NT EMERGENCY SERVICE

Darwin
Local Emergency Plan

Contents

1. Document control

1.1. Governance

Document title	Darwin 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-D25-107617

1.2. Version history

Date	Version	Author	Summary of changes
12/12/2014	1	John McRoberts	First version
04/11/2015	2	Reece P Kershaw	Reviewed and updated
19/01/2016	3	Reece P Kershaw	Reviewed and updated
30/12/2016	4	Kate Vanderlaan	Reviewed and updated
11/12/2018	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
08/06/2022	8	Travis Wurst	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
06/07/2023	9	Hege Burns	Reviewed and endorsed by the Regional Controller, as the Territory Controller's delegate
19/06/2024	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

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 Darwin Local Emergency Plan, to ensure it addresses the specific needs of the community.

Agency/organisation	Name	Role/position
Belyuen Community Council	Dave Ferguson	Committee member
Bushfires NT	Margarita Towers	Committee member
City of Darwin	Andrew Thomson	Committee member
City of Palmerston	Nadine Nilon	Committee member
Department of Children and Families	Judith Dowling	Committee member
Department of Education and Training	Charlottee Ten Have	Committee member
Department of the Chief Minister and Cabinet	Simone Phasey	Committee member
Dept. of Trade, Business and Asian Relations	Graeme Steer	Committee member
Landbridge	David Power	Committee member
NT Emergency Service	Seth Dugdell	Operations Officer
NT Fire and Emergency Services	Jamie Richardson	Planning Officer
NT Fire and Rescue Service	James Bromley	Committee member
NT Health	Nicola Hunter	Committee member
NT Health	Gregory McGrath	Committee member
NT Police Force	Shaun Gill	Local Controller
NT Police Force	Kirsten Engles	Deputy Local Controller
St John Ambulance	Aaron Reynolds	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 Darwin 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

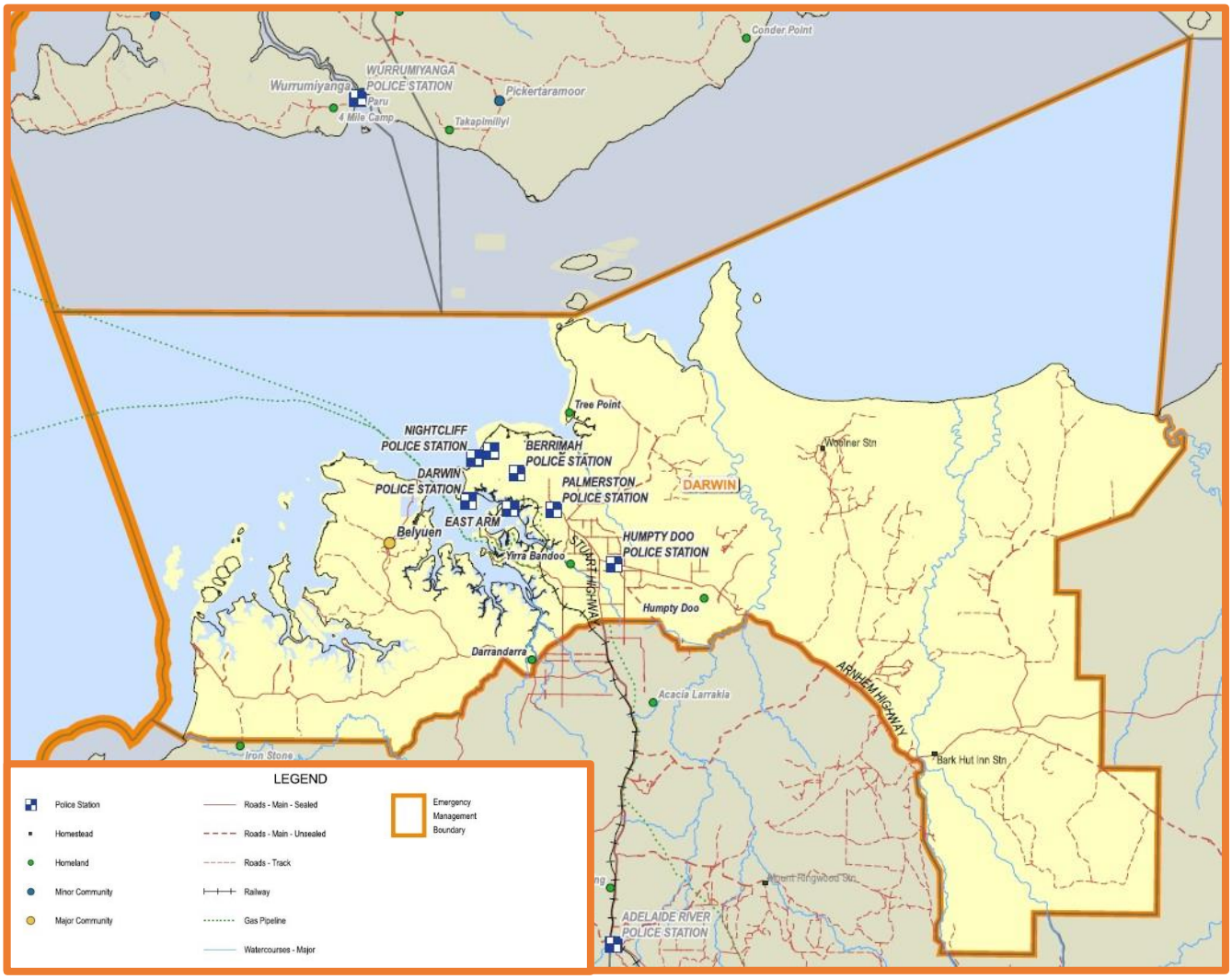
4. Locality context

This Plan complements the Northern Regional Emergency Plan[1] as it relates to the Locality. For further information on the hierarchy of plans, refer to the Territory Emergency Plan[2]. The Locality's emergency management area extends from Fog Bay in the south west, north to approximately the middle of the Beagle Gulf, east to Gunn Point, north east to the southern tip of Greenhill Island in the Van Diemen Gulf and south to the Annaburroo area.

The Locality includes the communities of: Darwin; Palmerston; Howard Springs; Coolalinga; Marrakai; Humpty Doo; Berry Springs and Dundee Beach and forms part of the Northern Region, as defined by the Territory Emergency Plan. This plan does not include the Tiwi Islands; Batchelor or Adelaide River, which each have their own Local Emergency Plan.

The area has an approximate population of 147,000. Local government areas within the Darwin area include: City of Darwin; City of Palmerston; Litchfield Shire; Wagait Shire and Belyuen Shire. This Locality also includes unincorporated areas that are bounded by the West Arnhem Regional Council, Victoria Regional Council and the Joseph Bonaparte Gulf.

