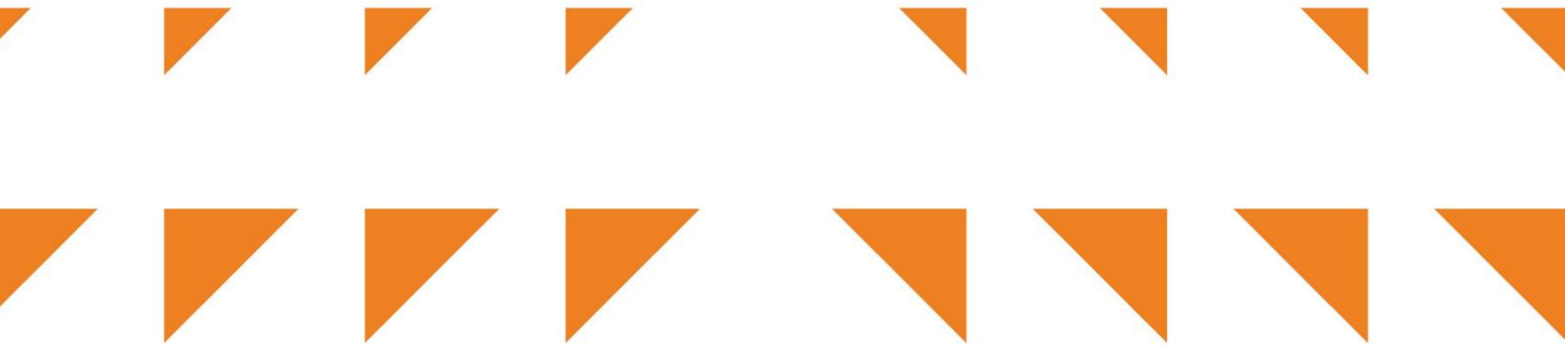


Ramingining
Local Emergency Plan



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1. Document control

1.1. Governance

Document title	Ramingining Local Emergency Plan
Contact Details	NT Emergency Service, Planning and Preparedness Command
Approved by	Territory Controller
Date Approved	12 December 2014
Document Review	Annually
TRM Number	04-D25-107666

1.2. Version history

Date	Version	Author	Summary of changes
16/11/2014	1	John McRoberts	First version
27/10/2015	2	Reece Kershaw	Reviewed and updated
30/12/2016	3	Kate Vanderlaan	Reviewed and updated
16/03/2018	4	Grant Nicholls	Reviewed and updated
28/11/2018	5	Travis Wurst	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
20/01/2020	6	Michael Hebb	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
17/11/2020	7	Travis Wurst	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
02/11/2021	8	Martin Dole	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
20/06/2023	9	Travis Wurst	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
16/06/2024	10	Matthew Hollamby	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
11/03/2025	11	Peter Malley	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
06/01/2026	12	James A O'Brien	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate

Disclaimer: Every effort has been made to ensure that the information contained within this Plan is accurate and where possible reflects current best practice. However, the Northern Territory Emergency Service does not give any warranty or accept any liability in relation to the content of material contained in the document.

1.3 Local Emergency Committee members and key stakeholders engaged for review

The following Local Emergency Committee members and key stakeholders were engaged with during the review of the Ramingining Local Emergency Plan, to ensure it addresses the specific needs of the community.

Agency/organisation	Name	Role/position
ASRAC Rangers	Helen TRUSCOTT	Committee member
NT Fire and Emergency Services	Brian HENNESSY	Planning Officer
NT Police Force	Noel SANTIAGO	Sergeant/Local Controller
Ramingining Art Centre – Bu’la Bu’la	Mel GEORGE	Committee member
Ramingining Contactors - Delta Reef	Cameron BAKER	Committee member
Ramingining EARC	Brad LENA	Committee member
Ramingining Health	Peter MALAVISI	Committee member
Ramingining School	Kevin HIGHDALE	Committee member

2. Acknowledgement of Country

The Northern Territory Fire and Emergency Services (NTFES) and the Northern Territory Police Force (NTPF) acknowledges the First Nations people throughout the Northern Territory (NT), from the red sands of Central Australia to the coastal people in the Top End.

We recognise their continuing connection to their lands, waters and culture. We also pay our respects to the Aboriginal and Torres Strait Islander people with whom we work and who we serve and protect.

We pay our respects to the Aboriginal and Torres Strait Islander cultures, and to their leaders past, present and emerging.

3. Introduction

3.1. Purpose

The purpose of this Plan is to describe the emergency management arrangements for the Ramingining Locality (the Locality).

3.2. Application

This Plan applies to the Locality.

3.3. Key considerations

The *Emergency Management Act 2013* (the Act) is the legislative basis for emergency management across the NT. The Act reflects an all hazards approach to emergency and disaster events, natural or otherwise. It provides for the adoption of measures necessary for the protection of life and property from the effects of such events.

The Act defines the emergency management structures, roles and responsibilities for the NT and, in conjunction with the Territory and regional emergency plan(s), form the basis for this Plan.

This Plan:

- confirms appointment of a Local Emergency Controller
- confirms establishment of the Local Emergency Committee (LEC)
- confirms appointment of a Local Recovery Coordinator
- confirms establishment of a Local Recovery Coordination Committee
- assesses hazards most likely to affect the community
- specifies control and coordination arrangements for mobilisation of local and, if necessary, regional, resources
- identifies roles and responsibilities of key stakeholders
- details specific emergency response procedures for the higher risk situations

4. Locality context

This Plan complements the Northern Regional Emergency Plan¹ as it relates to the Locality. For further information on the hierarchy of plans, refer to the Territory Emergency Plan². The Locality covers approximately 9,400 square kilometres (km) and is located approximately 580 km east of Darwin and forms part of the Northern Region, as defined by the Territory Emergency Plan.

The Locality comprises of 2 main centres: Ramingining and Milingimbi. Ramingining is a NT mainland community, located to the west of the Glyde River about 30 km south-east of Milingimbi. Milingimbi is an island of 7 km in length and 4 km in width.

Milingimbi Island has low level flood plains, swamps and tidal creeks subject to flooding during the Wet Season and in storm tides/surge. The highest point of the island is 16 metres (m) at the air strip, which is the only point of evacuation other than by sea.

There are also a number of homelands in the Locality, with population numbers for these homelands varying widely during the course of the year:

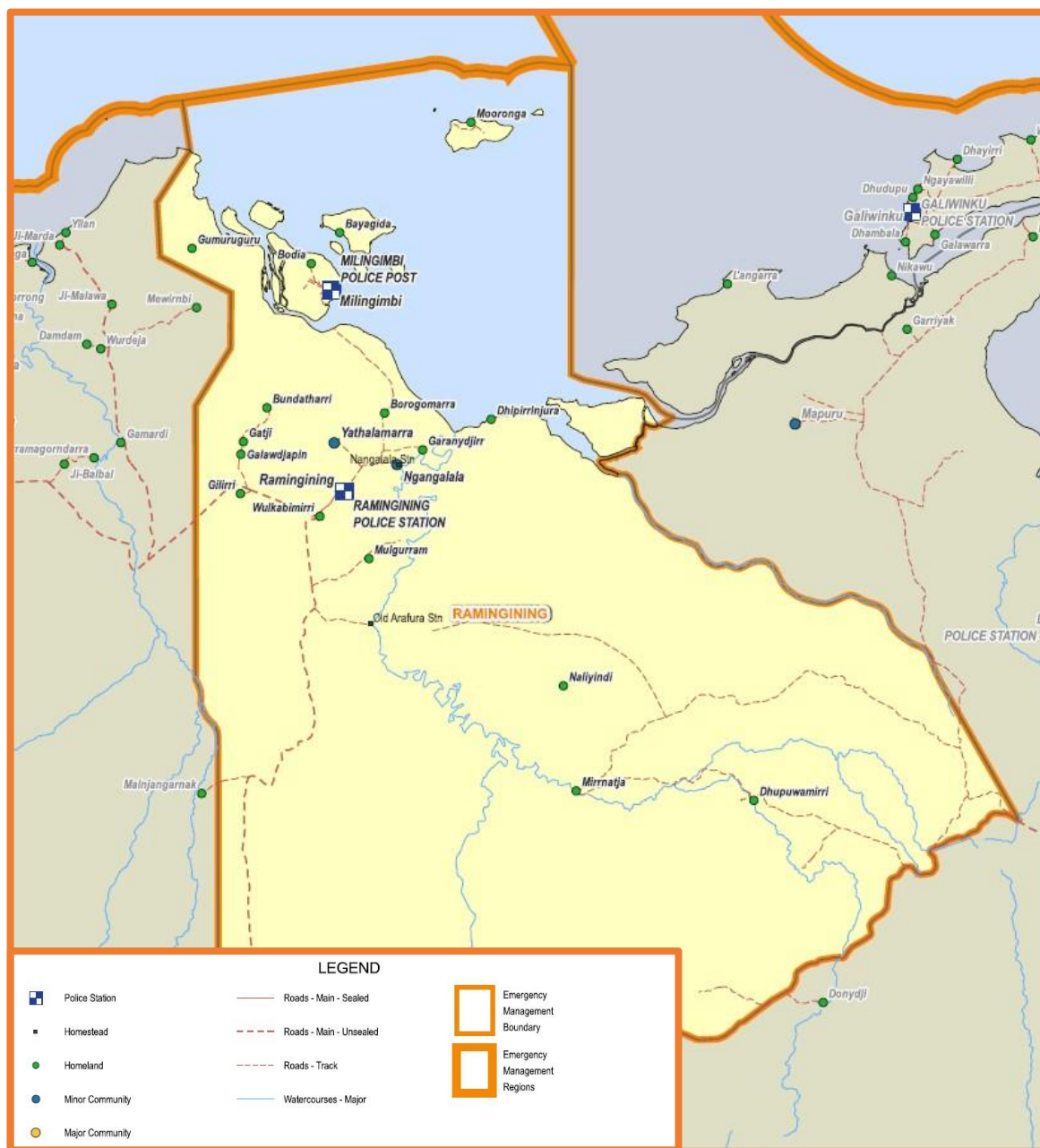
Bushtel ID	Locality	Aliases	Approx. population
550	Ramingining		956
531	Milingimbi		1,288
Bushtel ID	Homelands	Aliases	Approx. population
494	Bayagida	Galungali, Galunguli, Rapuma, Rapuma Galingulla, Rapuma Island and Yabooma Island	not recorded - via Milingimbi – 7 km by sea
465	Bodia		56 - via Milingimbi – 5 km NW of Milingimbi
481	Borogomarra	Djakalajirapurra, Djakalajiripurra, Mangbirr and Mangbirri	not recorded - 14 km from Ramingining
468	Bundatharri	Bundadharri	not recorded - 26 km from Ramingining via Gatji
479	Dhupuwamirri		18 – this community is closer to Gapuwiyak for response
477	Dhipirrinjura	Dhipirringura and Dipitji	50 - 24km ESE of Milingimbi on mainland
489	Galawdjapin	Galadjapin and Galatjapan	14 – 20 km from Ramingining via Gatji
315	Gamardi	Gamedi and Jimarde	50 – 36 km from Ramingining
507	Gatji	Gadji and Gartji	15 - 16 km the Ramingining police members would assist when access is restricted by flooding
963	Garanydjirr		7 – 13kms from Ramingining
490	Gilirri	Galerra and Gelerri	not recorded – 13 km from Ramingining
497	Gumuruguru	Gamarragurra, Gamarru Guyurru, Gamurru Guyurra and Garmalatjirrina	10 - Boat access to Milingimbi - 45 minutes by boat
523	Malnjangarnak	Malanganak and Malnyanganak	50 – via goat track 52 km from Ramingining
535	Mirrnatja	Mirrngatja	9 - while in Ramingining region this community is

