

2014 South Australian State Emergency Risk Assessment



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The National Strategy for Disaster Resilience (NSDR) was endorsed by the Council of Australian Governments in February 2011. The Strategy focuses on priority areas to build disaster resilient communities across Australia. Two of the key priorities are to understand and then communicate risk. The Strategy also recognises that disaster resilience is a shared responsibility for individuals, households, businesses and communities, as well as all levels of government.

It is hoped that all Australians will develop a shared understanding of the critical part they play in developing their own disaster resilience and that of their communities.

To meet the intent of the Strategy the South Australian Government has conducted a series of emergency risk assessments at both State and Emergency Management Zone (regional) level.

The nationally endorsed *National Emergency Risk Assessment Guidelines* (NERAG) were used for all hazards except Terrorism.

Terrorism is different from the other hazards as the risk specifically relates to a person(s) deliberately and maliciously taking action to harm people and/or property. In line with the National approach to Counter Terrorism a different risk assessment methodology has been used. The likelihood of a terrorist attack has been assessed more subjectively, as it is based on the likelihood of a person(s) carrying out a malicious act, rather than the likelihood of a natural event or accident occurring.

The initial focus has been on the 10 identified State Hazards:

- Animal & Plant Disease
- Earthquake
- Escape of Hazardous Materials
- Extreme Weather (storm and heatwave)
- Flood
- Human Disease
- Riverbank Collapse
- Rural Fire

- Terrorism
- Urban Fire.

In time, risks arising from a range of other hazard types will also be assessed.

Risk assessment workshops have been attended by subject matter experts and representatives from a broad range of organisations. At the workshops a series of credible scenarios ranging from low to high consequence events for each hazard type have been considered and the potential impacts assessed across the following categories:

- People: the number of injuries and fatalities
- Environment: the impacts on ecosystems including flora and fauna
- Economy: the economic impacts of the emergency
- Public Administration: the impacts on the ability of governing bodies to govern effectively and provide critical services
- Social setting: the impacts on society and its social fabric, including cultural heritage, and emotional and psychological well-being
- Infrastructure: the impacts on infrastructure, lifelines and utilities.

What are the risks to South Australia?

All communities are exposed to some level of hazard and associated risk. The purpose of emergency risk assessments is to understand the highest threats to communities, and prioritise efforts to reduce them.

The highest priority risks identified for South Australia are:

- Animal and Plant Disease
- Economic loss in the agricultural sector in the areas of farm production, loss of export market access, associated losses to uninfected properties in the sector and impact on supply chains

- Bushfire
- Injuries and loss of life and disruption to economic activity

- Flood
- Injuries and loss of life and damage and isolation of properties from flooding in the Brown Hill and Keswick Creeks, Gawler River and River Murray

- Increased storm surges, and associated damage to property and infrastructure, due to sea level rise

- Heatwaves
- Impacts on human health, risk of broad scale disruption to services, evacuation of buildings and a reduction in outside work

- Human Disease
- Severe pandemic disease that causes widespread illness and loss of life, overwhelms the health system and causes social disruption

- Storm
- Broad scale damage to property and disruption to economic activity

- Terrorism
- Injuries and loss of life at places of mass gathering and damage to critical infrastructure

- Urban Fire
- Injuries and loss of life and damage to property

Other high priority risks identified for South Australia are:

- Earthquake
- Injuries and loss of life, damage to property and impacts on economic activity and public administration

- Escape of Hazardous Materials
- Injuries and loss of life, environmental impact and shortages caused by supply chain disruptions of some materials.

Other medium priority risks identified for South Australia are:

- Riverbank Collapse
- Injuries and loss of life and damage to property and infrastructure from riverbank collapse in the event of a drought causing levels in the River Murray below Lock 1 to drop significantly.

This document provides information about the risks that face South Australian communities and what activities the Government is undertaking to reduce the likelihood and/or impact of those risks.

Information is provided on what you can do before, during and after an emergency, and where further information can be obtained to better understand, prepare for, respond to and recover from a range of emergencies.

In the event of any emergency it is crucial that everyone has an Emergency Plan and an Emergency Kit ready to go. The



A risk assessment workshop attended by subject matter experts and representatives from a broad range of organisations including Local Government

last page lists items that should be included in an Emergency Kit. You are encouraged to take the time to assess your personal situation, and prepare a plan, and an emergency kit that fits your needs.

Further risks associated with each hazard are identified in the body of the document.

Having identified and assessed these risks, State and Local Government and other organisations are undertaking a range of activities to monitor, reduce and manage them.

As part of the State's emergency management arrangements a series of plans exist, including Hazard Plans, that specify roles and responsibilities of response and other Government and non-Government agencies. Personnel are trained and equipped and plans are exercised regularly to ensure effective response and recovery operations.



Agriculture has been driving the South Australian economy since the 1800s and today the food and wine sectors employ one in five South Australian workers.

A major outbreak of a plant pest or animal disease, could potentially cost millions (if not billions) of dollars in lost earnings and affect farmers, their produce and livelihoods. Exotic pests and diseases may also put at risk South Australia's reputation for producing premium food and wine from our clean environment, and risk trade in both international and domestic markets.

Biosecurity is about managing the risks and potential harm to our community, environment and economy from pests and diseases. Biosecurity is everyone's business.

