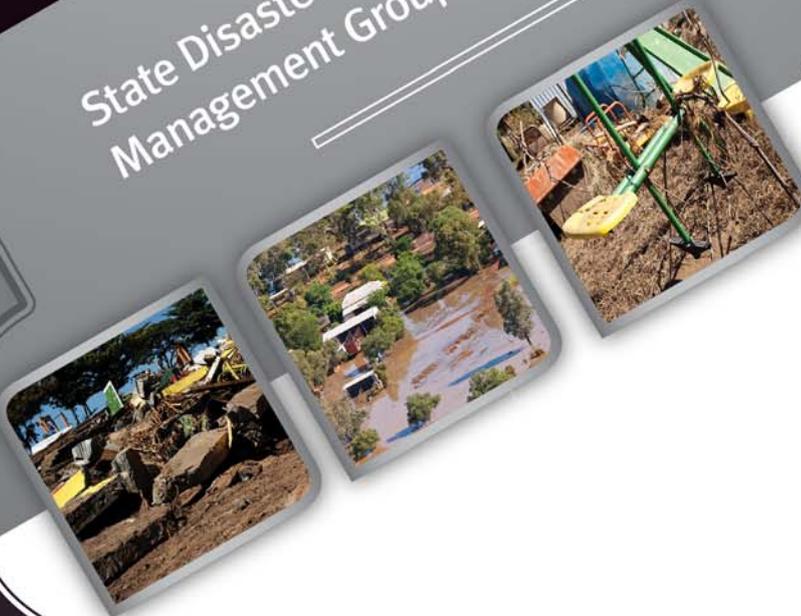


Queensland Tsunami Notification Guidelines

version 2

State Disaster
Management Group



Endorsement

The Queensland Tsunami Notification Guidelines (Guidelines) were developed by Emergency Management Queensland, Department of Community Safety, in accordance with the *Disaster Management Act 2003* with cooperative contribution from members of the State Disaster Management Group (SDMG).

These Guidelines are hereby approved by the SDMG.



Ken Smith
Chair
State Disaster Management Group

Dated: 15 November 2010

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BACKGROUND

1. The *Disaster Management Act 2003* (the Act) directs the SDMG to prepare a plan for disaster management for the State.¹ The plan is to include provision for, inter alia, the roles and responsibilities of entities involved in disaster operations and disaster management for the State.²
2. On 2 April 2007, Australia was alerted to a tsunami threat from an earthquake off the Solomon Islands under new protocols released five months earlier by the Bureau of Meteorology as part of the development stage of the Australian Tsunami Warning System project. Although the wave that subsequently reached the Queensland coast posed negligible risk, the warning caused several anxious hours for the Queensland community.
3. In October 2008, the Bureau of Meteorology (BoM) implemented the final stage of its warning system. Following analysis of this new approach the Queensland Tsunami Notification Protocol was developed and issued in 2009.
4. This 2010 version now reflects the outcomes of the review of Queensland's disaster management legislation and policy conducted in 2009, including amendments to the Act and agreed policy changes to the Queensland disaster management arrangements. The most significant amendments are the change of the title to 'Guidelines', to provide the document with the authority of s63 of the Act, and refinements to the dissemination of warnings at the District level.

AIM

5. The aim of these Guidelines is to describe the roles of government and non-government agencies, and other organisations in disseminating tsunami warning products to vulnerable communities.

SCOPE

6. These Guidelines indicate the responsibilities of government and non-government agencies, and other organisations for disseminating warning products. It does not address response issues subsequent to those warning products; this detail is to be found in respective disaster management plans.

INTRODUCTION

7. The BoM has legislative responsibility for the issue of warnings of gales, storms and other weather conditions likely to endanger life or property.
8. **Note that information and warnings released by International Tsunami Warning Centres such as the Pacific Tsunami Warning Center (PTWC) and Japan Meteorological Agency (JMA) should not be relied upon or referenced as the information is not applicable to the Australian coastline.**
9. The Joint Australian Tsunami Warning Centre (JATWC), operated by the BoM and GeoScience Australia (GA), is the issuing authority for tsunami warning products for Australia. All warning information is available to all through the BoM website.

