PURPOSE
This Plan outlines how staff in the School of Health will prepare for cyclone season and how the School will respond in the case of a cyclone threatening the NT Top End (Darwin, Jabiru or Gove Peninsula regions). The Plan should be read in conjunction with the CDU Cyclone Emergency – General Advice available at [http://www.cdu.edu.au/fas/cyclone](http://www.cdu.edu.au/fas/cyclone) and the CDU Emergency Management Plan available at [http://www.cdu.edu.au/governance/Plans/emergencymanagementplan.pdf](http://www.cdu.edu.au/governance/Plans/emergencymanagementplan.pdf)

GENERAL INFORMATION
Cyclones are giant, spinning, whirlwind storms. They are called hurricanes in North America and typhoons in Asia. In order for a cyclone to be identified as a cyclone, it must be travelling over 119km per hour and it must have been formed over the ocean in a tropical region. In order for a cyclone to form, the ocean waters need to be warm, at least 26°C. Above the warm ocean, water evaporates and forms clouds. If there is low air pressure where the clouds are formed, it pulls them in and they begin to rotate. Tropical cyclones from the Southern Hemisphere spin clockwise, while hurricanes and typhoons in the Northern Hemisphere spin anti-clockwise.

The northwest Australian coastline between Broome and Exmouth is the most cyclone-prone region of the entire Australian coastline, having the highest frequency of coastal crossings. On average about five tropical cyclones occur during each tropical cyclone season over the warm ocean waters off the northwest coast between 105 and 125°E. On average about two cyclones cross the coast, one of which is severe. The Australian cyclone season officially runs from November to April, although some have occurred outside the season. The Category 4 Cyclone ‘Tracy’ (Darwin, 1974) was Australia’s most destructive cyclone.

<table>
<thead>
<tr>
<th>Cyclone Category</th>
<th>Description</th>
<th>Wind Speed (km/h)</th>
<th>Characteristics</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - TC</td>
<td>Strong Gale</td>
<td>Less than 125</td>
<td>High waves, may affect visibility</td>
<td>Negligible property damages</td>
</tr>
<tr>
<td>2 - TC</td>
<td>Violent Storm</td>
<td>125-169</td>
<td>Air filled with foam, high waves,</td>
<td>Minor property damages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Visibility affected</td>
<td>Significant infrastructure and crop damages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local Power failure</td>
</tr>
<tr>
<td>3 – Severe TC</td>
<td>Very Destructive</td>
<td>170-224</td>
<td>Air filled with foam and spray,</td>
<td>Major property damages</td>
</tr>
<tr>
<td></td>
<td>Winds (Hurricane)</td>
<td></td>
<td>driving high waves, Visibility</td>
<td>Significant infrastructure and crop damages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>affected</td>
<td>Local Power failure</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Injuries</td>
</tr>
<tr>
<td>4 – Severe TC</td>
<td>Very Destructive</td>
<td>225-279</td>
<td>Air filled with foam and spray,</td>
<td>Major property damages</td>
</tr>
<tr>
<td></td>
<td>Winds (Hurricane)</td>
<td></td>
<td>driving high waves, Visibility</td>
<td>Destroy infrastructure and crop damages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>severely affected</td>
<td>Widespread Power failure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Injuries and Fatalities</td>
</tr>
<tr>
<td>5 – Severe TC</td>
<td>Very Destructive</td>
<td>More than 280</td>
<td>Air filled with foam and spray,</td>
<td>Extreme property damages</td>
</tr>
<tr>
<td></td>
<td>Winds (Hurricane)</td>
<td></td>
<td>driving high waves, Visibility</td>
<td>Destroy infrastructure and crop damages</td>
</tr>
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<td></td>
<td>severely affected</td>
<td>Widespread Power failure</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Injuries and Fatalities</td>
</tr>
</tbody>
</table>
PRE-CYCLONE SEASON (September/October each year)

1. **Housekeeping**

   By November the Emergency Management team member (EO) should have arranged for rubbish, or other materials, which could become projectiles in the event of severe wind gusts to be removed, stored in secure areas and/or tied down as appropriate. If you are aware of any rubbish etc which has not been removed, stored in secure areas and/or not tied down as appropriate then please communicate with your supervisor to ensure these issues are addressed. This is a matter of high priority.

