capabilities (e.g. Large Air Tankers).	NSW RFS	Q4 2023	In Progress 	The NSW Government has invested \$5.4 million over five years (commencing 2020-21) for NSW RFS to enhance the aerial fleet and aviation training facilities. Testing and validation of the night intelligence capability using the FLIR mission system installed in the NSW RFS owned Bell 412 helicopters was successfully completed. Trials will continue to be undertaken during the 2021-22 bush fire season.




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R53 That Government develop and implement a policy on injured wildlife response, rescue and rehabilitation including:					
<ul style="list-style-type: none"> a) a framework for the co-ordination and interaction with emergency management structures b) guidelines for Incident Management Plans to include wildlife rescue and rehabilitation as a consideration c) a requirement for all vets and wildlife rescue volunteers to obtain the Bush Fire Awareness accreditation 	<p>NPWS has commenced development of a framework for wildlife in emergencies under the AASFA supporting plan of the EMPLAN.</p> <p>NPWS is working with the RFS to develop guidelines and training for wildlife response teams. This will include bush fire awareness training for wildlife responders, as well as other relevant training.</p>	DPIE NSW RFS	Q4 2021	In Progress <div style="width: 20%; height: 10px; background-color: #0070C0; margin-top: 5px;"></div>	<p>The Government is investing \$1 million over three years for development and implementation of an improved framework for injured wildlife response, commencing 2021-22.</p> <p>NPWS is working with DPI, the NSW RFS, and the wildlife rehabilitation and veterinary sectors to improve coordination and capability for wildlife emergency response.</p> <p>Wildlife emergency response taskforces are being established with the wildlife rehabilitation, veterinary, firefighting and emergency management sectors. A Technical Advisor (wildlife) role is being established by NPWS for incident management teams to help inform wildlife response in bush fires and other emergencies. Tools are being developed to help guide wildlife response planning in incidents.</p> <p>200 wildlife rehabilitators and veterinary professionals have received subsidised bush fire awareness training. 18 additional vets and/or vet nurses have also received subsidised training in wildlife care by Taronga Conservation Society.</p>
d) guidance for firefighters on handling injured wildlife.	The NSW RFS will enhance its fire fighters pocket book (application) to incorporate a section related to this topic.	NSW RFS	Q4 2021	In progress <div style="width: 15%; height: 10px; background-color: #0070C0; margin-top: 5px;"></div>	<p>NPWS has developed a wildlife first response training program. This will be supplemented by online training and supporting materials being developed by the Taronga Conservation Society in consultation with NSW RFS, Forestry Corporation of NSW and FRNSW.</p> <p>Program is expected to be released to agencies in Q4 2021. The NSW RFS will incorporate information into its Fire Fighter Pocketbook App.</p>
R54 That, to ensure mobile generators are sourced and distributed on a priority basis during natural disasters, the EUSFAC work with the NSW Telco Authority, relevant NSW government agencies and commercial stakeholders to develop a mobile asset deployment strategy. The strategy should reduce duplication in purchasing, maintaining and housing mobile generators and improve agility in deployment.	EUSFAC to coordinate with relevant NSW government agencies and commercial stakeholders to support the development of a mobile power asset deployment strategy.	DPIE	Q4 2021	In progress <div style="width: 15%; height: 10px; background-color: #0070C0; margin-top: 5px;"></div>	<p>The mobile asset deployment strategy is on track for delivery by Q4 2021.</p> <p>A draft strategy has been circulated to key stakeholders for feedback. The final strategy is planned to be submitted for endorsement by SEMC in December.</p>






Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R55 That, in order to improve fire ground communications between NSW agencies and interstate personnel:					
a) Government ensure all NSW fire authority personnel and vehicles can access and utilise the Public Safety Network (PSN). This should include access to NSW RFS Private Mobile Radio (PMR) networks where PSN coverage is not yet available.	NSW RFS will provide approval for NSW firefighting agencies to program their radios with RFS PMR channels in accordance with standard protocols.	NSW RFS NSW Telco Authority	Ongoing	Completed 	Recommendation completed in Q2 2021. NSW RFS has provided approval for NSW firefighting agencies to program their radios with RFS PMR channels in accordance with standard protocols.
