

# What to do!

Although the possibility of storm surge is relatively small, people living in areas at risk should:

- Recognise and accept that you may be subject to the flooding and wave action caused by storm surge;
- Be prepared to evacuate and move to shelter in a higher area at short notice;
- Heed warnings, advice and instructions broadcast by the counter disaster authorities via radio and television if a storm surge is expected to occur; and
- required to take in such an event.

#### **Checklist for residents** evacuating areas at risk

- 1. Find out whether your property could be affected by a storm surge.
- Have ready your emergency evacuation kit containing portable radio and spare batteries, torch, candles and matches. Water containers, tinned food, tin opener, self-contained cooking gear and essential medicines, plastic bags, PLUS clothes, sleeping gear, children's needs and important papers.
- Decide beforehand where you will shelter, either with friends, relatives or in an emergency shelter. identified as places where residents can shelter in their cars with their pets. These car parks are built to code but are not designed as emergency shelters. They do not have supporting staff and are not fully enclosed.

- 4. When planning your evacuation route, your chosen shelter should be on higher ground.
- 5. If you have your own transport, remember to have it fuelled and ready to assist you
- 6. Above all, heed advice broadcast by the counter disaster authorities.

In addition, all normal cyclone preparations should be made.

#### **STANDARD EMERGENCY SHELTER LOCATIONS:**

Casuarina Senior College – 61 Trower Road, Moil Dripstone Middle School – 326 Trower Road, Tiwi Supreme Court Building – The Esplanade, Darwin Nightcliff Middle School – 90 Aralia Street, Nightcliff Palmerston Senior College – 10 Tilston Avenue, Driver Rosebery Primary and Middle School – Cnr Forrest Parade and Girraween Primary School – 25 Carruth Road, Girraween Taminmin College – Challoner Circuit, Humpty Doo Berry Springs Primary School – 1150 Cox Peninsula Road,

#### **CARPARKS**:

The Holiday Inn Esplanade – 116 The Esplanade, Darwin Casuarina Shopping Centre – 247 Trower Road, Casuarina Palmerston Shopping Centre and The Hub Palmerston – Temple Terrace, Palmerston

For additional advice concerning storm surge areas, contact:

Northern Territory Emergency Service Peter McAulay Centre PO Box 39764 Winnellie NT 0821 t: (08) 8922 3630 e : ntes@nt.gov.au

#### Or go to:

www.emergency.nt.gov.au www.securent.nt.gov.au

#### **NTES RECRUITING VOLUNTEERS NOW!!** phone (08) 8922 3630

Northern Territory Government Government

# DARWIN STORM SURGE GETREADY GETTHRU



#### NT Emergency Service www.emergency.nt.gov.au



# What is storm surge?

When a tropical cyclone moves across or near the coast, it can cause sea levels to rise higher than the normal tide levels. This is called a storm surge and is the result of the strong onshore winds and/ or reduced atmospheric pressure. Storm surge may also be formed by intense low-

The peak storm surge level does not necessarily occur as the cyclone crosses the coast but could be reached up to

several hours prior to landfall. A cyclone does not need to cross the coast for a storm surge to affect low lying areas on the coast.

Breaking waves on top of the surge act like a giant bulldozer, sweeping everything in its path.



Cyclones in the Southern Hemisphere are clockwise rotating systems and, where they cross the coast, storm surge levels would be at the maximum to the left (looking in the direction of motion) of their track. For example, the centre of Cyclone Tracy crossed the coast at Ludmilla. The tide gauge at Stokes Hill Wharf (the right of the cyclone track) recorded a maximum storm surge of storm surge at Casuarina Beach (to the left) was estimated to be three or four meters.

#### Who could storm surge affect in Darwin?

The map printed inside this pamphlet has been produced for emergency management uses and shows the area likely



to be affected by the estimated naximum possible storm surg

Heavy rain associated with the cyclone could result in possible escape routes being cut by flood waters.

To minimise the chance of people being trapped, any instructions to evacuate will be issued well before the arrival of a cyclone. However, at that early stage, the time and



location of landfall of a cyclone and the extent of areas likely

when the storm surge arrives on top of a high tide.

Worldwide, storm surges have been responsible for a major proportion of loss of life associated with cyclones.

## How does it occur?

The main elements affecting the height, extent and impact of a storm surge are the intensity of the cyclone; the direction of travel; speed and size of the tide at the peak of these effects; the depth of water offshore and the shape of the coastline.

the identified areas to take careful note of advice and other instructions issued in relation to storm surge. This map should not be confused with other official maps produced for land use planning which show primary and secondary storm surge

It is very difficult to location of landfall of a threatening cyclone. As the cyclone approaches the coast, wind strength and the risk of debris and fallen trees blocking

to be affected by a particular storm surge event would be difficult to predict. In order to minimise risk of loss of life or injury, more extensive areas than those potentially affected by the storm surge are likely to be the subject of instructions to evacuate.

At all times, the warning and instructions issued by the counter disaster authorities should be heeded.



## Normal tides a safety barrier!

The large tidal range in Darwin (eight meters) provides a natural safety barrier. The chance of a storm surge coinciding with the highest possible tide is quite low.

# ESTIMATED MAXIMUM STORM SURGE RISK AREAS IN THE DARWIN AREA