To obtain more information about this Locality, Bushtel[3] is the central point for information about the remote communities of the NT, their people and culutral and historical influences.



[1] More information can be found at: https://pfes.nt.gov.au/emergency-service/publications
[2] More information can be found at: https://www.pfes.nt.gov.au/emergency-service/emergency-management
[3] More information can be found at: https://bushtel.nt.gov.au/

4.1. Climate and weather

The Locality experiences similar weather conditions which occur throughout the Top End of the NT. There is a distinct Wet Season (October to April) and Dry Season (May to September).

4.2. Geography

The Darwin area is centred on Darwin Harbour, a natural port larger than Sydney Harbour. Darwin City sits upon a coastal escarpment, with its suburbs rolling back through coastal plains. Much of the coastal area is tidal mangrove; interspersed with natural beaches, woodland and grass plains. Much of the Darwin area is urbanised, with urban/rural development a feature further inland, including some agricultural and pastoral development. Much of the coastal area also features coastal floodplains and wetlands.

Within the Darwin area boundary, there are a number of rivers and streams, the more significant being:

- Mary River (part of eastern boundary)
- Adelaide River
- Elizabeth River
- Darwin River
- Blackmore River
- Finniss River
- Rapid Creek
- Hudson Creek
- Leaders Creek
- Buffalo Creek
- Ludmilla Creek
- Pioneer Creek
- Mitchell Creek

Whilst during the Dry Season, many of these water courses are below “cease to flow” levels, some are tidal and all will flow during Wet Season rains, with some causing at least localized flooding during heavy rain events.

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 following areas are sites of conservation significance for this Locality:

- Finniss River coastal floodplain
- Fog Bay
- Darwin Harbour
- Howard sand plains
- Shoal Bay
- Adelaide River coastal floodplain
- Mary River coastal floodplain
- Chambers Bay

Further information about these sites contact the Department of Lands, Planning and Environment[4] (DLPE).

4.5. Tourism

Tourism is also a major economic contributor to the Locality, particularly throughout the months of May to October. Most of the tourist activity occurs within the city with additional facilities being provided in the outskirts of the rural areas as well.

4.6. NT and local government

This Locality sits within the Darwin, Palmerston and Litchfield Boundary.

Darwin is the seat of Government for the NT, all NT Government (NTG) agencies are represented in Darwin with most agencies administered from Darwin.

The following local government areas sit within this Locality:

- City of Darwin
- City of Palmerston
- Litchfield Council
- Belyuen Community Government Council
- Wagait Shire Council

4.7. Building codes

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

4.8. Land use

The area covered by the Darwin Local Emergency Plan has a full range of land use specifications, as set out in the Darwin Regional Land Use Plan 2015[5].

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

[5] More information can be found at: https://planningcommission.nt.gov.au/__data/assets/pdf_file/0010/409708/Darwin-Regional-Land-Use-Plan-2015.pdf

4.9. Homelands

Homelands 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 Yilli Rreung Housing Aboriginal Corporation with a total of 6 town camps within the Locality, with approximately 124 dwellings and 418 people.

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 prescribed burning, installing firebreaks and other mitigation works.

4.10. Power generation and distribution

Territory Generation manages power generation in the NT. Within the Darwin area, there are 2 power stations.

- Channel Island Power Station (CIPS) is the largest power station in the NT and the main source of electricity for the Darwin- Katherine Interconnected system. The first units were commissioned at CIPS in 1986, and Channel Island now has 310 megawatt of installed capacity. CIPS is a natural gas fired station, with diesel fuelled back-up capability.
- The Weddell Power Station connects to the Darwin – Katherine grid and consists of 3 open cycle gas turbines commissioned in 2008, with a third commissioned in 2014, Weddell has a 129 megawatt capacity.

Throughout the Darwin area, there are numerous zone substations to break down high transmission voltage into lower voltages for domestic and business use. The power network is owned and operated by the Power and Water Corporation (PAWC).

4.11. Water services

The PAWC provides potable water to the Darwin area. The primary source is the Darwin River Dam (320000 mega litre capacity) providing around 85% of Darwin's water supply. The remaining supply comes from groundwater from the McMinn's and Howard East bore fields.

4.12. Health infrastructure

The Royal Darwin and Palmerston Regional Hospital provides a comprehensive range of healthcare services including emergency and trauma, surgery, critical care, medical conditions, maternity and paediatric services and care and support services for people who are admitted or recovering at home. The hospitals service the Darwin and Top End regions as well as a being a referral centre for the NT, north-west Australia and south-east Asia.

The hospital sits across 2 campuses:

- Royal Darwin Hospital (RDH) located in the suburb of Tiwi and has approx. 363 beds and 1700 staff
- Palmerston Regional Hospital (PRH) is located in Holtze and has 116 beds. The facility supports the delivery of medical services to the Darwin region during emergency events

Primary Health care provides clinical services in greater Darwin as well as remote communities. Greater Darwin services include: child health, wound care, home visiting community allied health and aged care, prison health, cancer screening services, hearing health, oral health, environmental health and Centre for Disease Control. There are community health centres located in Casuarina, Palmerston and Child Health Clinics in Parap and Karama.

Top End Mental Health Services offers a range of therapeutic services and interventions that focus on providing a recovery approach model of care. Services include assessment, treatment and clinical interventions within a case management model to patients of all ages. Facilities located at Tamarind Centre and RDH campus.

Darwin, Palmerston and rural areas are serviced by approximately 45 General Practitioner (GP) and community clinics which offer a wide range of multidisciplinary, integrated primary care services provided by GPs, practice nurses and allied health professionals.

4.13. Medically vulnerable clients

The Top End Region Primary Health Care team maintains a list of clients that have specific medical needs (e.g. oxygen, spinal patients). This list is stored in WebEOC with limited access as it contains clinical information.

NT Health does not maintain a complete list of medically vulnerable people in the Darwin, Palmerston and Litchfield region. Medically vulnerable persons will be managed based on the incident and in partnership with relevant service providers.

Planning for and responding to the needs of high-risk individuals in emergencies is a shared responsibility across the community, industry and government sectors.

4.14. Emergency service infrastructure

The NTPF is headquartered in Darwin. There is a full range of capability based in Darwin, including general duties, investigation and specialist capabilities from public order to marine patrols. There are stations located at:

- Darwin City
- Casuarina
- Nightcliff
- East Arm
- Palmerston
- Humpty Doo

The NT Fire and Rescue Service (NTFRS) is headquartered in Darwin and is responsible for delivery of fire services, as well as accident rescue and hazardous material response within its Emergency Response Areas (ERAs) across the NT.

