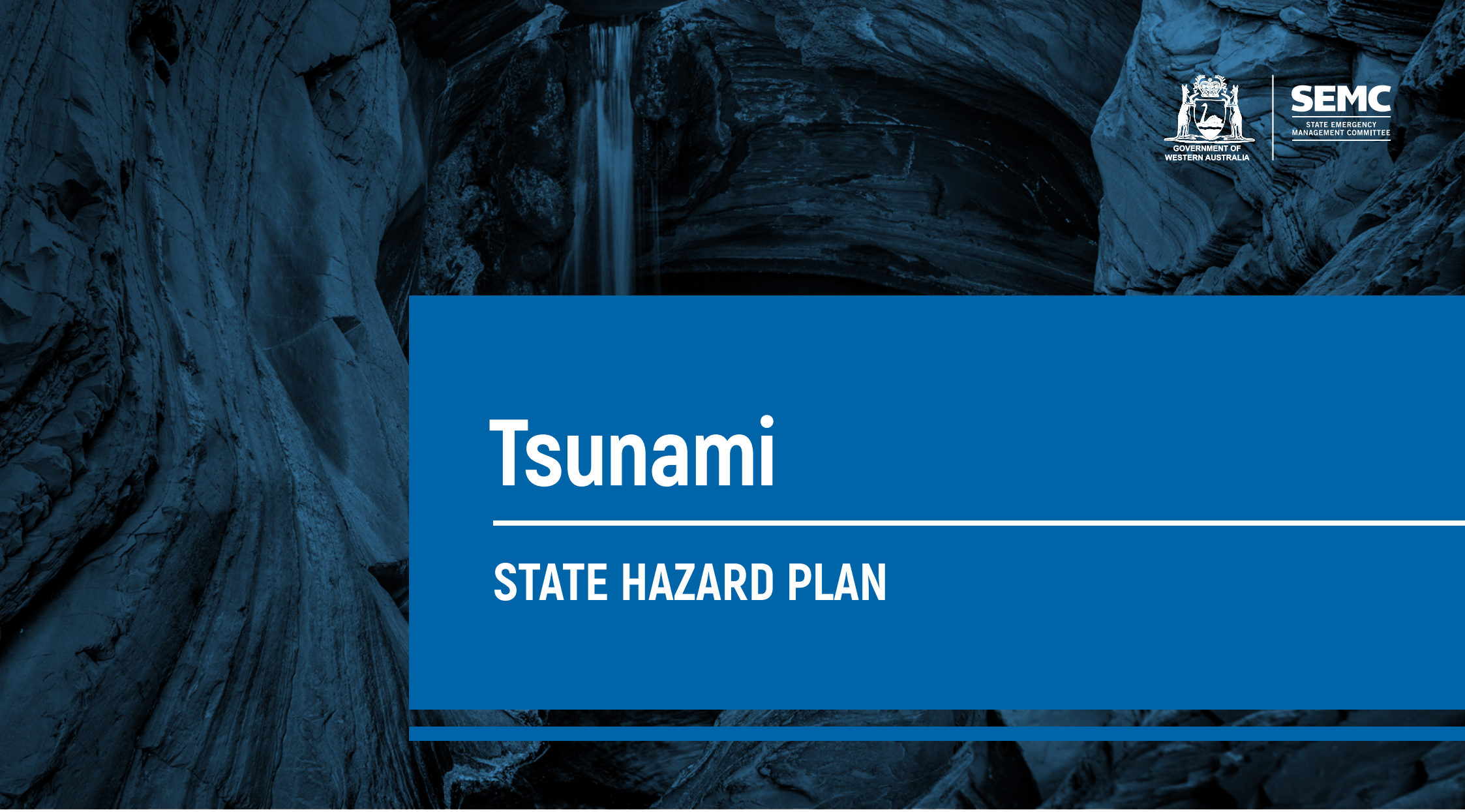

GOVERNMENT OF WESTERN AUSTRALIA

SEMC
STATE EMERGENCY MANAGEMENT COMMITTEE

Tsunami

STATE HAZARD PLAN

RESPONSIBLE AGENCY	Department of Fire and Emergency Services
APPROVED BY	State Emergency Management Committee
RESOLUTION NUMBER	77/2023
VERSION NUMBER	2.02
DATE OF APPROVAL	4 OCTOBER 2023
DATE OF EFFECT	31 OCTOBER 2023
REVIEW DATE	DECEMBER 2026

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Amendments Table

Date	Details	Amended by
December 2007	Complete reissue.	
September 2010	Complete review.	
2015	Complete review.	
May 2016	Statement of fact amendments.	SEMC Secretariat
December 2017	New State Hazard Plan format, statement of fact changes, removal of duplication, inclusion of assurance activities and Machinery of Government changes.	Department of Fire and Emergency Services
December 2018	Version 01.01 – Statement of fact amendments. Refer also to the generic amendments to the suite of State emergency management documents as per amendments table v02.00 approved by SEMC (Resolution Number 90/2018).	SEMC Business Unit

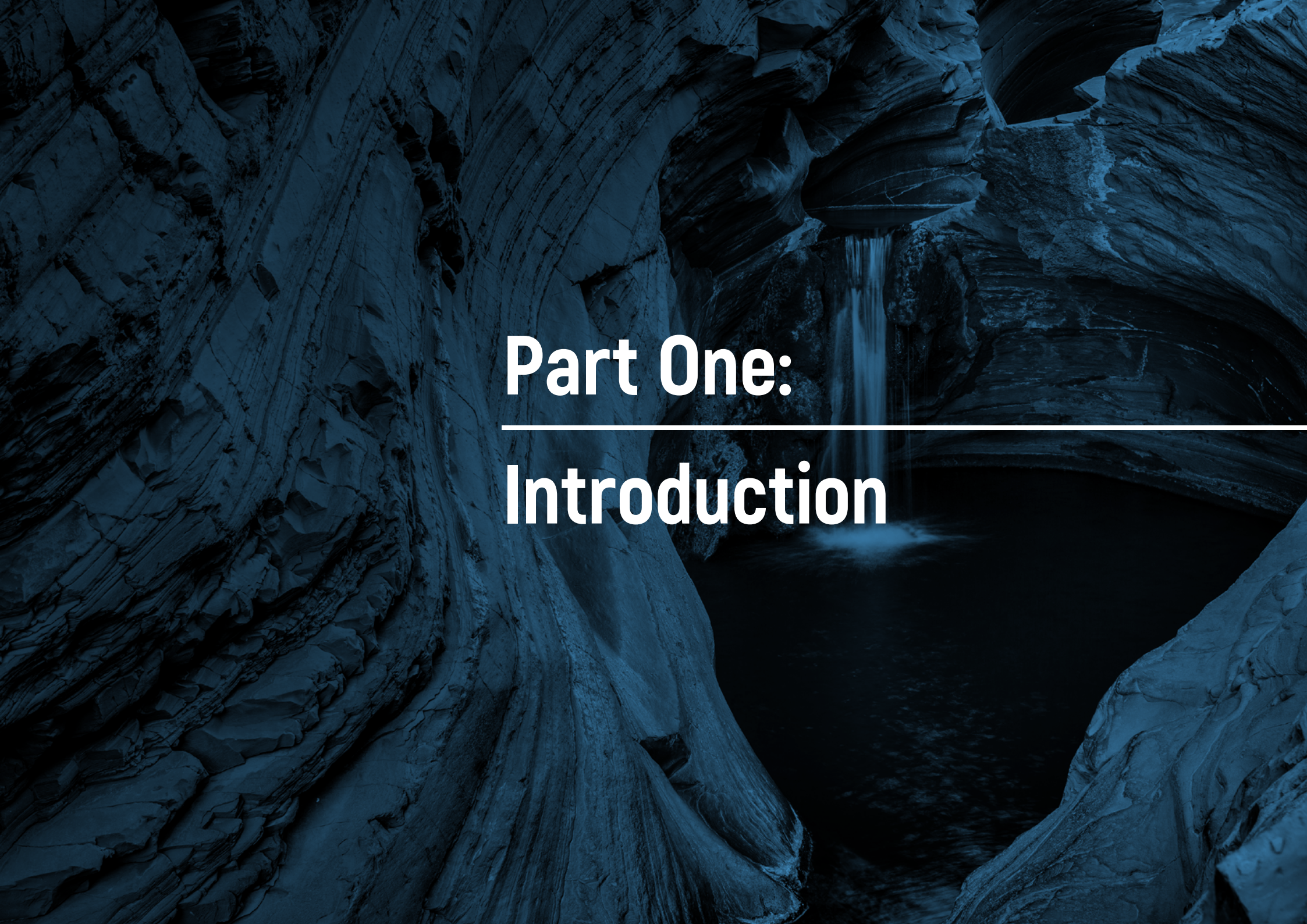
Date	Details	Amended by
October 2019	Version 01.02 – Minor amendments approved by SEMC (Resolution Number 91/2019) as per amendments table v02.02.	SEMC Business Unit
June 2020	Version 01.03 – Review date deferred to August 2021 approved by SEMC (Resolution Number 25/2020 and statement of fact amendments as per State emergency management documents amendments table v02.03.	SEMC Business Unit
December 2020	Version 01.04 – Amendments approved by SEMC (Resolution Number 84/2020) as per State emergency management documents amendments table v02.06.	SEMC Business Unit
December 2021	Version 2.00 - Comprehensive review and reissue approved by SEMC (Resolution Number 100/2021) as per State emergency management documents amendments table December 2021.	Department of Fire and Emergency Services
December 2022	Version 2.01 - Amendments approved by SEMC Executive Officer (Resolution Number 17/2021). Statement of fact changes and updated hyperlinks to new SEMC website as per amendments table December 2022.	SEMC Business Unit
October 2023	Version 2.02 - Consequential amendments approved by SEMC to reflect the change in terminology from 'welfare' to 'emergency relief and support' and related terms (resolution number 77/2023) and statement of fact and accessibility amendments approved by the SEMC Executive Officer (resolution number 17/2021) as outlined in State EM documents amendments table October 2023.	SEMC Business Unit

The SEMC acknowledges the Aboriginal peoples throughout the state of Western Australia as the Traditional Custodians of the lands, where we live, work and volunteer. We recognise Aboriginal peoples' continued connection to land, waters and community, and pay our respects to Elders both past and present.