Effective biosecurity allows us to maintain productivity in our primary industries and increase access to international and domestic markets, while protecting our natural environments, monitoring primary industry food safety and sustaining the wellbeing and health of our communities.

Government ensures that plans, processes, partnerships and capabilities are in place to prevent and respond to a disease incursion. Industry undertakes risk mitigation processes through early reporting and biosecurity planning at a national, regional and individual premises level. The community needs to be observant and promptly report anything that looks unusual; and ensure that a pest or disease is not inadvertently brought into the state.

Farmers have primary responsibility to manage biosecurity pests (animals and plants) and threats on their properties. Only in exceptional circumstances, like a locust plague, will a regional or State-wide response be warranted.

What is the Government doing?

Biosecurity SA is responsible for the State Biosecurity Policy 2013-2016 which outlines the South Australian Government's coordinated and strategic approach to biosecurity.

What can you do?

Industry, communities and individuals cannot rely on government alone to prepare for and respond to animal and plant diseases. You can help reduce the effects of these events by establishing biosecurity plans and applying good biosecurity measures at all times (such as washing hands with soapy water before and after handling animals or plants, keeping equipment clean and managing the movement of visitors).

Government, businesses, communities and individuals all have a role to play in preparing for and responding to an animal or plant disease.

Before

Play it safe and don't wait! If you have noticed any unusual signs in your livestock, animals, crops or plants please report it immediately. The earlier a disease is detected the sooner it can be contained, the outbreak's spread can be controlled, and our rural communities and industries can be protected.

Emergency Animal Disease Hotline
(1800 675 888)

Fruit Fly reports (1300 666 010)

Plant Pests (1800 084 881)

Fishwatch (for reporting aquatic pests)
(1800 065 522)

Locusts (1800 833 451)

During

During an outbreak of an animal or plant disease it is important that all members of the South Australian community:

- Report any suspicious signs of disease
- Comply with control measures (e.g. observe movement restrictions)
- Minimise interaction with affected areas, animals or plants; and
- Support the affected community.

After

When the animal or plant disease is eradicated/controlled it is important to support the affected community through their recovery.

For further information refer to the South Australian Government Website
www.pir.sa.gov.au/biosecuritysa/home



An earthquake is the sudden, rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface.



Most earthquakes occur at the edges of the earth's tectonic plates where they are forced against each other. Australia is located in the middle of the Indian-Australian tectonic plate which is being pushed north at the rate of about 7cm a year. Our plate is being compressed by surrounding plates. Earthquakes in Australia are usually caused by movements at weaknesses within the plate, as a result of this compression.

Aftershocks are earthquakes that follow the largest and usually the first earthquake in an earthquake sequence. In general, the larger the main shock, the larger and more numerous the aftershocks.

Earthquakes commonly cause damage to buildings that have:

- Poor quality mortar in brick wall construction
- Tall brick chimneys which can break easily
- Corroded metal ties within brick walls or missing ties
- Brick gable end walls which have no lateral support at the top

- Parapets that are cracked or have little or no lateral support
- Suspended awnings where the supporting structure is weak.

Flexible structures withstand earthquakes best.

Earthquake Risk in South Australia

By world standards, the earthquake hazard in Adelaide is low to moderate. By Australian standards, Adelaide has the highest earthquake hazard of all capital cities. Adelaide has experienced three damaging earthquakes in the past 120 years, the worst of which occurred on March 1, 1954 and measured magnitude 5.5 on the Richter Scale. The largest earthquake recorded to date in South Australia measured magnitude 6.5 near Beachport in 1897. Seismologists advise that, given the local geology, earthquakes up to Richter magnitude 7.5 could occur in South Australia. The likelihood of such a large earthquake is very low.

What is the Government doing?

Government is currently undertaking the following activities to help reduce the impact of earthquakes:

- Updating and requiring compliance with building standards
- Seismic monitoring
- Strengthening existing infrastructure such as school buildings, heritage buildings, bridges and dams
- Training, equipping and exercising urban search and rescue teams.

What can you do?

Unlike some other hazards there is no way of predicting when, where or how big an earthquake might be. Communities and individuals cannot rely on government alone to prepare for and respond to earthquakes. By knowing what to do before, during and after an earthquake you can help reduce the effects on you, your family, home and business.

Before

- Learn and practice the **DROP, COVER, HOLD** safety action to perform in an earthquake
- Identify safe places to “**DROP, COVER, HOLD**” in your home or at work
- Develop an emergency plan and prepare an emergency kit
- Check your insurance policies and ensure you have adequate coverage
- Reduce the risk of injury by moving or securely fixing furniture or fittings that might topple over and fall on you in an earthquake, particularly where you sleep or sit regularly.

During

- If you are at home or inside a building when you feel the ground start to shake:
 - **DROP** to the floor somewhere close to you – no more than a few steps or less than two metres away – where you can avoid injury from flying debris
 - Seek **COVER** under a strong table or desk
 - **HOLD** on to a table leg to keep your cover from moving away from you

Government, businesses, communities and individuals all have a role to play in preparing for and responding to an earthquake.