24/7 career firefighters staff stations at:

- Darwin (Illife St, Woolner)
- Marrara
- Berrimah (also NTFRS Special Operations)
- Palmerston
- Humpty Doo (weekdays only)

Volunteer stations are located at:

- Howard Springs
- Virginia
- Bees Creek
- Koolpinyah
- Humpty Doo

The NT Emergency Service (NTES) are headquartered in Darwin and are the hazard management authority for cyclone, severe storm and water damage, flood, earthquake and tsunami in the NT. There are 3 volunteer units located in the plan area:

- Darwin
    - based from the Berrimah Fire and Emergency Services Complex on Berrimah Road. The unit is equipped to deal with storm damage, flooding, rescue and communications.
- Palmerston
    - based from the Palmerston Fire, Rescue and Emergency Services Complex on Howard Springs Road, the unit is equipped to deal with storm damage, flooding, rescue and communications.
- Cox Peninsula
    - based in the Wagait Shire compound, the unit is equipped to deal with storm damage, road crash rescue, communications and rescue.

Bushfires NT (BFNT) are headquartered in Acacia Hills and are the lead agency for rural fire management outside of NTFRS ERAs. There are 5 fire control regions in the NT, 2 of which fall within the Darwin area – Vernon and parts of Arafura. Volunteer brigades are located at:

- Acacia Hills
- Beatrice Hill
- Berry Springs
- Cox Peninsular
- Darwin River
- Dundee
- Elizabeth Valley
- Labasheeda Park (Fly Creek)
- Livingstone
- Manton
- Milne
- Point Stuart

St John Ambulance are headquartered in Casuarina and are contracted to the NTG to provide emergency pre-hospital care and transport. Stations are located at:

- Parap
- Casuarina
- Palmerston
- Humpty Doo

St John Volunteer Brigades are located at:

- Casuarina
- Darwin
- Humpty Doo
- Litchfield
- Palmerston

4.15. Roads

The Stuart Highway terminates in Darwin City. Suburban areas are serviced by multilane feeders with a maintained network of paved streets within the suburbs. Some main and arterial roads are vested and maintained by the NTG, with the remaining roads maintained by relevant councils. In the Darwin rural area, some roads are formed dirt and maintained by local councils. Access for most of the area's roads is generally good; with wet conditions producing localised flooding that may lead to temporary or extended closures.

4.16. 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
Darwin International Airport	12°24'53"S 130°52'36"E Marrara	Certified	IATA: DRW ICAO: YPDN Runway 11/29 3354 metres (m) Runway 18/36 1524 m Asphalt surfaced Elevation 31 m Heavy aircraft capable Civilian and military use General aviation Helicopter port	Darwin International Airport Royal Australian Air Force
MKT	12°36'31.38"S 131°03'17.24"E Noonamah	Non-Certified	IATA: N/A ICAO: YMKT Runway 07/25 1200 m Bitumen surfaced Elevation 23 m Unlit runway No control tower Light aviation	Operated by the Top End Flying Club
Hughes Airstrip	12°41'20.13"S 131°05'21.11"E Noonamah	Non-Certified	Used by BFNT for aerial firefighting support	NTG and BFNT
Delissaville (Belyuen)	12°33'0"S 130°41'6"E Belyuen Cox Peninsula	Non-Certified	IATA: DLV ICAO: YDLV Runway 12/30 977 m Unsealed Light aviation	Belyuen Community Government Council

Name of the Strip	Datum	Certified Aerodrome	Details (type, length, etc.)	Operator of the strip
BFNT Milne VFB Heli-pad	12°48.210'S 130°36.652'E Bynoe Haven Road Dundee Beach	Non-Certified	10 m x 10 m concrete pad Wind sock	BFNT

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 services*[6].

4.17. Rail infrastructure

The Darwin to Adelaide Railway transits through the NT terminating in the vicinity of East Arm Port. At least 12 trains use the line each week, carrying either passengers or a variety of freight including hazardous chemicals/materials. Rail maintenance crews also operate various vehicles on the line at different times.

In the event of a major incident, many railway authorities have response capabilities and can provide specialised assistance, advice and support.

The various railway organisations are:

Organisation	Function
Aurizon	Rail operator, Train control operator of freight trains, Track maintenance, Maintenance of rolling stock, Rail Infrastructure Manager
Australasian Railway Corp	Managed by both the NT and South Australian Governments
Australian Southern Railroad	Train control operator of freight trains
BJB Joint Venture	Track maintenance
Evans Deacon Industries	Maintenance of rolling stock
Great Southern Railway	Passenger service operator (once per week)
Journey Beyond	Seasonal Passenger service operator (up to two per week)
One Rail (Previously Genesee & Wyoming Inc.)	Rail operator
Pacific National	Locomotive operator, including locomotive crews for passenger services onlyand terminal operators
All contact with these authorities is to be through the Regional Controller.	

[6] More information can be found at: https://www.casa.gov.au/operations-safety-and-travel/aerodromes

4.18. Ports (barge landings)

Port of Darwin is located within the natural Darwin Harbour. The port is operated by Landbridge Group, which controls and manages the land, waterways and facilities within the Port of Darwin. The facilities of Port of Darwin include:

- **Fort Hill Wharf**, is primarily used for cruise ship and naval operations and small non-cargo vessels. Tug boats operating in the Port are also berthed at Fort Hill. Fort Hill Wharf is a concrete deck berth on steel piles. Total length 300 m with a minimum depth alongside of 10.2 m
- **East Arm Wharf**, is the Port of Darwin's primary cargo port handling containerised cargo, bulk ore exports, livestock, dry bulk imports, break-bulk, general and bulk liquids. The wharf is sheet pile with retained fill and concrete deck on piles. Total length is 775 m with a minimum depth alongside declared annually in a local Notice to Mariners.
- **Hudson Creek,** is the primary location for servicing remote community landing barges. The berths are tidally restricted which means vessels are unable to operate on a 24/7 basis. There are a combination of 9 berths and slots operated by multiple service providers.
- **Francis Bay Barge Landings**, there are a further 4 remote community landing barge slots operated by a sole provide along the western edge of Francis Bay.

4.19. Telecommunication

Telecommunications are available across the Darwin area via a combination of landline, mobile, National Broadband Network and satellite communications delivery. Most telecommunications companies are active in the Darwin area.