This document was designed to be viewed electronically and aims to meet the West Australian Government's accessibility and inclusivity standard, including meeting the World Wide Web Consortium's Web Content Accessibility Guidelines version 2.1 (WCAG 2.1) at level AA. If anything in this document is inaccessible to you, or you are experiencing problems accessing content for any reason, please contact the State Emergency Management Committee Business Unit at semc.policylegislation@dfes.wa.gov.au.

All of the State emergency management legislation and documents can be accessed via the State Emergency Management Framework page of the State Emergency Management Committee website.

Contents



Part One:

Introduction

The State Hazard Plan for Tsunami (the Plan) provides an overview of arrangements for the management of tsunami emergencies in Western Australia (WA) and contains information on arrangements to support prevention, preparedness, response and initial recovery activities relating to tsunami emergencies.

The Plan refers to a range of existing acts, regulations, policies, plans and guidelines that support the management of tsunami emergencies in WA but does not duplicate the information contained in these, instead provides directions to websites and other sources where further information can be obtained.

The Fire and Emergency Services (FES) Commissioner is the Hazard Management Agency (HMA) for tsunami.[1] The State Emergency Committee (SEMC) has delegated responsibility for the development, maintenance, review and exercising of the State Hazard Plan for Tsunami (the Plan) to the FES Commissioner in accordance with section 20(1) of the *Emergency Management Act 2005*.

1.1 Background

Tsunamis are considered to be a low probability hazard with potentially catastrophic consequences.[2] Unlike meteorological hazards, which may be forecast a few days in advance to support emergency management preparations, it is not possible to forecast a tsunami until the earthquake is detected. This leaves only a small window of opportunity for emergency management actions prior to the tsunami arrival. This opportunity to act may range from one to five hours, depending on the location of the earthquake and where you are on the coast.[3] Low likelihood notwithstanding, records show that the northern coast of WA has been subject to some of the most significant tsunami impacts in Australia. Further detail on this hazard is set out in section 1.3.

1.2 Scope

This Plan covers emergency management arrangements within the geographic boundaries of WA, including State waters as defined in the *Emergency Management Regulations 2006* (regulation 14), for the hazard of tsunami. The Plan deals with risk reduction strategies, preparedness for, response to and initiation of recovery arrangements following the impact of a tsunami.

1.3 Hazard Definition And Impact

A tsunami is a natural phenomenon consisting of a series of waves generated when a large volume of water in the sea is rapidly displaced. Tsunamis are known for their capacity to inundate coastlines, causing property damage, injuries and loss of life. The principal sources of tsunami are:

- large submarine or coastal earthquakes, in which significant uplift or subsidence of the seafloor or coast occurs (this is the main source of tsunami)
- underwater landslides, which may be triggered by an earthquake, or volcanic activity
- volcanic eruptions, such as underwater explosions or caldera collapse, pyroclastic flows and atmospheric pressure waves
- meteor impact.

Notes

1 *Emergency Management Regulations 2006*, regulation 17(2).
2 Gareth Davies et al., "A Global Probabilistic Tsunami Hazard Assessment from Earthquake Sources," Geological Society, London, Special Publications 456, no. 1 (January 1, 2018): 219–44, https://doi.org/10.1144/SP456.5.
3 Hugh Glanville and Dan Jaksa, "Australian Earthquakes Explained," March 7, 2015, http://www.ga.gov.au/news-events/news/latest-news/australian-earthquakes-explained.

With much of WA's industry and critical infrastructure and more than 12 percent of WA's population living within 1km of the coast, the State could have significant exposure to the impacts of tsunamis. Acknowledging this exposure, the Western Australia Natural Hazards Risk Profile 2017 identifies tsunami as one of the highest risks to the built environment.[4] It highlights that a tsunami could result in catastrophic impacts to commercial buildings, particularly those associated with marinas and ports.

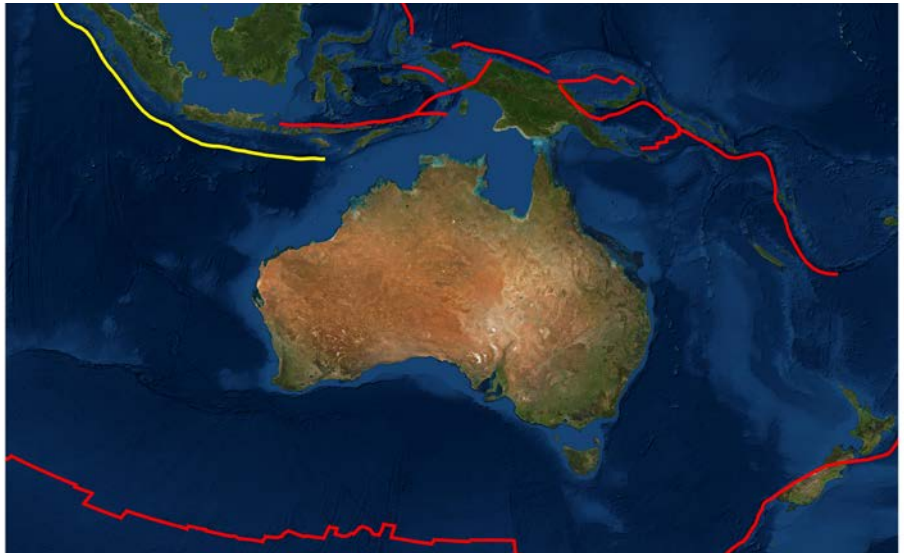


Figure 1: Subduction zones along tectonic plate boundaries around Australia that have the potential to generate a tsunami that may impact Australia (Source: Geoscience Australia)

While a low probability hazard, a number of tsunamis have affected the West Australian coastline since 1833.[5] These incidents have tended to generate dangerous rips and currents, with land inundation less common. Most of these events were triggered by earthquakes originating from the Sunda-Andaman subduction zone (Sunda Trench) near Indonesia (see yellow line in Figure 1).

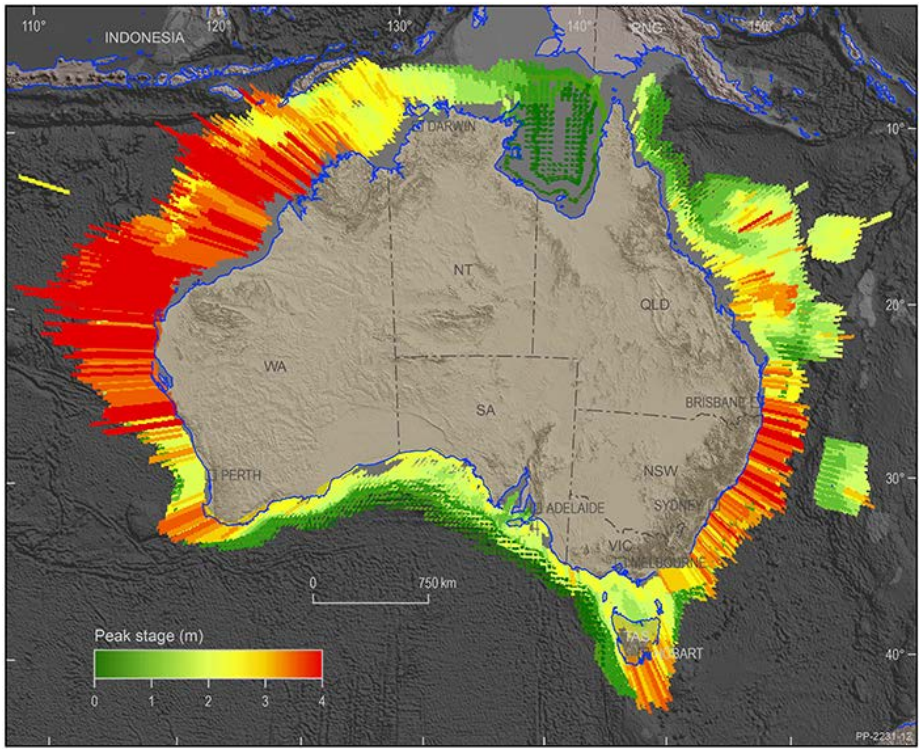


Figure 2: PTHA18 Hazard Summary Results (Source: Geoscience Australia)

Given the relatively low frequency of tsunamis historical observational records alone do not provide enough data to understand impacts of tsunami on the WA coastline. To fill this gap, Geoscience Australia (GA) released a Probabilistic Tsunami Hazard Assessment (PTHA) in 2018. The PTHA18 models the frequency with which tsunami of any given size occur around the Australian coast, due to subduction earthquakes in the Indian and Pacific Oceans (Figure 2).[6]

Notes

4 State Emergency Management Committee, "Western Australia Natural Hazards Risk Profile 2017," 2017, https://semc.wa.gov.au/capability-and-preparedness/reports-and-reviews/Documents.
5 BoM, Past tsunami events www.bom.gov.au/tsunami/history/index.shtml.
6 Geoscience Australia, Probabilistic Tsunami Hazard Assessment (PTHA) https://www.ga.gov.au/about/projects/safety/ptha.