¹ More information can be found at: <https://www.pfes.nt.gov.au/emergency-service/publications>

² More information can be found at: <https://www.pfes.nt.gov.au/emergency-service/emergency-management>

Bushtel ID	Locality	Aliases	Approx. population
			closer to Gapuwiyak for response
501	Mooronga	Garandjirngura, Garmalatjirrina, Mooroonga Island and Moorunga Island	36 - via boat 27 km NE OF Milingimbi
538	Mulgurram	Mangu and Mulgurram	less than 5 - via goat track 20 km from Ramingining
541	Naliyindi	Naliyinji, Nalyindi, Nayawili and Ngliyindi	not recorded
542	Nangalala	Nangala and Nangalala	70 – 9km from Ramingining
838	Wulkabimirri	Wulkubimirri	43 – 3km from Ramingining
871	Yathalmarra	Yathalamara and Yathalmarra	67 – 10 km from Ramingining

To obtain more information about this Locality, BushTel³ is the central point for information about the remote communities of the NT, their people and cultural and historical influences.



³ More information can be found at: [BushTel - Remote Communities of the NT](#)

4.1. Climate and weather

The Locality is situated in the East Arnhem and experiences weather conditions typical to those of the region. There is a distinct Wet Season (October to April) and Dry Season (May to September).

4.2. Geography

The Locality ranges from sea level to the northern edge of the Arnhem Escarpment.

The Locality is drained by a number of rivers and creeks. The main rivers that can impact the Locality, cutting off the Top Track are:

- Glyde River (west of Ramingining)
- Blyth River (east of Ramingining)

There are also a number of creeks in the vicinity including:

- Rarigaburu Creek
- Yarunga Creek
- Djimbi Creek
- Darbilla Creek

4.3. Sacred sites

The Aboriginal Areas Protection Authority (AAPA) is a statutory body established under the *Northern Territory Aboriginal Sacred Sites Act 1989* and is responsible for overseeing the protection of Aboriginal sacred sites on land and sea across the NT.

A sacred site is defined by the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) as being 'a site that is sacred to Aboriginals or is otherwise of significance according to Aboriginal tradition'. Sacred sites are typically landscape features or water places that are enlivened by the traditional narratives of Aboriginal people.

AAPA requests notification of any action that may have affected a sacred site. For more information on sacred sites relevant to this Locality, or to report an action that may have affected a sacred site, contact AAPA on (08) 8999 4365 or via email at enquiries.aapa@nt.gov.au.

4.4. Sites of conservation

The Arafura Swamp is a large inland freshwater wetland in Arnhem Land in the Top End of the NT with its western boundary on the eastern side of Ramingining. Castlereagh Bay is in remote northern Arnhem Land, 460 km east of Darwin and encompasses the coastline of Ramingining and Milingimbi⁴.

For further information about these sites, contact the Department of Lands, Planning and Environment (DLPE).

4.5. NT and local government

This Locality sits within the East Arnhem Region, with the following NT Government (NTG) agencies that have a presence in the Locality:

- NTPF
 - Ramingining Police Station
 - Milingimbi Police Station

⁴ More information can be found at: <https://nt.gov.au/environment/environment-data-maps/important-biodiversity-conservation-sites/conservation-significance-list>

- NTFES
 - NT Emergency Service (NTES) Volunteer Unit (non-operational)
- Department of Education and Training (DET)
 - Ramingining School
 - Milingimbi School
- Department of Children and Families (DCF)
 - Safe House

Local government is provided by the East Arnhem Regional Council (EARC).

4.6. Building codes

Buildings and construction in the Locality are subject to the *Building Act 1993* and the *Building Regulations 1993*.

4.7. Land use

The Northern Land Council (NLC) represent the Traditional Owners of the Arnhem Land Aboriginal Land Trust. Land use in the Locality is primarily determined in consultation between NLC and Traditional Owners, and includes but not limited to:

- air strip
- residential
- sewage ponds
- waste management

4.8. Homelands

Homelands (outstations) are typically located on Aboriginal land, which is held by the Aboriginal Land Trusts established under the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth). There are also some homelands that are located on Community Living Areas or parcels of land within national parks. Assets on homelands are owned by the underlying leaseholder, which for the majority of homelands is the relevant Aboriginal Land Trust. Generally, homelands are not subject to the NTG leasing or part of the NT's remote public housing system.

The homeland service provider for this Locality is the Milingimbi and Outstations Progress Resources Aboriginal Corporation, Laynhupuy Homelands Aboriginal Corporation and The Trustee for the Dinybulu Regional Services Trust. Homeland service providers contribute to the delivery of housing, municipal and essential services, including fire breaks, where funding allows. Homeland service providers do not deliver emergency services. Land councils and local ranger groups within the Locality may provide land management activities on Aboriginal land, such as back burning, installing firebreaks and other mitigation works.

4.9. Power generation and distribution

Power to the Locality is serviced by stand-alone, diesel power stations. A solar farm has been established in both Ramingining and Milingimbi which provides limited power to supplement the diesel plants.

4.10. Water services

The Locality's water supply is primarily ground water provided through Power and Water Corporation (PAWC).

4.11. Health infrastructure

The health clinics in the Locality under the control of Miwatj Health Aboriginal Corporation are the Ramininging Health Clinic and Milingimbi Health Clinic, which have the capacity to provide emergency medical aid in addition to routine health treatment. Serious medical cases are required to be evacuated to Darwin.

4.12. Medically vulnerable clients

A list of all vulnerable medical patients is held with the managers of the clinics within the Locality.

There are 3 aged care facilities in Ramininging and Milingimbi.

4.13. Emergency service infrastructure

The Locality has the following emergency service infrastructure:

- Ramininging police station and cells
- Milingimbi police station and cells
- NTES Ramininging Volunteer Unit (non-operational)

4.14. Roads

Roads in the Locality are all subject to inundation at various creek/river crossings and low-lying areas during the Wet Season.

All access roads in and out of Ramininging community are of gravel construction and can become impassable during the Wet Season, with no major roads to the community. The Southern access road, if flooded, stays impassable for no more than a few days to 4WD vehicles, whereas the Northern Road (Top Track) generally remains impassable for the Wet Season in its entirety.

Milingimbi Community is an island community and is not accessible by road. Parts of the island are susceptible to flooding and storm surge, however the roadways on the island are mostly sealed and accessible all year round.

4.15. Airports

The table below lists the airstrips in the Locality:

Name of the strip	Datum	Certified Aerodrome	Details (type, length, etc.)	Operator of the strip
Milingimbi	12°5'39.84"S 134°53'38.39"E	Certified	Sealed 1410 m x 30 m	Local Council - ESO
Ramininging	12°21'24.66"S 134°53'31.48"E	Certified	Sealed 1496.7 m x 49.1 m Airstrip ID: YRNG	Local Council - ESO

Certified Aerodrome: An airport officially approved by the Australian Government Civil Aviation Safety Authority (CASA) that meets strict safety and operational standards, often including air traffic control services⁵.

⁵ More information can be found at: <https://www.casa.gov.au/operations-safety-and-travel/aerodromes>

4.16. Barge landings

Ramingining Barge landing is 29 km from the main Ramingining Community. Ramingining Barge landing is subject to tidal conditions requiring a tide of no less than 2.2 m above sea level. Parts of the access road can also be inundated at times due to heavy rainfall – subject to flooding as well, as much of the road crosses a floodplain.

Milingimbi Barge landing is a concrete landing located adjacent to the community and is subject to tidal conditions. The landing requires a minimum tide of 2.2 m above sea level.

4.17. Telecommunication

Telecommunications are available across the Ramingining and Milingimbi community areas but not between, via a combination of landline, mobile and satellite communications delivery.

