

Bushfire Emergency Response Plan

The New South Wales Rural Fire Service
New South Wales, Australia



A Climate-Specific Appendix to the State Bush Fire Plan

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Preface

Bushfires in New South Wales:

In recent years, bushfires have greatly increased in frequency and severity in New South Wales (NSW). The 2019-2020 season, known as the Black Summer fires, is now recorded as the worst bushfire season in history, causing the deaths of at least 33 people, destroying 2,448 homes, and burning over 5.5 million hectares of land across the state.³ These fires were fueled by climate change, as it was the hottest and driest year on record that facilitated the growth and strength of these devastating fires.⁸ Moreover, bushfires are responsible for 10% of the cost of all major disasters in Australia, and are associated with the greatest loss of life.² South-eastern Australia, where NSW is located, is disproportionately at risk of bushfires as a result of high average temperatures, low moisture levels, several years of drought, and windy conditions.³ The majority of bushfires in NSW are caused by lightning strikes, accounting for 38% of fires, and arson or suspicious causes, accounting for 18%.⁴

Demographic Information:

NSW is home to 8,172,500 residents, making it the most populated state in the Commonwealth of Australia.²⁴ The environment of NSW is diverse. It contains both coastal mountains and woodlands, some rainforests and wetlands, and is home to a wide range of wildlife including rare birds and reptiles.⁵ Bushfires pose a significant threat, as past fires have destroyed many man-made and natural resources, highlighting the need to implement adequate fire preparation, management, and response plans to protect the over 7 million hectares of protected parks and reserves across NSW, as well as the citizens that inhabit that land.¹

Likely Impact of Climate Change:

This Bushfire Emergency Response Plan has been developed to provide guidance and considerations for a climate-specific appendix to the NSW State Bush Fire Plan. The Commonwealth of Scientific and Industrial Research Organization (CSIRO) recently submitted research to the Parliament of Australia expressing concern that several parts of the continent, including NSW, are at an increased risk of more serious fires in the future due to climate change.² Climate change is worsening the cost of bushfires, which are measured in the loss of lives (animal and human), the loss of property, and damage to the environment.⁸ Additionally, as NSW is Australia's largest state economy,²⁴ any negative economic impacts of bushfires will be especially devastating to both the state and Commonwealth economies.

Thus, the importance of mitigation measures and preparedness plans through a climate-specific approach is even more essential in order to protect life, property, and environment of NSW.

Signature Page

The signatures below indicate support for the climate-specific appendix to the NSW State Bush Fire Plan, which has been reviewed and adopted as the current bushfire emergency response plan in the state.

Rob Rogers AFSM Date
New South Wales Rural Fire Service Commissioner

Steph Cooke Date
Minister for Emergency Services and Resilience

Dominic Perrottet Date
Premier of New South Wales

Kate Wilson Date
New South Wales Department of Planning and Environment

Christian Porter Date
Commonwealth of Scientific and Industrial Research Organization

Carlene York Date
President of the Australasian Fire and Emergency Services National Council

Mission Statement

The mission of the NSW Rural Fire Service (NSW RFS) is to provide NSW with a community-based fire and emergency service that works to protect the community and environment by minimizing the negative impacts of fire hazards and other emergencies through high level training, community education and outreach, prevention, and operational capability activities.⁷

Statement of Purpose

The purpose of emergency planning is to mitigate hazards and their negative consequences. As climate change is increasingly impacting the severity and scale of bushfires, there is an urgent need to plan for the effects of climate change on bushfires in order to improve emergency response capabilities throughout NSW.⁸ This appendix is designed to improve the existing NSW State Bush Fire Plan and to provide relevant agencies with the climate-specific information they need to better prepare for and respond to bushfires.