According to this model, the northwest coast of WA is more likely than the east or southwest coast to experience a tsunami due to its proximity to the Indonesia tectonic plate boundary, which has a long, seismically active fault line. Previous studies indicate that any one of the modelled events can impact the whole of the WA coastline with only a few hours of warning time available to the WA emergency management community. This has implications for the management of a Statewide response and evacuation planning.[7] The Department of Fire and Emergency Services (DFES) and GA continue to work in partnership to analyse how tsunami may impact coastal communities.

Further detailed information on the tsunami hazard can be found at:

Geoscience Australia (GA)
https://www.ga.gov.au/scientific-topics/community-safety/tsunami

Bureau of Meteorology (BoM) http://www.bom.gov.au/tsunami/

1.4 Organisational Roles and Responsibilities

As HMA for tsunamis, the FES Commissioner is responsible for the management of the adverse effects of a tsunami emergency across the full prevention, preparedness, response and recovery (PPRR) spectrum.[8]

A coordinated response to a tsunami emergency requires emergency management agencies and support organisations to undertake a variety of agreed and statutory roles and responsibilities. It is recommended that each agency with a role or responsibility under this Plan has appropriate operational procedures detailing their response arrangements in accordance with this Plan. These arrangements should be complementary to the agency's operational procedures detailing their roles and responsibilities under the State Emergency Management Plan (State EM Plan).

Agencies involved in management of the impacts of a tsunami, or those which have roles and responsibilities to provide essential services to the community should also maintain a Business Continuity Plan to ensure they maintain capabilities in the event of a major tsunami incident impacting the state.

Information regarding the roles and responsibilities of relevant agencies under this Plan are detailed in Appendix C.

1.4.1 Joint Australian Tsunami Warning Centre

The Joint Australian Tsunami Warning Centre (JATWC) is operated by the Bureau of Meteorology and GA. Based in Melbourne and Canberra, it has been established so that Australia has an independent capability to detect, monitor, verify and warn the community of the existence of tsunamis in our region and possible threats to Australian coastal locations and offshore territories.[9]

1.4.2 Australian Tsunami Advisory Group

The Australian Tsunami Advisory Group (ATAG) is a reference group of which DFES is a member. Its membership comprises of emergency service representatives from each state and territory, Department of Home Affairs, BoM, GA, Surf Life Saving Australia and New Zealand.

ATAG provides national leadership in programs and projects relating to tsunami response and recovery capability development aimed at enhancing community resilience and industry capability. It works as a consultative and coordinating forum to facilitate processes for effective national exchange of practice, research, information and knowledge management in relation to tsunami.

Notes

7 Osuchowski, M. and Sexton, J., 2010, Tsunami Impact Scenarios for Mandurah, Western Australia. Geoscience Australia Professional Opinion. No.2010/03, page 10.
8 *Emergency Management Regulations 2006* regulation 17(2).
9 bom.gov.au/tsunami/about/jatwc.shtml.

1.5 Related Documents and Legislation

This Plan is to be read in conjunction with the State Emergency Management Framework including the *Emergency Management Act 2005*, *Emergency Management Regulations 2006*, State Emergency Management Policy (State EM Policy), plans and procedures.

This plan is to be read in conjunction with the following documents:

- Australian Government Disaster Response Plan (COMDISPLAN 2017)
- State Planning Policy 3.4 Natural Hazards and Disasters
- State Planning Policy 2.6 State Coastal Planning Policy
- Department of Heath WA State Health Emergency Response Plan
- Local Emergency Management Arrangements.

Legislation and codes relevant to this plan include but are not limited to:

- *Fire and Emergency Services Act and Regulations 1998*
- *Local Government (Miscellaneous Provisions) Act 1960*
- *Meteorology Act 1955 (Commonwealth)*
- *Mines Safety and Inspection Act 1994*
- *Occupational Safety and Health Act 1984*
- *Planning and Development Act 2005.*

1.6 Activities Informing the Assurance Process

The HMA engages with Geoscience Australia (GA), the Bureau of Meteorology and other subject matter experts to ensure an ongoing awareness and a contemporary understanding of the hazard and mitigation strategies.

The HMA ensures aspects of operational performance are reviewed and that a consistent and structured approach is applied to all aspects of operational performance that:

- complies with relevant State EM Policy and plans
- ensures that identified lessons and opportunities for improvement are actioned
- ensures that the HMA's service delivery meets community expectations.[10]

DFES will undertake operational lessons management activities after all incidents in accordance with DFES' Operational Lessons Management Policy and directives. DFES has adopted three types of After Action Reviews. The relevant Assistant Commissioner or Command Head will determine which After Action Review is utilised.

DFES Operations applies lessons management principles in the following manner:[11]

- Observations made during operations or in support of operations are analysed to develop insights and identify lessons for consideration by DFES Operations management.
- Approved lessons are validated by relevant personnel.
- Approved lessons are implemented and tested to ensure operational

Notes

10 DFES Operational Lessons Management Policy 2020.
11 DFES Directive 3.19 Operational Lessons Management.

improvements are embedded.

- Lessons learned and operational successes are sustained by sharing with all DFES personnel and relevant emergency management partners.

The Operational Area Manager (OAM)/Incident Controller (IC) will ensure that all agencies involved in a multi-agency emergency are able to provide input to any post operation analysis. DFES will work towards a collaborative multi-agency debrief, analysis and lesson development process that informs DFES operations.

DFES reviews operational lessons management activities to ensure ongoing effectiveness.

Post Operation Reports must be provided to SEMC in accordance with State EM Policy section 5.11 and State EM Plan section 5.7.

Part Two:

Prevention and Mitigation

By proactively reducing the presence and effects of a hazard, it is possible to reduce the financial and social costs to communities over time, reduce impact to the built and natural environments, and thereby improve resilience of the broader community. In WA, a range of prevention and mitigation strategies and projects have been developed and implemented to enhance planning and reduce risk associated with tsunamis.

2.1 Responsibility for Prevention and/or Mitigation

As the HMA, the FES Commissioner has overall responsibility for risk reduction aspects of tsunami events, within the limitations of legislation,[12] resource capabilities and capacity.

Local governments are responsible for planning in their local communities by ensuring appropriate local planning controls, which need to be consistent with objectives and requirements set by the Western Australia Planning Commission (WAPC).[13] The WAPC is responsible for approving subdivision applications and has delegated powers for the determination of development applications to local governments and development assessment panels.

Government agencies, essential services, network operators and other bodies that may be involved in the management of a tsunami should establish priorities, retrofit, replace, or relocate vulnerable infrastructure and identify potential failover sites to ensure that functions can be resumed rapidly after a tsunami.

2.2 Prevention and/or Mitigation Strategies

While a tsunami cannot be prevented, risk treatment strategies can contribute to the increased resilience and reduced vulnerability of communities. Key strategies are employed to reduce the risks associated with tsunami emergencies.

2.2.1 Research

In 2018 GA released the PTHA18, an assessment that models the frequency with which tsunami of any given size occur around the Australian coast, due to subduction earthquakes in the Indian and Pacific Oceans. While the PTHA18 significantly enhances our understanding of tsunami risk, it does not define the onshore impacts on communities and the economy. Commencing in 2020, DFES and GA are exploring collaborative opportunities to link the PTHA18 model with improved elevation and bathymetric data, to extend this model onshore. This project will facilitate the development of long-term tsunami preparedness strategies across the state.

2.2.2 Community Information and Engagement

DFES, local governments, GA and the BoM contribute to education programmes developed to inform and educate the public on tsunami notification, risk and management.

