



Government
of South Australia



Emergency Management

December 2022

SOUTH AUSTRALIA'S DISASTER RESILIENCE NEWSLETTER

RIVER MURRAY FLOOD EVENT



Image sources: [SASES Instagram](#)

South Australian River communities are experiencing river height levels not seen since 1931. More than 1100 properties are currently reported as inundated, with 4000 properties expected to be impacted at the peak flows.

The South Australian State Emergency Service (SASES) has been issuing Flood Emergency Warnings; and Flood Watch and Act Messages for the River Murray flood affected communities. A coordinated effort to the declared major emergency is now underway with many agencies such as the Department of Environment and Water (DEW), Department of Primary Industries South Australia (PIRSA), Country Fire Service (CFS) and the Metropolitan Fire Service (MFS) supporting the SASES. The current flows are similar to the 1974 flood levels at The River Murray and are predicted to reach 190GL/day – 220GL/day by the end of December. Current flow rates can be obtained from the [Department for Environment and Water website](#).

Community meetings have been hosted by the SASES with representatives from DEW, SA Water, SA Transport, SA Health, Housing SA, local councils, and other relevant agencies who have all been available to answer questions from the community. 15 Community meetings have occurred at Renmark, Berri, Barmera, Blanchetown, Loxton, Cobdogla, Morgan, Mannum, Murray Bridge, Goolwa, Meningie, Waikerie, and Norwood for property owners living in Adelaide with community members also linking in online. Apart from these SASES has taken part in several street corner meetings and other agencies' led community meetings. Community sandbagging events are also being held for the River Murray communities. SASES volunteers are on hand with sand, sandbags and available to provide advice to community members on sandbagging their homes.

Continued Page 2



Each decision and action makes us more vulnerable to disasters – or more resilient to them. Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.

page 1



DISASTER
RESILIENT
AUSTRALIA



Details of the community sandbagging events can be found on the SASES website www.ses.sa.gov.au. Properties and houseboats along the River Murray have been door knocked by SASES to provide important information on how to prepare for the flood event. This effort was supported by SAPOL, MFS, CFS, VRS and Surf Life Saving Australia.

Rising river levels are not only impacting shacks and homes but also significant infrastructure such as power and waste disposal. Key roads, ferries and recreational activities along the River Murray are also being impacted, and the Department for Infrastructure and Transport (DIT) are working with SASES and Councils to monitor the situation. Flood mitigation works on levees has been underway since October. SASES and DEW have worked with Council on remedial design and works program. SASES has secured a flood mitigation product DefenCELL that has been used for the first time in South Australia.

As the levees became engaged with higher flows, a number of levees are at risk to lives and property. Evacuation orders have been issued recently for different locations where the levee is failing or has failed. SASES and the Department of Environment and Water (DEW) are currently assessing privately owned levees along the river and further potential evacuations will be ordered if public safety is at risk.

For relief assistance and temporary accommodation or information, Emergency Relief Centres are open at Berri Senior Citizens Hall, 9 Crawford Terrace, Berri and Mannum Football Club, 28 Belvedere Rd, Mannum.

Flood preparedness advice and up-to-date information regarding the River Murray flood event can be found on the SASES website and on sa.gov.au/flood. Other support and information can be accessed by calling the River Murray Hotline on 1800 362 361 and the SA Relief Information Line 1800 302 787. For accessing information in other languages, contact Translating and Interpreting Service on 131 450.

Written by Beth Reid, Emergency Management Program Officer, SASES and information sourced from sa.gov.au and SASES

Japanese Encephalitis Virus (JEV)

Japanese encephalitis is a rare but serious disease caused by the Japanese encephalitis virus. It is spread to humans by infected mosquitoes. Most people with Japanese encephalitis virus infection do not experience any illness. There may be mild symptoms such as fever and headache. A small proportion will have encephalitis (inflammation of the brain). Japanese encephalitis virus (JEV) has been detected in South Australia, including nine cases in people in SA. Prior to February 2022, Japanese encephalitis was not known to occur in southern Australia.