The purpose of this appendix to NSW State Bush Fire Plan, which was developed by the NSW RFS, is to raise awareness and incorporate climate-specific considerations into the existing state bushfire plan. As the leading agency responsible for firefighting and fire mitigation, the NSW RFS believes that only by addressing the primary driving force behind the increased scale and severity of bushfires, can the state's emergency plan effectively prevent, prepare for, and respond to future bushfires in a way that reduces losses to life, property, and the environment.⁸

Authorities

The Commonwealth of Australia has limited responsibility for bushfire management. Accordingly, the protection of life, property, and the environment from bushfires is primarily the responsibility of individual states and territories.⁹

State Authorities:

The Rural Fire Service (NSW RFS)- is the largest volunteer fire service in the world and the lead agency responsible for firefighting and bushfire risk mitigation in NSW. NSW RFS is responsible for maintaining and operating the State Operations Centre (OpsCen), which serves as the primary state level operations and information center for bushfires and other hazards.¹⁰

The NSW RFS provides fire and emergency services to approximately 95% of the state of NSW.⁷

Fire and Rescue NSW (FRNSW)- is the other primary fire-fighting entity responsible for responding to and combating fires throughout NSW's metropolitan areas, major cities, and towns.¹⁰ The FRNSW also provides assistance to the NSW RFS and other government agencies both during and after emergencies of all kinds.⁹

The National Parks and Wildlife Service (NPWS)- is responsible for managing fires and reducing the risks of bushfires in the mostly rural and isolated parks and reserves across the state of NSW.¹ In partnership with other agencies, including the NSW RFS, activities performed by the NPWS include fire management planning, fire preparedness and hazard reduction, and bushfire response.¹

Department of Environment Climate Change and Water (DECCW)- is the department primarily responsible for land management across the state of NSW.⁹

The State Emergency Management Committee (SEMC)- is the committee primarily responsible for identifying the emergency resources within and outside of the state of NSW and for planning how these resources are to be allocated.¹¹

The Forestry Commission of New South Wales- was established by the Forestry Act 1916. State Forests of NSW works to protect state forests from the harmful consequences of bushfires and is responsible for preventing bushfires from spreading outside of state forest boundaries.⁹

Commonwealth Authorities:

The Attorney-General's Department- is the government entity responsible for national level emergency management and response activities.⁹

The Bureau of Meteorology- provides critical climate and weather information to fire agencies and the general public, especially during times of high risk conditions, including pertinent weather-related bushfire information.⁹

Climate Agencies:

Emergency Leaders for Climate Action (ELCA)- is a climate action group consisting of 33 members, all of whom are former Australian fire and emergency service leaders from across the country. This group has specifically called for stronger climate change action and improved emergency response capabilities that incorporate the context of climate change in order to effectively reduce the negative outcomes of bushfires.⁸

The Commonwealth Scientific Industrial Research Organization (CSIRO)- is a scientific organization that conducts bushfire research with the aim of improving prediction and preparation for this hazard. CSIRO also advises governments, agencies, industries and communities on how to be better prepared for and respond to bushfires. CSIRO has reported on the need to improve Australia's climate resilience given the unprecedented impact of climate change on bushfires.¹²

The Climate Change Authority- serves as an advisory entity that guides the Australian government's decisions and actions as related to climate change.¹³

Definitions

Bushfires: a fire in scrubland, forests, or other wild areas of land that spread quickly and are difficult to manage or control.¹⁴ The terms bushfire and wildfire are considered interchangeable, with wildfire being the preferred term in America, and bushfire being the preferred term in Australia. Other common terms for bushfires include forest fire, grassfire, and veldfire.²²

Bushfire management: are the emergency actions or preventative measures taken to prevent bushfires from damaging life and/or property.¹⁵

Bushfire season: bushfire season is the term that describes a period of months during which weather conditions make bushfires a likely occurrence. The bushfire season in NSW is typically the summer and autumn months (December through May).¹⁶

Emergency Response Plan: a set of written procedures for dealing with emergencies that minimize the impact of the event and facilitate recovery from the event.

Mutual aid: a voluntary reciprocal exchange of resources and services for mutual benefit.

Mutual aid agreement: establish the terms under which assistance is provided between two or more jurisdictions within a state and between states or other private sector entities, NGOs, and community partners.