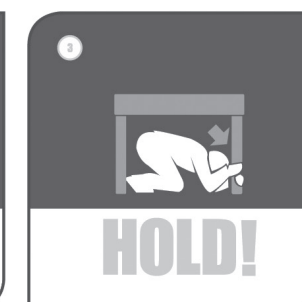
- If you are outside, move away from buildings, trees, streetlights and power lines, then **DROP, COVER, HOLD**, covering your head and neck with your arms
- If you are driving, pull over to a safe place away from buildings, trees, service poles and bridges. Stay in the car with your seatbelt fastened until the shaking stops, then proceed with extreme caution.

After

- Stay indoors until the shaking stops and you are sure it is safe to move
- Identify a safe exit route, walk out slowly, watching for anything that has fallen or could fall. Move away from and do not re-enter damaged buildings
- To report a life threatening emergency Dial 000
- Turn off electricity, water and gas services if they have been damaged
- Expect aftershocks, remember to **DROP, COVER, HOLD** each time one occurs
- Check on your neighbours, help others if you can
- Listen to local radio stations for updated emergency information
- Do not go “sightseeing” in damaged areas.

For further information refer to the South Australian Government Website www.sa.gov.au/emergency/earthquake

In an earthquake ...



Hazardous materials include dangerous substances that present an immediate hazard when there is an uncontrolled release. These materials can include explosives, flammable gases and liquids, oxidising agents, toxic and corrosive substances.

Government, businesses, communities and individuals all have a role to play in preparing for and responding to an escape of hazardous materials.



The transport, storage and handling of hazardous materials are subject to regulatory controls and licensing. Uncontrolled escape of hazardous materials occasionally occur due to factors such as human error, accident and equipment failure. This has the potential to lead to injury and loss of life, and damage to property and the environment.

What is the Government doing?

Dangerous Substances legislation requires that a licence must be issued for the storage of many dangerous substances. The WHS regulations 2012 requires that an emergency response plan must be developed for sites with prescribed quantities of listed hazardous materials and this plan must be provided to the relevant fire authority.

The transport of dangerous goods is administered under a national scheme and regulatory requirements are outlined in the *Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road and Rail*.

Very large quantities of stored hazardous materials are regulated under Major Hazard Facilities legislation.

Expert advice is provided to emergency response agencies attending incidents from the Technical Advice Co-ordinator (TAC) group under contract to Government.

What can you do?

Households, businesses and industries have a responsibility to ensure that hazardous materials are stored in accordance with regulatory requirements and that measures are in place to prevent a hazardous release. By knowing what to before, during and after a hazardous release you can help reduce the effects on you, your family, home and business.

Before

All hazardous materials should be :

- Appropriately packaged and labelled
- Stored safely and securely to prevent theft and unauthorised access
- Stored well away from sources of ignition and flammable substances
- Regularly stock checked against up to date inventories and Material Safety Data Sheets.
- Readily accessible to Personal Protective and fire protection equipment
- Stored within secondary containment measures (where appropriate) such as bunding to contain spilt material
- The subject of an emergency response and evacuation plan that is exercised and tested regularly
- Disposed of in accordance with manufacturer's recommendations.

During

- To report an emergency Dial 000
- Monitor radio/TV broadcasts for further information
- Follow instructions issued by emergency authorities (such as

evacuating or remaining in place)

- Keep well away from the spill and stay upwind where possible.

After

- Do not return to the site until deemed safe to do so by authorities
- Do not attempt to clean up and dispose of contaminated materials unless you have the appropriate protective equipment, knowledge and training. If in doubt, contact a licensed hazardous waste contractor.

For further information refer to the South Australian Government Website www.safework.sa.gov.au



Escape of Hazardous Materials

A heatwave is a prolonged period of extreme heat. Heatwaves are characterised by exceptionally warm nights making it difficult for people and machinery to cool down.

During the 20th century heatwaves caused more deaths in Australia than any other natural hazard. With global warming resulting in increased temperatures and extreme weather events becoming much more common, heatwaves have become a part of life in Australia.

Heatwaves can have a detrimental impact on communities. They affect many parts of everyday life such as health and wellbeing, energy and infrastructure, public transport and agriculture. They can also contribute to an increased fire risk and heat stressed trees, which pose a significant threat to public safety.



Government, businesses, communities and individuals all have a role to play in preparing for and responding to a heatwave.

What is the Government doing?

The State Emergency Service (SES) has developed a Heatwave Information Guide which includes lots of helpful tips on how to reduce the impact of extreme heat and information about how to respond to heat stress so the community is better prepared for heatwaves.

What can you do?

Communities and individuals cannot rely on government alone to prepare for and respond to heatwaves. By knowing what to do before and during a heatwave you can help reduce the effects on you, your family, home and business.

Before

Prepare early. Service or replace your air conditioner **BEFORE** you need it. Curtains, awnings and blinds can also help to keep a building cool.

Heat can affect anyone, but some people run a greater risk of serious harm. Those at serious risk include:

- Elderly people
- Babies and young children
- People with serious mental health problems
- People on certain medication
- People with serious chronic conditions (particularly breathing or heart problems)
- People who already have a high temperature
- People with mobility problems
- People who misuse alcohol or take illicit drugs
- People who are physically active, such as manual workers and sports people.