Japanese encephalitis has been detected in mosquitoes and animals in the following local government areas; Loxton Waikerie, Murray Bridge, Coorong, Goyder, Clare and Gilbert Valleys and Light. Japanese encephalitis virus vaccination is recommended for persons at highest risk of infection, including certain occupations. SA Health is responding to the Japanese encephalitis outbreak by providing [funded vaccines to priority groups](#) as advised by the Communicable Diseases Network Australia, as well as other vulnerable members of the community.

There are simple steps all people should take to protect themselves against mosquito bites and mosquito-borne diseases, including wearing long, loose fitting clothing; using insect repellent and eliminating the water the mosquitoes can breed in. For more information visit the [Fight the Bite](#) page.

Written by SA Health



Photo taken by Christina Retsas, Swan Reach Ferry, 9th November 2022



DISASTER
RESILIENT
AUSTRALIA



LA NIÑA IN AUSTRALIA

Both the La Niña and the negative Indian Ocean Dipole have been major contributors to record rainfall and significant flooding for parts of Australia during 2022.

La Niña is the phase of the El Niño–Southern Oscillation that increases the chance of above average rainfall for eastern and central Australia. During La Niña, trade winds over the Pacific Ocean strengthen, increasing the sea surface temperatures north of Australia. Convection north of Australia is enhanced, typically leading to above average rainfall over large parts of the country. Similarly, during a negative Indian Ocean Dipole, warmer sea surface temperatures concentrate off north-western Australia, increasing the chance of above average rainfall over parts of the country, especially the south-east.

Spring 2022 rainfall was highest on record for large parts of south-eastern and north-western Australia (records begin 1900), and very much above average in most other parts. The high rainfall has been responsible for cooler than average spring maximum temperatures across the southern two-thirds of the mainland. In contrast, parts of Australia's northern tropics have had highest on record spring mean maximum temperatures.

Climate models forecast the current La Niña event will start to ease in early 2023. The negative Indian Ocean Dipole has already started to weaken and is likely to end by December. As the La Niña and the negative Indian Ocean Dipole retreat, we are likely to see their wet influence start to recede. The rainfall outlook for January to March is neutral for most of the country—no strong push towards above or below average rainfall—with the area likely to have above average rainfall contracting to eastern and northern Queensland, and eastern New South Wales.

For more information on La Nina and weather observations visit the Bureau of Meteorology (bom.gov.au)

Written by the Bureau of Meteorology

HEATWAVE WARNINGS

The South Australian State Emergency Service (SASES) is adopting the Australian Warning System in the way it displays heatwave warnings.

All SASES heatwave warnings will incorporate the nationally consistent heatwave icon consisting of an illustration of the sun. The background colour of each heatwave warning will be different depending on the warning level. Advice heatwave warnings will have a yellow background. Watch and Act heatwave warnings will have an orange background. Emergency Warning heatwave warnings will have a red background as seen below.



Heatwave – Advice - (Yellow)

A heatwave has started. There is no immediate danger. Stay up to date in case the situation changes.



Heatwave - Watch and Act - (Orange)

There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family.



Heatwave - Emergency Warning - (Red)

An Emergency Warning is the highest level of heatwave warning. You may be in danger and need to take action immediately. Any delay now puts your life at risk.



Page 2

To learn more about the new national warning system visit the Australian Warning System website.



Each decision and action makes us more vulnerable to disasters – or more resilient to them. Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.