2.2.3 Risk Treatment Strategies

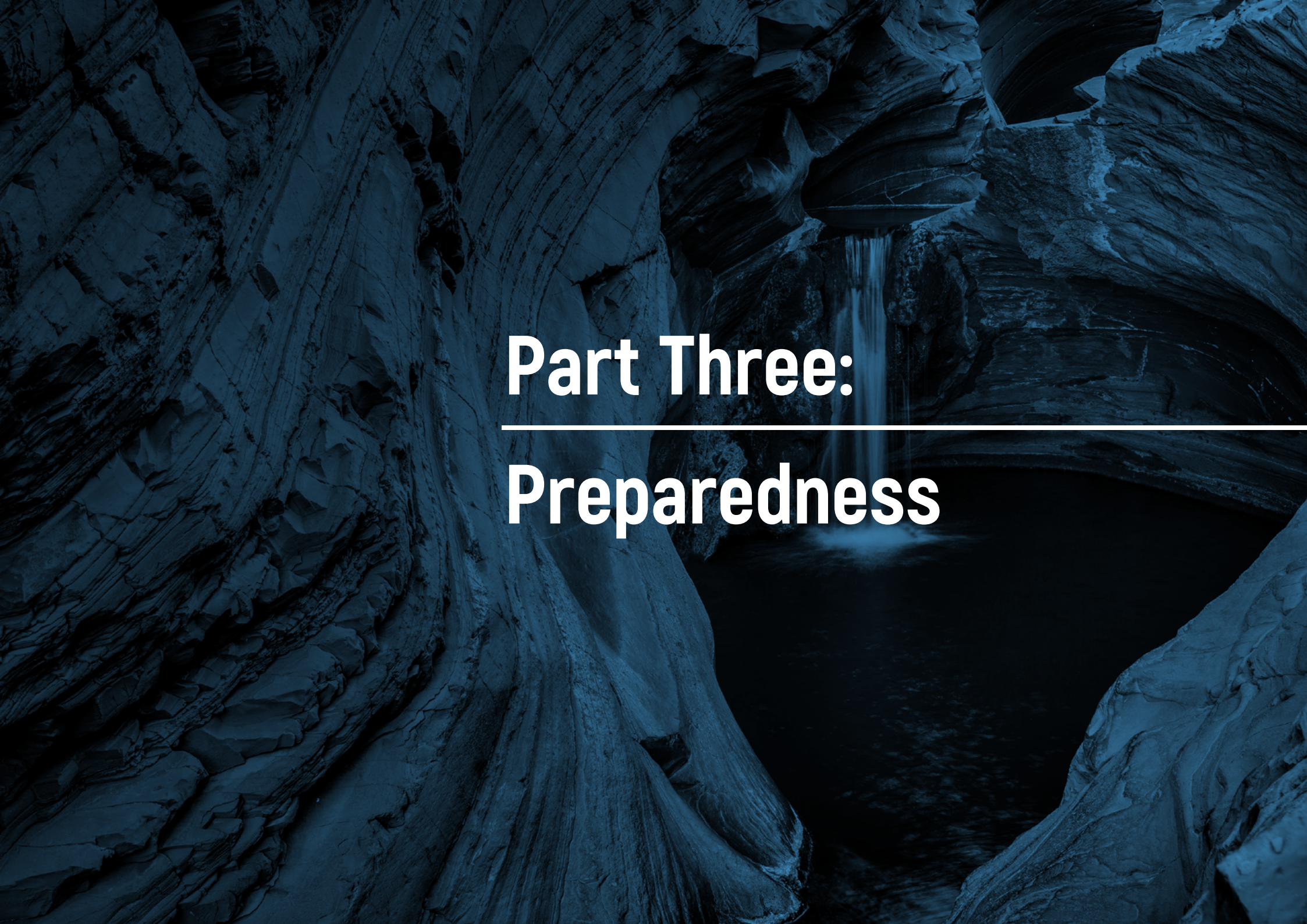
Western Australia has adopted several key risk reduction strategies associated with tsunami emergencies. These strategies are shown in Table 1.

Notes

12 *Emergency Management Act 2005, Fire and Emergency Services Act 1998.*
13 WAPC State Planning Policy 3.4 Natural Hazards and Disasters, https://www.dplh.wa.gov.au/spp3-4.

Strategy	Responsible Agency
Participation in Australian Tsunami Advisory Group (ATAG).	BoM, GA, DFES
Tsunami inundation modelling and mapping.	DFES and GA
Application and enforcement of the Building Codes of Australia and informed land use planning for vulnerable areas.	Local governments
Participation in research and development programs directed towards identifying and implementing risk treatment strategies.	DFES, ATAG, GA and BoM
Promoting an improved state of resilience within communities to improve the management of future risks.	DFES
Developing resilience in the community and minimising the vulnerability of communities to effects of tsunami.	DFES in partnership with local governments
Promotion of, and participation in, community awareness campaigns for 'at risk' communities.	Local governments assisted by DFES, BoM and WA Police Force
Provision of tsunami advice to the community.	DFES, GA and BoM (through JATWC)
Participation in local and regional tsunami planning.	Local government, BoM, GA, DFES, DEMCs and LEMCs
Ensuring the sustainability of service delivery of critical infrastructure through design and maintenance standards.	Essential services and network operators
Advising relevant agencies in relation to the construction/maintenance of critical infrastructure services and access in 'at risk' communities.	Essential services and network operators

Table 1 Tsunami Risk Reduction Strategies



Part Three:

Preparedness

3.1 Responsibility for Preparedness

As the HMA for tsunami, the FES Commissioner has responsibility for:

- promoting resilience activities within communities to improve the management of future risks
- promoting all emergency management activities related to tsunami preparedness is undertaken.

3.2 Capability Baseline

The Australian Disaster Preparedness Framework has been developed and endorsed by the Australia-New Zealand Emergency Management Committee (ANZEMC) to support the national development of the required capability to effectively prepare for and manage severe to catastrophic disasters. The Framework acknowledges the responsibility of all jurisdictions to deal with disasters or emergencies within their existing arrangements.

It emphasises the importance of simulation and exercising to consider the capabilities required in terms of both the level of capability to effectively deal with the task at hand and the capacity required to sustain this level of capability over an identified time.

A State level response is initiated for any incident which will or is likely to cause severe and widespread impact on industry, the community or the environment. It usually requires a response being managed primarily at a State level. To assist with planning and preparedness for a State level response to a tsunami emergency, supporting agencies are to consider the following scenario as an indicative baseline:

> *A tsunami impacting the full length of the WA coastline with minor to moderate coastal inundation. Some areas in the south west and Midwest receive moderate to major impacts.*

This capability baseline is based on the 1977 Sunda earthquake tsunami, the 2004 Indian Ocean Tsunami and previous modelling.

3.3 Planning and Arrangements

Successful tsunami operations depend on sound planning, effective resource utilisation and a coordinated response which is timely, efficient and effective. Emergency management plans are to be developed and reviewed regularly based on:

- best practice principles
- technical and scientific knowledge
- research, including historical data and post incident analysis
- local knowledge and experience.

The concept of this Plan is to employ and coordinate the resources of State and Australian Government departments, authorities and agencies; resources available to private industry; and resources available to volunteer groups, for tsunami operations. This concept is based on:

- availability of the JATWC 24-hour national tsunami warning capability
- availability of the 24-hour National Earthquake Alerts Centre (NEAC)
- availability of the DFES 24-hour State Operations Centre (SOC) for receipt of tsunami notification reports
- establishment of operational facilities at three levels (State, Regional and local), from which management of tsunami operations takes place
- deployment of emergency service personnel
- provision of expert technical advice on tsunami impact modelling by State and Australian Government agencies when requested by DFES
- tasking of agencies in a coordinated manner in support of DFES. Agency procedures are then employed to carry out tasks.

Local government is responsible for the development of local emergency management arrangements.[14] The Local Emergency Management Committee (LEMC) is to provide advice to local government in this regard.

3.4 Resources

Identifying and securing access to critical response enabling resources and expertise is an essential component of tsunami preparedness. If these resources are not able to be sourced or deployed into the impacted regions, the response effort will be compromised. Planning at all levels should reference resource identification, prioritisation, sourcing, acquisition, maintenance and management arrangements.

As the HMA, the FES Commissioner is responsible for the overall provision and management of resources and personnel required to physically respond to a tsunami event, including acquisition, pre-positioning and inventory management. Specific responsibilities include:

- establishing, equipping, training and maintaining an Urban Search and Rescue Task Force
- prioritising, procuring and allocating specialist equipment and vehicles
- safely storing equipment and vehicles in locations that provide ease of access but protection from damage from hazards such as tsunamis, earthquakes, fires and structural collapse.

Emergency management agencies and support organisations are required to provide their own resources in the first instance and request additional resources from DFES if required.

Whilst industry is required to have emergency plans in place, sometimes these plans have included additional preparedness provisions. Ideally, these will be made available via LEMAs on local government websites.

In certain areas, some industry groups have established mutual aid agreements and/or systems that contribute to the reduction of the effects of an emergency through rapid response and improved response capability.

The identification of appropriate and adequate resources and expertise is essential to preparedness for a tsunami. Planning at all levels should reference resource management, inventory and acquisition arrangements.

Where the scale of an operation exceeds or exhausts the resources available to the State, a request for assistance from other jurisdictions may be made in accordance with section 3.7 "Assistance Arrangements with Other Jurisdictions".

3.5 Community Information and Education

DFES, in collaboration with BoM, GA, ATAG and local governments, contributes to the development of education programs and materials to inform and educate the public on tsunami notification, risk and management.

During a tsunami, DFES will provide community information in a coordinated manner through the IC and/or Operational Area Manager.

Media and public information strategies are reviewed annually by DFES to ensure appropriate communication of tsunami information to the community. This section may not be relevant to all hazards.

3.6 Local and District Hazard Emergency Management Plans

Where areas susceptible to tsunami inundation are identified as a risk to the community DFES may develop Local and District plans to address the prevention, preparedness, response and recovery activities for tsunami.

Notes

14 *Emergency Management Act 2005* section 41(1).

3.7 Assistance Arrangements with other Jurisdictions

Should the scale of a tsunami event be such that the total resources of the State cannot reasonably cope with the needs of the operation, DFES and/or the WA Government may seek assistance from other states and territories, the Australian Government or from overseas.