During

- Drink plenty of fluids but avoid alcoholic and caffeinated drinks
- Make regular contact with elderly relatives, friends and neighbours, especially if they live alone, to ensure they are keeping cool and drinking plenty of fluids
- Keep homes cool by closing blinds and curtains during the day and making good use of fans or air conditioners (which are on the cool setting)
- Stay indoors and open up homes at night if it cools down
- Limit outdoor activities to mornings and evenings
- When outdoors wear light, loose fitting clothing, as well as a broad brimmed hat, sunglasses and sunscreen
- Ensure babies and young children stay out of the sun and are provided with extra fluids, dress them lightly and keep them cool
- If you have an ongoing mental health condition you should continue to take your medication, stay in touch with family or friends and seek medical help if you start to feel unwell
- Never leave children or pets unattended in the car
- Make use of air conditioned public facilities such as shopping centres, cinemas and libraries, if appropriate
- Be aware of the symptoms of heat stress and if they develop take cool baths or showers and use cool packs or wet towels to cool down
- Remember that cordless landline telephones do not work during power outages. Make sure you have alternative means of communication
- Consider the safety of your pets and animals. Wet them down and ensure they are kept cool.

After

- Be aware that the effect of the heatwave on human health may continue for some period after it ends.



For further information on:

- Medical advice for the symptoms of heat stress
- Heatwave Information Guide
- Services, Transport, Energy and power outages.

Refer to the South Australian Government Website
www.ses.sa.gov.au/site/community_safety/heatwave_information.jsp

Flood

Despite South Australia's dry climate, many parts of South Australia, including Adelaide, are at risk of flooding. Flooding is considered to be one of the State's most economically damaging natural disasters.

In South Australia, the winter months produce the greatest rainfall but floods can occur at any time of the year. Flooding can be caused by rivers, stormwater or coastal inundation. Flash flooding, which is the rapid onset of flooding following intense rainfall, is often difficult to forecast and occurs without warning.

Urban areas are particularly susceptible to flash flooding due to large areas of roofs and roads which make the water run off quickly.

The 1956 flood of the River Murray was the most significant flood event in South Australia's history. Levees surrounding Renmark only just saved the town from extensive flooding, but further downstream, Swan Reach and Mannum were not so lucky. Widespread damage occurred to houses, property and horticulture.

More recently, heavy rain in November 2005 caused the Gawler River to flood large areas of Virginia, resulting in approximately \$40 million of crop damage. In January 2007, severe storms led to flooding in Port Pirie, Whyalla and Hawker with the damage bill in Port Pirie alone estimated to be more than \$2 million.

The risk of flooding in urban and coastal areas is likely to increase in future due to rising sea levels and increasing urbanisation of the floodplain. Climate change is also expected to increase the intensity of rainfall events.



Government, businesses, communities and individuals all have a role to play in preparing for and responding to a flood.

What is the Government Doing?

- Providing community education programs as such FloodSafe which encourage flood preparedness
- Supporting local councils to undertake flood studies, stormwater management plans and mitigation works
- Reviewing and updating flood response and evacuation plans
- Conducting flood risk assessments at regional and State level
- Maintaining and strengthening emergency response capability
- Working with the Bureau of Meteorology to monitor flood systems and issue warnings as appropriate.

What can you do?

Communities and individuals cannot rely on government alone to prepare for and respond to flood. By knowing what to do before, during and after a flood you can help reduce the effects on you, your family, home and business.

Before

- You should prepare an Emergency Plan and an Emergency Kit in advance
- Keep drains clear of debris; sweep up fallen street tree leaves
- Ask your council about local flood plans (or records) which detail problem areas
- Advise neighbours of the impending flood and offer assistance when possible
- Move valuable items, and hazardous items and chemicals that may react with water, to a higher level
- Monitor Bureau of Meteorology forecasts and warnings or listen to your local radio station or ABC Radio 891
- Place important documents, personal effects and vital medical supplies in a waterproof case
- Secure any item that may become buoyant in your yard (gas cylinders, drums, timber etc.)
- Ensure your pets are safe by including them in your emergency plan.

During

- To report an emergency Dial 000
- Secure your property and valuables
- Turn off power sources such as gas and electricity and do not turn anything on again until you are sure it is safe to do so
- Have waterproof bags ready to protect clothing
- Never attempt to drive in flood waters
- Do not camp in creek beds
- Never enter flood waters and in particular do not allow children to play in or near them
- If stranded stay with your vehicle
- Stay tuned to local radio for current weather advice and warnings.

After

- Before entering your property make sure it is safe to do so and the flood water has dropped below floor level
- Do not turn on any lights or powerpoints until a qualified electrician has checked the entire electrical system in your home including all appliances
- Don't allow children to play in, or near, flood waters
- Boil tap water until supplies have been declared safe
- When floodwater rises, it is common for spiders, snakes, rats and mice to look for a drier home - often inside our properties. If you have floodwater through your property check for unwanted visitors.

For further information refer to the South Australian Government Website
www.ses.sa.gov.au

For Extreme Storm warnings refer to
www.bom.gov.au/sa/warnings/



Human Disease

Pandemic Influenza is an epidemic of a novel influenza virus that spreads on a worldwide scale and infects a large proportion of the human population.

This hazard may cause detrimental consequences on the community including social impacts, increased demand on the health system, reduced workforce and loss of income to the State and potentially the whole of Australia.

Pandemic Influenza has no boundaries and efforts to combat the virus will be based on slowing it down and trying to control the spread rather than stopping it.