Communication Plans

The NSW State Bush Fire Plan includes operational plans for the management of the online computer-based incident management application system (ICON) and the NSW Government's radio communications network. ICON serves as the primary source of bushfire information in NSW and is the main method for the exchange of operational information between the OpsCen, district and regional offices, and incident management teams.¹⁰

Internal Communication

The NSW Public Safety Network (PSN) operates as the primary mobile and radio-based communication platform through which approved government agencies communicate regarding emergency services, special events, exercises, and training.¹⁹ Equipment and vehicles utilized by the NSW RFS are equipped with Motorola P25 conventional and vehicle trunk mobile radios, which NSW RFS personnel use to communicate on several localized frequencies and channels.²³

External Communication

The NSW government operates and maintains a broad radio communications network that facilitates and enables communications between NSW emergency services and outside organizations and agencies. Supporting agencies, however, are expected to utilize their own unique internal communications systems when supporting bushfire operations.¹⁰ The NSW RFS utilizes the new Australian Warning System, which is a country-wide digital and telephone-based warning system, to better inform the general public on local bushfire threats and recommended response actions.^{20,23} The NSW RFS operates the Fires Near Me website and smartphone app on IOS and Android devices to provide critical bushfire warnings and information to the general public for chosen "Watch Zones".²⁵ The NSW RFS also disseminates alerts and information about bushfires for the general public via Twitter, Facebook, YouTube and Instagram platforms.²⁵

Communications Considerations

In response to the historic 2019-2020 bushfire season, the Final Report of the NSW Bushfire Inquiry revealed an urgent need to improve communications, especially telecommunications redundancy options, to ensure that communities in NSW have access to critical information and to improve the state's fire-fighting capability.¹⁷ The report highlighted critical inadequacies in the

NSW PSN. Specifically, the report highlighted a critical need for the government to ensure that all NSW fire authority personnel and vehicles have access to the PSN or access to the NSW RFS Private Mobile Radio networks to improve communications between NSW agencies and interstate personnel.¹⁷ Additionally, cross-border communications strategies must be strengthened to better facilitate multi-state communications during emergencies.¹⁷ This is especially important during bushfires, since fires frequently cross state boundaries, making effective interstate communications capabilities essential to adequately mitigate bushfire risks to life, property, and the environment.

Mutual Aid Agreements

Given the increased severity and scope of bushfires due to climate change throughout the Commonwealth of Australia, there are likely to be fire incidents in NSW that exceed the response needs and resources currently available to the NSW RFS. Accordingly, the NSW RFS may request assistance from a variety of agencies and organizations to enhance their firefighting, mitigation, and response capacities. In particular, Mutual Aid Agreements between the NSW RFS and leading climate agencies, including the ECLA and CSIRO, are essential in order to better prepare for and respond to bushfires in the context of climate change. Mutual Aid Agreements between the NSW RFS and other states and the Commonwealth are already in place to provide mutual support whenever needed.¹⁰ Mutual Aid Agreements have already been established or need to be established with the following government agencies, non-governmental agencies, and organizations:

- Fire and Rescue NSW
- The National Parks and Wildlife Service
- The Department of Environment, Climate Change and Water
- The Forestry Commission of New South Wales
- Emergency Leaders for Climate Action
- The Commonwealth Scientific Industrial Research Organization
- The United States Department of the Interior and Department of Agriculture
- The Australian Red Cross
- The International Association of Wildland Fire

VI. Concept of Operations (CONOPS)

The purpose of this CONOPS is to provide a detailed overview of NSW's preparation for, response to, and recovery from a bushfire emergency. A State of Emergency can be declared by the Premier of NSW whenever a bushfire poses a significant and widespread danger to life and/or property.²⁶ This action enables the RFS to undertake "extraordinary powers" including the power to instruct Government agencies to continue or halt functions, to control and disseminate Government resources, to manage necessary evacuations, to close roads and manage traffic, to shutdown essential utilities (i.e., gas, water), and to seize control of property to adequately conduct the emergency response.²⁷

Lead Staff Roles:

Emergency management in NSW is based on a tiered structure, in which the lowest effective level is in charge of emergency management activities.²⁶ Under this structure, it is the State Emergency Operations Controller (SEOC), who is a member of the NSW Police Force Senior Executive Service, who advises the Premier on when a State of Emergency declaration is needed, and who establishes and controls the State Emergency Operations Centre (SEOC).²⁶ At the state level, the SEOC is the primary base for the control and coordination of all emergency response operations.^{26,28}

Other Lead Staff Roles:

1. The Minister of Emergency Services is responsible for ensuring that government agencies take the necessary measures to prevent, prepare for, respond to, and recover from emergencies, including bushfires.²⁶
2. The State Emergency Management Committee (SEMC) is responsible for "convening, briefing and raising the situational awareness of its members in respect of emergencies," with further duties outlined under the SERM Act.²⁶
3. The State Emergency Recovery Controller (SERCON) chairs the State Recovery Committee and is tasked with "overseeing the preparation and maintenance of NSW recovery policies, arrangements and plans," and "liaising with the SEOC during the response phase of an emergency." The SERCON is also responsible for recommending the appointment of a Recovery Coordinator to the Minister/Premier.²⁶
4. At the regional level, the Region Emergency Operations Controller (REOC), who is the Region Commander of Police, is responsible for control and coordination of the regional

emergency response, and for establishing and managing the Emergency Operations Centre(s).²⁶

5. Locally, a Local Emergency Operations Controller (LEOCON) is a police officer within the region of the local government area that is appointed by the REOCON.²⁶
6. Other agencies involved in bushfire emergency management include Ambulance Service of NSW, FRNSW, NSW Police Force, NSW RFS, State Emergency Service, NSW Volunteer Rescue Association Inc., NGOs, and other rescue unit agencies.²⁶

Assessing the Needs of Those Affected by Bushfires

The primary objective of this plan is to mitigate the negative impacts of bushfires on affected communities. NSW is the most populous state of Australia and home to 8,172,500 residents.²⁴ As one of Australia's most fire-prone states, most of the population of NSW is vulnerable to bushfires. In 2019, an analysis by SGS revealed that an estimated 569,000 people in NSW were at high and very high bushfire risk.²⁹ NSW is also the country's largest state economy,²⁴ meaning negative economic impacts of bushfires can be especially devastating to both the state and Commonwealth economies. Thus, it is urgent to continuously improve preparedness strategies to mitigate the negative impacts of bushfires and to tailor these activities to the context of climate change. Climate-specific preparedness and mitigation strategies will better ensure that the community of NSW is equipped to respond to and recover from bushfires.

The most vulnerable populations include those with disabilities, the elderly, children, and those with chronic illnesses, such as asthma, that make them especially vulnerable to bushfire smoke. While most of New South Wales is at risk of bushfire, several regions have consistently been devastated, including the Wollemi National Park, the Blue Mountains, the Hunter region, and the North and South Coast.³⁶ Additionally, segments of NSW's population require special attention and aid for evacuation, such as those in nursing homes or other congregate care settings, persons with disabilities (functional/physical, cognitive, vision, auditory), children, hospitalized patients, those with chronic illnesses, and the elderly. The needs of these vulnerable populations include continuity of healthcare, medication provision, and shelter following evacuation or loss of homes. Importantly, bushfire preparedness and mitigation improvements were made, especially in the context of climate change, following the historic 2019-2020 bushfire season. These improvements included increased research and reports identifying practical measures to build climate and disaster resilience at local, regional, and national scales; improved use of science and technology, including for early detection and management, and

situation reporting to support responses to natural disasters by Australian governments, volunteer organizations and the community; government and government agency capability improvements to better target threat warnings and public safety communications.³⁰

Matching Available Resources to the Needs

It is essential that those affected by bushfire emergencies have access to essential resources in an emergency. Citizens must also be aware of their role in bushfire responses and the procedures to follow during a bushfire emergency. Emergency and warning communication systems via TV, radio, landline, and mobile phones must be operational and able to effectively alert citizens of a bushfire threat and the recommended actions to take in response. Bushfire awareness campaigns are necessary to educate the public about how to prepare themselves and their families, including how to develop household bushfire plans. These plans should include planning for medication provision, evacuation, and emergency contact lists. The following measures are also essential to ensure available resources are matched to the needs of the citizens of NSW:

- State sharing plans to ensure resources are delivered when state resources are insufficient.
- Established agreements with out of state hospitals to ensure care of the injured and continued care for patients evacuated from the affected area.
- A stable state stockpile of essential resources including N95 masks and air filtration units to mitigate the health impacts of bushfire air pollution.
- Plans for ensuring vulnerable populations have access to health care, medications, evacuation, and shelter.
- Plans for redirecting staff and resources to the emergency.

Implementation of Strategies to Reduce Health Impacts

A range of strategies to reduce the health impacts of bushfires is also a critical aspect of operational plans. A major health risk associated with the smoke produced by bushfires is air pollution, which contributes to climate change and can negatively impact health. Bushfire smoke produces fine particulate matter (PM2.5), which when inhaled can penetrate deep into the lung tissue and cause impaired respiratory and cardiac functioning, promotion of inflammation, and alteration of immune function.³¹ Bushfires also have lasting psychological effects, contributing to increased rates of depression, PTSD, and substance abuse following bushfire exposure.³¹ As with other health outcomes, vulnerable populations are at the highest risk for adverse health

outcomes related to bushfires. In addition to the harmful effects of air pollution on humans, it also negatively impacts the environment. Bushfire smoke contains large amounts of particulate matter, polycyclic aromatic hydrocarbons, carbon monoxide, aldehydes, organic acids, volatile organic compounds, and ozone, all of which are harmful to humans and the planet.³² In turn, bushfires contribute significantly to air pollution globally, but especially in NSW.

To prevent injury and death from fire or smoke inhalation, several preventative actions can be taken. Examples include limiting the amount of exposure to smoke by seeking refuge in an indoor filtered air facility (if possible), keeping windows and doors closed, and running an air conditioner with the fresh air intake closed.³² Also, limiting physical exertion during high levels of smoke exposure and staying informed by local air quality reports and advisory announcements are also effective preventative actions.³² Additionally, a stable stockpile of N95 masks and air filtration units that can be easily distributed to or accessed by those affected by bushfires is essential.

Evaluating the Effectiveness of the Bushfire Response

Evaluations are an essential component of preparedness, as they help ensure an effective emergency response. Evaluations will reveal areas of the bushfire plan that are working, as well as illuminate areas of the plan requiring improvements. After-action reports are a critical component of evaluation that reveal how future responses can better meet the needs of the population and mitigate the negative impacts of a disaster.³⁵ It will also be necessary to determine the number of injuries, deaths and evacuations, the scale of property damage and economic impacts, determine the resources utilized and lacking, as well provide an overall evaluation of the response effectiveness.³⁴ Based on evaluation responses, emergency planning must adapt to better meet the needs of those affected by bushfires in NSW. Evaluation responses will also better inform awareness campaigns targeted at ensuring the general public is adequately prepared for their role in bushfire preparedness and response.

Additionally, there is an urgent need for climate specific evaluations to prevent further damage to the environment and to address how bushfires are likely to worsen due to climate change. The 2019–20 bushfire season resulted in record levels of smoke and aerosols being released into the atmosphere,³³ negatively impacting health and further damaging the environment. The Royal Commission into National Natural Disaster Arrangements reports that Australia must adapt to climate change and the significant impact it will have on the severity of bushfires.