3.7.1 National and International Assistance Arrangements

The Australian Government Disaster Response Plan (COMDISPLAN) (activated by the Director General Emergency Management Australia), facilitates the provision of Australian Government Physical Assistance to States and Territories, following a formal request. This assistance can include but is not limited to air and maritime border control, traffic management and communications capabilities, satellite imagery capabilities, Australian Medical Assistance Team deployment and disaster victim identification.[15]

All requests for Australian Government Physical Assistance are to be made by the State Emergency Coordinator for consideration by the Director General Emergency Management Australia. Further detail on Australian Government Physical Assistance can be found in State EM Policy section 5.10, State EM Plan section 5.6 and State EM Response Procedure 4.20.

3.7.2 Interstate Assistance Arrangements

The Australasian Arrangement for Interstate Assistance (AIA) provides a framework for mutual assistance between Australasian fire services, emergency services and land management agencies. It is intended for use within Australia and between Australia and New Zealand. It does not replace any existing bilateral agreements that may exist between jurisdictions. It caters for occasions when significant resource deployments are requested for response to large scale events.

The AIA was developed and is maintained by the National Resource Sharing Centre (NRSC), a division of the National Aerial Firefighting Centre, in consultation with the Commissioners and Chief Officers Strategic Committee (CCOSC). The CCOSC of the Australasian Fire and Emergency Service Authorities Council (AFAC) has endorsed the AIA as the basis for sharing fire and emergency service resources across state boundaries and between Australian states and territories and New Zealand. The Commonwealth, through Emergency Management Australia, co-chairs CCOSC and is integral to this arrangement. The CCOSC and NRSC are primary points of contact for any request made through the AIA for an interstate deployment.[16]

3.7.3 Requesting Interstate Assistance

Requests for interstate deployment support can be made by the FES Commissioner directly to the relevant jurisdiction as required. Deployment must be undertaken according to each agency's policy and directives.

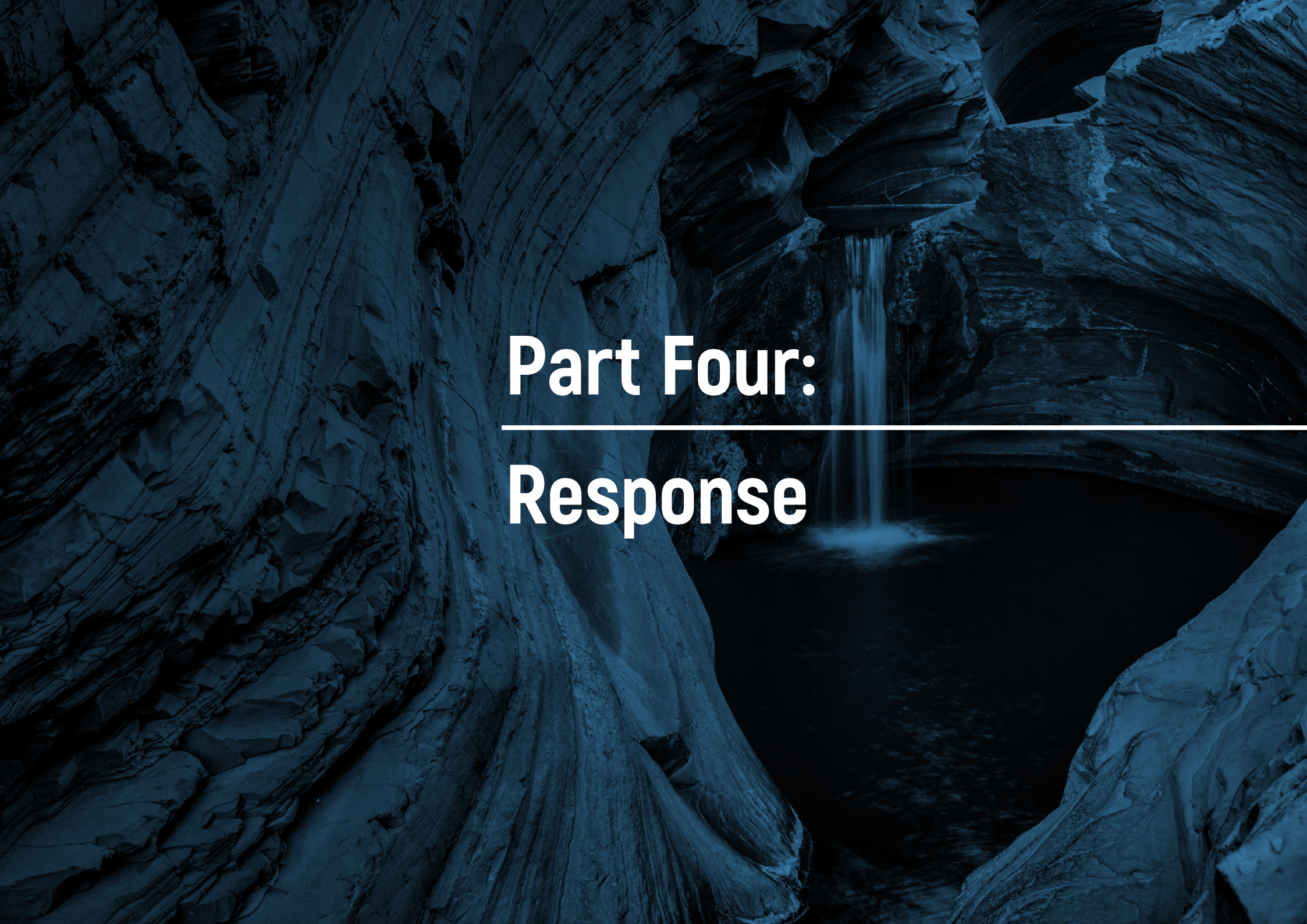
3.7.4 Providing Interstate Assistance

In accordance with agency policies and directives, DFES will consider requests for assistance from other jurisdictions via the DFES State Operations Centre. Any requests for assistance will be subject to conditions agreed between the WA Government and the requesting State or territory and/or the Australian Government.

Deployment must be undertaken according to each agencies policy and directives. The Minister must be notified prior to any deployment of any agency personnel.

Notes

15 https://www.homeaffairs.gov.au/emergency/files/plan-disaster-response.pdf.
16 Australasian Arrangement for Interstate Assistance, AFAC National Resource Sharing Centre (2019) https://www.afac.com.au/initiative/nrsc/article/principles-of-arrangement-for-interstate-assistance.



Part Four:

Response

4.1 Responsibility for Response

As the HMA, the FES Commissioner is responsible for the coordination of a response to the hazard of tsunami. To facilitate the effective execution of these responsibilities, DFES applies the following strategic control priorities and guiding principles.

4.1.1 Strategic Control Priorities

The Strategic Control Priorities for tsunami events are:

- Protection and Preservation of Life: This is the fundamental overarching priority for the State and includes prioritising the safety of:
  - emergency services personnel and
  - community members including at risk community members and visitors/tourists located within the incident area
- Provision of community warnings and information
- Protection of critical infrastructure and community assets
- Protection of residential property
- Protection of assets supporting the livelihood of individuals and the financial sustainability of communities
- Protection of places of environmental and heritage significance.

Where there are concurrent risks or competing priorities, the overarching principle of the Protection and Preservation of Life must drive the identification and the prioritisation of all roles, decisions and actions associated with the emergency management response.[17]

4.1.2 Principles

In accordance with the State Emergency Management Framework, the management of a tsunami emergency is based on a graduated approach using the following guiding principles:[18]

- The FES Commissioner is the HMA for tsunami emergencies in WA[19]
- DFES is the Controlling Agency for tsunami emergencies in WA[20]
- DFES is responsible for activating and controlling the response to a tsunami emergency within WA
- DFES will use arrangements which employ identified emergency management agencies and support organisations to provide an effective and coordinated response
- Responsibility for resourcing and responding to an emergency initially rests with the Incident Controller at the local level
- An emergency beyond the capability of local resources will receive support from district resources
- State resources will be provided if district resources are inadequate
- The State, through the State Emergency Coordinator (SEC) will seek assistance from the Commonwealth, State and Territory Governments if State resources are inadequate

Notes

17 State EM Policy section 5.1.6.
18 State EM Plan section 2.3.
19 *Emergency Management Regulations* 2006 regulation 17(2).
20 State EM Policy section 5.2 and State EM Plan section 5.1.

- Communication between local, district, State, Interstate and Commonwealth authorities is essential to ensure intelligent and timely application of resources to manage the emergency.

4.2 Response Arrangements

DFES will undertake a range of pre-emptive activities prior to the onset of the hazard, during times of potential threat, or reactively post impact. This may include a range of actions by the SOC, All Hazards Liaison Group (AHLG), Metropolitan and relevant Regional Operation Centres (MOC/ROC), Operations Area Support Group (OASG), Incident Management Teams (IMT) and Incident Support Group (ISG) established by DFES.[21]

DFES will promptly and deliberately instigate IMTs appropriate to the scale and requirements of the emergency in accordance with the State's emergency management arrangements. Tsunamis can have large impact areas. Therefore, a tsunami response may be managed by numerous IMTs working through multiple Operational Area Managers in a number of geographically diverse facilities.

The level of implementation of plans and operational structures can vary considerably depending upon circumstances. Factors which may influence the level of response include the degree of threat to a community, the number of DFES regions impacted by the tsunami and whether a multi-agency response is required.

If the tsunami is likely to result in a significant event, which may have a large impact on WA attracting national attention, DFES will send Situation Reports to the Australian Government's National Situation Room (NSR) regarding actions taken for this event. This will assist in providing whole of Australian Government situational awareness.

