



SURF LIFE SAVING AUSTRALIA POLICY STATEMENT TSUNAMI POLICY

**POLICY
NUMBER
1.16
JULY
2009**

DEFINITIONS

Tsunami - a series of waves travelling across the ocean due to a sudden displacement of a large body of water. This displacement can be caused by events such as undersea earthquakes, landslides, volcanic eruptions or even asteroid impacts.

Emergency Management Australia (EMA) - represents is charged with assisting States and Territories to develop their emergency management capabilities to protect all Australian citizens and their property. It provides national leadership in the development of measures to reduce risk to communities and manage the consequences of disasters. EMA is part of the Federal Attorney-General's Department.

State Emergency Authority (SEA) - Has the overall responsibility of coordinating and managing wide-scale emergencies and disasters.

Bureau of Meteorology (BOM) - provides overall national strategic planning, management and coordination of the Bureau's integrated observations, telecommunications and computing infrastructure and its weather, climate and hydrological services. It also includes the National Climate Centre, the Bureau of Meteorology Training Centre and the Bureau of Meteorology Research Centre.

EXECUTIVE SUMMARY

- Surf Life Saving Australia has developed a tsunami response plan including pre-impact, impact and post-impact guidelines.
- Surf Life Saving, and other lifesaving services, will be the first point for warning, closing and evacuating beaches.
- This would be done only if it is safe to do so, and as directed by the state/territory Surf Life Saving centre or service supervisor.
- The appropriate authority will instruct Surf Life Saving when to begin rescue and recovery following the impact of tsunami.
- During a tsunami event, personal safety remains the priority and action should only be taken when it is safe to do so.

SLSA & TSUNAMI EMERGENCY RESPONSE

SLS works closely with council lifeguard services in managing Australia's beaches. SLS is the primary responder on beach management should a tsunami occur on the Australian coastline. SLS has the capacity to assist by:

- warning the beach-going public through its communication points around the coastline, including the public address system and;
- providing adequate rescue and emergency care, through the active membership volunteer and professional surf lifesaving clubs, and support operation services.

The SEA in each state/territory will have the overall responsibility of coordinating and managing of a tsunami warning. The SEA may also delegate particular responsibilities to SLS, such as warning the community or assisting in rescue and recovery. It is important that SLS should act upon its Tsunami Response Plan **only** after it has been asked to do so by the relevant SEA. It is not SLS's responsibility to determine if a Tsunami Warning should be issued or not, with subsequent plans put in place.

The Bureau of Meteorology (the Bureau) is the delegated authority to issue a tsunami warning. The SEA then determines what level of response should be taken by relevant authorities, such as SLS.

SLS RESPONSE GUIDELINES

Surf Life Saving Australia has developed a response guideline for a tsunami event. This guideline explains the processes that are to be considered by Surf Life Saving State/Territory centres, and associated bodies, when developing a Tsunami Response Plan. **All lifesaving services, including lifesaving clubs, council lifeguards, support operations etc, must contact their respective state/territory centre to confirm their state/territory specific operational procedures.**

There are three distinct components of a tsunami response plan:

- **Pre-impact.** Activities carried out during this period are precautionary and are focused on protecting life.
- **Impact.** This phase is likely to last several hours, within which the impact of a series of separate waves will occur.
- **Post-impact.** This phase can be associated with the time directly after the first wave and/or after a series of waves. It begins after the damaging effects of the tsunami have been experienced.

For regional and distant tsunami, there may be a period before impact of several hours to almost a day. This depends on where the tsunami has been generated.

It is critical that this time is used effectively to:

- ensure sufficient warning time is given
- evacuate people at risk
- implement measures to reduce property damage
- minimise disruption to essential services and;
- reduce the requirement for post impact functions.

Lifesaving services will use the appropriate response plan according to the level of warning issued by the Bureau of Meteorology (BOM).

There are three levels of warning:

- No action required.
- Marine based threat.
- Marine and land based threat.

Important Notes:

Always confirm with your direct supervisor before initiating, or finalising any component of a response plan.

The Australian Tsunami Warning System has been implemented to track any possibility of tsunami affecting the Australian coastline. However, there is still the possibility one may impact on Australia **without** any warning at all. It is important to know what natural signs could come before a tsunami.

If a tsunami wave is about to impact on the coastline you are responsible for, and there is no time to confirm with your direct Lifesaving Supervisor (ie. Surfcom or area Director of Lifesaving) you could:

- evacuate people immediately from the water and off the beach area using emergency evacuation flash and alarm, and public address systems
- notify Surfcom or area Director of Lifesaving or;
- monitor situation if possible.

No threat

If this warning is issued, you will receive the following notification: *'An undersea earthquake has been detected, however it has not generated a tsunami, or the tsunami poses no threat to Australia and its offshore territories'*. A Level 1 warning to the Australian public is a warning that lifesaving services need to be aware of. There may not be an immediate major threat to the community, however, normal wave patterns and tidal currents may be affected enough to cause unusual conditions at the coastline that could impact on your lifesaving services area. These conditions can last up to ten days after a tsunami event.

There may not be any obvious features that a tsunami has impacted your area and the three components of a tsunami response plan, being **pre-impact**, **impact** and **post-impact**, may not be directly evident. It is important to keep in mind the following actions:

- Monitor surf conditions for unusual rip and tidal currents - up to six days after.
- Advise Surfcoms of any change in conditions - up to ten days after.
- Increase surveillance of the people using the coastline, especially through deployment of Support Operations at unpatrolled locations - up to ten days after.