4.20. 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 at and managed by the following facilities:

- Wagait Beach Community Centre
- Dundee Beach School
- Middle Point School

4.21. Local radio stations

Darwin has the following radio stations broadcasting locally:

- 105.7 FM Australian Broadcasting Corporation (ABC)
- 97.7 FM – Darwin 97 Seven FM
- 100.1 FM – Hot100
- 94.5 FM – Radio Larrakia
- 104.9 FM – Mix 104.9
- 100.9 FM – Special Broadcasting Service (SBS) Radio
- 104.1 FM – Territory FM
- FM – Top Country
- 88.9 FM – Yolngu Radio

5. Prevention

5.1. Emergency risk assessments

The Darwin 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)
- fire (within Gazetted Area)
- flood
- hazardous material
- heatwave
- marine oil spill (inside the Port)
- rail crash
- road crash
- storm and water damage
- tropical cyclone
- tsunami

Hazard	Overall consequence	Overall likelihood	Risk rating
Air crash	Moderate	Rare	**Low**
Bushfire (within Fire Protection and Management Zones)	Moderate	Likely	**High**
Fire (within Gazetted Area)	Minor	Likely	**Medium**
Flood	Minor	Unlikely	**Low**
Hazardous material	Minor	Unlikely	**Low**
Heatwave	Moderate	Unlikely	**Medium**
Marine oil spill (inside the Port)	Minor	Unlikely	**Low**
Rail crash	Minor	Rare	**Very Low**
Road crash	Moderate	Unlikely	**Medium**
Storm and water damage	Minor	Likely	**Medium**
Tropical cyclone	Moderate	Likely	**High**
Tsunami	Moderate	Rare	**Low**

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 plans[7] 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 the 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:

- NTES hazard briefings
- NTES Paddy Program
- NTFRS Smart Sparx Program
- Australian Red Cross Pillowcase Program

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

- St John Ambulance First Aid in Schools Program

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) can appoint a Local Emergency Controller (Local Controller). The Local Controller for the locality is the Superintendent of the Darwin 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 Darwin 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 Local Controllers 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 Darwin 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 NTPF and 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)

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)[8] 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, Department of Education and Training (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.

[8] More information can be found at: https://pfes.nt.gov.au/emergency-service/publications

7.14. Emergency shelters or strong buildings

Emergency shelters and 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)	Location	People capacity	Accessibility
Berry Springs Primary School	1150 Cox Peninsula Road, Berry Springs	515	Wheelchair access/toilet
Casuarina Senior College	61 Parer Drive, Moil	750 main, 973 overflow	
Dripstone Middle School	10 Delamere, Tiwi	500	Preferred shelter for those with additional needs
Girraween Primary School	25 Carruth Road, Girraween	100	Wheelchair access
Hindu Society Harmony Hall	44 Patterson St, Malak NT 0812	250	
Marrara Stadium	10 Abala Road, Marrara	1024	
Nightcliff Middle School	90 Aralia Street, Nightcliff	673 main, 1020 overflow	
Palmerston College Driver Campus	10 Tilston Avenue, Driver	500	Wheelchair access/toilet
Palmerston College Rosebery Campus	185 Forrest Parade, Rosebery	593	Wheelchair access/toilet
Sikh Centre (community shelter, vegetarian only, no smoking or alcohol)	8 Earhart Court, Marrara	200	
State Square Carpark	State Square, Smith Street, Darwin City	600	
Supreme Court Building	State Square, Smith Street, Darwin City	2165	
Taminmin College	70 Challoner Circuit, Humpty Doo	540	Wheelchair access/toilet
Wagait Shire Council Community Centre	Lot 62 Wagait Tower Road, Wagait Beach	100 main, 60 overflow	

There is also underground car parks designated as suitable sheltering including:

- Casuarina Square – pets allowed, providing they are secured within vehicle.
- Doubletree by Hilton Hotel
- Palmerston Shopping Centre

The DET in conjunction with the NTPF and the 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 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. It is up to the discretion of the local shelter manager if food will be provided.

7.15. Evacuation

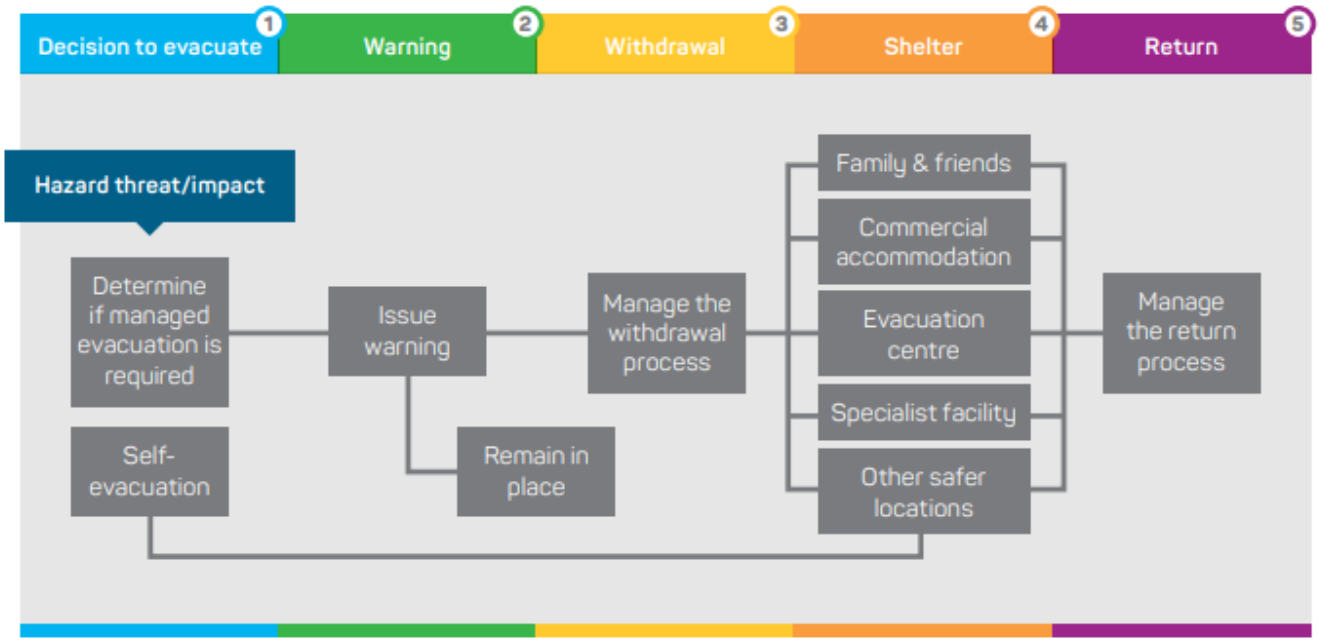
Evacuation is a risk management strategy that can be used to mitigate the effect of an emergency or disaster on a community. It involves the movement of people to a safer location and their return. The decision to evacuate a community, including establishing an evacuation centre, is not taken lightly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

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

An evacuation centre implies the provision of these services in contrast to an emergency shelter, in which people are expected to be self-sufficient.

For further information on evacuation centres/shelters management, refer to the NT Evacuation Centre 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 social, economic and natural environments.