4.18. Strengthening Telecommunications Against Natural Disasters

As a result of the Royal Commission into the 2019-2020 summer bushfires, the Commonwealth government implemented the Strengthening Telecommunications Against Natural Disasters (STAND) initiative. STAND is a Commonwealth funded program, aimed at enhancing the resilience of Australia's telecommunication networks, to prevent, mitigate and manage outages during emergencies.

There are currently 56 sites across the Territory that have STAND capability, and additional sites will be incorporated within the next stage of installation.

There are 3 STAND sites within this Locality which are located and managed by the following facilities:

- Millingimbi Cyclone Shelter
- Ramingining School
- Ramingining Police Station

4.19. Local radio stations

The Locality has the following local radio stations:

- 88.9 FM Ramingining Yolngu Radio
- 105.7 FM Top End Aboriginal Bush Broadcasting Association (TEABBA) Radio (Ramingining)
- 106.1 FM TEABBA Radio (Milingimbi)

5. Prevention

5.1. Emergency risk assessments

The Ramingining LEC are responsible for undertaking appropriate activities to prevent and mitigate the impact of emergencies in their Locality.

5.2. Disaster hazard analysis and risk register

The Territory Emergency Management Council (TEMC) have identified 30 hazards, as outlined in the Territory Emergency Plan, that may pose a risk across the NT, which have been allocated to designated Controlling Authorities and Hazard Management Authorities.

Many hazards require specific prevention and mitigation measures, an annual risk assessment (rated against the National Emergency Risk Assessment Guidelines) is undertaken by the LEC and determines which hazards pose a greater risk to the Locality.

The LEC has identified the following hazards as posing a risk to the Locality, with further advice provided within **Annex C** for those hazards rated at medium risk or higher:

- air crash
- bushfire (within Fire Protection and Management Zones)
- coastal marine incident
- flooding
- heatwave
- human disease
- road crash
- storm surge
- tropical cyclone

Hazard	Overall consequence	Overall likelihood	Risk rating
Air crash	Minor	Rare	Low
Bushfire (within Fire Protection and Management Zones)	Moderate	Unlikely	Medium
Coastal marine incident	Insignificant	Likely	Low
Flooding	Moderate	Unlikely	Medium
Heatwave	Minor	Likely	Medium
Human disease	Moderate	Very Rare	Low
Road crash	Moderate	Very Rare	Low
Storm surge	Minor	Unlikely	Low
Tropical cyclone	Moderate	Likely	High

5.3. Hazard specific prevention and mitigation strategies

Prevention and mitigation relates to measures to reduce exposure to hazards, and reduce or eliminate risk. Actions include identifying hazards, assessing threats to life and property, and from these activities, taking measures to reduce potential loss of life and property damage.

The cornerstone of mitigation is guided and coordinated risk assessments, which should involve all potentially affected members of a community. Strategies are developed based on a thorough

understanding of hazards identified in emergency risk planning and their interaction with all aspects of society. Specific prevention and mitigation strategies for identified hazards can be found at **Annex C**.

6. Preparedness

Arrangements to ensure that, should an emergency occur, all resources and services that are needed to provide an emergency response and / or recovery can be efficiently mobilised and deployed.

6.1. Planning

NT emergency plans⁶ are required by the Act and are maintained at a Territory, regional and local level. Arrangements in plans aim to be flexible and scalable for all hazards. The Planning process enables agreements to be reached between people and organisations in meeting communities' needs during emergencies. The Plan becomes a record of the agreements made by contributing organisations to accept roles and responsibilities, provide resources and work cooperatively.

The Regional Controller is responsible for the annual review of operations and the effectiveness of the Local Emergency Plan, supported by the LEC and the NTES Planning and Preparedness Command.

6.2. Emergency resources and contacts

The Local Controller is responsible for maintaining the emergency resource register and LEC contact lists. Local emergency management stakeholders are to advise the Local Controller of changes to resource holdings, operational response capabilities and key personnel contacts. Emergency resource and LEC contact lists for each locality are available on Web-based Emergency Operations Centre (WebEOC).

6.3. Training and education

The Act provides the legislative requirement for those involved in emergency management activities to be appropriately trained. Training and education activities are undertaken to ensure agencies are familiar with and understand the NT emergency management arrangements, as well as the relevant controlling and hazard management authorities for identified hazards.

The NTES Learning and Development Command is responsible for emergency management training across the NT. Online and face to face training is scheduled throughout the year. For further information contact the NTES Learning and Development Command via email at Training.EMTU@pfes.nt.gov.au.

6.4. Community education and awareness

Effective and ongoing community education and preparedness programs that emphasise to communities the importance of practical and tested emergency plans and safety strategies is essential. Empowering communities to act in a timely and safe manner will minimise the loss of life, personal injury and damage to property and contribute to the effectiveness of any warning system.

List of available activities and initiatives but are not limited to within the area:

- NT Fire and Rescue Service (NTFRS) Smart Sparx Program
- NTES hazard briefings
- NTES Paddy Program
- Australian Red Cross Pillowcase Program
- St John Ambulance First Aid in Schools Program

⁶ More information can be found at: <https://pfes.nt.gov.au/emergency-service/publications>

6.5. Exercises

Local level exercises are a key measure for testing the effectiveness of the local emergency plan and should involve all relevant stakeholders. Exercises ensure that the Plan is robust and understood, and that capabilities and resources are adequate. Exercises are conducted if arrangements with the plan have not been enacted since the last review, or substantial changes have occurred, including:

- legislative changes
- major changes have occurred in the areas of key personnel, positions or functions across prevention, preparedness, response and recovery
- new or emerging hazards/risks have been identified.

The NTES Planning and Preparedness Command have developed resources that outlines the process to develop the exercise concept in designing, planning, conducting, facilitating, participating or evaluating exercises. The Local Controller can request an exercise by emailing the request through to EmergencyManagementPlanning@pfes.nt.gov.au.

7. Response

Actions taken in anticipation of, during and immediately after an emergency to ensure that its effects are minimised and that people affected are given immediate relief and support.

7.1. Activation of the Plan

This plan has 5 stages of activation and are designed to ensure a graduated response to hazardous events, reducing the possibility of under or over reaction by the emergency management agency.

The stages are:

Stage 1	Alert	This stage is declared when the Local Controller receives warning of an event which, in their opinion, may necessitate an emergency management response
Stage 2	Standby	This stage is declared when the Local Controller considers an emergency operation is imminent. During this stage passive emergency measures are commenced
Stage 3	Activation	This stage is declared when active emergency measures are required
Stage 4	Stand-down response operations and transition to Recovery	Stage 4 occurs when the Local Controller and Local Recovery Coordinator agree to transition to recovery (if required) in accordance with the transitional arrangements of this Plan
Stage 5	Recovery	This stage is called if ongoing recovery operations and coordination is required

The stages identified provide for a sequential response. However, it may be necessary because of the degree of warning and speed of onset of an event, for the Local Controller to skip the actions required under stage 1 or 2.

7.2. Control and coordination

Arrangements for response are based on pre-agreed roles and responsibilities for stakeholders. When the scale and complexity of an event is such that resources of the community are depleted a number of arrangements are in place to seek assistance from the region, the Territory and/or the Australian Government. Pathway for assistance is through the Regional Controller.

7.3. Local Emergency Controller

In accordance with section 76 of the Act, the Territory Controller or their delegate (section 112 of the Act) has appointed a Local Emergency Controller (Local Controller). The Local Controller for the locality is the Officer In Charge of the Ramingining Police Station. The Local Controller is subject to the directions of the Regional Controller. The powers, functions and directions of the Local Controller can be found in sections 77, 78 and 79 of the Act.

7.4. Local Emergency Committee

In accordance with section 80 of the Act, the Territory Controller has established a Ramingining Local Emergency Committee (LEC). The Local Controller is Chair of the LEC and remaining membership consists of representatives from NTG and non-government entities within the Locality. Division 11 of the Act specifies the establishment, functions, powers, membership and procedure requirements of a LEC.

7.5. Emergency Operations Centre / Local Coordination Centre

NT Emergency Management Arrangements	Controlling Authority Arrangements
Emergency Operations Centre (EOC) (Territory and Regional level)	Incident Control Centre (ICC)
Local Coordination Centre (LCC) (local level)	Incident Control Point (ICP)

LCCs are established as required by the Local Controller to provide a central focus to the management, control and coordination of emergency operations in the Locality. When activated, the functions of the LCCs are:

- information collection and dissemination
- preparation and issue of official warnings and advice to the public
- coordination of the provision of resources required in the Locality
- submitting requests for resources through the Regional Controller to the Territory EOC where applicable
- dissemination of information to the media and general public.

The LCC for this Locality is the Ramingining Police Station. The Regional EOC is located in Darwin at the Peter McAulay Centre. Agencies and functional groups may establish their own coordination centres to provide the focal point for the overall control and coordination of their own agency resources. Liaison officers from functional groups and support agencies will attend the EOC as required.

ICCs will be established as required by a controlling authority to provide an identified facility for the management of all activities necessary for the resolution of an incident. An ICP is normally located near the incident in its early stages but may be relocated to an ICC where more permanent and convenient facilities and services are available.

7.6. WebEOC

WebEOC is a critical information management system used throughout the NT for emergency management activities. The system is owned and maintained by the NTFES. The online platform is used

for the coordination of multi-agency response to, and recovery from, an emergency event. WebEOC also enables real-time information sharing across all agencies involved in emergency management activities.

7.7. Situation reports

It is essential for effective control and coordination of emergency management operations that the Local Controller is able to gather and collate relevant information relating to the emergency from regular, concise and accurate Situation Reports (SITREPs).