Marine based threat

If this warning is issued, you will receive the following notification: *'Warning of potentially dangerous waves, strong ocean currents in the marine environment and the possibility of only some localised overflow onto the immediate foreshore'*.

Pre-impact

Below are examples of what a tsunami response plan for Level 2 may include:

- confirmation that the tsunami warning is official with your direct lifesaving service supervisor i.e. Director of Lifesaving
- coordination of your local lifesaving service according to your direct supervisor's instructions
- warning any communities in the direct vicinity of the beach using public address systems and/or lifesaving craft (only if directed and is safe to do so)
- evacuation of any public from the immediate sand/beach according to the level of warning using PA system and/or evacuation flag
- pre-deployment of resources to staging areas outside the likely impact area (at Level 2 the staging area may be the back of the beach)

- restriction of access to the likely impact areas by establishing signs i.e. Beach Closed signs and red flag or other as directed (at Level 2 lifesaving services may remain at the back of the beach to continue evacuation)
- support operations vessels on standby
- support operation vessels/craft positioned according to Lifesaving Supervisor
- monitoring of likely impact areas
- coastal watch cameras and/or support operation craft i.e. offshore boats or;
- management of the media - direct all media enquiries to State/Territory centre.

Impact

Below are examples of what a tsunami response plan for Level 2 may include:

- monitoring of likely impact areas (at Level 2 this can be from the back of the beach)
- detection of tsunami impact
- continued warning and evacuation of threatened communities to safe areas. At Level 2 this can be conducted from the beach or;
- rescue of persons **only if safe to do so and/or have been instructed to do so.**

Post-impact

Post impact can be seen for several hours after initial impact.

Below are examples of what a tsunami response plan for Level 2 may include:

- confirm ability to proceed with Post-impact procedures with direct Lifesaving Services Supervisor
- reconnaissance of areas likely to have been impacted
- search and rescue of people in the immediate coastal environment
- treatment of sick or injured people
- re-open beach **only** when direct lifesaving service supervisor has informed you and you have the capacity to do so (do not take instructions from media) or;
- debrief.

Land and marine based threat

If this warning is issued, you will receive the following notification: *'Warning for low-lying coastal areas of major land inundation, flooding, dangerous waves and strong ocean currents'*.

Pre-impact

Below are examples of what a tsunami response plan for Level 3 may include:

- confirmation that the tsunami warning is official with your direct lifesaving service supervisor i.e. Director of Lifesaving
- coordination of your local lifesaving service according to your direct supervisor's instructions
- warning any communities in the direct vicinity of the beach using public address systems and/or lifesaving craft (only if directed and is safe to do so)

- evacuation of any public from the immediate sand/beach according to the level of warning using PA system and/or evacuation flag
- pre-deployment of resources to staging areas outside the likely impact area (at Level 3, staging area may be a few kilometres inland to be pre-determined)
- restriction of access to the likely impact areas by establishing signs i.e. Beach Closed signs and red flag or other as directed (at Level 3, communicate to the public via PA system and signage and evaluate all lifesaving service personnel and equipment where possible to a 'staging area' inland)
- support operations vessels on standby (at Level 3, all mobile support operation vessels evacuated to staging area)
- monitoring of likely impact areas
- Level 3 coastal watch cameras and/or aerial surveillance i.e. helicopters only or;
- management of the media (direct all media enquiries to State/Territory centres).

Impact

Below are examples of what a tsunami response plan for level 3 may include:

- monitoring of likely impact areas (at Level 3, from 'staging area' and using technology such as Coastal Watch)
- detection of tsunami impact
- continued warning and evacuation of threatened communities to safe areas (at Level 3, only to be conducted by aerial capabilities) or;
- rescue of persons (at Level 3, it is highly recommended **not** to perform a rescue during Impact phase unless via aerial capabilities).

Post-impact

Post impact can be seen for several hours or even days after initial impact.

Below are examples of what a tsunami response plan for Level 3 may include:

- confirm ability to proceed with post impact procedures with direct Lifesaving Services Supervisor
- reconnaissance of areas likely to have been impacted
- search and rescue of people in the aquatic environment (at Level 3, primarily the immediate coastal environment. However, it may be tasked as a secondary priority to inland search and rescue)
- treatment of sick or injured people
- re-open beach **only** when a direct lifesaving service supervisor has informed you and you have the capacity (do not take instructions from media) or;
- debrief.

Procedures to be followed after the impact of tsunami

Actions may include:

- reconnaissance of areas likely to have been impacted
- search and rescue of people trapped and injured
- response to collapsed structures, fires and hazmat incidents
- treatment of sick and injured people
- provision of accommodation and welfare services for displaced people or;
- management of pets and companion animals belonging to displaced persons.

FURTHER INFORMATION

For further information regarding your specific state based operational procedure, Surf Life Saving state/territory contacts are:

- New South Wales (02) 9984 7188
- Queensland (07) 3846 8000
- Victoria (03) 9676 6900
- South Australia (08) 8354 6900
- Western Australia (08) 9243 9444
- Tasmania (03) 6223 5555
- Northern Territory (08) 8985 6588

State Emergency Authorities (SEA) in each state/territory are:

- Queensland - Emergency Management Queensland (EMQ)
- New South Wales - State Emergency Service (SES)
- Victoria - State Emergency Service (SES)
- Tasmania - Police
- South Australia - State Emergency Service (SES)
- Western Australia - Fire and Emergency Services Authority (FESA)
- Northern Territory - Police Fire and Emergency Services (PFES)