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 Department of the Chief Minister and Cabinet (CM&C). The Local Recovery Coordinator 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 multi-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 (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 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)
Critical Goods and Services	Department of Trade, Business and Asian Relations (DTBAR)
Digital and Telecommunications	Department of Corporate and Digital Development (DCDD)
Emergency Shelter	DET
Engineering	Department of Logistics and Infrastructure (DLI)/regional and local council/s
Industry	DTBAR
Medical	DOH
Public Health	DOH
Public Information	CM&C
Public Utilities	PAWC
Survey, Rescue and Impact Assessment	NTPF/NTFES
Transport	DLI/regional and local council/s
Welfare	Department of Children and Families (DCF)

Full details of 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
Airport: commercial and public airport/planes	Darwin International Airport
Animal/livestock management	DAF
Anti-looting protection	NTPF
Banking Services	DTBAR
Broadcasting: What radio stations provide announcements?	ABC/local radio
Clearing of essential traffic routes	DLI/regional and local councils
Clearing storm water drains	DLPE/DLI/regional and local councils
Clothing and Household Items	DCF
Community Clean Up (including parks)	Local Council and NTG depending on ownership
Control, coordination and management	Designated control authority
Coordination to evacuate public	NTPF
Critical Goods and Services (protect/resupply) • food • bottle gas • camping equipment • building supplies	DTBAR
Damaged public buildings: coordination and inspections	DLI
Disaster Victim identification capability	NTPF
Emergency Alerts	NTPF/NTFES/BFNT
Emergency food distribution	DCF
EOC, including WebEOC	NTPF/NTFES
Emergency shelter staff, operations and control	DET

Functions	Agency/organisation/provider responsible
Evacuation centre - staffing, operations and control	DCF
Financial relief/assistance Disaster Recovery Funding Arrangements	CM&C/DCF (Category A measures to individuals) DTBAR (Category B measures) DHLGCD also have a role for Local Government claims under Cat B/DLI for Cat B for NTG measures
Identification of suitable buildings for shelters	LEC
Interpreter services	Aboriginal Interpreter Service
Management of expenditure in emergencies	Controlling authority and any activated Functional Groups at the direction of the controlling authority
Medical services	DOH
Network communications (IT): Responders/public maintenance and restoration of emergency communication	DCDD
Port/Barge Services	Landbridge/private barge operators
Power: protection and restoration:	PAWC
Public messaging during response and recovery	The Bureau/NTPF/NTFES
Public/Environmental Health (EH) management • All EH functions including water & food safety • Disease control	NT Health/Centre for Disease Control
Rapid Impact Assessment	NTPF/NTFES
Recovery coordination	CM&C
Repatriation	As detailed in local emergency arrangements
Restoration of NTG public buildings	DLI
Restoration of roads and bridges (council/territory) excluding railways	DLI/regional and local councils
Road management and traffic control including public Information on road closures	DLI/NTPF/regional and local councils
Sewerage: protection and restoration	PAWC

Functions	Agency/organisation/provider responsible
Survey	NTPF/NTFES
Traffic control	DLI/NTPF/regional and local councils
Transport: automobiles, buses	DLI/Public Ferries
Vulnerable Groups (medical)	Top End Health/NT Health
Waste management • collection • disposal of stock • kerbside collection • emergency waste overflow sites	DLI/DLPE/regional and local councils
Water (including drinking water): protection and restoration	PAWC

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 the landholder or one or more of the statutory fire response agencies. A bushfire is 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.

As bushfire activity is an annual hazard within the Locality, BFNT establish a 3-month standing Incident Management Team (IMT) to coordinate emergency management response of daily fire incidents during the Dry Season.

Prevention is the activities that can be undertaken by a range of stakeholders that will assist in the mitigation against a bushfire. 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 BFNT 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, forms the basis of successful fire management throughout the NT.

Outlined below is a list of key prevention activities within the Locality:

- risk assessment through the LEC and other relevant stakeholders
- fire danger period declaration, which spans over large areas when climatic and seasonal conditions present increased fire risk for a prolonged period of time. A fire danger period usually coincides with the accepted ‘fire season’ in an area. A permit to burn is required before using fire during a fire danger period in all zones
- a fire ban that 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 ERA and BFNT Fire Protection Zone (FPZ) and Management Zones (FMZ). This includes:
    - permits to burn are required throughout the entire year inside an ERA and FPZ
    - within ERAs and FPZ a 4 m wide firebreak along the perimeter boundary of all properties and with additional firebreaks around permanent structures and stationary engines are required
- compliance inspections
    - both NTFRS and BFNT undertake compliance inspections on firebreak and fuel load management within the ERA and FPZ. Fire Breaks outside these areas are encouraged but not enforceable
- fuel management activities
    - as it is across the NT, it is the responsibility of the land owner / land holder to manage and mitigate the risk on the property. This is a responsibility of both the government and private entities
    - within the Locality the following list are some of the stakeholders responsible for managing and mitigating fuel load:
        - DLPE
        - Regional Community Councils
        - Aboriginal Land Councils
        - Parks and Wildlife
        - NTFRS
        - BFNT
        - Contracted private entities.

Preparedness is the range of activities that can prepare for an incident. These are commonly training, resource management and allocations and community education.

At a Territory Emergency Plan level the BFNT maintain the Bushfire Hazard plan, which goes into further depth on strategic planning. At the local level all relevant facilities should undertake planning to determine what actions need to occur in the event of local bushfires.

The BFNT, through normal business, recruits, trains and resources their volunteers and staff for fire operations.

The BFNT undertake community engagement / awareness programs within the Locality, these programs primarily focuses on:

- private home and block preparations
- fire break inspections
- bushfire survival plans
- gamba and buffel grass management and inspections

The Australian Fire Danger Rating System[9] (AFDRS) is a nationally aligned approach to fire weather forecast. Both the NTFRS and BFNT, through a Territory wide observer network, gather a specific range of observation data at selected locations to provide data for the daily Fire Danger Rating. The ratings are described in the below image.

[9] More information can be found at: https://afdrs.com.au/

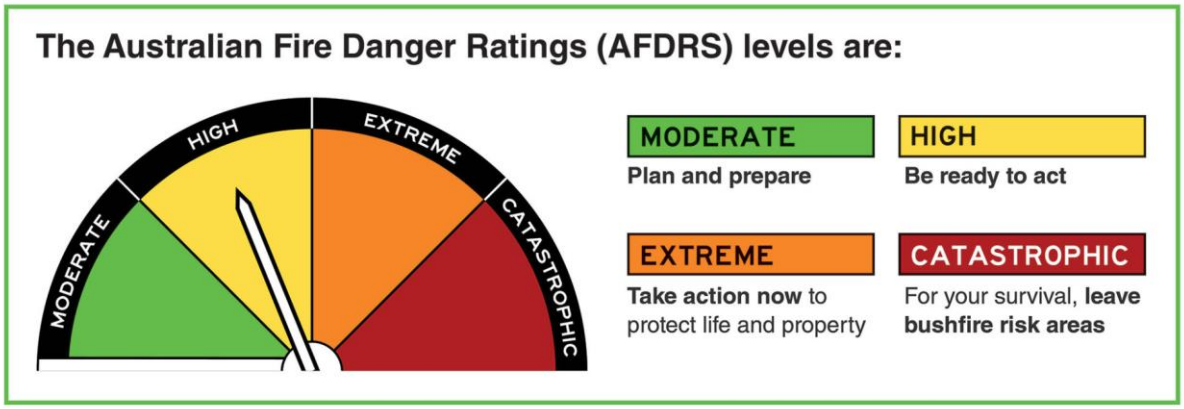


Figure 2: AFDRS Ratings

The response to bushfires is a business as usual activity for both the NTFRS and BFNT.