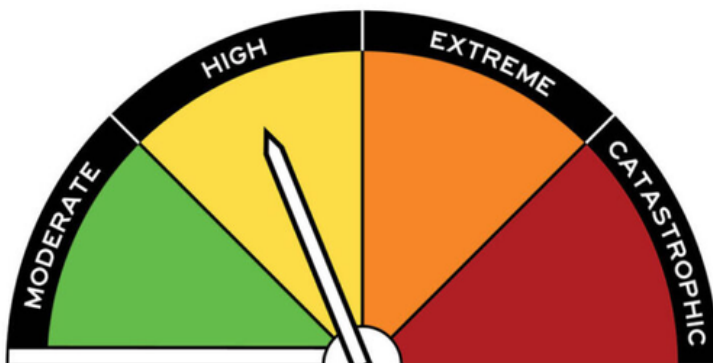


DISASTER
RESILIENT
AUSTRALIA



AUSTRALIAN FIRE DANGER RATING SYSTEM

The Australian Fire Danger Ratings (AFDRS) levels are:



MODERATE

Plan and prepare

HIGH

Be ready to act

EXTREME

Take action now to
protect life and property

CATASTROPHIC

For your survival, leave
bushfire risk areas

Australian Fire Danger Rating (AFDRS) levels, source: [AFDRS website](https://www.afdrs.gov.au/)

The Australian Fire Danger Rating System (AFDRS) uses up-to-date fuel state data, spatial and satellite data, weather data, research and technology to provide a more accurate and detailed prediction of fire behaviour and potential threat to the community. It has four levels – Moderate, High, Extreme and Catastrophic – and is supported by action-oriented messages to encourage people to take action to protect themselves and others in the face of bushfire risks. It has also introduced a 'No rating' for days of minimal risk. In addition, the AFDRS has replaced the old McArthur Fire Danger Index (FDI) with a new Fire Behaviour Index (FBI) – a scale of fire danger that takes the latest in fire science and produces outputs across eight different vegetation or fuel types (compared to the existing two) to support operational decisions about fire preparedness and bushfire suppression. The FBI calculations provide a truer representation of forecast and actual fire behaviour especially at the lower end of the scale where an error of $\pm 20\%$ occurred frequently with the old FDIs.

Aligning Fire Danger Ratings and FBI with operational decision-making the old FDI and FBI align reasonably well at the upper end of the scale eg. old GFDI 75 (Extreme) roughly equates to FBI 75 (Extreme), GFDI 51 (Severe) roughly equates to FBI 51 (Extreme). Your existing operational policies may require adjustments based on the FBI-Fire Danger Ratings alignment. Users with existing Bureau of Meteorology registered MetEye accounts can access the FBI displayed for Fire Ban Districts if the need to refer to FBI instead of Fire Danger Ratings for your levels of preparedness arises. Total Fire Ban (TFB) declarations will be made on days with an FBI 50 and above (Extreme and above). Further information email: cfs.afdrsimplementationteam@eso.sa.gov.au for further enquiries.

Written by the CFS



Each decision and action makes us more vulnerable to disasters – or more resilient to them.
Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.



DISASTER
RESILIENT
AUSTRALIA



SEMP UPDATE

The State Emergency Management Plan (SEMP) provides details of the arrangements and structures in place to prevent, prepare for, respond to, and recover from emergencies in South Australia. The State Emergency Management Committee (SEMC) is established under the Emergency Management Act. It is the SEMC responsibility to prepare and review the SEMP. In August 2022, Part 1 was updated which now includes a clear set of principles defining the responsibilities of government agencies and participating organisations in emergency management activities.



Key updates include:

- The establishment of the four primary SEMC sub-committees (that implement and report on strategic initiatives agreed upon by SEMC):
 - Capability and Capacity Sub-committee
 - Emergency Management Assurance Sub-committee
 - Strategic Advice and Coordination Sub-committee
 - Resilience, Recovery and Engagement Sub-committee
- Hazard Leaders (as they have previously been known) are now referred to as Hazard Risk Reduction Leaders
- Cyber Crisis - is a new hazard added to the State hazard list in the SEMP. The Hazard Risk Reduction Leader for Cyber Crisis is the Department of Premier and Cabinet

Parts 3 and 4 of the previous version of the SEMP are in the process of being updated and are now referred to as Part 2 'Frameworks and Guidelines' and Part 3 'Supporting Plans' on this webpage, and in the new Part 1 of the SEMP.