What is the Government doing?

SA Health undertake a number of activities to help reduce the likelihood and impacts of pandemic influenza:

- Ensuring hospitals have a plan to cope with increasing demand
- Disease monitoring
- Planning for whole of system response.

What can you do?

Communities and individuals cannot rely on government alone to prepare for and respond to pandemic influenza. By knowing what to do before, during and after pandemic influenza, you can help reduce the effects on you, your family and business.

Before

Take precautions such as:

- Get your seasonal flu vaccination every year
- **Wash, Wipe, Cover:**
 - Wash your hands, particularly after going to the toilet or handling used tissues
 - Wipe down frequently touched surfaces
 - Cover your coughs and sneezes with a tissue
- When you have flu like symptoms, stay away from work and social situations.

Government, communities and individuals all have a role to play in preparing for and responding to a pandemic influenza.

During

- If you are unwell stay at home so you don't infect other people
- Call medical help lines such as Health Direct on 1800 022 222 for advice
- Hospitals are for emergencies. If you have flu like symptoms please see your GP or go to a Flu Clinic if established
- Assist family and friends where you can and it is safe to do so

During a pandemic you may notice that:

- Your normal workforce is reduced
- Some mass gatherings may be cancelled
- Personal Protective masks may be worn by individuals
- Some social distancing may be recommended.

After

A pandemic influenza event has the potential to last months, leading into a year, depending on the severity of the virus.

Over time, the community will start to develop some immunity to the disease which in turn will reduce the spread.

The time leading up to recovery can be long and the mental, physical and financial effect on people as a result of a reduced workforce, needs to be considered.

It is reasonable to assume that in a pandemic event the whole of Australia will be affected to varying degrees.

For further information refer to the South Australian Government Website www.sahealth.sa.gov.au

The exceptional low water levels experienced along the River Murray between 2006 and 2010 reduced the stability along some sections of the river between Blanchetown and Wellington, with some areas susceptible to riverbank collapse presenting high risk to life and property.

Government, businesses, communities and individuals all have a role to play in preparing for and responding to a riverbank collapse.



Steep riverbanks with a sudden drop off to deep water are considered to be at a particular risk of collapse but all riverbanks should be treated with caution.

People visiting, living and working on or near the River Murray are encouraged to exercise caution and be aware of the signs of potential collapse.

Signs are not always obvious and may occur more than 30 metres from the river's edge. Collapse can occur quickly with minimal time to evacuate. Fencing and warning signs have been erected where there has been a visible collapse, or where there is known potential for collapse.

What is the Government doing?

- Established a 24-hour Riverbank Collapse Hotline on 1800 751 970 on which to report any instances of riverbank or suspected riverbank collapse
- Established public education websites
- Conducting riverbank collapse risk assessments at a local and State level
- Ongoing monitoring of high risk sites
- Funding a geotechnical Review of the Management Options for Four Riverbank Collapse High Risk Sites
- Facilitating a Goyder Institute for Water Research project on addressing fundamental knowledge gaps of riverbank collapse processes to develop and implement long-term hazard management and site specific management plans
- Maintaining and strengthening emergency response capability.



What can you do?

Communities and individuals cannot rely on government alone to prepare for or respond to riverbank collapse. By knowing what to do before, during and after a riverbank collapse event you can help reduce the effects on you, your family, home and property.

Before

- Be aware of the indicators of riverbank collapse which can include:
 - Cracking in the riverbank
 - Trees leaning towards the water
 - Bubbling in the water near the riverbank
- Supervise children at all times
- Avoid taking vehicles and vessels close to areas susceptible to collapse
- Comply with any signage and fencing that has been erected.
- Avoid camping close to areas that are susceptible to riverbank collapse.
- Immediately report any signs of potential riverbank collapse to the Riverbank Collapse Hotline.

During

- To report an emergency Dial 000
- Immediately warn others in the vicinity and evacuate yourself and any other people away from the riverbank, leaving any property if it is likely to delay movement to a safe area
- Leave any vehicle in place as sudden movement may increase the potential for riverbank collapse and put the lives of those within the vehicle at risk.

After

- Do not return to the area
- Supervise children and pets that are present
- Await the arrival of emergency services.

For further information refer to the South Australian Government Website www.waterconnect.sa.gov.au/Hazard-Management/Riverbank-Collapse/SitePages/Home.aspx

Riverbank Collapse

Bushfires in Australia are caused by lightning and accidental or deliberate ignition through human activity. Bushfires are an intrinsic part of Australia's environment, which has a climate that is generally hot, dry and prone to drought.

Government, businesses, communities and individuals all have a role to play in preparing for and responding to a rural fire.

Our natural ecosystems have evolved with fire and the landscape has been shaped by both historic and recent fires.

The most serious fires in recent decades in South Australia include the 1983 "Ash Wednesday 2" fire and the Lower Eyre Peninsula "Wangary Bushfire" in 2005. More recently, in early 2014 the SA Country Fire Service (CFS) had one of its busiest operational periods since Ash Wednesday fighting fires across the State including at Bangor, Rockleigh and Eden Valley.

Whilst large areas of South Australia can be impacted by bushfires the greatest losses of human life, property and infrastructure occur on the fringes of urban areas, regional centres and towns.