Both agencies are the controlling authority and hazard management authority for fires within each of their jurisdictions. Practically each agency is responsible for managing the technical aspects of responding to a bushfire and commanding its resources through their Incident Controller.

If a fire is occurring within an ERA, the NTFRS is the control and hazard management authority, whereas when the fire is in the FPZ, BFNT is the controlling and hazard management authority.

The BFNT has 3 classifications of incidents and describes them in generic terms, as shown in the table below:

Incident Classification	Description
Level 1	Level 1 fire incidents are characterised by being able to be controlled through local or initial response resources within a few hours of notification. Being relatively minor, all functions of incident management are generally undertaken by the first arriving crew/s.
Level 2	Level 2 fire incidents are more complex either in size, resources, risk or community impact. Level 2 incidents usually require delegation of several incident management functions and may require interagency response. They may be characterised by the need for: • deployment of resources beyond the initial response, • sectorisation of the incident, • the establishment of function sections due to the levels of complexity, or • a combination of the above.
Level 3	Level 3 fire incidents are protracted, large and resource intensive. They may affect community assets and/or public infrastructure, and attract significant community, media and political interest. These incidents will usually involve delegation of all the Incident Management functions.

Australian Warning System

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

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

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

In instances where the Local Controller is required to perform a task or function, the controlling authority will contact the Local Controller.

Tasks approved by the controlling authority's Incident Controller may include, but not limited to:

- liaison with key community stakeholders
- closure of roads or places
- fire cause or protection of potential area of origin
- post fire impact assessments
- establishment of reception areas/evacuation centres should people evacuate.

11.3.2. Fire (within Gazetted Area)

	Hazard	Controlling authority	Hazard management authority
	Fire (within Gazetted Area)	NT Fire and Emergency Services (NT Fire and Rescue Service)	NT Fire and Emergency Services (NT Fire and Rescue Service)

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

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

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.

Prevention is the activities that can be undertaken by a range of stakeholders that will assist in the prevention of a fire. Outlined below is a list of key prevention activities within the Locality.

- risk assessment through the LEC and other relevant stakeholders
- fire danger period declaration, which spans 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. A permit to burn is required at all times while 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
- additional fire regulations apply within NTFRS ERA, this includes:
    - permits to burn are required throughout the entire year inside an ERA
    - within ERAs a 4 m wide firebreak along the perimeter boundary of all properties and with additional firebreaks around permanent structures and stationary engines is required
- compliance inspections
    - NTFRS may undertake compliance inspections on firebreak and fuel load management
- fuel management activities
    - as it is across the NT, it is the responsibility of the land owner / land holder to manage and mitigate the risk on the property. This is a responsibility of both the government and private entities
    - within the Locality the following list are some of the stakeholders responsible for managing and mitigating fuel load:
        - DLI
        - Local council

- Parks and Wildlife
- NTFRS
- BFNT
- Contracted private entities.

Preparedness is the range of activities that can prepare for an incident. These are commonly training, resource management and allocations and community education.

The NTFRS, through normal business, recruits, trains and resources their volunteers and staff for fire operations.

The NTFRS also undertake community engagement programs within the Locality, these programs primarily focus on:

- private home and block preparations
- fire survival plans
- youth engagement

The Australian Fire Danger Rating System10 (AFDRS) is a nationally aligned approach to fire weather forecast. Both the NTFRS and BFNT, through an observer network, gather a range of observations across the NT to provide data to the daily Fire Danger Rating. The ratings are described in the below image.