LEC members are to provide SITREPs at agreed times to enable the preparation of a consolidated report which will be distributed to all committee members and other relevant authorities. This may be achieved through WebEOC.

7.8. Stakeholder notifications

Upon activation of the Plan the following personnel are to be advised as a matter of urgency:

- all available members of the LEC
- Northern Regional Controller
- NTES Territory Duty Officer (TDO)

The Local Controller will notify LEC members of imminent events or activations through various means including but not limited to phone, SMS and email notifications dependant on the most appropriate and available at the time.

7.9. Official warnings and general public information

Official warnings and general public information will be broadcast to the Locality through the following means:

- radio broadcast
- television news broadcast
- SecureNT website and social media broadcasts and updates

Official warnings are issued by the Bureau of Meteorology (the Bureau), Geoscience Australia, NTPF, NTFES and controlling authorities.

Emergency Alert is a national telephony-based emergency warning system that can deliver warning messages to landlines and mobile handsets based on the service address and mobile handsets based on the last known location of the device. Authority to utilise the Emergency Alert may be given by virtue of the pre-approval of a hazard specific emergency plan or under the Territory Emergency Plan.

The approval for the release of an emergency alert message can only be authorised by one of the following:

- Territory Controller
- Chief Officer, NTES
- Regional Controller
- Chief Fire Officer, NTFRS
- Deputy Chief Fire Officer, NTFRS
- Executive Director, BFNT
- Chief Fire Control Officer, BFNT

The Standard Emergency Warning Signal (SEWS) is an audio alert signal (wailing siren) which may be broadcast on public media to draw attention to the fact that an urgent safety message is about to be made. Generally, SEWS is only played before announcements concerning significant emergencies where emergency management arrangements should be activated as a result.

Control and hazard management authorities may have pre-planned use of SEWS for non-weather related events, through a pre-approved hazard-specific emergency plan.

The approval for the release of a SEWS message can only be authorised by one of the following:

- Territory Controller
- Chief Officer, NTES
- Manager Hazard Preparedness and Response NT (the Bureau) (for weather and flood-related events)

Warning and information messages for general public are authorised by the Regional or Incident Controller. The dissemination of such emergency warnings and information is to be by whatever means are appropriate and available at the time.

7.10. Australasian Inter-Service Incident Management System

The Australasian Inter-Service Incident Management System (AIIMS)⁷ is a robust incident management system that enables the seamless integration of activities and resources of a single agency or multiple agencies when applied to the resolution of any event.

7.11. Closure of schools

The decision to close schools due to an impending threat will be made by the Chief Minister on advice from the TEMC. When the nature of an event demands an immediate response, local authorities will take the appropriate steps to ensure the safety to the public. This action may include the temporary closure of a school to begin preparations, pending formal closure of the school by the Chief Minister for the remainder of the event.

The decision to reopen schools will be made by the Chief Minister on advice from the Chief Executive, DET.

7.12. Closure of government offices

The decision to close government offices due to an impending threat will be made by the Chief Minister on advice from the TEMC. When the nature of an event demands an immediate response, local authorities should take all appropriate steps to ensure public safety and the protection of property.

The decision to reopen government offices will be made by the Chief Minister on advice from the TEMC.

All NTG agencies are to have an emergency preparedness plan which sets out their processes for closing down their offices once approval has been given. This should have clearly articulated employee guidelines to ensure employees know when they are authorised to leave and are required to return to work.

7.13. Sheltering in community

The TEMC have identified the need to review opportunities to support 'sheltering in community' for weather-vulnerable communities under the NT Emergency Management Arrangements.

In the NT, 'sheltering in community' means residents remain in their community in a safe place before, during, and after a hazard. This may include staying at home or arranging their own safe accommodation. For those without options, formal emergency shelters or temporary accommodation may be provided by Incident Controllers until it's safe to return home.

This approach can be supported by additional community resources like personnel, goods, or equipment. While evacuation remains an option, sheltering in community is often safer and more effective when supported.

The decision depends on community capacity and the specific event.

⁷ More information can be found at: <https://pfes.nt.gov.au/emergency-service/publications>

7.14. Emergency shelters and strong buildings

Emergency shelters and strong buildings are places of refuge are buildings or structures that provide people with a place of protection and shelter during a disaster or emergency event such as a cyclone, flood or fire.

The recognised emergency shelters within the Locality are:

Shelter(s)	People capacity	Accessibility (ramps, toilets etc)
Milingimbi Cyclone Shelter	300	Ramp and toilets
Milingimbi Education Centre	200	Ramp and toilets
Milingimbi Sport and Rec Hall	100 (staging area)	Ramp and toilets
Ramingining School Emergency Shelter	570	Ramp and toilets

There are a number of strong houses built to the wind terrain code in the Locality. A list of strong homes is held by EARC Milingimbi.

The DET in conjunction with NTPF and shelter owners are responsible for the management of emergency shelters during an emergency event.

The responsibilities of the emergency shelter manager are:

- the provision of personnel to staff and operate the emergency shelters at such times as they are activated
- the maintenance of effective liaison with other stakeholders with responsibilities relating to cyclone shelters, in particular the NTPF.

Emergency shelters are opened under the direction of the Territory or Regional Controller in consultation with the Shelter Group (DET). Emergency shelters will not normally operate for more than 48 hours.

The timing of the opening of emergency shelters will be dependent upon the severity of the impending incident, the numbers to be sheltered, the time of day the incident is expected to impact and the period of time the emergency shelters are likely to be occupied. The announcement that emergency shelters are open in the Locality will be made by radio broadcast and social media, and will include emergency shelter rules such as no pets or alcohol being permitted in shelters and that food will not be provided.

7.15. Evacuation

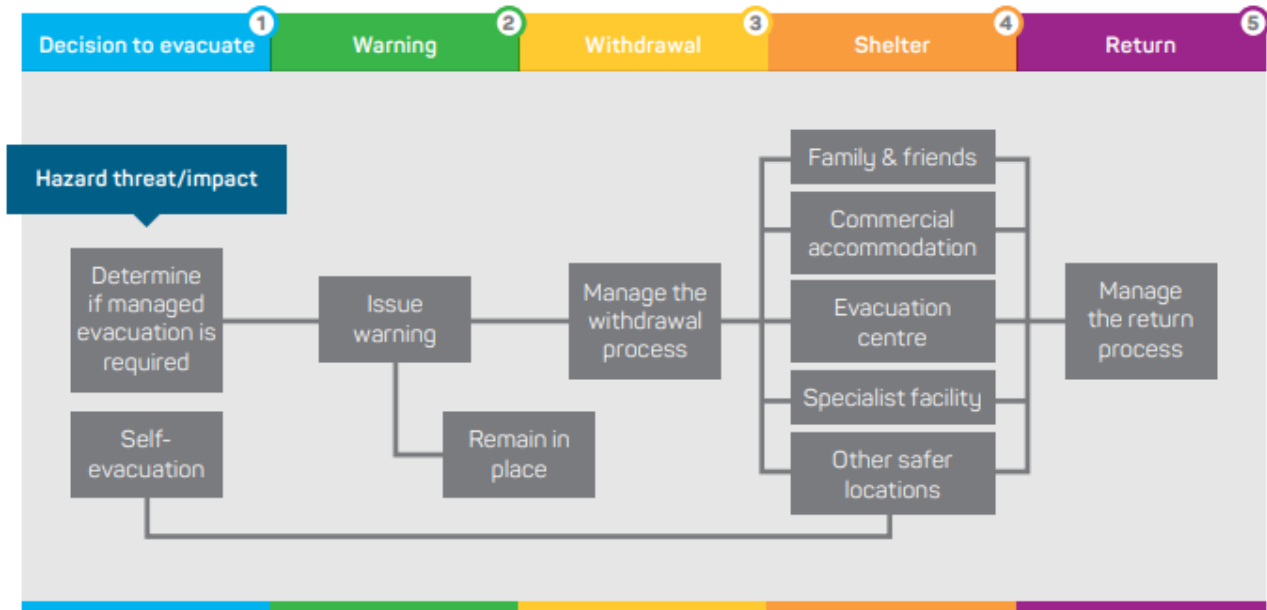
Evacuation is a risk management strategy that can be used to mitigate the effect of an emergency or disaster on a community. It involves the movement of people to a safer location and their return. The decision to evacuate a community, including establishing an evacuation centre, is not taken lightly as it represents significant resource and financial implications.

Evacuation of the Locality will be considered as a last resort. Where an evacuation is required the TEMC, in consultation with the Regional Controller, Local Controller and the LEC, will arrange emergency accommodation and transport, as necessary, through the relevant functional group/s.

Evacuation is a complex process that has 5 distinct steps:

1. decision
2. warning
3. withdrawal
4. shelter
5. return

Each step is linked and must be carefully planned and carried out in order for the entire process to be successful. Given an evacuation centre will only be opened as a part of an evacuation, it is vital to have an understanding of the 5-step process.



Source: Australian Institute of Disaster Resilience, *Evacuation Planning Handbook*, 2017

7.16. Identified evacuation centres

An evacuation centre is designed to accommodate people for short to medium periods of approximately 4 weeks, although this figure may vary.

An evacuation centre will provide some or all of the following services:

- assistance accessing finances and recreational activities
- beds
- linen
- meals
- medical services (or access to them)
- personal support

An evacuation centre's provision of some or all of these services is in contrast to an emergency shelter, in which people are expected to be self-sufficient.

For further information on evacuation centres management, refer to the NT Evacuation Field Guide available on WebEOC.

7.17. Impact assessment

Immediately after an emergency event, there is a need to identify and assess impacts to inform short and long-term recovery priorities. Comprehensive assessment of all impacts is a vital component of emergency response activities. Guidelines for the conduct of rapid assessments in the NT, including the establishment of dedicated Rapid Assessment Teams (RATs) to collect data in the field, have been developed.