   Staff from Finance and Asset Services are available to assist and advise if required. Please communicate with facilities@cdu.edu.au or phone 6500. Note that the clear-up and secure action cannot be left until such time as a cyclone warning is issued for at that point in time all large bins are removed from the Campus site and Finance and Asset Services staff will be employed on other cyclone priority tasks.

   EHSE Faculty Office to check:
   - Blue 5 Surrounds
   - Blue 5 Courtyard

   School of Health Admin staff to check:
   - Blue 5 Courtyards
   - Blue 5 Special teaching facilities like labs, storage areas and the like
   - Yellow 1.1.20 Conference room

2. **Cyclone Kit**

   A fully operational battery operated torch, FM radio and spare batteries for those items are to be placed in Building Warden’s office in Blue 5 before end of October. Torches are placed in First Aid Kits.

   **Cyclone season information update**

   The Faculty Emergency Management Team member (EO) will:
   1. Distribute to staff all sources of cyclone information including web links to CDU, Bureau of Meteorology, EHSE Cyclone Plans etc.
   2. Provide the names of staff to be included on the Cyclone Distribution List to the CDU Emergency Controller

**CYCLONE EVENT**

**Cyclone Watch** – a cyclone watch is issued by the Bureau of Meteorology when a cyclone or developing cyclone is likely to affect coastal or inland communities within 24 to 48 hours.

**CDU RESPONSE:**

1. University’s Emergency Controller will advise all key staff and wardens on the Cyclone Distribution List of the Cyclone Watch and the current status of the cyclone. Emergency Controller remains available to provide advice and assistance to faculties and cost centres should this be required.
2. Pro Vice Chancellors/Directors and Cost Centre Managers activate Stage 1 of their individual Cyclone Action Plans.
STAGE 1 - Cyclone Watch

The Emergency Coordinator at the University will issue suitable advice via the emergency email system and at that time staff should:

1. All staff and students should monitor the CDU Cyclone Advice website (particularly one hour within BOM announcements), check emails or listen to Territory FM (104.1) for current advice.
2. Review recovery stage of action plans to ensure preparation for soft re-opening deadlines.
3. The Building Warden (or delegate) (EO) will distribute the University Notice(s) via email and post a copy at EHSE reception in Blue 5. In the event of loss of electronic or telephone communication all advice will be obtained from ABC radio and Territory FM. The Building Warden (or delegate) will monitor the radio and will become the sole point of contact for providing the updates in their area.
4. Preparation for recovery and soft re-opening may include:
   - local briefings to explain soft re-opening deadlines to staff and the responsibilities of staff to attend work following Campus reopening,
   - Identification of scheduled/timetabled learning activities (such as classes) likely to be impacted by Campus closure and soft re-opening, identifying ahead of time staff likely to be unable to attend work on re-opening and making arrangements for teaching to be operational,
   - ensuring supervisors/relevant staff have current contact lists to facilitate staff reporting in to work,
   - Designating staff to be responsible for interim activities during soft re-opening and formal re-opening period.

If a Cyclone Watch is current on a Friday then immediately move to Stage 2 arrangements and ensure all is completed before close of business.

Cyclone Warning – a cyclone warning is issued by the Bureau of Meteorology when a cyclone or developing cyclone is likely to affect coastal or inland communities within 24 hours. Communities under threat will be advised to take certain precautions to safeguard life and property.