1 Disaster Management Act 2003, Section 18 (f) and 49 (1)

2 Disaster Management Act 2003, Section 49 (2) (b)

10. A description of the JATWC warning product suite issued is listed below:
 - a. **National No Threat Bulletin:** To advise people that the earthquake has been assessed and that no tsunami threat exists to Australia or its territories.
 - b. **National or State / Territory Watch:** To advise people that a tsunami threat to Australia or its territories may exist and that they should look out for further updates.
 - c. **State / Territory Warning:** To advise people that a tsunami threat to their state / territory does exist and to advise them of the level of threat (marine or land) and action they should take.
 - d. **Tsunami Watch or Warning Cancellation:** to advise when the main threat to Australia and its territories has passed or a tsunami fails to eventuate.
 - e. **National Warning Summary:** To provide the public, media and emergency authorities with the status of tsunami warnings nationally.
 - f. **Event Summary:** To provide the public, media, emergency authorities and government with summary information that can be used in post-event analysis.
11. JATWC will make these available:
 - a. through the BoM website (www.bom.gov.au/tsunami) and through the 1300 TSUNAMI automated recording number; and
 - b. directly by email and / or fax through the BoM to media outlets (for broadcast), and State Government departments, Local Government authorities, other Federal Government agencies and other major key recipients (including Queensland Police Service (QPS)).
12. In addition, the JATWC will notify the BoM's Queensland Regional Office by telephone before issuing a tsunami warning. The BoM's Queensland Regional Office will in turn ensure receipt of warning products by the State Disaster Coordination Centre (SDCC) by telephone call.
13. While not responsible for passing warning products to the public, the Department of Community Safety (Emergency Management Queensland) is responsible for ensuring that warning products are passed on to specified entities³, and that the arrangements are in place to ensure the community is aware of the meaning of the warning products and the accompanying safety messages.

PRINCIPLES

14. **Redundancy.** Redundancy in communication channels for passing tsunami warning products to the community is highly desirable and underpins these Guidelines. Broadcast media provides one element of this redundancy. Government agencies at all three levels provide the other.

³ See Annex A

15. **Timeliness.** These Guidelines are based on the assumption of a minimum of 90 minutes warning of a tsunami's arrival in accordance with JATWC protocols. Activities during this period, therefore, may not occur sequentially but may be concurrent.
16. **Staged approach.** Some warning products can include detailed information regarding locations and the level of threat. Due to technological constraints, it may not be possible to immediately disseminate complete warnings products. In order to avoid any possible misunderstandings arising from paraphrasing, the SDCC and other agencies with dissemination responsibilities are to use the following abbreviated message format:

'The Bureau of Meteorology has issued a tsunami no threat bulletin / watch / updated watch / warning / updated warning / cancellation / summary* for parts of Queensland. Please call 1300 TSUNAMI, that is 1300 8786 264, or log on to www.bom.gov.au/tsunami for the full text of the message'
17. **Sources of reliable information.** Reliable information regarding any tsunami threat is essential for all members of the community. Reliable sources of information in Queensland regarding tsunami warning products are:
 - a. JATWC website, <http://www.bom.gov.au/tsunami>
 - b. 1300 TSUNAMI (1300 878 6264)
18. **Plans for action.** Under these Guidelines, any facility where large groups of people congregate (including, but not limited to: shopping centres, auditoriums, or hospitals) in vulnerable areas should have, and practise, a tsunami plan for the receipt of warning products and subsequent actions as advised by local governments. Tsunami warning communication and response plans should be integrated with other site / facility emergency response and evacuation protocols. Annual reviews of disaster management plans at local, district and state levels should assess these plans.
19. **Collaborative action.** Agencies should consider using assets, facilities and resources NOT at risk, and OUTSIDE any potential threatened area, to assist in the passage of warning messages, as well as response and recovery.
20. **Shared responsibility and knowledge.** All agencies shown in these Guidelines share responsibility for passing on warning products to their communities of interest and must know what actions others covered by these Guidelines are taking to avoid repetition, and confusion during the transmission of warning products. This requires individual agencies to identify, within their area of responsibility, those facilities, organisations or hubs where provision of warning products is in the public interest and how such warning products will be provided, and for informing others at local, district and state coordination centres of what will be done, and when. Agencies should record these in site / facility emergency response and evacuation plans or disaster management plans (as applicable), and share them with other stakeholders at the relevant level. Annual reviews of disaster management plans at local, district and state levels should assess these plans.

RESPONSIBILITIES

FEDERAL ARRANGEMENTS

21. These Guidelines are based on Federal authorities undertaking the following:
 - a. issue tsunami warning products from the JATWC;
 - b. ensure signs and other aspects of the warning system are common across Australia;
 - c. be responsible for the transmission of warning products from JATWC to Australian Maritime Safety Authority (AMSA), for onward passage to larger ships;
 - d. be responsible for the transmission of warning products from JATWC to the Attorney-General's Crisis Coordination Centre;
 - e. be responsible for the transmission of warning products from JATWC to Airservices Australia for onward passage to commercial aircraft approaching affected airports; and
 - f. be responsible for the transmission of warning products to any other Federal Government agencies in at-risk areas within Queensland, including Defence establishments.
22. Transmission of warning products pertaining to Queensland to other agencies is arranged through the BoM's Queensland Regional Office. The BoM will directly transmit warning products free of charge via email or fax to:
 - a. Broadcast Media.
 - b. State Government departments / authorities / agencies, local governments, and other Federal Government agencies, including port and airport authorities.
 - c. Any other public interest agencies.
23. On request, the BoM will make warning products available to other private or commercial bodies or agencies under cost recovery arrangements.