What is the Government doing?

The SA Country Fire Service (CFS) invests considerable resources in identifying risks to the community, fostering behaviours that increase community preparedness and ensuring South Australia is a safe place to live and

work.

After a series of reviews a bushfire risk management and planning process has been established that includes 9 Bushfire Management Committees that are responsible for developing Bushfire Management Area Plans covering the State.

Government is developing a systematic risk management process that will allow it to prioritise, target and implement treatments to minimise the adverse impact of bushfires on people, property and the environment.

What can you do?

Communities and individuals cannot rely on Government alone to save them and their property from bushfire. By knowing what to do before, during and after bushfire, you can help reduce the effects on you, your family, home and business.

Before

- In order to defend your home or property you need to be physically capable and mentally prepared
- Prepare a Bushfire Survival Plan and kit using information available from the CFS website
- Practice your Bushfire Survival Plan
- Make sure you understand the National

Fire Danger Ratings and what those ratings mean for your Bushfire Survival Plan and learn as much as you can about bushfire warnings and safety

- Update your insurance and leave a copy of your policies in a secure place away from your home or property.

During

- To report an emergency Dial 000
- If you have planned to relocate on a high risk day do so early
- If you have planned to stay, when the fire front arrives:
 - Shelter inside your home/property
 - Bring buckets, hoses etc. inside with you
 - Patrol inside for spot fires and extinguish them
 - Check the ceiling cavity
 - Drink plenty of water
 - Reassure family and pets, co-workers etc
 - Make sure you shelter in a room with two exits.

After

- Return outside when safe to do so
- Continue to patrol for an extended period of time and extinguish spot fires
- Let family and neighbours know that you are safe
- Continue drinking plenty of water.

For further information refer to the South Australian Government Website
www.cfs.sa.gov.au



Rural Fire

South Australia is regularly subjected to severe weather conditions.

Severe weather can affect all parts of the state both in the form of widespread synoptic storms and more localised severe thunderstorms. Both phenomena can give rise to heavy rainfall, destructive wind, hail and lightning, all capable of causing significant damage and, in certain circumstances, deaths.

The South Australian State-Level Storm Emergency Risk Assessment has identified that the highest risk is likely to come from a widespread synoptic storm giving rise to multiple severe thunderstorm cells impacting highly populated areas.

In South Australia both Storm and Flood damage often have higher average annual costs than bushfires.

Storms can also give rise to tornadoes and South Australia has suffered from a number of these events impacting on populated areas. Penola, Karoonda, Renmark and Port Broughton have all suffered significant damage as a result of destructive tornadoes hitting their towns.



What is the Government Doing?

The State Government is currently undertaking the following activities to help reduce the impact of storms:

- Considering storm impact in land use planning strategies.
- Providing community education programs such as StormSafe, which encourage storm preparedness.
- Protecting vulnerable critical infrastructure such as power lines.
- Ensuring compliance with building design standards.
- Maintaining and strengthening emergency response capability to storms.
- Conducting NERAG (National Emergency Risk Assessment Guidelines) based Extreme Storm risk assessments including treatment options workshops at both Zone and State levels.

What can you do?

Communities and individuals cannot rely on government alone to prepare for and respond to extreme storm. By knowing what to do before, during and after an Extreme Storm you can help reduce the effects on you, your family, home and business.

Before

- Prepare your Emergency Plan
- Inspect and fix fences, roofs and gutters and remove loose materials
- Clean gutters and down pipes frequently
- Seal cracks in building foundations and exterior walls
- Keep branches near your home and power lines trimmed
- Check that you have adequate insurance cover for your building and contents
- Keep a list of emergency numbers near the telephone
- Prepare an emergency kit and place it where you can find it easily
- Learn how and when to turn off the utility mains such as gas, electricity and water
- Keep your yard and balcony/patio free from clutter eg. move outdoor furniture to a safe location such as the garage
- Make contact with neighbours to ensure they are appropriately prepared
- Bring children and pets indoors
- Park your car undercover and away from trees.

During

Storm warnings are broadcast via ABC radio 891, news, Internet and the Bureau of Meteorology. If a storm warning is issued for your area, you should:

- Stay indoors if possible and stay clear of windows

Government, businesses, communities and individuals all have a role to play in preparing for and responding to an extreme storm.



If you are in your vehicle during a storm

- **DO NOT** drive into flood water as this can be deadly
- Slow down and turn headlights on
- Be alert and watch for hazards on the road, such as power lines.

After

- For life-threatening emergencies, Dial 000
- Check your property for damage
- If you need assistance from the SES call 132 500
- Check on your neighbours as soon as it is safe to do so
- Stay well clear of creeks, drains, causeways and other water ways
- Stay well clear of fallen trees, power lines and other damaged structures
- Do not go sightseeing.

For further information refer to the South Australian Government Website

www.ses.sa.gov.au/site/community_safety/stormsafe/before_the_storm_hits.jsp

For Extreme Storm warnings
www.bom.gov.au/sa/warnings/

The current National Counter-terrorism alert level is medium, meaning a terrorist attack could occur.

Government, businesses, communities and individuals all have a role to play in preparing for and responding to terrorism.

The threat of terrorism to Australia and its interests is real and is now a permanent feature of Australia's security environment.