The Survey, Rescue and Impact Assessment Group, led by the NTPF, is responsible for coordinating rapid impact assessments. At the local level, local controllers or an Incident Controller if appointed, should contact the Survey, Rescue and Impact Assessment Group lead to discuss impact assessments if deemed appropriate.

8. Recovery

The coordinated process and measures for supporting emergency-affected communities in the reconstruction of physical infrastructure and restoration of the social, economic and natural environments. In the NT, the Department of the Chief Minister and Cabinet (CM&C) lead recovery coordination.

8.1. Local Recovery Coordinator and Coordination Committee

When a region and/or Locality has been affected by an event, the Regional Recovery Coordinator may appoint a Local Recovery Coordinator in accordance with section 87 of the Act, the responsible agency for Recovery is the CM&C.

Local Recovery Coordinator will be an employee of the East Arnhem Region's CM&C office and will establish a Local Recovery Coordination Committee (LRCC) drawing from membership of the LEC and other relevant members of the community as needed. The Local Recovery Coordinator reports directly to the Regional Recovery Coordinator.

Local Recovery Coordinator and committee functions, powers and directions are established in Division 12 and 13 of the Act respectively.

8.2. Transitional arrangements

The transition from response to recovery coordination reflects the shift from the protection of life and supporting the immediate needs of the community to establishing longer term, more sustainable support structures.

The transition to recovery coordination occurs after the completion of the transition checklist and at a time agreed by the Territory Controller and Territory Recovery Coordinator in accordance with the Territory Emergency Plan.

Transition will occur when the Territory Recovery Coordinator is satisfied that the following has occurred:

- the Territory Controller has briefed the TEMC and the Territory Recovery Coordinator
- the Regional Controller has briefed the Regional Recovery Coordinator
- where there is significant changeover of personnel, the EOC planning operations and logistics sections have briefed incoming recovery planning, operations and logistics staff.

The Regional Recovery Coordinator will ensure all functional group leaders, agencies, support groups and other relevant stakeholders are notified prior to the transition to recovery. This notification is to include changes to relevant contact details and other pertinent information.

An example of response and recovery activities can be found at **Annex D**.

9. Debrief

Debrief processes embed continuous improvement into the delivery of emergency management activities. Consistent approaches to lessons learned encourage adaptability, and flexibility across all levels of government. Sharing of knowledge and experiences throughout emergency events assists with ongoing continuous improvement of people and organisations involved.

The NTG implements a lessons learned approach recognising the positive impact on organisational culture commensurate with increasing opportunities to achieve emergency management goals. Whilst lessons learned often begins in one agency through an internal debrief process, those lessons learned are transferable across multiple agencies.

During any operational response, personnel involved are encouraged to record activities where there are lessons to be learned. Activities can include decision making and consequential responses. Where decisions are made by an Incident Controller, Incident Management Team (IMT) member or a functional group member, those decisions should be recorded in a Decision Log (within WebEOC). Decision Logs can be referred to as part of the debrief process.

10. Related references

The following references apply:

- *Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)*
- *Building Act 1993*
- *Building Regulations 1993*
- *Emergency Management Act 2013*
- National Disaster Risk Assessment Guidelines
- National Disaster Risk Reduction Framework
- Northern Regional Emergency Plan
- *Northern Territory Aboriginal Sacred Sites Act 1989*
- Rapid Assessment Team Guidelines
- Territory Emergency Plan
- Transition to Recovery Checklist

11. Annexures

Annex A Functional groups - roles and responsibilities

Annex B Functions table

Annex C Specific prevention, mitigation strategies and action plans for identified hazards

Annex D Summary of response and recovery activities

11.1. Annex A: Functional groups - roles and responsibilities

Functional group	Local contact
Animal Welfare	Department of Agriculture and Fisheries (DAF)/Ramingining Rangers (ASRAC)/Milingimbi Rangers (MOPRA)
Critical Goods and Services	Department of Trade, Business, and Asian Relations (DTBAR)
Digital and Telecommunications	Department of Corporate and Digital Development (DCDD)
Emergency Shelter	Ramingining School/Milingimbi School
Engineering	Department of Logistics and Infrastructure (DLI)
Industry	DTBAR
Medical	Miwatj Health (Ramingining Health Centre)
Public Health	Miwatj Health (Ramingining Health Centre)
Public Information	CM&C
Public Utilities	PAWC
Transport	DLI/EARC
Survey, Rescue and Impact Assessment	NTPF
Welfare	Department of Children and Families (DCF)

Full details on functional group roles and responsibilities are detailed in the Territory Emergency Plan.

11.2. Annex B: Functions table


Emergency response and recovery functions with identified agencies/organisation/provider. During an event some of these functions may be needed at a local level.

Functions	Agency /organisation/provider responsible	
	Ramingining	Milingimbi
Animal/livestock management	NTPF/ASRAC	EARC/MOPRA
Anti-looting protection	NTPF	NTPF
Banking services	Traditional Credit Union (TCU)/ALPA store	TCU/ALPA store
Broadcasting: What radio stations provide announcements?	Social media/radio/loud speaker	Social media/radio/loud speaker
Clearing of essential traffic routes	EARC/DLI	EARC/DLI
Clearing storm water drains	EARC/DLI	ESO/DLI
Clothing and household items	ALPA	ALPA
Community clean up	EARC/Community Development Program (CDP)/Individual property owners	EARC/CDP)/Individual property owners
Control, coordination and management	Designated control authority	Designated control authority
Coordination to evacuate public	NTPF	NTPF
Critical goods and services (protect/resupply) <ul style="list-style-type: none"> • food • bottle gas • camping equipment • building supplies 	ALPA store/CDP	ALPA store
Damaged public buildings: Coordination and inspections	EARC/Delta Reef/ Department of Housing, Local Government and Community Development (DHLGCD)	EARC/DHLGCD
Disaster victim identification capability	NTPF	NTPF
Emergency Alert	NTPF/NTFES	NTPF/NTFES
Emergency food distribution	ALPA store/CDP	ALPA store
WebEOC	NTPF/NTFES	NTPF/NTFES
Emergency shelter - staff, operations and control	DET/Shelter owners	DET/Shelter owners
Evacuation centre – staff, operations and control	DCF	DCF
Financial relief/assistance	CM&C/DCF (Category A measures to individuals)/DTBAR (Category B measures)	

Functions	Agency /organisation/provider responsible	
	Ramingining	Milingimbi
Identification of suitable buildings for shelters	EARC/NTPF/LEC	EARC/NTPF/LEC
Interpreter services	Aboriginal Interpreter Service/CDP	
Management of expenditure in emergencies	Controlling authority and any activated functional groups at the direction of the controlling authority	
Medical services	Miwatj Health	Miwatj Health
Network communications (IT): Responders, public maintenance and restoration of emergency communication	Telstra/Delta Reef/DCDD	Telstra/Abacus Plumbing
Power: Protection and restoration:	PAWC	PAWC
Public messaging during response and recovery.	Hazard management authority	
Public/Environmental health (EH) management <ul style="list-style-type: none"> all EH functions including water and food safety disease control 	EARC/ESO/DOH	EARC/ESO/DOH
Rapid impact assessment	NTPF	NTPF
Recovery coordination	CM&C	CM&C
Repatriation	As per local arrangements/DCF	
Restoration of public buildings	DCF/DHLGCD	DCF/DHLGCD
Restoration of roads and bridges (council/territory) excluding railways	EARC/DLI	EARC/DLI
Road management and traffic control including public information on road closures	EARC	EARC
Sewerage: Protection and restoration	PAWC	
Survey	NTPF	
Traffic Control	EARC/NTPF	EARC/NTPF
Transport: Commercial and public airport/Planes, automobiles, buses	EARC/Rangers/CDP	
Vulnerable groups (medical)	Miwatj Health	Miwatj Health
Waste management <ul style="list-style-type: none"> collection disposal of stock 	EARC	
Water (including drinking water): Protection and restoration	PAWC/ALPA Store	

11.3. Annex C: Prevention, mitigation strategies and action plans for identified hazards

11.3.1. Bushfire (within Fire Protection and Management Zones)

Hazard	Controlling authority	Hazard management authority
 Bushfire (within Fire Protection and Management Zones)	NT Fire and Emergency Services (Bushfires NT)	NT Fire and Emergency Services (Bushfires NT)

A fire hazard is an event, accidentally or deliberately caused, which requires a response from one or more of the statutory fire response agencies.

A fire hazard can include, but not limited to:

Term	Definition
Structure fire	A fire burning part, or all of any building, shelter, or other construction.
Bushfire	An unplanned fire. It is a generic term that includes grass fires, forest fires and scrub fires. Bushfires are a natural, essential and complex part of the NT environment. The term bushfire is interchangeable with the term wildfire.
Vehicle fire	An undesired fire involving a motor vehicle.

In the NT, managing bushfire and vegetation on private properties is the responsibility of the landowner.

Landholder responsibility to control fire

The landholder or occupier of land must take all reasonable steps to protect property on the land from fire and inhibit the fire from spreading.

If a landholder or occupier is unable to control a fire and prevent it from spreading to other land, they must:

- notify fire control officer or fire warden and all neighbouring property holders
- call 000 in an emergency.

Under section 90(3) of the *Bushfires Management Act* the landholder or occupier commits an offence if the fire has the potential to spread to other land and they fail to take reasonable steps to control the fire and to notify all parties.

Communication, co-operation and shared responsibility within the community, matched by a capacity to undertake self-protective measures, form the basis of successful fire management throughout the NT.