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Annex 1: Threat and Hazards Assessment Table: NSW, Australia

Natural	Technological	Human-caused
Resulting from acts of nature	Involves accidents or the failures of systems and structures	Caused by the intentional acts of an adversary
<ul style="list-style-type: none"> Bushfires: Australia's climate and vegetation (e.g., fire prone plants) make bushfires a common occurrence. Due to Australia's size and diverse weather patterns, there are multiple varied fire seasons.¹ The 2019-2020 bushfire season was especially catastrophic. The severe social, environmental, ecological, and economic impacts² included approximately 33 human deaths, 1 billion animal deaths, 2,439 homes destroyed, and 5.3 hectares burned.³ Studies show the intensity and frequency of wildfires is notably increasing.⁴ Floods & Cyclones: Floods and cyclones are common in Australia. Cyclones develop in the warm waters of the Coral Sea and Indian Ocean, and cost Australia approximately \$266 million per year. Flooding is the costliest natural disaster to the country, with La Niña years contributing to the most floods. Climate projections show flooding intensity is increasing.⁵ Flooding in NSW in March of 2021 forced the declaration of a natural disaster.⁶ Drought: Drought modelling reveals that significant increases in drought are likely, especially in southern and eastern Australia.⁷ The Millennium Drought (2001-2009), which affected New South Wales and Queensland, remains one of the worst on record.⁸ Earthquakes: Australia is mostly seismically stable, making damaging earthquakes of low probability.⁵ However, they are listed by Geoscience Australia as high consequence events.⁹ On September 22nd, 2021, one of the country's largest earthquakes on record (magnitude 6.0) struck the state of Victoria, leading to power outages and infrastructure damage.¹⁰ 	<ul style="list-style-type: none"> Dam failure: There are 500 large dams throughout Australia.¹¹ Increased frequency of storms threaten the capacity of these dams, thereby increasing the likelihood of damaging floods, particularly to agricultural areas. A breach of the Queensland dam in 2020 led to evacuations and threatened numerous farms.¹² Power Outage/Blackout: Australia's electricity networks and infrastructure are vulnerable to extreme weather events and the country's numerous natural hazards. Bushfires, extreme heat, and strong storms represent the biggest threats to the country's electricity networks.¹³ One example is the weather induced state-wide blackout that occurred in South Australia in 2016. This blackout cost businesses an estimated \$360 million and caused days long power outages.¹⁴ Transportation accidents: Nationally, fatal car accidents increased by 2.9 percent from 2020 to 2021. 1,127 total deaths car accidents were reported in 2021.¹⁷ While NSW boasted a notable fall in the number of road deaths in 2021 (270 deaths total), car accidents remain a significant hazard in NSW and throughout the country.¹⁸ 	<ul style="list-style-type: none"> Terrorism: The government of Australia lists the current terrorism threat level at PROBABLE, which means that current intelligence indicates that both the intent and the capability to carry out a terrorist attack is present. Attacks via explosives, firearms, and other basic and/or low-cost weapons are the most likely.¹⁵ Bioterrorism: The purposeful release of biological agents by terrorists has the potential to inflict severe damage to the health of Australia's people and its economy. A 2006 government report revealed that the country's security approach for preventing bioterrorist attacks was lacking, leading to the creation of the SSBA Regulatory Scheme, which is tasked with preventing opportunities for bioterrorist attacks.¹⁶ The country's densely populated cities, including Melbourne and Sydney, are the most vulnerable.¹⁵ Cyber-Attack/Crime: The Australian Cyber Security Centre (ACSC) reports that cyber-attacks targeting Australia's critical infrastructure and financial institutions are increasing in frequency, severity, and scale.¹⁹ The ACSC reported over 67,500 cybercrime reports for the 2020-2021 year, which was a 13% increase from the previous year.²⁰

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Annex 2: Drills and Exercises