Since September 11, 2001 approximately 40 people have been charged in this country for terrorism related offences.

The Australian Intelligence Community has assessed that if a terrorist attack was to occur, the most likely targets are critical infrastructure sites and places of mass gathering - including significant sporting events, public transport, major shopping precincts and symbolic/ cultural sites.

The most likely choice of weapon/s for terrorists are improvised explosive devices (IEDs), firearms or a combination of both.

What is the Government doing?

Public safety and security is SAPOL's highest priority.

South Australia is a member of the Australia - New Zealand Counter-Terrorism Committee (ANZCTC). The roles of this committee include maintaining the National Counter Terrorism Plan and ensuring there is an effective nation-wide counter terrorism capability.

What can you do?

Preventing terrorism is the shared responsibility of the community, government and law enforcement.

Knowing what you can do before, during and after a terrorist event may prevent or minimise its impact on you, your family, home or business and ensure our state's social, cultural and economic life is preserved.

There are a number of ways for people to provide information to assist in the prevention of terrorism, including contacting the National Security Hotline, Crime Stoppers or your local police station.

Before

Look, listen and report.

Every piece of information received from the public is useful. It is often the smallest details that make the difference. If you see or hear something suspicious, please call the National Security Hotline, Crime Stoppers or report it to a police officer.

All information remains confidential and you can remain anonymous if you wish.

National Security Hotline (1800 123 400)

The National Security Hotline is a free call number that allows you to report possible terrorist activities in Australia. It operates 24 hours a day.

Crime Stoppers (1800 333 000)

This number links directly to a SAPOL operator for the public to provide information on issues related to crime. It is a free call number operating 24 hours a day.

In the event you require immediate Police assistance, or in an emergency, Dial 000

During

In the event of a terrorist attack, the response from police, emergency service personnel and other support agencies will be coordinated and swift.

In the event of a terrorist incident you should:

- listen to broadcasts via television, radio and internet, as updates will be delivered regularly
- particularly view the SA Police News on www.sapolicenews.com.au which will provide updated information
- always act on the latest official safety information – it could save your life
- at the site of an attack always follow any directions from Police and emergency services
- assist by providing information relevant to the investigation
- if you are able, offer assistance and

advice to vulnerable members of your community.

After

Ongoing community support is a vital part of the recovery phase.

An emergency management plan outlining the roles and responsibilities of each Government agency for the recovery phase of a terrorist incident is in place.

It is likely that any terrorist attack will come from individuals or a group holding an extreme view of a religion or ideology. It is important that our community recognises that the extreme view of an individual or group is not the view of the vast majority of people from that religion

or nationality, who reject violence and positively contribute to keeping SA safe.

It is equally important that focus is placed on the individual perpetrator(s), and as such, positive community engagement by the broader community is vital in ensuring a safe and secure community.

For further information refer to the South Australian Government website www.police.sa.gov.au/sapol/safety_security.jsp

- State Security and Emergency Response
- Mass Gathering Guided Self-Assessment.



Uncontrolled fires can result in injury and loss of life, and damage to property, infrastructure and the environment, including: residential, commercial, industrial, institutional and transport.



Urban Fire directly and indirectly impacts the entire community. In addition to placing lives at risk fires can destroy homes, property and community assets, as well as impact businesses and the economy by disrupting supply chains.

There are now more highly flammable synthetic materials in most buildings so when fires do occur they burn with greater intensity causing more damage and increased economic loss.

What is the Government doing?

The SA Metropolitan Fire Service (MFS) invests considerable resources in identifying risks to the community, fostering behaviours that increase community preparedness and ensuring South Australian buildings are safe places to live and work.

Preventative fire safety activities include:

- Building Fire Safety Committees work in collaboration with local councils
- Provision of Built Environment Guidelines, Emergency Planning Guidelines, Home Fire Safety Information Brochures
- Conducting Urban Fire Risk Assessments
- Conducting triennial Inspections of Aged Care Facilities
- Implementing Junior Firelighters Intervention Program
- Inspecting Places of Public Entertainment
- Membership of industry bodies such as the Australasian Fire and Emergency Services Council
- Distributing consumer warnings highlighting specific product information alerts designed to raise awareness of potential defects in materials or services
- Conducting community education activities.

What can you do?

Communities and individuals cannot rely on government alone to prepare for and respond to urban fire. By knowing what to do before, during and after an urban fire you can help reduce the effects on you, your family, home and business.

Before

- Ensure smoke alarms or other building fire systems are working
- Locate appropriate firefighting equipment near an exit and learn how to use them
- Develop a Fire Safety Plan
- Plan how you will evacuate and where you will meet
- If you have deadlocks on your doors or windows make sure everyone knows how to open them.

During

- To report an emergency Dial 000
- Remember that smoke is the biggest killer

- Heat and smoke rise — so get down low and escape using the safest door or window. Yell and bang on doors to alert others to the fire
- If an exit door is hot to touch find another way out
- Once outside go to your meeting place and Dial 000 for the fire service. Use a mobile phone or a neighbour's phone
- **NEVER** go back into a burning building for any reason
- If your clothes catch fire:
 - Stop moving immediately
 - Cover your face with your hands to protect it from heat and rising flames
 - Drop to the ground
 - Roll back and forth on the ground to extinguish the flames.