SoH Specific Actions:

1. Faculty EO will check and monitor on away from base activities in the cyclone affected area with the Faculty Support Hub. Such activity should cease and staff should return to base. All away from base/campus activities in the cyclone affected area not already underway will be postponed upon the issue of the first official University advice. Relevant Course Coordinators / Unit Coordinators will communicate if site visits are postponed or to proceed under certain conditions.
2. Undergraduate/Graduate teaching will only cease upon notification to do so from the University.
3. Move equipment adjacent to windows to a more secure location, if practicable
   - Computers/printers in offices
   - Other laboratory equipment
   - Clean out refrigerators if practicable
   - remove equipment from desks and tables adjacent to windows if practicable.
   - check to ensure equipment stored in the open is secure.
   - take action to store documents in the safest and most secure location available (including electronic documents on external storage devices that should be backed up to corporate drives).
4. All staff will report tasks completed, movements and any other relevant information to the SoH Admin leader and or HoS Executive assistant.

CDU RESPONSE:

1. The University's Emergency Controller will notify all key staff and wardens on the Cyclone Distribution List and advise them that a Cyclone Warning has been issued, and advise them to implement the second stage of their Cyclone Action Plans. Key staff and wardens on the
Cyclone Distribution List will be alerted to the possibility of closure of the University, and system shutdowns.

2. If the Bureau of Meteorology forecasts the likelihood of cyclonic winds affecting the Darwin (Nhulunbuy) region immediately prior to, during or soon after University teaching hours, a decision to close the University will be made by the Vice-Chancellor at the earliest opportunity based on advice from the Emergency Controller. This Notice of Closure will be conveyed to staff via email and SMS alerts and CDU website announcements, and broadcast on all emergency and commercial radio stations.

The decision to close the University will be based on the following considerations: obligations of staff and student needs in relation to closures of schools and child care centres, children at home, elderly relatives and visitors; environmental factors such as local flooding; issues such as public transport and the requirement to take shelter, including the need to evacuate students in residence. Authority to advise staff to proceed home and to order any building, facility or the entire University closed rests with the Vice-Chancellor. Cost Centre Managers wishing to release staff from duty or close down all or part of any building they occupy are required to consult with their supervisor prior to taking such action.

STAGE 2 - Cyclone Warning

When appropriate the Emergency Coordinator at the University will issue advice via the emergency email system. At that time staff should:

1. Monitor the CDU Cyclone Advice website (particularly within one hour of BOM announcements), check emails or listen to ABC Radio (primary source of information) or Territory FM for current advice.
2. Turn off all electrical equipment (computers do not need to be bagged and stored under desks, but should be shut down and turned off at the wall if practicable).
3. Ensure all portable outdoor furniture and related items are stored within buildings.
4. Ensure important documents stored as safely as possible to maximise business continuity in the event of water incursion and damage.
5. And when advised to by the Vice-Chancellor, vacate the University buildings and campus and seek appropriate shelter as advised by the Northern Territory Emergency Services.

SoH Specific Actions

1. Complete Stage 1 actions
2. Commence shutdown off non-essential equipment including computers and office equipment.
3. Ensure all portable equipment and furniture is stored inside the building including the bike racks, BBQ’s etc. (SoH admin team to check)
4. Shutdown all gas supplies at the bottles (unless running an instrument deemed to be essential).
5. Commence lock up of rooms and facilities in preparation for vacation of University property
6. The Building Warden (or delegate) (EO) will distribute the University Notice(s) via email and post a copy at EHS reception in Blue 5. In the event of loss of electronic communication all advantages will be those generated on ABC Radio. The Building Warden (or delegate) will monitor the radio and will become the sole point of contact for providing the updates in their area.

POST CYCLONE

Return to work: General advice for university staff re: return to work will be available on the CDU website and broadcast by ABC radio (primary source of information) and 104.1 Territory FM. Staff will only be able to occupy buildings once they are declared safe by FAS post cyclone.

SPECIAL CONSIDERATIONS

1. Leaving work early: With approval from their supervisor, individual staff may be excused from work early to meet personal obligations such as picking up children from school/child care, attending to dependents etc.
2. **Staff on Leave:** are required to check with their supervisor via telephone prior to returning to work post-cyclone. Staff may or may not be required to return to work early to assist with post-event activity. Staff must also consult CDU website or listen to ABC Radio (primary source of information) or Territory FM (104.1) for latest information regarding the cyclone and any arrangements for CDU.