b) the NSW Telco Authority review cross-border communications availability and planning and advise NSW fire authorities on next steps to enable multi-state interoperability for wide area communications.	NSW Telco will review jurisdictional interoperability and continue to deliver against the Operational Communications Strategy 2020.	NSW Telco Authority	Q2 2025	In Progress 	Cross-border communications and inter-operability is a key tenet of the NSW Government Operational Communications Strategy. Implementation continues for operational communications networks across the NSW-QLD border. A tactical solution to bridge the period between now and full integration between the state's networks is being developed with requirements being developed by AFAC. Engagement with Victorian counterparts has commenced to develop a roadmap for interoperability.
R56 That, in order to ensure the State Emergency Operations Centre (SEOC) can maintain communications during emergencies, the Government provide the SEOC with independent Public Safety Network functionality.	Resilience NSW will work with NSW Telco to get PSN capability for SEOC.	Resilience NSW	Q2 2021	Completed 	Recommendation completed in Q2 2021. Resilience NSW and NSW Telco Authority have secured an agreement to provide PSN capability for SEOC.
R57 That, in order to ensure emergency response agencies can communicate across state and territory borders, the Commonwealth Government allocate 10 + 10 MHz as a dedicated spectrum for Public Safety Mobile Broadband (PSMB) at no cost to states and territories.	This recommendation will be progressed through engagement with the Commonwealth Government, particularly through the PSMB SOC and ministerial liaison.	NSW Telco Authority	Q1 2023	In Progress 	The NSW Government is investing \$6.2 million to continue supporting the PSMB program in 2021-22. The Commonwealth Government has offered 5 + 5 MHz of spectrum for PSMB at lower than market cost. NSW is leading PSMB Spectrum workstream on behalf of all states and territories. Regular spectrum workshops will be conducted with all jurisdictions to work towards determining the spectrum requirements and potential access options. NSW is also leading a Proof of Concept, on behalf of all states, territories and the Commonwealth. It will run until August 2022.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R58 That, in order to ensure all agencies have a clear understanding of cross-border communication channels during bush fires, all MoUs between state or territory agencies include an agreed protocol about how agencies will communicate across borders and that these are reflected in Incident Action Plans.	NSW RFS will upgrade border MoU's to include a communications protocol and include this information in Operational Coordination Plans.	NSW RFS	Q4 2021	In Progress 	All interstate MoUs have been reviewed and are current. The Victorian Country Fire Authority (CFA) MoU was extended while a new MoU is being finalised. A new Cross Border Mutual Aid Agreement template has been finalised following consultation with border areas. This is being reviewed for approval and will provide a consistent approach including communications planning.
R59 That, in order to improve response times to Triple Zero calls, the NSW RFS implements the integrated dispatch system before the 2020-21 fire season commences.	NSW RFS is implementing an integrated dispatch system. The system will be implemented during the 2020-21 fire season for 18 of 45 Districts. NSW RFS will accelerate transition of the remaining 27 Districts.	NSW RFS	Q2 2023	In Progress 	The NSW Government has allocated \$8.3 million for extension of an integrated dispatch system for the NSW RFS. Phase 2 of the Integrated Dispatch project is now complete with an additional 6 Rural Fire Districts successfully on-boarded as part of centralised dispatch arrangements. 26 of the 45 NSW RFS Districts are now operating on centralised dispatch arrangements and using Computer Aided Dispatch.
R60 That, in order to ensure timely payment and maintain positive ongoing supplier relationships during large-scale bush fires, the NSW RFS implements an automated logistics solution, informed by the outcomes of the Emergency Logistics Project.	NSW RFS to develop an automated emergency logistics and resource management solution.	NSW RFS	Q2 2022	In Progress 	The NSW RFS has completed scoping a system-based solution to integrate with the existing systems and future resource management solutions. As such, the NSW RFS has released a request for quotation to engage appropriate resources to deliver the project.