Training Seminar Title:	Household Bushfire Preparedness
Training Seminal Objectives	The objective of the training seminar is to ensure household preparedness for bushfire emergencies in NSW.
Estimated Length of Training	4 hours
Target Audience and Max Audience Size	NSW Community members & residents, especially those in areas that are at high risk for bushfires. Large group target audiences include schools, local businesses, federal organizations, & congregate living institutions. The max audience size should be 200 persons per session.
Who would be a good candidate as facilitator and why?	Trained professionals from the NSW RFS, such as firefighters & other emergency responders, especially those with extensive bushfire mitigation & response experience. These professionals have the most field knowledge & expertise & are in the best position to educate the public about bushfire preparedness & response, emergency resources, & preparedness planning.
What do you want community members to do as a result of their attending this session?	<ol style="list-style-type: none"> 1. Know how to access the 'Fires Near Me' webpage or download the 'Fires Near Me' App to ensure they are always informed about nearby bushfires & understand the various alert levels & how to respond. 2. Follow the RFS on twitter & Facebook to have access to bushfire updates & alerts. 3. Develop a family bushfire survival plan that can be activated when bushfire warning texts or alert calls are received. 4. Develop a plan for household pets 5. Create an evacuation plan, evacuation checklist, & prepare a "go bag" that is easily reached & includes: essential medications, emergency call lists, & basic first aid kit. 6. Secure important documents in a fireproof box in the home & additional copies in another location such as a safety deposit box. 7. Keep a stockpile of emergency essentials: water, canned food, flashlights & batteries, & fire extinguishers. 8. Learn how to prepare homes to mitigate fire damage
Strategies to increase community uptake of your mitigation	<ol style="list-style-type: none"> 1. Distribute fireproof boxes to safeguard important documents. 2. Provide fill in the blank emergency call lists & home fire equipment checklists to complete during the seminar. 3. Have all attendees download the 'Fires Near Me' app. 4. Provide attendees with printed handouts of the NSW RFS "Four Simple Steps to Making Your Bushfire Survival Plan" guide. 5. Provide a handout of local community shelters and evacuation sites. 6. Provide a certificate of completion & encourage attendees to share the knowledge gained with friends, family & neighbors. 7. Target vulnerable populations by conducting training at congregate living institutions, such as nursing homes.

Annex 3: Bushfire Disaster Short-term Recovery Strategies

Necessities	Possible Resources	Distribution Strategies
Water	<ul style="list-style-type: none"> • Water sharing systems - water provided by other neighboring states • Diversification of shared water sources <ul style="list-style-type: none"> ◦ Variety of reservoirs, tanks, dams • Collect a stockpile of water donations from aid organizations and local food banks to ensure access to safe water • Individual and government stockpiles • Bushfire emergency kits 	<ul style="list-style-type: none"> • Activities directed by aid organizations such as the Australian Red Cross Disaster Recovery and Relief, Salvation Army Disaster Appeal, St. Vincent de Paul Society Bushfire Appeal, as well as the NSW RFS • Distribution to shelters and centrally located refuge sites • Government distributed bushfire emergency kits
Food	<ul style="list-style-type: none"> • Contact hunger relief groups, non-profits, and charities for food assistance, including the Salvation Army, OzHarvest, and Foodbank Australia • Engage with large scale Supermarket retailers for increased quantities of food and bottled water • Donations from fellow citizens 	<ul style="list-style-type: none"> • Activities directed by hunger relief groups that are specific to each area • Government distributed bushfire emergency kits stocked with non-perishables for short-term sustenance • Grocery retailers and general public to distribute to shelters and community centers • NSW RFS to distribute to populations in rural areas
Housing	<ul style="list-style-type: none"> • Identify sites within less affected communities, such as schools, churches, or community centers as places of refuge for those whose homes were destroyed in the bushfires • Ensure adequate infrastructure within shelters, including bathrooms, showers, and beds 	<ul style="list-style-type: none"> • Involve local governments and community leaders and aid organizations to coordinate temporary housing for victims of bushfires.
Critical Infrastructure Restoration	<ul style="list-style-type: none"> • Seek funding and materials from both the private and public sector through fundraising, lobbying, and donations • Electrical power <ul style="list-style-type: none"> ◦ Seek assistance from electricity service providers in other areas and loan of portable electrical generators from within and outside the communities • Water and roads <ul style="list-style-type: none"> ◦ Installation of temporary modular roadways, and repair of water systems by 	<ul style="list-style-type: none"> • Electricity service providers are responsible for activities related to electrical power, and may distribute generators around the community on loan • Rapid Damage Assessments conducted by emergency operation centers to triage sites and make repairs • Draw upon communities as a whole to pool resources and engage with a variety of sectors to repair infrastructure and resilience