In areas where there is no gazetted fire protection zone, if the owner or occupier of land is unable to control fire on the land, the owner or occupier must notify BFNT of this fact. When fires are reported to 000, the Joint Emergency Services Call Centre, the (JESCC) will contact BFNT to triage the report. In these areas, firefighting response from BFNT is not guaranteed as there is no established volunteer firefighting resource. BFNT may assist the owner or occupier of the land through the coordination of information and advice to assist the owner or occupier to control the fire. This may include liaison with affected neighbouring owners or occupiers for resource support, provision of fire weather information or the issuing of public information. In some circumstances, BFNT may deploy firefighting resources from

larger regional centres to assist the owner or occupier to control the fire. BFNT have a rostered NT Duty Officer (NTDO) to provide 24/7 incident triage coverage who can be contacted through the JESCC.

Actions to be taken

As described above, in areas where there is no fire protection and management zones (BFNT) or emergency response area (NTFRS), fire is the responsibility of the land owner or occupier. Where an owner or occupier has contacted BFNT that they are unable to control fire on the land, BFNT may contact the Local Controller to discuss local response arrangements and coordination of resources.




Prevention and preparative controls include, but are not limited to:

- a fire danger period is declared over large areas when climatic and seasonal conditions presents increased fire risk for a prolonged period of time. A fire danger period usually coincides with the accepted 'fire season' in an area. Broadly this is during the Australian summer months in central Australia and during the Dry Season further north. A permit to burn is required before using fire during a fire danger period in all zones.
- a fire ban can be declared for up to 24 hours. A combination of factors are considered when declaring a fire ban period including forecast fire danger, ignition likelihood, hazards and resourcing. All permits to burn are revoked within the declared fire ban area.
- a fire management area can be declared in an area where BFNT have identified heightened fire risk. A fire management plan can be prescribed for a fire management area, and the plan can require landowners to take action to prepare for, or prevent, the spread of fire.
- additional fire regulations apply within NTFRS Emergency Response Areas (ERA) and BFNT Fire Protection and Management Zones (FPMZ). Permits to burn are required throughout the entire year inside an ERA or FPMZ and a minimum 4 m wide firebreak within the perimeter boundary of all properties and additional firebreaks around permanent structures and stationary engines is required within an FPMZ.
- the BFNT Regional Fire Management Plan
- establishment of an IMT with liaison officers from other agencies to assist
- radio, television and social media posts.

Warning and advice approval flow (bushfire only):

The Australian Warning System is a national approach to information and warnings during emergencies like bushfire. The System uses a nationally consistent set of icons, like those below.

There are 3 warning levels:

	Warning level	Description
	Advice (Yellow)	An incident has started. There is no immediate danger. Stay up to date in case the situation changes
	Watch and Act (Orange)	There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family
	Emergency Warning (Red)	An Emergency Warning is the highest level of warning. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

Each warning level has a set of action statements to give the community clearer advice about what to do. Calls to Action can be used flexibly across all 3 warning levels depending on the hazard.

All warnings and advice will be issued by the Incident Controller from the relevant controlling authority for fire (NTFRS or BFNT).

11.3.2. Flooding

Hazard	Controlling Authority	Hazard Management Authority
 Flooding	NT Police Force	NT Fire and Emergency Services (NT Emergency Service)

The Ramingining Locality may be subject to isolation caused by seasonal monsoonal/severe storm activity. Isolation causes communities/individuals to be cut off from the rest of the area. This could mean some people in an area are affected by a flood while others are not. Flood events can cause long-term impacts on communities, such as disruptions to supplies of food, clean water, wastewater treatment, electricity, transport, communication, education and health care. Where isolation is likely to occur for an extended time, pre-season planning by the LEC is critical to ensure there will be limited disruptions to critical goods and services.

A flood hazard includes a flood threat to the township, housing and infrastructure of the Locality including the surrounding areas. The Bureau will issue a flood watch advice with up to 4 days lead time in situations where forecast rainfall and catchment conditions may lead to flooding.

Ramingining is west of the Glyde River and is surrounded by flood plains that have the potential to flood in the Wet Season. Ramingining Community is prone to isolation and flooding with extreme rainfall. Road access into Ramingining is via 4WD in the Dry Season. Should flooding occur, it will not be possible to access the community by road. It is difficult to assess when and to what extent flooding will affect the Ramingining Community throughout any given Wet Season.

Milingimbi Island has low level flood plains, swamps and tidal creeks subject to flooding during the Wet Season and in storm tides/surge. The highest point of the island is 16 m at the air strip, which is the only point of evacuation other than by sea.

Although some warning may be possible, due to computation of data collected from the Bureau, a flood event may occur with little warning. Whilst there are no gauging stations for the Locality, the following table provides guidance for riverine flooding on NT communities.

Flood impacts	Consequence
Disruptive flooding	Causes inconvenience. Low-lying areas next to water courses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas removal of stock and equipment may be required.
Community impact flooding	In addition to the above, the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be affected above the floor level. Evacuation of flood affected areas may be required. In rural areas removal of stock is required.
Critical/emergency flooding	In addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.

Prevention and preparative controls include, but are not limited to:

- Ensure food stocks are maintained at community stores
- Ensure fuel supplies are adequate for such an event
- Ensure power house fuel supplies are adequate




Public safety message process:

- the Bureau issues a flood advice to NTES TDO
- NTES TDO issues Australian Warning System to the NTFES Media Unit
- NTES TDO notifies Local Controller and NTES Manager Northern
- Local Controller notifies LEC
- NTES Manager Northern consults with the Bureau and Incident Controller to determine recommended messaging
- NTFES Media Unit or Public Information Officer receives approved messaging to publish

Warnings and advice approval flow

The Australian Warning System is a national approach to information and warnings during emergencies like storm, flood and cyclone. The system uses a nationally consistent set of icons that are found below.

There are 3 warning levels:

	Warning level	Description
	Advice (Yellow)	An incident has started. There is no immediate danger. Stay up to date in case the situation changes
	Watch and Act (Orange)	There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family
	Emergency Warning (Red)	An Emergency Warning is the highest level of warning. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

Each warning level has a set of action statements to give the community clearer advice about what to do. Calls to Action can be used flexibly across all 3 warning levels depending on the hazard.

On advice from the Bureau's weather warnings, the NTES determine the Australian Warning System level.

The NTES TDO is responsible for issuing Australian Warning System warnings and advice prior to an Incident Controller is appointed.

Actions to be taken – Flooding - guide only⁸

Organisation / Provider	Flood Watch	Isolation
All Members	Attend LEC meetings Relay information to other key stakeholders	Assist where necessary and ensure all procedures for each location/area to be affected is well prepared
Local Controller	Update LEC members of the impending situation Activate Local Emergency Plan	SITREP is to be circulated to committee members and key stakeholders Ensure all necessary procedures have been updated

⁸ Action stages as per Flood products issued by the Bureau of Meteorology

11.3.3. Heatwave

	Hazard	Controlling Authority	Hazard Management Authority
	Heatwave	Department of Health	Department of Health

The NT has naturally warm to hot weather. However, maximum and minimum temperatures occasionally exceed historical records creating heatwave conditions. Heatwave (extreme heat) conditions occur across the Territory between the months of October and March. Extreme heat is predicted to become more frequent, more intense, of longer duration, and occurring earlier in the warm season.

A heatwave occurs when maximum and minimum temperatures are unusually hot (unusual for that location) projected over a 3 day period. Heatwaves can occur with or without high humidity. They have potential to cover a large area, exposing individuals and communities to hazardous heat. Forecast minimum and maximum temperatures are compared to the historical data of a location as well as temperatures over the last 30 days to establish a heatwave occurrence.

Extreme heat can be very taxing on the body. The human body can be over-heated when it is surrounded by a temperature close to or exceeding body temperature of 37°C in the presence of dehydration. If the body's temperature is unable to be reduced adequately by evaporation of perspiration or moving to cooler surroundings, the resulting illness may range from mild to severe/catastrophic.

A heatwave forecast is a warning that the hot temperatures will be a shock to the body, compared to recent temperatures. Even the most acclimatised NT residents can be affected by heat stress.

The Bureau's heatwave forecast covers all localities in the NT.

NT Health publishes heat health alerts where a severe or extreme heatwave is forecast to affect:

- a major centre (Greater Darwin Region, Alice Springs, Katherine, Tennant Creek, Nhulunbuy; OR
- 3 or more populated centres in a Bureau weather district,

AND the forecast is:

- 3 or more days of severe heatwave; OR
- 2 or more days of extreme heatwave

The level of a severe or extreme heatwave event will determine the magnitude of response required to effectively manage the situation. The following describes heatwave incident response hierarchy and are based on AIIMS incident classification.

Level	Description
Level 1	The thresholds for a heatwave are activated with a Severe or Extreme Heatwave meeting the triggers. The Severe or Extreme Heatwave has minimal or no impact on normal operations. The Severe or Extreme Heatwave continues for 1 – 3 days.
Level 2	The Extreme Heatwave continues for approximately 3 – 6 days. The Extreme Heatwave has major impact on normal operations. The weather event is resulting in compounding impacts on essential services and infrastructure, and there are anticipated impacts on human health and infrastructure.
Level 3	An Extreme Heatwave is protracted, exceeding 6 days. Maximum temperatures for the localities are exceeded for what is normally expected and multiple days with significantly increased night-time temperatures. Public infrastructure is affected.