The SEMP is available to the public and is on the Department Premier Cabinet [website](#).

MAJOR INCIDENTS REPORT 2021-2022

The publication of the Major Incidents Report has been released by AIDR. This is the 9th edition and has been commissioned by the Emergency Management and Response Group, National Emergency Management Australia (NEMA). The Major Incidents Report includes an overview of climate change, weather patterns and highlights 36 significant events that impacted the nation over the 2021-2022 financial year. A detailed summary (including lessons learnt) of 9 of the significant events (see image below) is included in the report.

1 Earthquake Victoria 22 September 2021	2 Storms South Australia 28 - 29 October 2021	3 Storms Victoria 28 October - 8 November 2021
4 Severe flooding from (ex) Tropical Cyclone Tiffany South Australia 21 January - 3 February 2022	5 Volcanic eruption and tsunami (Australian response) Tonga 15 January 2022	6 Tsunami warning Norfolk, Lord Howe and Macquarie Islands 15 January 2022
7 Bushfire Western Australia 5 - 15 February 2022	8 Rainfall and flooding Queensland 22 February - 7 March 2022	9 Flooding New South Wales 22 February - early April 2022

Image source: Major Incidents Report 2021-2022, pg 24, [AIDR website](#)



Each decision and action makes us more vulnerable to disasters – or more resilient to them. Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.

GRANT FUNDING OPPORTUNITIES

Disaster Ready Fund (DRF) 2023

The Australian Government will establish the Disaster Ready Fund (DRF) from 1 July 2023. The DRF will provide up to one billion dollars over the next five years, from 2023/24 to improve Australia's recovery and response capability.

(Disaster Ready Fund | National Emergency Management Agency (nema.gov.au))

For more information email: disaster.ready@nema.gov.au

Future Drought Fund

Drought is an enduring feature of the Australian landscape. It has significant economic, social and environmental impacts.

The \$5 billion Future Drought Fund provides secure, continuous funding for drought resilience initiatives. It will help Australian farms and communities prepare for the impacts of drought.

(Future Drought Fund - DAFF (agriculture.gov.au))

For more information email: droughtresilience@agriculture.gov.au.

Foundation for Rural Regional Renewal (FRRR) for NFPs

The Strengthening Rural Communities (SRC) Small & Vital stream gives small remote, rural and regional communities across Australia the opportunity to access funds for a broad range of initiatives that directly and clearly benefit local communities.

Grants up to \$10,000 are available for a broad range of grassroots, community-led initiatives that directly and clearly benefit local communities that strengthen local people, places and climate solutions, with a preference for smaller communities (populations under 15,000).

(Strengthening Rural Communities - Small & Vital | FRRR)

Applications are accepted on an ongoing basis and assessed quarterly.

For more information contact: Ph: 1800 170 020 or Email: info@frrr.org.au

Regional Mobile Infrastructure Inquiry 2022/23

On 31 March 2022, the Australian Government announced that it had directed the ACCC to conduct an inquiry into towers used in the supply of mobile telecommunications and other radiocommunications services in regional areas, and into the feasibility of providing mobile roaming during natural disasters or other emergencies. The Inquiry will be conducted under Part 25 of the Telecommunications Act 1997.

(Regional mobile infrastructure inquiry 2022-23 | ACCC)

Individuals and stakeholders who would like to share their experiences can email their submission to the ACCC at rmii@accc.gov.au or submit it online via the [consumer survey](#), which will be open until February 2023.