After

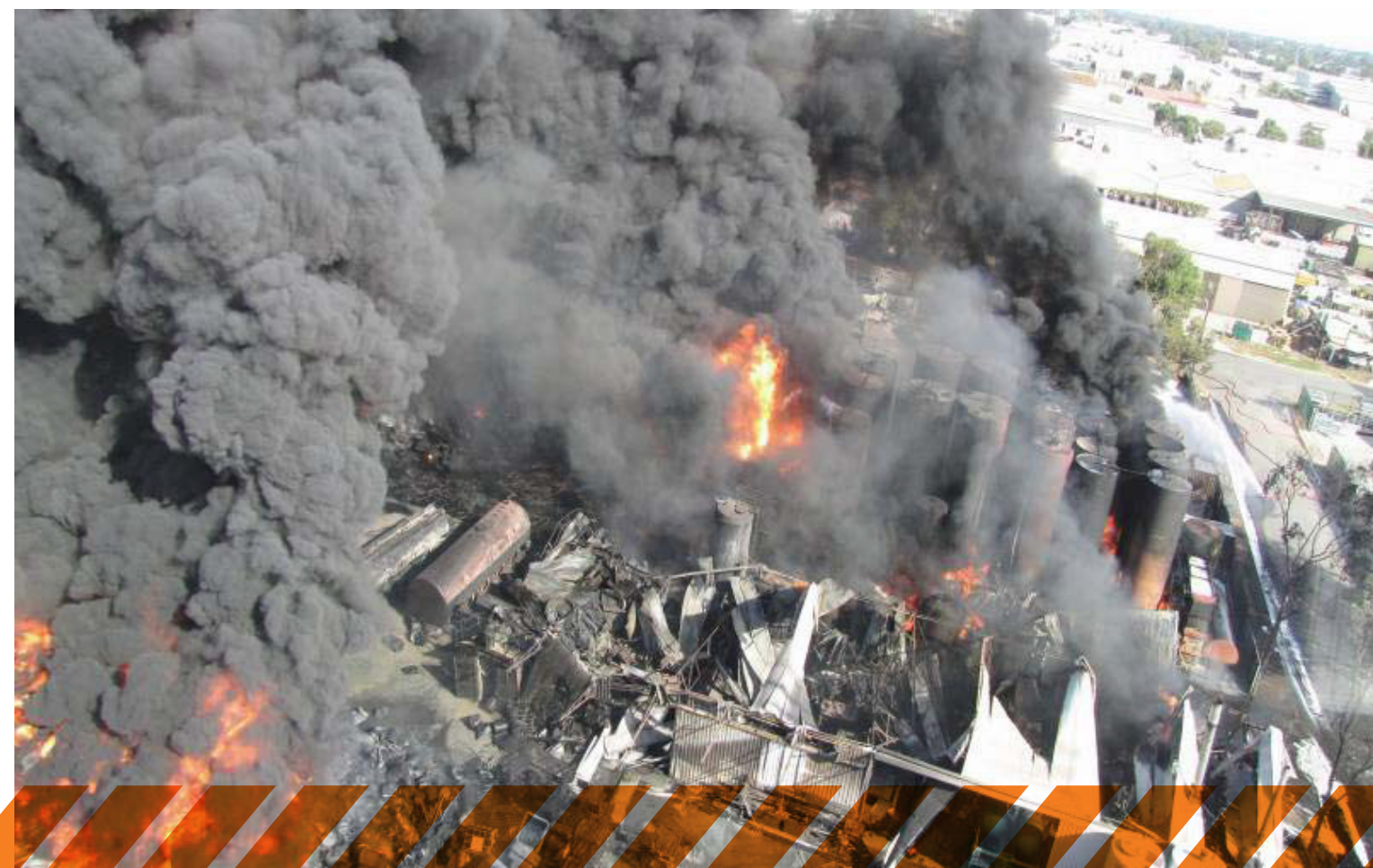
After a fire has been extinguished:

- Do not enter the burnt area without clearance from the fire service

Government, businesses, communities and individuals all have a role to play in preparing for and responding to an urban fire.

- Be aware that part or all of a building may collapse
- Toxic gases may be present in dangerous quantities for some time
- Electrical wiring may have been damaged and should be checked by a licensed electrician before power is turned back on
- Food, drink and medicines exposed to heat, smoke or soot should be discarded in an appropriate manner
- The Fire Service may have disconnected the gas, water and electricity supplies to your site. If so it is your responsibility to have the services checked and reconnected by a licensed tradesperson. Do not attempt to reconnect the services yourself.

For further information refer to the South Australian Government Website www.mfs.sa.gov.au



Your emergency kit includes items you, your family or workmates will need during and after most emergencies.



- A copy of your home or business emergency plan
- A battery or wind-up radio
- A battery or wind-up torch
- Spare batteries
- A first aid kit
- Rubber gloves and strong leather work or garden gloves
- Strong shoes or boots
- Spare clothes
- Mobile phone and charger
- An appropriate container for valuables, important papers, IDs, wills, photographs, phone numbers, back up copy of computer files etc
- An adequate supply of everyone's medicines and prescriptions
- Special needs for babies, the disabled or elderly
- Enough non-perishable food and drinking water for every person (and pets) for 3 days.

* Example only. Refer to websites contained in this document for more detail specific to the hazard.