R61 That, in order to improve cross-agency communication and coordination during bush fires, the NSW RFS review Fire Control Centres (FCCs) in areas that were heavily affected by fire. The results should be combined with the Emergency Operations Centre (EOC) Facilities Review to identify areas that would benefit from a purpose-built FCC, enabling co-location with the EOC.	The NSW RFS to review fire control centres in areas heavily affected by fire to identify priority areas where purpose built FCCs will include support for an EOC. The review is to be undertaken in conjunction with the NSW Emergency Services Board of Commissioners EOC review.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q2 2021. The NSW RFS completed a review of FCCs and identified 13 FCCs that would benefit from priority upgrades. The NSW Government has allocated \$15 million to support the build program in 2021-22 and 2022-23. Projects are currently underway for Armidale and Mudgee FCCs.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R62 That, in order to ensure State Emergency Operations Centre (SEOC) interoperability during all natural disasters, Resilience NSW review the current SEOC arrangements and location including responsibilities for ongoing resourcing and maintenance.	Resilience NSW will review the current SEOC arrangements and location including responsibilities for ongoing resourcing and maintenance.	Resilience NSW	Q4 2021	In Progress 	The State Emergency Management Committee agreed to the terms of reference for the review of SEOC on 3 June 2021. The review will be conducted in partnership between the State Emergency Operations Controller and Resilience NSW. Interviews have been conducted with key stakeholders and discussion exercises designed to test key themes and gather information on the requirements of SEOC.
R63 That, in order to ensure the guiding principles and approval processes are contemporary, streamlined and more flexible, the NSW and Commonwealth Governments review the Defence Assistance to the Civil Community (DACC) arrangements. This review should include the circumstances in which the State can request Commonwealth assistance, and the level of information provided by the ADF to the State on available resources and capabilities.	This recommendation will be progressed through engagement with the Commonwealth Government, particularly with EMA.	Resilience NSW	Q4 2021	Completed 	Recommendation completed in Q1 2021. EMA completed an administrative change to COMDISPLAN to reflect recommendations from the Royal Commission in December 2020. The Commonwealth also updated the DACC policy and manual in August 2020. To ensure clarity within NSW in relation to accessing Australian Government non-financial assistance in an emergency, Resilience NSW and the State Emergency Operations Controller have prepared a draft policy on how these arrangements are accessed within the NSW context which will be considered by the SEMC in December 2021.
R64 That, in order to expand the pool of trained personnel able to undertake the Public Information Functional Area Coordinator (PIFAC) role, Resilience NSW and the NSW Police Media Unit (PIFAC) develop and deliver a training package for Emergency Management Media Liaison Officers.	Resilience NSW to design, develop and deliver Media Liaison Officer training specific to the Emergency Management Arrangements in consultation with the PIFAC.	Resilience NSW	Q2 2022	In Progress 	Resilience NSW and NSW Police Force are working closely together to expedite a basic package to address the requirements. Resilience NSW and NSW Police Force are also continuing to participate on the National Working Group (NWG) established by AFAC, which is investigating a national training package for public information officers. The NWG is meeting monthly to progress and determine educational programs to address the identified issues.


Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R65 That, in order to improve information flows and increase public awareness of ABC emergency broadcasts, Government:					
a) include an ABC Manager in the Public Information Functional Area Coordinator (PIFAC) team within the State Operations Centre.	The NSW RFS will review its media facilities at the State Operations Centre, and in collaboration with the NSWPF (PIFAC) consider improved liaison arrangements with the ABC, as well as other media outlets.	NSW RFS PIFAC	Q4 2021	Completed 	Recommendation completed in Q1 2021. NSW RFS has established a process for the ABC to be based at NSW RFS headquarters on days of significant fire danger or activity. Other media outlets also have access to NSW RFS headquarters on days of significant fire danger or activity.
b) strategically place roadside signage with local/regional ABC station frequency band throughout the State.	TfNSW to consider options to support enhanced public information through fixed and portable variable electronic messaging signage across the road network, together with the Live Traffic website and app, and TfNSW social media.	TfNSW	Q4 2022	In Progress 	TfNSW and the ABC are exploring options for continuing to support each other once the ABC's Emergency Broadcasting is activated. TfNSW supports communication of early warning advice of bush fire events as issued by the NSW RFS on the Live Traffic website and mobile application, TfNSW social media, portable and permanent electronic messaging signs around the state. In September 2020, TfNSW rolled out interstate road data on Live Traffic NSW. This helps drivers avoid congestion by showing the impact of fire, flood, snow, roadworks, crashes and other disruptions on roads across five jurisdictions. In April 2021, TfNSW released an update to the Live Traffic NSW mobile apps, providing customers with the ability to save trips and areas and opt in to receive proactive notifications of incidents occurring on those trips or in their areas. This includes information about road closures due to bush fires. TfNSW is also progressively integrating available Local Council road network information onto the Live Traffic platform where Councils have the technological capability to provide the data.




Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R66 That, in order to provide real-time information on evacuation door-knocking during emergency events, Government explore a shared data gateway for NSW agencies based on the NSW State Emergency Service Collector app and a common mapping and analytics platform.	This recommendation will be addressed in the Review of Evacuation Management Guidelines (noted in recommendation 70).	Resilience NSW	Q4 2021	In Progress 	The NSW Emergency Services Board of Commissioners is overseeing the Door-knocking Data Collection Working Group, comprised of representatives from the Emergency Information Coordination Unit (EICU), NSW SES, NSW RFS, FRNSW, NSW Police Force and Resilience NSW, which is working through standardising survey forms, developing standard operational policy for activation, collection and sharing, and developing guidance materials. A standardised survey form has been developed for use by all government agencies and will be considered by the Board of Commissioners in November 2021.
R67 That, in order to ensure people can access clear information on cross-border fires, the NSW RFS:					
a) incorporate information on fires in neighboring states and territories into Fires Near Me NSW	The NSW RFS will work with interstate jurisdictions on data sharing to establish a 50km buffer areas across interstate boundaries within the Fires Near Me app.	NSW RFS	Q1 2021	Completed 	Recommendation completed in Q1 2021. Incidents within 50km of the NSW border have been incorporated into NSW RFS systems and released in March 2021.
b) collaborate with other states and territories to develop a national app as part of the Australian Warning System being developed through the AFAC Warnings Group.	COAG requested the Australian Data and Digital Council to improve national natural hazard data and intelligence to enable the development of new information products such as a national fire map in 13 March 2020. NSW will continue to participate in national forums to progress integration and tactical sharing of hazard information across all hazards and implementation of this recommendation and Royal Commission recommendations 13.5 and 13.6.	DCS	Ongoing	In Progress 	A program of work to consider a national multi hazards app is being overseen by the Data and Digital Minister's Meeting. NSW is leading two streams of work, including working with all jurisdictions and the Commonwealth to develop a national storms, cyclones and floods service, and a national fires service.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R68 That the NSW RFS include the following priorities in the Fires Near Me improvements roadmap:					
<ul style="list-style-type: none"> ▪ text enlargement functionality 	NSW RFS will upgrade the Fires Near Me app to incorporate the functionality recommended.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q1 2021.
<ul style="list-style-type: none"> ▪ a clear statement about the app's limitations and the importance of heeding public warnings and relying on personal observations 	NSW RFS will upgrade the Fires Near Me app to incorporate the functionality recommended.	NSW RFS	Q4 2021*	In Progress 	The NSW RFS Fires Near Me NSW app is one of a range of products available to the community. A statement outlining the limitations of Fires Near Me, such as reliability of mobile connectivity, has been developed and includes a recommendation for users to access information from a range of sources. It is due to be released to the public in Q4 2021.
<ul style="list-style-type: none"> ▪ fire spread prediction maps on extreme/catastrophic days 	NSW RFS will upgrade the Fires Near Me app to incorporate the functionality recommended.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q2 2021.
<ul style="list-style-type: none"> ▪ update fire map information as technology improves. 	NSW RFS will upgrade the Fires Near Me app to incorporate the functionality recommended.	NSW RFS	Q2 2021	Completed 	Recommendation completed in Q1 2021.