COASTAL & ESTUARINE RISK MITIGATION PROJECT - SUCCESSFUL APPLICANTS, SOUTH AUSTRALIA

"Coastal hazards, such as inundation, storm surges and erosion threaten a diverse set of social, natural and cultural assets, including public and private property and valued recreational and tourist areas, with flow-on social and economic impacts. [The Coastal and Estuarine Risk Mitigation Program](#) will help drive long term resilience and sustainability by delivering priority projects that mitigate the impact of disasters on communities and economies."

(National Emergency Management Australia (NEMA) website)

Successful Applicants, South Australia

- **The Barunga West Council:** The Barunga West Council Coastal Protection Project
- **Local Government Association of South Australia:** Coastal Adaptation for South Australia - CA4SA Project: Bringing science and people together to mitigate coastal risks from
- **City of Victor Harbor:** Encounter Bay Coastal Protection Sea Wall
- **Kingston District Council:** Wyomi Stage 2 Seawall Construction
- **Alexandrina Council:** Data Collection and Modelling Study: Horseshoe Bay, Port Elliot, South Australia
- **District Council of Lower Eyre Peninsula:** Lower Eyre Peninsula Coastal Adaptation and Emergency Management Strategy



Each decision and action makes us more vulnerable to disasters – or more resilient to them.
Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.

SPOTLIGHT ON AIDR

In Australia there is national institute for disaster risk reduction and resilience, it is called the Australian Institute for Disaster Resilience (AIDR). AIDR develops, maintains and shares knowledge to support a disaster resilient Australia (AIDR website).

The AIDR website has a collection of emergency management resources, information and links including an emergency management library, the Disaster Map (which is an online tool that provides historical data on past disasters), training and education information as well as links to podcasts, conferences and many other key emergency management documents and articles.

The latest update from the AIDR includes:

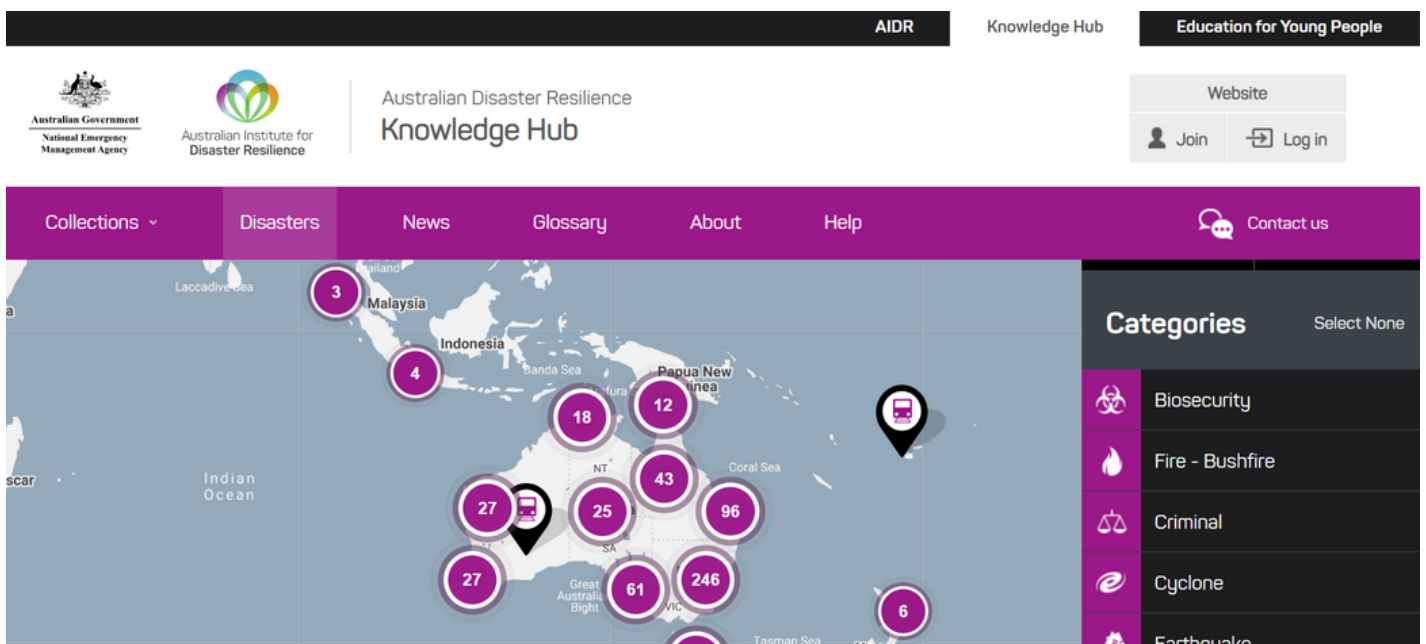
- **“Disaster Talks”** podcast: A link to the 3-part podcast called “Disaster Talks” a podcast which discusses strategies and advice around preparing a school for a disaster. Learnings and past experiences are heard in the podcast from principals, teachers, students and mental health and education department leaders. Disaster Talks is produced by the Australian Child and Adolescent Trauma, Loss & Grief Network at the Australian National University in collaboration with UNICEF Australia.
- **“Helping your children in a flood emergency”** this resource has been developed by Emerging Minds and the Australian Child and Adolescent Trauma, Loss & Grief Network (ACATLGN) at the Australian National University. “Helping your children in a flood emergency” is about helping families include their children in planning and preparing for a flood. Advice around what to do during and after a flood and managing the physical recovery are also some important points outlined in this resource. The Emerging Mind website also includes many other resources such as “Supporting your child through a drought” and “Children in the immediate aftermath of a disaster or traumatic event”.