Should another hazard occur as a consequence of a tsunami emergency and, if the FES Commissioner is not the HMA or DFES is not the Controlling Agency for the consequent hazard then the provisions of State EM Plan section 5.1.2 will apply. DFES will retain responsibility for the tsunami aspects of the emergency.

4.2.1 Levels of Response

The declaration of an incident level is a critical component of emergency management in terms of triggering the responsibilities and actions of emergency management stakeholders to ensure a response in which the size of both the IMT and the coordination structure are proportional to the size of the Tsunami emergency. State EM Response Procedure 4.2 enables one of three operational levels to be declared by the IC depending upon the characteristic 'factors' of the emergency. Level one is the lowest level, typically a routine incident that has a single or limited multiagency response. Level three is the highest level, typically the most complex, requiring the coordination of a multi-agency response and recovery and significantly impacting the routine functioning of the community and infrastructure. This procedure is aligned with State EM Plan section 5.1.5 and is reflected in the Western Australian Fire and Emergency Service Manual: Part 5 Incident Management Teams, section 3 Incident Level Declaration.

4.2.2 Declaration of an Emergency Situation or State of Emergency

The FES Commissioner has responsibility for the provision of emergency services for tsunami incidents under the *Fire and Emergency Services Act 1998.* These provisions are wide ranging and are normally adequate to respond to tsunami emergencies.

Should an incident occur that requires *Emergency Management Act 2005* powers to protect life, property or the environment, the State EM Plan[22] sets

Notes

21 DFES, Fire & Emergency Services Manual – Part Two, 2019, page 5.

22 State EM Plan sections 5.2.3 -5.2.4

out arrangements for the declaration of an Emergency Situation or a State of Emergency.

4.3 Notifications

The JATWC issues Tsunami Watches and Tsunami Warnings (described below). These are used in BoM and DFES alerts to alert participants in State Hazard Plan – Tsunami. The BoM Perth Regional Forecasting Centre (RFC) is the primary liaison point for DFES during a tsunami.

4.3.1 Distribution of Tsunami Bulletins and Warnings

Media organisations across WA work with DFES and BoM to inform the public in the case of a tsunami event. Tsunami warning distribution lists are maintained at BoM Perth RFC. These distribution lists are used for both the National Bulletins and Regional Warnings and are all issued through JATWC. In addition to the media, key agencies such as DFES, emergency services, local councils, port authorities and police are included on these dissemination lists. The bulletin and warning messages are also automatically uploaded to the BoM website and a phone advice line (1300 TSUNAMI or 1300 878 6264).

4.4 Public Warnings/Information

If the tsunami has been generated by an earthquake, the Australian Government's NSR would have already notified DFES of the earthquake as per their Standard Operating Procedures.

There are five different types of Tsunami Warning messages as described in the following paragraphs and in Figure 3 below.

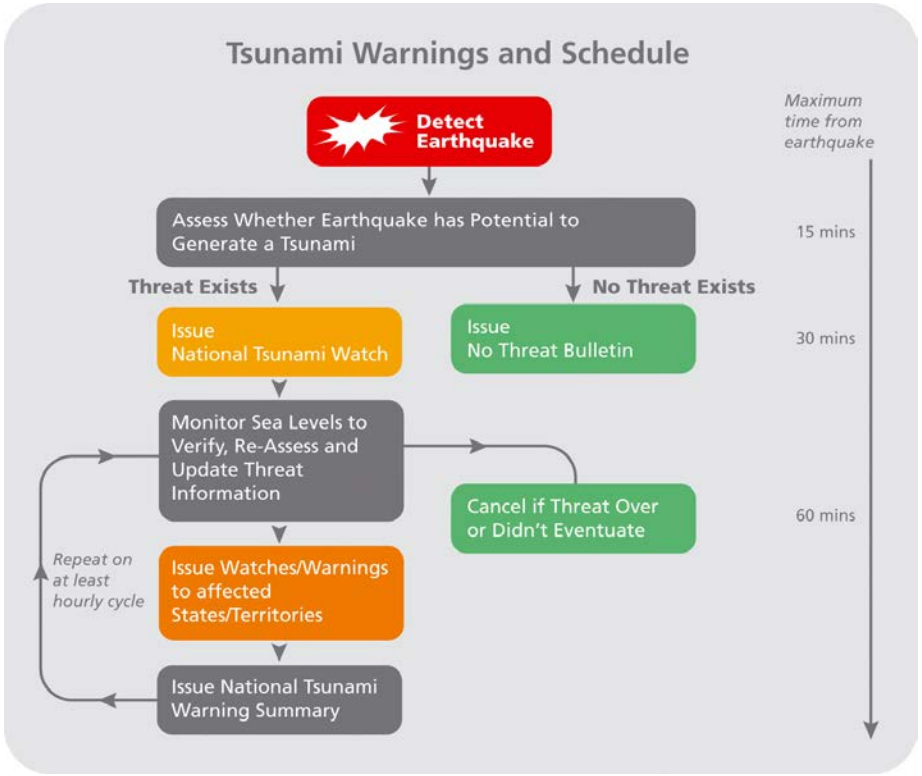


Figure 3: Tsunami Warnings and Schedule[23]

4.4.1 National No Threat Bulletin

Where JATWC have determined there has been an undersea earthquake, or other causal event, but there is no tsunami threat to Australia, the JATWC will issue a *National No Threat Bulletin (horizontal green stripes).*

Notes

23 http://www.bom.gov.au/tsunami/about/tsunami_warnings.shtml.

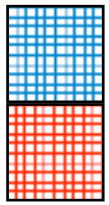
4.4.2 Tsunami Watch

If JATWC advises that a Tsunami Watch (vertical yellow stripes) is current off the WA coast, the Australian Government's NSR will notify DFES of the warning issued and advise them to monitor the BoM website. WA's BoM's Regional Offices will also be notified of the warnings by JATWC.

Where JATWC determines there has been an undersea earthquake or other event which has potential to cause a tsunami threat to Australia, the JATWC will issue a *National Tsunami Watch*. If a tsunami remains unconfirmed by sea level observations and any potential first point of impact on Australia is more than 90 minutes away (the minimum time criteria for warning), then the *National Tsunami Watch* may be reissued.

A State-based watch may be issued if a 'warning' or 'no threat' exists for other parts of Australia.

4.4.3 Tsunami Warning



If sea level observations and further data confirm the tsunami threat, the JATWC will issue a Tsunami Warning (Marine Warning: cross hatch blue pattern, Land Warning: cross hatch red pattern) through its warning system communication infrastructure. Alternatively, even if sea level observations have not yet detected the tsunami, but the potential first point of impact is less than 90 minutes away, then a Tsunami Warning will also be issued.

4.4.4 Tsunami Watch/Warning Cancellation

When the main threat has passed or if a tsunami does not eventuate, the JATWC will issue a Tsunami *Watch Cancellation or Tsunami Warning Cancellation (pixelated diagonal green pattern)*. A National Tsunami Event Summary is then issued after the event.

4.4.5 National Tsunami Warning Summary

When separate tsunami watches or warnings are being issued for individual States and Territories, a *National Tsunami Warning Summary* will also be issued listing all the watches, warnings and cancellations that are in effect for the current tsunami event.

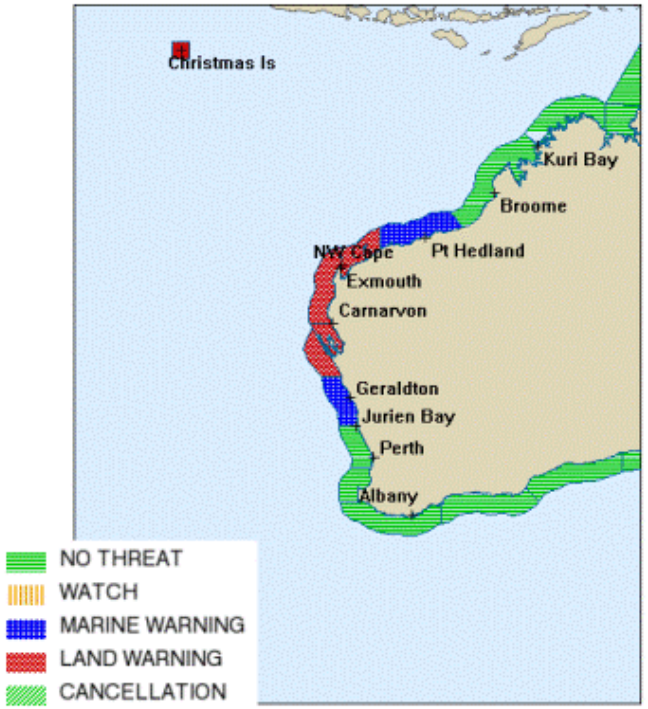


Figure 4 Tsunami watches and warnings indicating the level of threat are issued for coastal zones around Australia and its offshore territories.

The BoM website (http://www.bom.gov.au/tsunami/) will provide a complementary coastal threat graphic showing the regions currently under threat.

4.4.6 Emergency Alert

The DFES Telephone Warning System (TWS) is a web-based system designed by the Australian Government (Emergency Alert) to alert people within a specific location for any emergency where there is an imminent threat. The TWS provides warnings to fixed line phones (based on service address) and mobile phones (based on billing address and location based) in a defined area.