Prevention and preparative controls include, but are not limited to:

- preseason situational awareness with the Bureau
- developing heat health communication and community engagement strategies
- engagement with government and private agencies, functional groups and community organisations
- preparing fact sheets, and translating into indigenous and multicultural languages
- updating heat health advice email distribution list
- monitoring the Bureau heatwave forecast and decision support product
- public messaging (using radio, website posts, and social media posts) when a heatwave is forecasted, imminent or in progress




Public safety message process:

- NT Health receives heatwave warning from the Bureau
- the heatwave decision support product is reviewed and localities of forecast severe or extreme heatwave noted
- Director Environmental Health circulates information on extreme heat to stakeholders, listing all localities likely to be impacted
- NT Health Strategic Media, Marketing and Communications Team publish heat health alerts on NT Health Alerts webpage and other channels
- NT Health publishes media release through NTG Media Releases
- NT Health engages with media to broadcast heat health messages.

Warnings and advice approval flow:

The Australian Warning System is a national approach to information and warnings during emergencies like bushfire. The system uses a nationally consistent set of icons, like those below.

There are 3 warning levels:

	Warning level	Description
	Advice (Yellow)	An incident has started. There is no immediate danger. Stay up to date in case the situation changes
	Watch and Act (Orange)	There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family
	Emergency Warning (Red)	An Emergency Warning is the highest level of warning. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

Each warning level has a set of action statements to give the community clearer advice about what to do. Calls to Action can be used flexibly across all 3 warning levels depending on the hazard.

11.3.4. Tropical cyclone

	Hazard	Controlling Authority	Hazard Management Authority
	Tropical cyclone	NT Police Force	NT Fire and Emergency Services (NT Emergency Service)

A tropical cyclone⁹ hazard includes a cyclone threat to the township, housing and infrastructure of the Locality including the surrounding areas. During the cyclone season, November to April, the Bureau keeps a 24-hour watch on developing tropical weather systems. The Bureau will issue a Tropical Cyclone Advice whenever a tropical cyclone is likely to cause winds in excess of 62 km/h (gale force) over Australian communities within the next 48 hours.

A number of cyclones have directly or indirectly impacted NT in recent years. The following is a summary of significant tropical cyclones to have impacted the Territory:

- Severe Tropical Cyclone Megan – March 2024
Category 3 system at landfall. Brought destructive winds and major flooding to Borroloola and surrounding areas.
- Severe Tropical Cyclone Trevor – March 2019
Category 4 system at landfall. Triggered widespread evacuations across the Gulf of Carpentaria and caused significant wind damage and flooding.
- Severe Tropical Cyclone Marcus – March 2018
Category 5 at peak intensity, Category 2 when crossing near Darwin. Caused widespread damage with destructive winds and heavy rainfall across the Northern Territory, especially Darwin and surrounding regions.
- Severe Tropical Cyclone Lam – February 2015
Category 4 system at landfall. Brought destructive winds and flooding to Arnhem Land communities, damaging homes and infrastructure.
- Severe Tropical Cyclone Monica – April 2006
Category 5 system at peak intensity. One of the most intense cyclones recorded in the Southern Hemisphere; caused extensive environmental damage.
- Severe Tropical Cyclone Ingrid – March 2005
Category 4 system at landfall. Impacted Arnhem Land and the Tiwi Islands with strong winds and heavy rainfall.
- Severe Tropical Cyclone Tracy – December 1974
Category 4 system at landfall. Devastated Darwin, destroying most of the city and causing 71 fatalities.

Tropical cyclones are classified into categories based on their sustained wind speed. These categories help communicate the potential severity of a cyclone's impact, including wind damage, storm surge, and flooding. Understanding these categories is essential for assessing risk and implementing appropriate emergency response measures.

The table on the following page outlines the classification system used for tropical cyclones.

⁹ More information can be found at: <http://www.bom.gov.au/cyclone/tropical-cyclone-knowledge-centre/understanding/tc-info/>

Table - Tropical cyclone categories

Category	Max mean wind (km/h)	Typical strongest gust (km/h)	Transport effects
1	63 - 88	< 125	Negligible house damage. Damage to some crops, trees and caravans. Craft may drag moorings
2	89 - 117	125 - 164	Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small craft may break moorings.
3	118 - 159	165 - 224	Some roof and structural damage. Some caravans destroyed. Power failures likely.
4	160 - 199	225 - 279	Significant roofing loss and structural damage. Many caravans destroyed and blown away. Dangerous airborne debris. Widespread power failures.
5	>200	> 279	Extremely dangerous with widespread destruction.

Note: Corresponding approximate wind gusts and central pressure are also provided as a guide. Stronger gusts may be observed over hilltops, in gullies and around structures.

As the Hazard Management Authority, the NTES have established, equipped and trained volunteer units, to support response and recovery operations to tropical cyclones.

the Territory EOC is required to be activated by the Regional Controller, the NTES will support this activation and facilitate, where possible, the staffing requests for IMT personnel.

Prevention and preparative controls include, but are not limited to:

- implementation of cyclone preparation initiatives and council clean ups
- radio, television and social media posts

Public safety message process:




- the Bureau issue a cyclone advice to NTES TDO
- NTES TDO issues Australian Warning System to the NTFES Media Unit
- NTES TDO notifies Local Controller and NTES Manager Northern
- Local Controller notifies LEC
- NTES Manager Northern consults with the Bureau, Regional Controller, NTES Chief Officer and Incident Controller to determine recommended messaging
- NTFES Media Unit or Public Information Officer receives approved messaging to publish.

The response to a cyclone event is staged and dependant on timings of the Watch and Warnings issued by the Bureau and the projected impact on the communities. The following table provides a guide to typical actions for members of the LEC upon receipt of notifications from the Bureau. The table also notes the need for LEC members to contribute to the recovery process post the impact of the cyclone.

Warnings and advice approval flow

The Australian Warning System is a national approach to information and warnings during emergencies like storm, flood and cyclone. The system uses a nationally consistent set of icons that are found below.

There are 3 warning levels:

	Warning level	Description
	Advice (Yellow)	An incident has started. There is no immediate danger. Stay up to date in case the situation changes
	Watch and Act (Orange)	There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family
	Emergency Warning (Red)	An Emergency Warning is the highest level of warning. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

Each warning level has a set of action statements to give the community clearer advice about what to do. Calls to Action can be used flexibly across all 3 warning levels depending on the hazard.

On advice from the Bureau's weather warnings, the NTES determine the Australian Warning System level.

The NTES TDO is responsible for issuing Australian Warning System warnings and advice prior to an Incident Controller is appointed

Actions to be taken – Tropical cyclone – guide only¹⁰

Organisation/ Provider	Watch	Warning (onset of Gale Force Winds)			Reduced risk	Transition to recovery
	48 hours	24 + hours	6 + hours	3 + hours		
All LEC members	Attend briefings Inform key stakeholders Provide SITREPs Assist the Local Controller as required Ensure final preparations are undertaken prior to Warning	Attend briefings Inform key personnel Assist the Local Controller as required	Attend briefings Assist the Local Controller as required Inform key personnel	Assist the Local Controller as required Take and remain in shelter	Remain in shelter until directed by Local Controller Assist the Local Controller as required	Attend briefings Inform key personnel Assist the Local Controller as required
Local Controller	Convene meeting of the LEC Ensure LEC members and community have activated their cyclone plan Co-ordinate the dissemination of the cyclone watch information to the relevant local community Communications established and maintained with Regional Controller, and	Convene meeting of the LEC Ensure that the dissemination of the cyclone warning information to the public is maintained Advise Regional Controller of state of preparedness and ascertain SITREPs requirement	Update LEC and allocate tasks as required Ensure that the dissemination of the cyclone warning information to the public is maintained At the appropriate time, advise persons at risk to move to a shelter	Take and remain in shelter	When it is declared safe to move outside, ascertain the extent of injury to persons and damage to property Give directions to survey teams advising community of reduced risk Provide SITREPs to Regional Controller and	Provide SITREPs to Regional Controller and Incident Controller Prepare for transition to recovery Begin compilation of information for Post Operation Report

¹⁰ Action stages as per Tropical Cyclone advice and warnings issued by the Bureau of Meteorology

Organisation/ Provider	Watch	Warning (onset of Gale Force Winds)			Reduced risk	Transition to recovery
	48 hours	24 + hours	6 + hours	3 + hours		
	<p>NTES TDO and advise state of preparedness</p> <p>Participate in REC meetings as required</p> <p>Consider pre-deployment of NTPF to Milingimbi</p>	Activate EOC if required			<p>Incident Controller</p> <p>Prepare for transition to recovery</p>	
NTPF	<p>Disseminate warnings and information as required</p> <p>Maintain normal police duties</p> <p>Assist Local Controller as required</p> <p>Ensure all operational vehicles are fully fuelled</p>	<p>Disseminate warnings and information as directed by the Local Controller</p> <p>Limit transport and ensure all operational vehicles are fully fuelled</p> <p>Assist the Local Controller as required</p> <p>Maintain normal education service</p>	<p>Disseminate warnings and information as directed by the Local Controller</p> <p>Coordinate the movement of personnel to shelter in Milingimbi community</p> <p>Direct a final patrol of the town</p> <p>Ensure all personnel take shelter</p>	Take and remain in shelter	<p>When it is considered safe to move outside, ascertain the extent of injury to persons and damage to property</p> <p>Give direction to survey teams</p> <p>Assist in advising the public of the conclusion of the operation</p> <p>Assist Local Controller as required</p>	Assist Local Controller as required
PAWC - Essential services	Attend emergency management meetings and perform actions as required	Monitor	Monitor	Take and remain in shelter	At the direction of the Local Controller, commence survey	Assist the Local Recovery Coordinator as required