Disaster Talks Podcast



Helping Your Children in a flood emergency



Disaster Map - AIDR website



Each decision and action makes us more vulnerable to disasters – or more resilient to them. Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector.” United Nations International Strategy for Disaster Reduction.



DISASTER
RESILIENT
AUSTRALIA



ZONE EMERGENCY MANAGEMENT SYMPOSIUM



John Mannion – SA's Lead Mental Health Commissioner speaking at the Zone Emergency Management Symposium

Photo source: Annemarie Louis, SASES

The Zone Emergency Management Symposium was held on the International Day for Disaster Risk Reduction (13th of October 2022). Over 120 attendees from the Emergency Management sector gathered in the Phar Lap room at the Morphettville Racecourse, with several linking in virtually.

Proud Ngarrindjeri and Kaurna man, Cliff Wilson opened with a Welcome to Country, followed by SASES Chief Officer – Chris Beattie formally opening the Symposium. Attendees listened to John Mannion – SA's Lead Mental Health Commissioner's reflections on prioritising Mental Health after a Disaster.

Later in the day a panel of experts; AdaptWest Regional Coordinator- Jeremy Miller; Acting Resilient Hills & Coasts Coordinator – Dr Olivia Davies and Regional Coordinator Resilient South – Dr Stefan Caddy-Retalic joined SASES Deputy Chief Officer Liz Connell as she led important climate change discussions.

The Symposium closed with well-known media personality Sophie Thompson who inspired the room with her recovery efforts in leading the creation of community gardens after the Kangaroo Island bushfires.

Other speakers included:

Executive Director Biosecurity SA – Nathan Rhodes, Principal Climate & Flood Analyst, IAG – Andrew Dyer Deputy Director Cyber Resilience, DPC – Michael Billett, Coord Community Resilience, Red Cross – Mary Hajistassi, Principal Flood Management Officer, DTI, Amber Webster, Manager Planning and Design Code, DTI, Jason Bailey and SASES Manager Emergency & Hazard Planning – Priti Meda.

Written by Beth Reid, Emergency Management Program Officer, SASES



Each decision and action makes us more vulnerable to disasters – or more resilient to them. Thus disaster risk reduction involves every part of society, every part of government, and every part of the professional and private sector." United Nations International Strategy for Disaster Reduction.