The IC or IC delegate can request activation of the TWS in support of incidents and emergencies.[24]

4.4.7 Standard Emergency Warning Signal (SEWS)

The Standard Emergency Warning Signal (SEWS) is a distinctive siren sound to alert the community to the broadcast of an urgent safety message relating to a major emergency.

SEWS is intended for use as an alert signal to be played on public media such as radio, television, or public address systems to draw listeners' attention to the emergency warning that follows. SEWS should only be used when issuing Emergency Warnings as there is a need to warn people to take urgent and immediate action to reduce the potential for loss of life or property from emergency events. **Note that it is not required for all Emergency Warnings.**

4.5 Evacuation Arrangements

Evacuation is a risk mitigation strategy that may be used to mitigate the effects of an emergency on a community. The decision to evacuate is complex and requires careful consideration to ensure residents are not placed at greater risk. Evacuation arrangements will be developed according to the State EM Policy section 5.7, State EM Plan section 5.3.2, State EM Response Procedures 4.8 and 4.17 and the SEMC *Western Australian Community Evacuation in Emergencies Guideline* describe the State EM arrangements.

Notes

24 Directive 3.1 – WA Fire & Emergency Services, SAP 3.1.D – Telephone Warning System, May 2018.
25 State EM Policy statement 5.7.4.

Refuge sites and evacuation centres should be identified in LEMAs,[25] and are identified and established in partnership with local government and Department of Communities. The Department of Communities is responsible for maintaining a list and providing information on evacuation centres.

4.6 Traffic Management During Emergencies

In order to ensure community safety, it is often necessary to alter the normal flow of traffic through an area affected by an emergency or its immediate surrounds. It is acknowledged some agencies have traffic management responsibilities under legislation other than the *Emergency Management Act 2005*. It is recommended these agencies conduct those activities consistent with the framework created by the State EM Policy, plans, procedures and guidelines. Emergency management agencies should implement appropriate agency-specific procedures and training in accordance with State EM Plan section 5.3.3 for the conduct of immediate traffic management.

Part Five:

Recovery

The HMA and Controlling Agency have a role in initiating both relief and recovery during emergencies associated with their designated hazards. It is the responsibility of the Controlling Agency to gain an understanding of known or emerging impacts during the response to an emergency and to coordinate the completion of an Impact Statement in accordance with State EM Plan section 6.4. The Impact Statement should be developed in consultation with the members of the ISG, Local Government Recovery Coordinator/s and other relevant agencies.

The Controlling Agency will assist relief agencies to deliver essential services in safe and accessible community-based locations.[26] Recovery activities will be undertaken in accordance with the State EM Policy section 6, State EM Plan section 6 and will commence during the response phase. As such, there needs to be high levels of understanding and cooperation between response and recovery organisations at each level (State, District, local).

Notes

26 DFES, WA Fire and Emergency Services Manual – Part One: Overview, 2017, page 20.

Appendices

Appendix A: Distribution List

This State Hazard Plan is available on the SEMC website. The agencies below will be notified by the HMA (unless otherwise specified) when an updated version is published on this website.

- All agencies and organisations with responsibilities under this Plan
- Emergency Management Australia (SEMC Business Unit to notify)
- Minister for Emergency Services (SEMC Business Unit to notify)
- State Emergency Management Committee (SEMC), SEMC subcommittees and SEMC reference group members (SEMC Business Unit to notify)
- State Library of Western Australia (SEMC Business Unit to notify)
- Department of Fire & Emergency Services (All staff).

Appendix B: Acronyms

Terminology used throughout this document has the meaning prescribed in section 3 of the *Emergency Management Act 2005* or as defined in the State Emergency Management Glossary. In addition, the following hazard-specific acronyms apply.

Acronym	Meaning
ADF	Australian Defence Force
AFAC	Australasian Fire and Emergency Service Authorities Council
AHLG	All Hazards Liaison Group
AIA	Arrangements for Interstate Assistance
ANZEMC	Australia-New Zealand Emergency Management Committee
ATAG	Australian Tsunami Advisory Group
BoM	Bureau of Meteorology
CCOSC	Commissioners and Chief Officers Strategic Committee
DACC	Defence Assistance to the Civil Community
DFAT	Department of Foreign Affairs and Trade
DFES	Department of Fire and Emergency Services
FES	Fire and Emergency Services Commissioner
GA	Geoscience Australia
HMA	Hazard Management Agency
IC	Incident Controller
IMT	Incident Management Team
ISG	Incident Support Group
JATWC	Joint Australian Tsunami Warning Centre
LEMC	Local Emergency Management Committee
MOC	Metropolitan Operations Centre

Acronym	Meaning
NEAC	National Earthquake Alerts Centre
NRSC	National Resources Sharing Centre
NSR	National Situation Room
OASG	Operational Areas Support Group
PPRR	Prevention, Preparedness, Response and Recovery
RFC	Regional Forecasting Centre
ROC	Regional Operation Centre
SEMC	State Emergency Management Committee
SEWS	Standard Emergency Warning Signal
SOC	State Operations Centre
TWS	Telephone Warning System

Acronym	Meaning
WAPC	Western Australia Planning Commissioner

Appendix C: Roles and Responsibilities

DFES, through the FES Commissioner as the Hazard Management Agency (HMA), has responsibility for managing the adverse effects of emergencies associated with tsunami in WA. The assistance and cooperation of other agencies and organisations operating within their functional areas are necessary for effective emergency prevention, preparation, response and recovery.

This appendix outlines the hazard specific roles and responsibilities of agencies and organisations under this Plan, however some all-hazards information is provided. State Emergency Management Plan, Appendix E provides an outline of the all-hazards roles and responsibilities across the Prevention, Preparedness, Response and Recovery spectrum.

The *Emergency Management Act 2005, Emergency Management Regulations 2006*, State Emergency Management Policy, Plan and Procedures, State Hazard Plans and State Support Plans should be referenced for a comprehensive understanding of the roles and responsibilities within the emergency management framework.

The agencies will undertake the agreed responsibilities as detailed below.

Note: The capability and commitment of each Local Government to undertake the tasks and meet the responsibilities identified in this State Plan should be confirmed by the HMA and detailed in Local Emergency Management Arrangements. This will ensure the varying capabilities of individual Local Governments are recognised and accommodated.

Overarching

Organisation	Overarching Roles and Responsibilities
Department of Fire and Emergency Services	**Role:** Supporting the FES Commissioner in their role as the Hazard Management Agency (HMA) a. Manage the adverse effects of a tsunami emergency across the prevention, preparedness, response and recovery (PPRR) spectrum. b. Undertake operational lessons management activities.

Prevention and Mitigation

Organisation	Prevention and Mitigation Roles and Responsibilities
Bureau of Meteorology	a. Participate in Australian Tsunami Advisory Group (ATAG). b. Participate in research and development programs directed towards identifying and implementing risk treatment strategies. c. Provide tsunami advice to the community (through JATWC). d. Participate in local and regional tsunami planning.
Department of Fire and Emergency Services	**Role:** Supporting the FES Commissioner in their role as the Hazard Management Agency (HMA) in holding the overall responsibility for risk reduction aspects of tsunami events, within the limitations of legislation, resource capabilities and capacity. a. Ensure the development and maintenance of response and risk treatment plans specific to tsunami. b. Recommend the adoption of risk treatment strategies to State, District and Local Emergency Management Committees. c. Participate in Australian Tsunami Advisory Group (ATAG). d. Tsunami inundation modelling and mapping. e. Participate in research and development programs directed towards identifying and implementing risk treatment strategies. f. Promote an improved state of resilience within communities to improve the management of future risks. g. Develop resilience in the community and minimising the vulnerability of communities to effects of tsunami in partnership with local governments. h. Provide tsunami advice to the community (through JATWC). i. Participate in local and regional tsunami planning.

Organisation	Prevention and Mitigation Roles and Responsibilities
Department of Planning, Lands and Heritage	a. Incorporate tsunami risk treatment measures into state and local planning and development processes.
Essential services and network operators	a. Ensure the sustainability of service delivery of critical infrastructure through design and maintenance standards. b. Advise relevant agencies in relation to the construction/maintenance of critical infrastructure services and access in 'at risk' communities.
Geoscience Australia	a. Participate in Australian Tsunami Advisory Group (ATAG). b. Tsunami inundation modelling and mapping. c. Participate in research and development programs directed towards identifying and implementing risk treatment strategies. d. Provide tsunami advice to the community (through JATWC). e. Participate in local and regional tsunami planning.
Relevant Local Governments	a. Develop and ensure appropriate local planning controls, consistent with objectives and requirements set by the Western Australia Planning Commission (WAPC). b. Apply and enforce the Building Codes of Australia and informed land use planning for vulnerable areas. c. Promote and participate in community awareness campaigns for 'at risk' communities. d. Participate in research and development programs directed towards risk treatment strategies. e. Identify suitable buildings for designation as Evacuation Centres in partnership with Department of Communities.
Western Australia Planning Commission (WAPC)	a. Approve subdivision applications and has delegated powers for the determination of development applications to local governments and development assessment panels.

Organisation	Prevention and Mitigation Roles and Responsibilities
Government agencies, essential services, network operators and other relevant bodies	a. Are reccomended to structurally retrofit, where necessary, facilities, which provide essential services following any tsunami event.