R69 That, in order to ensure evacuation arrangements can be scaled up when needed, Resilience NSW:					
<ul style="list-style-type: none"> a) ensure staff who are willing to be deployed to evacuation centres are trained as soon as possible to bolster evacuation centre staff surge capacity b) train council and NSW government regional staff in evacuation centre establishment and management, supported by a one-page 'start up sheet' for opening an evacuation centre 	Resilience NSW to deliver an enhanced training strategy for evacuation management and consider if development of a supplement to Evacuation Management Guidelines is required.	Resilience NSW	Q3 2021	Completed 	An additional 1,100 training placements for evacuation centre management surge staff was provided in 2020-21. All currently trained staff are able to undertake refresher courses through the online eLearning portal and updates to support COVID safe procedures have been added to training packages. ResNSW and DCJ are continuing planning another round of training for DCJ staff ahead of the 2021-22 summer season. A eLearning module for evacuation centres is also planned for launch in late 2021. The Welfare Services Functional Area have produced a guide for Evacuation Centre Facility Managers. This guide has been distributed to REMOs to support LEMCs and Facility Managers in their role in an Evacuation Centre.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
c) enable interested community members to be trained to assist in evacuation centre establishment and management and provide an avenue for skilled volunteers to register their interest	This recommendation will be delivered in conjunction with recommendation 69(a) and 69(b).	Resilience NSW	Q3 2021	Completed ■	The Community Partners Volunteer Training Scheme has been allocated \$200,000 in 2021-22 to support community organisations including the Red Cross, Anglicare, The Salvation Army, and Uniting Church Disaster Recovery Chaplaincy Network, to provide volunteers with the training and knowledge to support the Welfare Services Functional Area in evacuation centres. Through this scheme in 2020-21, the Uniting Church Disaster Recovery Chaplaincy Network has provided training including advanced training in suicide intervention and prevention, leadership, and logistic & duty officer roles in disaster events. Anglicare has also delivered training sessions to volunteers on providing psychological first aid and self-care to disaster affected regions and is implementing a learning management system to allow over 1,000 volunteers access to training online. Red Cross delivered online and face-to-face training to volunteers covering psychosocial support, Register.Find.Reunite, community engagement, and leadership training.
d) develop an exercise for the management of multiple evacuation centres dealing with large numbers of people for a protracted period over a widespread area.	Resilience NSW will also develop evacuation exercises for catastrophic events for the local, regional and state context.	Resilience NSW	Q3 2021	Completed ■	Recommendation completed in Q2 2021. This was exercised in a real scenario. The Welfare Services Functional Area opened 33 evacuation centres in the March 2021 floods, with 20 open simultaneously. The operation ran smoothly with support provided to nearly 3,000 people. Lessons learned during the March floods will be incorporated into future operational planning.
R70 That, in order to ensure evacuation centres are fit-for-purpose, Resilience NSW work with Local Emergency Management Committees (LEMCs) to: a) update the guidelines for LEMCs identifying evacuation centres to require a risk assessment of potential locations, which should include identifying alternate sources of power for use by evacuation centres and recording these appropriately b) review existing evacuation centre locations to assess compliance with updated LEMC guidelines and report to the State Emergency Management Committee on their suitability.	SEMC will review the Evacuation Management Guideline to incorporate recommendations from the Inquiry related to evacuation. The review will consider if a supplement to the Evacuation Management Guidelines is required.	Resilience NSW	Q4 2021	In Progress ■	The SEMC Evacuation Management Guideline Working Group is continuing to address this recommendation as part of its work program. The December 2020 audit of evacuation centres is informing the work program. Updated risk assessment requirements are being finalised and are due to be considered by the SEMC in December 2021.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R71 That, in order to ensure people only need to tell their story once to access government agency support following an emergency, Resilience NSW and Service NSW jointly design an inclusive, person-centred approach to information collection at evacuation centres. This should be supported by an opt-in scheme enabling personal information to be shared between NSW government agencies, local councils and non-governmental organisations administering support services for disaster-affected people.</p>	<p>Service NSW and Resilience NSW to develop a customer-centric registration, identification and care capability based on a central register/database of disaster affected people to enable sharing of information between levels of government and other authorised parties for the purposes of delivering support and recovery.</p>	<p>Resilience NSW DCS</p>	<p>Q2 2022</p>	<p>In Progress ■</p>	<p>Resilience NSW is working with Service NSW to develop a detailed work program for the development of a new "Tell Your Story Once" CRM. The project team has commenced on pre-discovery tasks, including gathering of customer and stakeholder feedback to inform the upcoming discovery phase.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