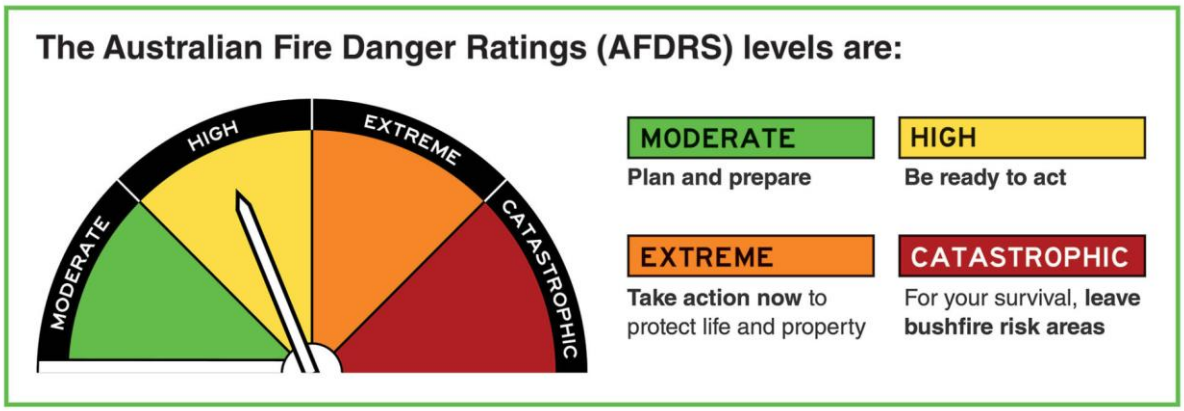


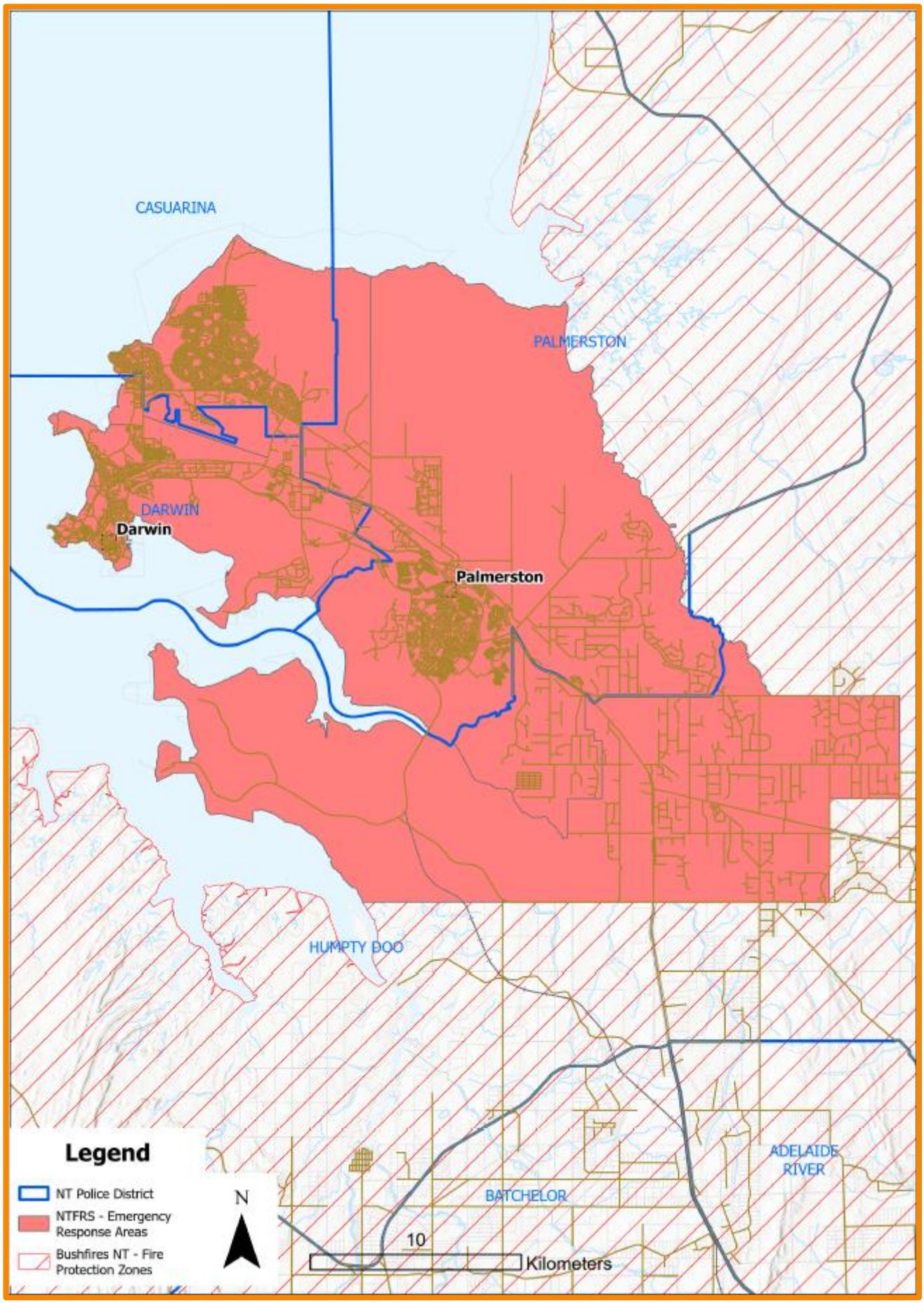
Figure 2: AFDRS Ratings

The response to bushfires is a business as usual activity for both the NTFRS and BFNT. Both agencies are the hazard management authority and controlling authority for fires within each of their jurisdictions. Practically each agency is responsible for managing the technical aspects of responding to a bushfire and commanding its resources through their Incident Controller.

If a fire is occurring within an ERA, the NTFRS is the control and hazard management authority, whereas when the fire is in the FPMZ, BFNT is the controlling and hazard management authority. This is graphically represented on page 40 Fire Jurisdictional boundary – Darwin.

[10] More information can be found at: https://afdrs.com.au/

Fire ERA map – Darwin



NTFRS and BFNT has 3 classifications of incidents and describes them in generic terms, as shown in the table below:

Incident classification	Description
Level 1	Level 1 incidents are generally characterised by being able to be resolved through the use of local or initial response resources only.
Level 2	Level 2 incidents may be more complex either in size, resources or risk. They are characterised by the need for: • deployment of resources beyond initial response, • sectorisation of the incident, • the establishment of function sections due to the levels of complexity, • a combination of the above.
Level 3	Level 3 incidents are characterised by degrees of complexity that may require the establishment of divisions for effective management of the situation.

Australian Warning System

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. All warnings and advice will be issued by the Incident Controller from the relevant controlling authority for fire.

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.

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.

In instances where the Local Controller is required to perform a task or function, the controlling authority will contact the Local Controller. Tasks approved by the controlling authority's Incident Controller may include, but not limited to:

- liaison with key community stakeholders
- closure of roads or places
- fire cause or protection of potential area of origin
- post fire impact assessments.

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.

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 Severe or Extreme Heatwave has minimal or no impact on normal operations. The Severe or Extreme Heatwave continues for 1 - 3 days. Hospitals and health services may observe an increase in activity commensurate with the incident. Response by NT Health through heat health alerts. Community alert messaging may utilise Watch and Act or Emergency Warning for day(s) where the heatwave is occurring.
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. Hospital and health service activity increases. Response by NT Health through heat health alerts and emergency medical attention.
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. Power supply outages, compounding the heatwave and resulting in the public unable to seek respite from the heat. Abnormally high presentations at hospitals for heat related illness. Abnormally high ambulance call outs. Businesses are taking significant actions to protect the welfare of their workers.

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
- 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
- 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. Road crash

	Hazard	Controlling authority	Hazard management authority
	Road Crash	NT Police Force	NT Fire and Emergency Services (NT Fire and Rescue Service)

A road crash occurs when a vehicle collides with another vehicle, pedestrian, animal, road debris, or other stationary obstruction, such as a tree, pole or building. Road crashes often result in injury, disability, death, and or property damage as well as financial costs to both society and the individuals involved. Emergency services are frequently called on to extricate seriously injured casualties from their vehicles following road crashes. This is achieved by employing space creation techniques to create openings in the vehicle. These openings make it possible to administer first aid to the casualty and to remove them from the vehicle.

A number of factors contribute to the risk of collisions, including vehicle design, speed of operation, road design, weather, road environment, driving skills, fatigue, impairment due to alcohol or drugs, and behaviour, notably aggressive driving, distracted driving, speeding and street racing.

Responses to road crash incidents will be coordinated from the Joint Emergency Services Communications Centre (JESCC). NTFRS will respond as per pre-determined response arrangements contained within SerPro system for incidents occurring within an NTFRS ERA. For incidents occurring outside of an ERA, response will be approved by the rostered NTFRS TDO.