3. **Return to work:** As soon as practicable after a cyclone, staff are to communicate with their supervisor to confirm availability to return to work. Normally the communication will be to the supervisors’ work telephone number. Staff have a personal responsibility to seek information about a return to work, use judgement about environmental conditions affecting their commute to work or home, avoid absences wherever possible and communicate with line management. The need to avoid absence from work should not conflict with, and is secondary to, the need to obey safety instructions and advice from authorities such as NT Police Fire & Emergency Services. Staff with dependents who are unable to attend work are eligible for carer’s leave. Staff who do not provide appropriate justification for not attending work when instructed can be told to take LWOP or ARL.

**All Clear Stage**

The Emergency Controller will:

- Assess the impact of the cyclone and take all necessary action to resume operations at the University.
- based on the assessment the Vice-Chancellor will make a decision regarding the continued operation of the University. This advice will be broadcast by ABC Radio.

The University has endorsed new protocols for ‘soft’ re-opening of campuses. This is to ensure areas responsible for delivering front-line services, particularly teaching, are able to respond to the decision to re-open and be operational in time for resumption of full services. Consideration to re-open the campuses approximately 4 hours after the decision to re-open is made subject to the following guidelines:

a. If the decision is made to re-open at around 8am then campuses should officially re-open for services at midday with staff expected to return to work in preparation for re-opening at this time unless otherwise advised.

b. If the decision is made to re-open campuses closer to midday then campuses should officially re-open for services at 8am the following day as per normal.

**KEY CONTACTS:**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Extension</th>
<th>Full number</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Cyclone Committee Member (EO) – Natasha Lawrence</td>
<td>7134</td>
<td>8946 7134 0427 615 137</td>
<td>Casuarina – Blue 5.1.05A</td>
</tr>
<tr>
<td>Building Warden Lynley Walker</td>
<td>7137</td>
<td>8946 7137</td>
<td>Blue 5.1.05B</td>
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<tr>
<td>Deputy Building Warden</td>
<td></td>
<td>8946</td>
<td></td>
</tr>
<tr>
<td>Pro-Vice Chancellor EHSE – Sue Carthew</td>
<td>6550</td>
<td>8946 6550</td>
<td>Blue 5.1.06</td>
</tr>
<tr>
<td>HOS SEIT – Friso De Boer</td>
<td>6994</td>
<td>8946 6994</td>
<td>Purple 12.01.07</td>
</tr>
<tr>
<td>HOS Health – Rose McEldowney</td>
<td>6443</td>
<td>8946 6443</td>
<td>Blue 5.1.80</td>
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<tr>
<td>HOS Psychological &amp; Clinical Sciences – Timothy Skinner</td>
<td>6408</td>
<td>8946 6408</td>
<td>Yellow 2.2.07</td>
</tr>
<tr>
<td>Director, Research Institute of Environment &amp; Livelihoods – Andrew Campbell</td>
<td>7707</td>
<td>8946 7707 0419 208 923</td>
<td>Red 1.2.41</td>
</tr>
</tbody>
</table>
Emergency Cyclone Committee Member (Manager Technical Services) – Himi Ibrahim  
0477 391 292  
Yellow 2.1.26  
CDU Facilities and Services  
6500  
8946 6500  
Casuarina – Orange 8  
CDU Security – Casuarina  
7777  
8946 7777  
Casuarina – Red 1  

FURTHER INFORMATION AVAILABLE FROM:  
1. Charles Darwin University Management Plan  
2. CDU Cyclone advice  
(http://www.cdu.edu.au/fas/cyclone)  
3. School of Health Cyclone Action documentation  
V:\shs\Cyclone Action Plan  
4. Location of plans within Blue 5  
V:\shs\Cyclone Action Plan  
5. Staff Check list/Staff contact list :  
V:\shs\Cyclone Action Plan