R72 That, in order to ensure Aboriginal people can access appropriate support during evacuation, Resilience NSW work with Local Emergency Management Committees and Aboriginal Affairs to ensure:					
a) local Aboriginal communities are included in emergency planning and preparation	<p>Aboriginal Affairs NSW, in partnership with Resilience NSW, to support pilot program for enhanced emergency preparedness and capability of discrete Aboriginal communities.</p> <p>The NSW Government will amend the <i>Rural Fires Act 1997</i> to allow the Minister for Police and Emergency Services to appoint a member representing NSW Aboriginal Land Councils to the BFCC.</p>	AANSW Resilience NSW	Q4 2021	In Progress 	<p>AANSW, supported by Resilience NSW are continuing a pilot project working with four discrete Aboriginal communities.</p> <p>Phase One of the project has been completed, including:</p> <ul style="list-style-type: none"> - Development of Community Protection Plans to reduce fire risk in collaboration with NSW RFS; - Co-design of two emergency management plans with two communities; - Delivery of 16 Emergency Management Planning and Stakeholder workshops; - Cultural burns to reduce fire load, and tree removal and clearing around office and houses to protect houses and community members; - Purchase of shipping containers to store new maintenance equipment to help maintain communities and fight fires; - Purchase of masks, hand sanitiser and entry signage for communities to protect community from COVID-19; and - Attendance at local BFMC and LEMC meetings to connect communities to local EM agencies. <p>The project has been extended for an additional twelve months and will be extended to other discrete Aboriginal communities.</p> <p>The <i>Rural Fires Act 1997</i> was amended in November 2020 to expand BFCC membership to include representatives from NSW Aboriginal Land Council and NTSCORP Ltd, and a representative to promote the integrity of cultural burning.</p>

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
b) all staff involved in evacuation centres and support services are culturally competent.	This recommendation will be addressed in the Review of Evacuation Management Guidelines (noted in recommendation 70).	Resilience NSW	Ongoing	In Progress 	Resilience NSW has launched an improved Emergency Management Training site with enhanced functionality to support best practice education products. As part of Closing the Gap Priority Reform 3 (Transforming Government Organisations), the NSW Government is undertaking a review of cultural competence training programs across the whole of government.
R73 That, in order to ensure the safety and wellbeing of vulnerable people during an evacuation, Resilience NSW: a) identify aged care facilities in fire and flood prone areas, and ensure that emergency plans are in place and comply with the Evacuation Decision Guidelines for Private Health and Residential Care Facilities b) develop/refresh evacuation centre protocols to specifically address the needs of vulnerable people.	This recommendation will be addressed in the Review of Evacuation Management Guidelines (noted in recommendation 70).	Resilience NSW	Q4 2021	In Progress 	All aged care facilities are recorded on the Emergency Services Spatial Information Layer available via the SEOC operating system. Resilience NSW is a member of the NSW Disability Stakeholder Forum which is facilitating open dialogue with service providers to plan for natural disasters. Work through this forum has ensured disability support plans are required to include emergency management as of December 2020. Work is continuing to consider specific recommendations concerning persons with a disability, on the advice of the NDIS and research bodies.
R74 That, in order to ensure equitable access to evacuation centres and associated support services for people in border communities, Resilience NSW ensure cross-border access arrangements are reflected in evacuation centre management guidelines.	This recommendation will be addressed in the Review of Evacuation Management Guidelines (noted in recommendation 70).	Resilience NSW	Q4 2021	In Progress 	The SEMC Evacuation Management Guideline Working Group is continuing to address this recommendation as part of its work program. Revised Evacuation Management Guidelines will include updated operational doctrine that makes it explicit that no matter where people are from, they will have access to NSW centres and immediate assistance. This is due to be considered by SEMC in December 2021.