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

- radio, television and social media posts
- targeted road safety campaigns
- community engagement strategies
- NTES road crash trailer
- training in PUASAR024 - undertake road crash rescue delivered by NTES and NTFRS to NTPF and NTFES members

Public safety message process:

- NTPF Territory Duty Superintendent to approve public messaging and forward to NTPF and NTFES Media Unit for dissemination

11.3.5. Storm and water damage

	Hazard	Controlling authority	Hazard management authority
	Storm and Water Damage	NT Police Force	NT Fire and Emergency Services (NT Emergency Service)

Severe storms are localised events that do not usually affect wide areas, consequently the threat they pose is often underestimated by the community. These storms can occur anywhere in the Territory and do so much more frequently than any other major natural hazard.

On average, each year severe storms are responsible for more damage, as measured through insurance costs, than tropical cyclones, earthquakes, floods or bushfires. It is reported that, between 5 and 10 deaths are caused by lightning strikes each year, as a result of storms. Deaths can also occur when strong winds cause tree limbs to fall, debris to become projectiles and small boats in open water to capsize.

As the Hazard Management Authority the NTES have established, equipped and trained volunteer units within NT, all of which are capable of responding to the impact of storms. Initial control and coordination will be through the NTES TDO.

The NTES maintain the Territory EOC in a state of readiness. If the 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 high risk season preparation initiatives and council clean ups
- radio, television and social media posts

Public safety message process:

- the Bureau issues a Broadcast warning to NTES TDO
- NTES TDO issues Australian Warning System to the NTPF and NTFES Media Unit
- TDO Notifies Local Controller/NTES Regional Manager
- Local Controller notifies LEC
- NTES Regional Manager in consultation with the Bureau/DLPE, Deputy Chief Officer NTES, Chief Officer NTES, Local Controller will determine recommended plan stages based on information to hand and pre-determined by local plan/hazard management plan
- NTES passes recommendations to the Regional and Local Controller to confirm plan stages
- Incident Controller approves public messaging prior to release
- NTPF and NTFES Media Unit to publish public messaging

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 on the following page.

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 Bureaus' 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.

11.3.6. Tropical cyclone

	Hazard	Controlling authority	Hazard management authority
	Tropical cyclone	NT Police Force	NT Fire and Emergency Services (NT Emergency Service)

A tropical cyclone[11] 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 area:

- 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.

[11] 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 within NT, to support response and recovery operations to tropical cyclones.

The NTES maintain the Territory EOC in a state of readiness. If the 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 (initial notification):

- the Bureau issue a cyclone advice to NTES TDO
- NTES TDO issues Australian Warning System to the NTPF and NTFES Media Unit
- NTES TDO notifies Local Controller and NTES Manager Northern Command
- Local Controller notifies LEC
- NTES Manager Northern Command consults with the Bureau, Regional Controller, NTES Chief Officer and Incident Controller to determine recommended messaging
- NTPF and NTFES Media Unit or Public Information Group receives approved messaging to publish
- responsibility for development and promulgation of warnings and information post the establishment of an IMT will rest with the Public Information Officer and the Incident Controller

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 Bureaus' 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.

11.4. Annex D: Summary of response and recovery activities

The following table outlines 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 • Spokes persons 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 • Assess Stuart Hwy to Katherine (supply route)	• Restoration of road networks and bridges • Return to business as usual

Activity	Response activities	Recovery activities
5. **Emergency accommodation**	• Emergency accommodation and shelter - evacuation centres • Provision of resources that will enable people to remain in their homes • Emergency clothing	• Evacuation centres may continue into recovery • Temporary accommodation options • Repatriation planning

6. **Medical**	• Hospital
	  - 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
	  - identify any issues with accessing facilities
	  - Access to critical supplies e.g. medicines, consumables, power or fuel and water
	• GP clinics and pharmacies
	  - identify operational GP services
	  - identify operational pharmacies
	• Support Medically vulnerable people
	• Medical retrieval services (air and road)
		• Ongoing provision of health services
		  - which may include business continuity plans
		  - engagement with stakeholders
		• Repatriation of medically vulnerable people in community
		• GP clinics and pharmacies
		  - 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	• Support the re-opening of the private business sector

Activity	Response activities	Recovery activities
	• 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	• 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 • Manage fuel supplies to emergency power generation	• Monitor fuel levels • Infrastructure repairs • Emergency fuel supplies for recovery • 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

Activity	Response activities	Recovery activities
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 Territory Highways (Stuart, Barkly, Victoria and Arnhem)
	<u>Rail</u> • Rail damage assessment • Outage estimation	• Ongoing liaison with operator to support restoration to business as usual
	<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 • Initial emergency waste volume estimates • Assessment of capacity of waste management facilities • Stand up emergency waste overflow sites • Community communications	• Continues in recovery • Manage and decommission emergency waste overflow sites
14. Repairs and reconstruction	• Private housing - impact assessments - temporary repairs • Government buildings - damage assessment	• Private housing - information and support to facilitate repairs • Government buildings - repairs and reconstruction

Activity	Response activities	Recovery activities

	• Public housing
	  - impact assessments
	• Private industry
	  - damage assessments
		• Public housing
		  - long term repair plans
		• Private industry
		  - repair and reconstruction
		• Temporary accommodation for a visiting construction workforce

15. **Transport Services**	• Staged re-establishment of public transport services	• Continues in recovery
16. **Telecommunications**	• 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**	• Police 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

12. Acronyms

Acronyms	Definitions
AAPA	Aboriginal Areas Protection Authority
ABC	Australian Broadcasting Corporation
AIIMS	Australasian Inter-Service Incident Management System
BFNT	Bushfires NT
CASA	Civil Aviation Safety Authority
CM&C	Department of the Chief Minister and Cabinet
DCDD	Department of Corporate and Digital Development
DCF	Department of Children and Families
DET	Department of Education and Training
DLI	Department of Logistics and Infrastructure
DLPE	Department of Lands, Planning and Environment
DOH	Department of Health
DTBAR	Department of Trade, Business and Asian Relations
EOC	Emergency Operations Centre
ERA	Emergency Response Area
FERG	Fire and Emergency Response Group
GP	General Practitioner
ICAD	Intergraph Computer-Aided Dispatch
ICC	Incident Control Centre
ICP	Incident Control Point
IMT	Incident Management Team
JESCC	Joint Emergency Services Communications Centre
KM	Kilometres
LCC	Local Coordination Centre

Acronyms	Definitions
LEC	Local Emergency Committee
LRCC	Local Recovery Coordination Committee
M	Metre
NERAG	National Disaster 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
PRH	Palmerston Regional Hospital
RAT	Rapid Assessment Team
RCC	Rescue Coordination Centre
RDH	Royal Darwin Hospital
SBS	Special Broadcasting Service
SERPRO	Serve and Protect System
SEWS	Standard Emergency Warning Signal
SITREP	Situation Report
STAND	Strengthening Telecommunications Against Natural Disasters
TDO	Territory Duty Officer
TEMC	Territory Emergency Management Council
WebEOC	Web-Based Emergency Operations Centre