STATE ARRANGEMENTS

Planning phase (i.e. normal business)

24. The SDMG will inform District Disaster Coordinators (DDCs) of those outlets, clients and contacts points within local government areas that will be contacted by the state agencies in the event of a tsunami warning.

During an event

25. Within Queensland the decision to supplement any JATWC warning product is initiated at state level by duty staff at the SDCC.
26. Queensland government agencies have particular responsibilities for passing on warning products to those within their areas of responsibility as outlined in Annex A.

⁴ See Annex A

REGIONAL AND DISASTER DISTRICT ARRANGEMENTS

Planning phase (i.e. normal business)

27. District Disaster Management Groups (DDMG) have the responsibility for reviewing and assessing plans at district and local government level for the receipt and onward passage of tsunami warning products. DDCs are responsible for ensuring that local governments are notified of those outlets, clients and contacts points within local government areas that will be contacted by the state agencies in the event of a tsunami warning. The planning phase includes close cooperation between the DDMG and local government agencies through formal arrangements, including routine DDMG meetings, and informal networks.

During an event

28. The DDC will ensure the dissemination of warnings to vulnerable LDMGs within the district. DDMG member agencies will be notified via local arrangements.
29. EMQ Regional Offices will confirm the receipt of disseminated warnings by vulnerable LDMGs. This is a supplementary message to those provided by the BOM and the DDC.

LOCAL ARRANGEMENTS

Planning phase (i.e. normal business)

30. Local governments should take a risk-based and collaborative approach to the development of plans, warning systems and contact lists. This approach should identify those elements within the community vulnerable to a tsunami threat, take account of complementary existing tsunami warning systems operated by agencies within their boundaries, and encourage community resilience by advocating for the community and businesses to make their own arrangements for the receipt of warnings. This approach should define the responsibilities of local government itself and appropriate methods of delivering on these responsibilities.

During an event

31. Local governments should carry out their responsibilities defined in the planning phase. It is anticipated that these may include responsibility for ensuring warning products are passed on to:
- a. local government outlets;
 - b. Local Disaster Management Group (LDMG);
 - c. local government managed facilities and camp sites; and
 - d. other vulnerable land and marine based elements of the community.
32. Local plans should contain a communications strategy with pre-scripted messages based on established JATWC messages to be delivered by identified local leaders, usually the Mayor or other designated LDMG representative.

SUMMARY

33. A diagram summarising the state, district and local arrangements for the dissemination of tsunami warning products is at Annex A. Contact lists must be managed in accordance with relevant privacy legislation and should include sufficient redundancy to ensure that contact can be made any time of the day or night.

PASSING MESSAGES

34. Broadcast media will carry messages distributed directly by the JATWC. Radio and television broadcasts may be preceded by the Standard Emergency Warning Signal (SEWS) if authorised by the BoM.⁵ Local broadcast media may be used to carry messages tailored by LDMGs to their local communities.
35. Telephone is the most appropriate alert, particularly at night. The use of local or agency mass phone dialling message systems for alerting should be used, commensurate with the risk.
36. The optimum way to pass warning products particularly to those on the immediate coastline is by siren. Local Governments may choose to use this option - based on a risk assessment of their local area.
37. Use of radio, public address systems, and variable messaging signs should be used, as appropriate.
38. In remote northern coastal locations the School of the Air may have potential, albeit limited, to pass on messages to their service recipients.
39. Further considerations for public information and warnings are contained in the DCS publication 'Operational Planning Guidelines for Local Disaster Management Groups' available at <http://www.disaster.qld.gov.au/publications>.

MAINTAINING AND TESTING RESPONSE ARRANGEMENTS

40. The BoM, the SDCC, and other agencies with responsibilities for the transmission of warning products will review and update details of recipients of the warning service quarterly.
41. The system is to be tested at least bi-annually through the promulgation of 'No Threat' warnings as part of a standard dissemination system to all stakeholders.

Annex

- A. Responsibilities of Agencies for Tsunami Notification in Queensland.

⁵ Reference: The Standard Emergency Warning Signal SEWS and its use in Queensland

Responsibilities of Agencies for Tsunami Notification in Queensland