Recommendation	Action	Lead Agency	Target Date	Status	Progress to Date
<p>R75 That, in order to improve support for people evacuating with animals, the Department of Primary Industries:</p> <ul style="list-style-type: none"> a) work with Resilience NSW to develop evacuation protocols and procedures to ensure appropriate supports are provided for both people and animals (informed by the findings from Project Ohana), including a process for animal registration at evacuation centres and mutually agreed naming conventions, and provide this information to Local Emergency Management Committees (LEMCs) b) work with LEMCs to identify overflow sites that can be used for evacuated animals when preferred sites are full c) further develop the domestic pets evacuation protocol. 	<p>This recommendation will be addressed in the Review of Evacuation Management Guidelines (noted in recommendation 70).</p>	<p>Resilience NSW</p>	<p>Q4 2021</p>	<p>In Progress</p>	<p>The SEMC Evacuation Management Guideline Working Group is continuing to address this recommendation as part of its work program. Resilience NSW held a workshop with NSW DPI, Local Land Services, Public Works Authority and TfNSW in May 2021 to consider the process for animal registration at evacuation centres and confirm mutually agreed naming conventions. Incorporating amendments from multiple recommendations, the updated guidelines were circulated to workshop attendees for further consultation in August 2021. This is due to be considered by SEMC in December 2021.</p>
<p>R76 That Resilience NSW review existing functional area arrangements to ensure they are closely aligned to agencies responsible for direct service delivery.</p>	<p>The SEMC will conduct a review of functional area arrangements.</p>	<p>Resilience NSW</p>	<p>Q4 2021</p>	<p>In Progress</p>	<p>The SEMC has endorsed a review of the functional area arrangements, to be jointly led by Resilience NSW and the State Emergency Operations Controller. Resilience NSW has commenced data and information gathering, and consultation with functional areas and service delivery agencies. The review is scheduled to be finalised by Q4 2021.</p>

ACRONYMS & ABBREVIATIONS

AANSW	Aboriginal Affairs NSW
AASFA	Animal and Agriculture Services Functional Area
ABC	Australian Broadcasting Corporation
AFAC	National Council for Fire and Emergency Services
ANZEMC	Australia-New Zealand Emergency Management Committee
APZ	Asset Protection Zone
BAU	“Business as Usual”
BFCC	Bush Fire Coordinating Committee
BFMC	Bush Fire Management Committee
BFRMP	Bush Fire Risk Management Plan
BOM	Bureau of Meteorology
CAD	Computer-aided Dispatch
CFA	Country Fire Authority (Victoria)
COAG	Council of Australian Governments
COMDISPLAN	Australian Government Disaster Response Plan
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DACC	Defence Assistance to the Civil Community
DCJ	Department of Communities and Justice
DCS	Department of Customer Service
DITRDC	Commonwealth Department of Infrastructure, Transport, Regional Development and Communications
DPI	Department of Primary Industries
DPIE	Department of Planning, Industry and Environment
EMA	Emergency Management Australia
EMPLAN	Emergency Management Plan
EOC	Emergency Operations Center
EUSFAC	Energy and Utilities Services Functional Area Coordinator
FAFT	Fire Access and Fire Trail
FBA _n	Fire Behaviour Analyst
FCC	Fire Control Centre
FCNSW	Forestry Corporation of NSW

FRNSW	Fire and Rescue NSW
ICA	Insurance Council of Australia
IMZ	Ignition Management Zone
LEMC	Local Emergency Management Committee
LEMO	Local Emergency Management Officer
LiDAR	Light Detection and Ranging
LGA	Local Government Area
MoU	Memorandum of Understanding
NAFC	National Aerial Firefighting Centre
NDIS	National Disability Insurance Scheme
NEMMM	National Emergency Management Minister’s Meeting
NGO	Non-Government Organisation
NPWS	National Parks and Wildlife Service
NRSC	National Resource Sharing Centre
NSP	Neighbourhood Safer Place
NSW	New South Wales
PIFAC	Public Information Services Functional Area Coordinator
PMR	Private Mobile Terminal
PPC	Personal Protective Clothing
PSMB	Public Mobile Safety Broadband
PSMB SOC	Public Mobile Safety Broadband Senior Officers Group
PSN	Public Safety Network
ResNSW	Resilience NSW
RFS	Rural Fire Service
RPAS	Remote Piloted Aircraft Systems
SBC	Small Business Commissioner
SEMC	State Emergency Management Committee
SEOC	State Emergency Operations Centre
SES	State Emergency Service
SFAZ	Strategic Fire Advantage Zone
TfNSW	Transport for NSW
UHF	Ultra High Frequency