Preparedness

Organisation	Preparedness Roles and Responsibilities
Department of Fire and Emergency Services	**Role:** Supporting the FES Commissioner in their role as HMA. a. Promote resilience activities within communities to improve the management of future risks. b. Promote all emergency management activities related to tsunami preparedness. c. Develop, maintain, review and exercise this Plan, in consultation with key stakeholders. d. Where areas susceptible to tsunami are identified as a risk to the community, may develop Local and District tsunami plans to address prevention, preparedness, response and recovery activities. e. Periodically test and validate local, regional/district and State tsunami plans. f. Provide and manage of resources and personnel required to physically respond to an tsunami event, including: – establish, equip, train and maintain an Urban Search and Rescue Task Force – prioritise, procure and allocate specialist equipment and vehicles – safely store equipment and vehicles in locations that provide ease of access but protection from hazards such as tsunamis, earthquakes, fires and structural collapse. g. Contribute to the development of education programs and materials to inform and education the public on tsunami notification, risk and management. h. Annually review media and public information strategies to ensure appropriate communication of relevant hazard information to the community. i. Liaise with local government in the provision of incident control centres in tsunami susceptible areas of the State.

Organisation	Preparedness Roles and Responsibilities
Emergency Management Agencies and support services with a response role or responsibility	a. Are recommended to maintain appropriate public information arrangements, policy, plans and procedures in relation to their specific responsibilities. b. Are recommended to maintain a Business Continuity Plan to ensure they maintain capabilities in the event of a major tsunami incident. c. Plan to provide their own resources in the first instance and request additional resources from DFES if required.
Essential services and network operators	a. Are recommended to maintain a Business Continuity Plan to ensure they maintain capabilities in the event of a major tsunami incident.
Relevant Local Governments	a. Develop local emergency management arrangements with the advice of the Local Emergency Management Committee. b. Identify and establish refuge sites and evacuation centres in partnership with Department of Communities c. Participate in community awareness programs on tsunami risks.

Response

Organisation	Response Roles and Responsibilities
Bureau of Meteorology	a. Provide 24/7 tsunami warning services to Australia together with Geoscience Australia as JATWC. b. Provide a tsunami interpretation and notification service when a tsunami warning is issued. c. Establish and maintain data collection networks and monitor tsunami events. d. Contribute to the planning, installation and maintenance of new and improved tsunami notification systems. e. Provide a State Operations Centre Meteorologist (SOCMET) to DFES State Operations Centre, during normal working hours and/or after hours. Alternative liaison officers are Regional Manager Severe Weather, Regional Forecasting Centre Operations Manager, Manager Weather Services or Regional Director as required. f. Provide a representative for SECG if required.
Department of Communities	a. Coordinate emergency relief and support services for those impacted by the incident including operating evacuation centres and providing crisis support services (emergency accommodation, emergency clothing and personal requisites, personal support services, financial assistance, emergency food) as required. b. Coordinate and facilitate registration and reunification, including arranging for Register.Find.Reunite. to be activated via the Australian Red Cross as required. c. In consultation with DFES, and consideration of available resources, determine the number and location of evacuation centres to be opened during a tsunami emergency. d. Provide a liaison officer to DFES SOC if required. e. Provide a representative for SECG if required.

Organisation	Response Roles and Responsibilities
Department of Fire & Emergency Services	a. Discharge the duties of HMA and Controlling Agency for tsunami emergencies, in accordance with the *Emergency Management Act 2005* and State EM Policy section 5 and State EM Plan section 5. b. Appoint emergency managers at all levels for a particular tsunami. c. Facilitate the provision of assistance as required. d. Request activation of a SECG if required.
Department of Health	a. Coordinate the health response during a tsunami, including the activation of the State Health Emergency Response Plan if required. b. Advise DFES on all medical and health aspects in relation to a tsunami situation c. Through the hospital stream, provide acute medical care and relief to injured persons. d. Through the public health stream, provide environmental health, public health, mental health and communicable disease control services as required. e. Maintain an awareness of the readiness of health service infrastructure including assessment of impact on clinical services, response and/or evacuation requirements. f. Provide acute health services, particularly to those persons within the affected community who have chronic medical conditions. g. Provide a liaison officer to DFES SOC if required. h. Provide a representative for SECG if required.
Department of Planning, Lands and Heritage	a. Provide a liaison officer to DFES SOC if required. b. Provide a representative for SECG if required.

Organisation	Response Roles and Responsibilities
Emergency Management Australia	a. Notify DFES regarding seismic events magnitude 3.5 and above within WA. b. Notify DFES regarding a Tsunami Watch, warning messages and Tsunami Watch/Warning Cancellation. c. Activate COMDISPLAN if required to provide Australian Government non-financial assistance. d. Provide a Liaison Officer to DFES' SOC if required. e. If required, develop an Australian Government Incident Brief. f. If required, develop Australian Government Talking Points.
Essential services and network operators	a. Disconnect and restore essential services as prioritised by DFES or the designated recovery authority. Restoration priority will include consideration of other lifeline interdependence requirements. b. Provide technical advice to DFES in relation to essential services supply, disconnection and restoration. c. Assist in the provision of emergency essential services as requested by DFES or the designated recovery authority. d. Provide a liaison officer to DFES SOC if required. e. Provide a representative for SECG if required.
Local governments	a. Provide resources to assist DFES when requested. b. Make available suitable local government buildings to be used as evacuation centres. c. Close and open roads within their jurisdiction, when requested by DFES. d. Provide details on road conditions to DFES. e. Inspect and declare buildings safe and fit for habitation.

Organisation	Response Roles and Responsibilities
Main Roads WA	a. Provide advice to DFES of the potential and actual impacts of tsunamis on the State road network. b. Close and open State roads when requested to do so by DFES. This Plan recognises that the Commissioner of Main Roads (or delegated Officers) has the power to close or open roads under the *Main Roads Act 1930*. c. Communicate road closures to the public. d. Provide a liaison officer to DFES SOC if required. e. Provide a representative for SECG if required.
Public Transport Authority	a. Provide advice to DFES of the potential and actual impacts of a tsunami on the public transport system. b. Close and open transport services when requested by DFES. c. Communicate service closures to the public. d. Provide a liaison officer to DFES SOC if required. e. Provide a representative for SECG if required.
St John Ambulance Western Australia Ltd.	a. Provide pre-hospital mass triage at the emergency site, pre-hospital care and transport of causalities to hospital by road. b. Participate in the ISG, OASG and SECG meetings as requested. c. Provide a liaison officer to the State Health Incident Coordination Centre as required. d. Responsible for tasking the emergency rescue helicopters.

Organisation	Response Roles and Responsibilities
Surf Life Saving WA	a. Support DFES in conducting beach evacuations and warnings. b. Provide real time aerial surveillance through SLSWA Drone and Helicopter services. c. In the event of mass casualties provide on-scene first responders/first aiders. d. Provide a liaison officer to DFES SOC if required. e. Provide access to SLSWA's Beach Camera Surveillance Network
Telstra	a. Restore basic communications to the general public as a priority. b. Provide advice regarding the provision of emergency communications services. c. Give priority consideration to emergency communications requirements of authorities responsible for hazard and emergency management within WA. Actual service provision and restoration priorities will depend on Telstra's network configuration, the safety and availability of staff, material availability, local community issues and national and local security issues. d. Provide a liaison officer to DFES SOC if required.
Water Corporation	As outlined in the State EM Plan Appendix E, the Response Responsibilities are as follows: a. Participate in ISG, OASG and SECG meetings as requested. b. Assist with the provision of potable water to affected communities until normal services are restored. c. Provide a liaison officer(s) and other trained staff to operations and coordination centres as requested and appropriate.

Organisation	Response Roles and Responsibilities
Water Corporation (continued)	d. Provide or assist in the acquisition of resources and engineering services including earthmoving machinery and operators. e. Provide information on local conditions and hazards, environmental and water issues associated with waste disposal. f. Assist with the supply of water to affected areas through the provision of tanker access to Water Corporation resources (e.g. standpipes, pipelines and reservoirs). g. For emergencies affecting the Water Corporation drinking water supplies and critical assets, activate the joint agency coordination team (Department of Health and Water Corporation) and to manage the incident as a security incident as required. h. Provide a written report or participate in post-operation debriefs on the emergency as required by the HMA. i. Be contactable on a 24/7 basis.
Western Australia Police Force	a. Assist with evacuation and/or traffic management on request. b. Maintain public order where required. c. In the event of mass casualties, provide Disaster Victim Identification. d. Provide liaison officers and/or representation to any ISG/OASG/ALHG and/or SECG as appropriate. e. Provide emergency coordinators as appropriate to assist DFES in the provision of a coordinated response.

Recovery

Organisation	Recovery Roles and Responsibilities
Department of Fire & Emergency Services	**Role**: Supporting the FES Commissioner as HMA and DFES as Controlling Agency in initiating both relief and recovery activities. a. Commence recovery activities during the response phase in accordance with the State EM Policy section 6 and State EM Plan section 6.
Department of Health	a. Provide health advice and support to the designated recovery committee.
Local Government	a. Initiate and lead the local community through the recovery process.
Main Roads	a. Assist in the recovery process through State road infrastructure repair and reconstruction.
Public Transport Agency	a. Assist in the recovery process through rail infrastructure repair and reconstruction.
Relevant agencies listed with roles and responsibilities in this plan	a. Comply with their responsibilities identified in the State EM Policy section 6 and State EM Plan section 6.
Surf Life Saving WA	a. Assist in the recovery process through provision of assets for inshore rescue/recovery post impact.