Organisation/ Provider	Watch	Warning (onset of Gale Force Winds)			Reduced risk	Transition to recovery
	48 hours	24 + hours	6 + hours	3 + hours		
					Advise Local Controller of damage and what essential services are still in operation	
Miwatj Health	Participate in pre-cyclone clean-up Test satellite phone Have cyclone kit available Fill jerry cans with water Fill vehicles with fuel Maintain normal duties	Medical staff to have access to health vehicles Check and take population list Staff to personal residence Maintain normal duties	Do final checks Ensure all personnel take shelter	Take and remain in shelter	Ensure all personnel to remain in shelter At direction of Local Controller, check the health clinic premises for damage Prepare and open clinic When the airstrip is clear, organise medical evacuations as needed	Advise Local Recovery Coordinator of any urgent priorities and participate in meetings as required
DET	Participate in pre cyclone clean up Refuel vehicle Fill water containers and store Maintain normal duties	When advised, close school and advise community to secure buildings Staff to secure personal residence	Do final checks Ensure all personnel take shelter	Take and remain in shelter	Ensure all personnel to remain in shelter At direction of Local Controller, check the school for damage Assist where necessary	

Organisation/ Provider	Watch	Warning (onset of Gale Force Winds)			Reduced risk	Transition to recovery
	48 hours	24 + hours	6 + hours	3 + hours		
					Restore facilities and resume normal education duties as soon as possible	
ALPA store	<p>Get emergency supplies ready</p> <p>Clear yard/store of any dangerous items and lock up store</p> <p>Help with community clean-up</p> <p>Maintain normal duties</p>	<p>Staff to secure personal residence</p> <p>Prepare to close store</p>	<p>Do final checks</p> <p>Ensure all personnel take shelter</p>	<p>Take and remain in shelter</p>	<p>Ensure all personnel to remain in shelter</p> <p>At direction of Local Controller, attend and assess damage to store and supplies</p> <p>Assess food and fuel stocks and advise on quantity</p> <p>Restore facilities and resume normal duties as soon as possible</p>	

11.4. Annex D: Summary of response and recovery activities

The following tables list a summary of possible response and recovery activities to be considered following an event.

This table is presented as a guide only, assisting emergency managers with operational decision making, planning and resource allocation. It also highlights the importance of response and recovery coordination working collaboratively.

Activities have been broken down and are listed under either response or recovery for simplicity and ease of use. In practice not all response activities will be completed during the response phase, likewise not all recovery activities will commence after the transition to recovery.

The post event period of any event is highly dynamic and produces many challenges, both foreseen and unpredicted. Response and recovery coordination must be flexible and able to adapt to the situation as it evolves.

In most cases the points noted in this table and in the ensuing document are outlined in greater detail in functional group or agency plans.



Activity	Response activities	Recovery activities
1. Situational awareness	Road clearance teams General public Media reports Survey and rescue teams Impact assessment teams	Contributes to recovery planning through impact assessment data Comprehensive Impact Assessments Needs Assessment
2. Public Information	Public Information Group activation Spokespersons identified SecureNT activated	Continues in recovery
3. Survey and Rescue	Survey teams deploy to designated areas Critical sites surveyed Deploy rescue teams – NTFRS and NTPF Specialist Response Division provide primary Urban Search and Rescue capability	Survey and Impact Assessment data used to contribute to the Recovery Action Plan
4. Road clearance	Road patrol teams deploy and check assigned routes Road clearance to priority sites	Restoration of road networks and bridges Return to business as usual
5. Emergency accommodation	Emergency accommodation and shelter - evacuation centres	Evacuation centres may continue into recovery Temporary accommodation options

Activity	Response activities	Recovery activities
	Provision of resources that will enable people to remain in their homes Emergency clothing	Repatriation planning
6. Medical	Hospital <ul style="list-style-type: none"> - identify any issues with accessing facilities - initial impact assessment - access to critical supplies e.g. medicines, consumables, power or fuel and water - ongoing acute clinical care and critical services requirements - increase morgue capacity Health Centres <ul style="list-style-type: none"> - identify any issues with accessing facilities - access to critical supplies e.g. medicines, consumables, power or fuel and water GP clinics and pharmacies <ul style="list-style-type: none"> - identify operational GP services - identify operational pharmacies Support medically vulnerable people Medical retrieval services (air and road)	Ongoing provision of health services <ul style="list-style-type: none"> - which may include business continuity plans - engagement with stakeholders Repatriation of medically vulnerable people in community GP clinics and pharmacies <ul style="list-style-type: none"> - ongoing liaison by the Medical Group Medical retrieval services – resume business as usual
7. Essential goods and services	Establish emergency feeding and food distribution points Assessing the damage to suppliers and retailers of critical resources Assess the impact on barge operations and any effect on the ability to supply remote communities Implement interim banking arrangements	Ensure enablers are in place to support the re-opening of essential services Monitor levels and availability of essential goods Manage logistics arrangements supplying resources to outlying communities Public health inspections (food outlets) Banking sector business continuity arrangements
	<u>Fuel</u> Fuel suppliers and point of sale	Monitor fuel levels Infrastructure repairs Emergency fuel supplies for recovery

Activity	Response activities	Recovery activities
	Manage fuel supplies to emergency power generation	Liaise with fuel suppliers, distributors and wholesalers to re-establish long term supply
	<u>Banking</u> Assess damage to banks and ATMs Implement temporary arrangements	Emergency cash outlets Implement long term arrangements
8. Evacuation	Evacuations within community Evacuation out of community Registration	Support services for evacuees Recovery information for evacuees Repatriation
9. Public health	Communicable disease control response Drinking water safety standards Sewage and waste disposal Safe food distribution and advice Vector and vermin control Food and commercial premises	Ongoing in recovery
10. Utilities	Power supply Power generation Water supply Sewerage Emergency sanitation	Restore power network Restore water and sewerage infrastructure Issue alerts until safe to use
11. Impact assessments	Training assessment teams Initial impact assessments	Comprehensive impact assessments Ongoing needs assessments
12. Transport infrastructure (supply lines)	<u>Air (airport/airstrip)</u> Clear the runway to allow air movements Establish a logistics hub at the airport Terminal damage and operational capability assessment	Monitor repairs and business continuity activities
	<u>Road</u> Highway and critical access roads damage assessment Repair work to commence immediately	Planning and prioritising repair work of all affected key roads for the Locality.

Activity	Response activities	Recovery activities
	<u>Port, harbour and barge</u> Assess damage to port infrastructure and harbour facilities Assess the damage to barge facilities	Repairing infrastructure Establish alternate arrangements for the supply of remote communities
13. Waste management	Waste management requirements and develop waste management plan if required	Continues in recovery
14. Repairs and reconstruction	Private housing <ul style="list-style-type: none"> - impact assessments - temporary repairs Government buildings <ul style="list-style-type: none"> - damage assessment Public housing <ul style="list-style-type: none"> - impact assessments Private industry <ul style="list-style-type: none"> - damage assessments 	Private housing <ul style="list-style-type: none"> - information and support to facilitate repairs Government buildings <ul style="list-style-type: none"> - repairs and reconstruction Public housing <ul style="list-style-type: none"> - long term repair plans Private industry <ul style="list-style-type: none"> - repair and reconstruction of enabling infrastructure - support DRFA payment facilitation where eligible Temporary accommodation for a visiting construction workforce if necessary or suitable accommodation is unavailable
15. Transport services	Staged re-establishment of public transport services	Continues in recovery
16. Telecommunication	Telecommunications providers will assess the damage to their infrastructure Put in place temporary measures to enable landline and mobile services	Repair damage networks and infrastructure (for private entities there is support for operators only)
17. Public safety	NTPF will maintain normal policing services to the community	Gradual return to business as usual
18. Animal welfare	Temporary emergency arrangements for pets	Reunite pets with their owners and cease emergency support arrangements
19. Community consultation	Information provision regarding the overall situation, response efforts, what services are available and how to access them	Community consultation process regarding long term recovery and community development led by relevant departments

12. Acronyms

Acronyms	Definitions
AAPA	Aboriginal Areas Protection Authority
ABC	Australian Broadcasting Corporation
AIIMS	Australasian Inter-Service Incident Management System
ALPA	Arnhem Land Progress Aboriginal Corporation
CASA	Civil Aviation Safety Authority
CDP	Community Development Program
CM&C	Department of the Chief Minister and Cabinet
DAF	Department of Agriculture and Fisheries
DCF	Department of Children and Families
DCDD	Department of Corporate and Digital Development
DHLGCD	Department of Housing, Local Government and Community Development
DLI	Department of Logistics and Infrastructure
DLPE	Department of Lands, Planning and Environment
DTBAR	Department of Trade, Business, and Asian Relations
DET	Department of Education and Training
DOH	Department of Health
DRFA	Disaster Recovery Funding Arrangements
EARC	East Arnhem Regional Council
EOC	Emergency Operations Centre
ESO	Essential Services Operators
FPMZ	Fire Protection and Management Zone
ICC	Incident Control Centre
ICP	Incident Control Point

Acronyms	Definitions
IMT	Incident Management Team
JESCC	Joint Emergency Services Communications Centre
LCC	Local Coordination Centre
LEC	Local Emergency Committee
LRCC	Local Recovery Coordination Committee
NERAG	National Emergency Risk Assessment Guidelines
NT	Northern Territory
NTES	Northern Territory Emergency Service
NTFES	Northern Territory Fire and Emergency Services
NTFRS	Northern Territory Fire and Rescue Service
NTG	Northern Territory Government
NTPF	Northern Territory Police Force
PAWC	Power and Water Corporation
PPRR	Prevention, Preparedness, Response and Recovery
RAT	Rapid Assessment Team
RCC	Rescue Coordination Centre
SEWS	Standard Emergency Warning Signal
SITREP	Situation Report
STAND	Strengthening Telecommunications Against Natural Disasters
TCU	Traditional Credit Union
TDO	Territory Duty Officer
TEABBA	Top End Aboriginal Bush Broadcasting Association
TEMC	Territory Emergency Management Council
WebEOC	Web-Based Emergency Operations Centre