

Annex II

Nomination form for cities and local governments to participate in the campaign

Please send the nomination form to isdr-campaign@un.org. Nominations will be accepted on an ongoing basis throughout 2010-11.

City / Local Government (Please indicate the year the numbers were provided.)							
City name	Cairns Regional Council						
Location (short description)	<p>Economy : Mainly Tourism and Sugar Production</p> <p>Cairns is the main point of entry to Far North Queensland and contains main commercial, industrial, education, retail and entertainment centre for the region.</p> <p>It is also major tourist destination throughout the year. The major tourist centres and accommodation houses are along the coast line and offshore island resorts (Double, Green and Low and Fitzroy Islands). The peak tourist season are the months of July and August with the population increasing by approximately 27,000 visitors per night for Cairns and approximately 20,000 for Port Douglas.</p> <p>The Cairns Region is one of the fastest growing in Australia, at around 3% annual growth - well above both the State and National average.</p> <p>Environment : Wet tropics</p> <p>The majority of the Cairns population centres are located on the coastal strip and as a result are within storm surge and flooding vulnerability areas. Most hotels, caravan parks and other tourist accommodation are located in similar areas.</p> <p>Topography : Coastal</p> <p>The Cairns Regional Council has an area comprises of a corridor of coastal flood plains bounded on the west by mountain ranges. There are three significant river systems (Barron, Russell/Mulgrave, and Daintree Rivers), which traverse these plains.</p> <p>The mains arterial road through the Region, the Captain Cook Highway (North) and Bruce Highway (South), cross the flood plains of these rivers. Flooding can quickly isolate various communities throughout the Region. Other access roads to the West and North are also prone to landslides during heavy weather conditions.</p>						
Size (year)	4135 sq km						
Population (year)	Approximately 164,356 (2009)						
GDP	<table border="1"> <tbody> <tr> <td>GDP</td> <td>US\$1.032 trillion (2010 est.) (AUD\$1.116 trillion)</td> </tr> <tr> <td>GDP growth</td> <td>2.9% (2010 est.)</td> </tr> <tr> <td>GDP per capita</td> <td>\$46,278 (2010 est.)</td> </tr> </tbody> </table>	GDP	US\$1.032 trillion (2010 est.) (AUD\$1.116 trillion)	GDP growth	2.9% (2010 est.)	GDP per capita	\$46,278 (2010 est.)
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	GDP by sector agriculture: (3.8%); industry: (24.9%); services: 71.3% (2009 est.)
Hazard type(s)	<p>Cairns Regional Council fundamentally adopts an ‘all-hazards’ approach to their disaster planning. This approach recognizes that although counter-measures will often vary with specific hazards, it is desirable to establish a single set of management arrangements capable of encompassing all hazards. However our disaster planning also identifies particular areas vulnerable to specific risk (i.e. Storm Tide, Cyclone, Tsunami, Flooding), and developed procedures and plans accordingly. The main risks to Cairns (in order of priority) are:</p> <ol style="list-style-type: none"> 1. Cyclones / Storm Surge 2. Flooding 3. Tsunami 4. Bushfire <p>Other threats identified in Council’s Risk Management Strategy, but are deemed as lower risks, are Heat wave, Landslip and Earthquake.</p>
Name of Mayor / Commissioner / Governor / Community leader	
Mayor Val Schier	
Which part of the city administration will be the focal point for the Campaign?	
Cairns Regional Council's Disaster Management Unit. The Disaster Management operations of Local Government is governed by the Disaster Management Act 2003 (Qld)	
Contact details Focal Point	
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Function	Coordinator Disaster Management
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Which local institutions will be engaged in the Campaign? (in addition to the local government)	
<ul style="list-style-type: none"> • Mayor and Councillors; • Cairns Regional Council (Disaster Management, Infrastructure Planning, GIS, Strategic Planning and Community Development); • Other Neighbouring Regional Councils (Tablelands, Cassowary Coast, Townsville, Burdekin and Hinchinbrook); • General Community; 	

- Local Disaster Management Group - Cairns Region, including:
 - James Cook University;
 - Emergency Management Queensland;
 - Queensland Police Service;
 - Queensland Fire & Rescue Service;
 - Queensland Ambulance Service;
 - Cairns Base Hospital and Cairns Private Hospital;
 - Department of Transport and Main Roads;
 - State Emergency Services;
 - Ergon Energy;
 - Queensland Health;
 - Ports North;
 - Cairns Airport Pty Ltd;
 - Tourism Tropical North Queensland;
 - Australian Red Cross; and
 - Bureau of Meteorology.

Major Disaster Risks

(Please indicate major disasters that have occurred, prevailing hazards and vulnerable conditions)

Summary by Hazards

Cyclone

Cyclones are a frequent occurrence for the Cairns Regional Council area. Since 1878, Cairns has been affected by at least 60 cyclones, of which eleven have had potential to generate hazardous storm tides, had they made landfall closer to or north of Cairns, or at higher tide.

Recent history of Severe Tropical Cyclones and Tropical Low affecting Cairns are detailed below:

- **OLGA** - Jan 2010 – Cat 1
- **NELSON** – Feb 2007 – Low/Cyclone
- **MONICA** – April 2006 – Cat 3
- **LARRY** - March 2006 – Cat 4
- **INGRID** - March 2005 – Cat 4
- **GRACE** – March 2004 – Low/Cyclone
- **ABIGAIL** – February 2001 – Cat 1
- **STEVE** - February 2000 – Cat 2
- **RONA** - February 1999 – Cat 3
- **JUSTIN** - March 1997 – Cat 2
- **JOY** - December 1990 – Cat 4

The [Bureau of Meteorology's website](#) contains a full list of those cyclones that have threatened the Cairns area. In the past 5 years there has been five Category 5 systems formed in the East Coast region of Australia (Severe Tropical Cyclones Ingrid, Larry, Monica, Hamish and Ului).

Storm Tide

The majority of the Cairns population centres are located on the coastal strip and as a result are within storm surge and flooding vulnerability areas. Most hotels, caravan parks and other tourist accommodation are located in similar areas. As a result Storm Tide is identified as one of Council's major disaster risks.

Cairns Regional Council has recently conducted a Storm Tide Study, which includes detailed mapping for its area. The Storm Tide Zones identified in this Study are in accordance with the [National Storm Tide Mapping Model](#):

<u>Zone</u>	<u>Inundation Depth</u>
Zone 1	HAT to 2m AHD
Zone 2	2m to 2.5m AHD
Zone 3	2.5m to 3m AHD
Zone 4	3m to 3.5m AHD
Zone 5	3.5m to 4m AHD
Zone 6	4m to 4.5m AHD
Zone 7	4.5m to 5m AHD

A subsequent study this year (2010), used this information to create a detailed *Evacuation Strategy* for the region. This Strategy further defines the storm tide risk to the Cairns Region and the actual population affected. It also includes mitigation options, evacuation routes and safer areas, should an event occur.

Council is committed to furthering this strategy over the next few months, which will involve a dedicated community engagement strategy and the production of public mapping. The Table below is an extract from the recent *Evacuation Strategy*.

Flooding

Localised flooding is experienced in Cairns on an almost annual occurrence, isolating a number of low-lying communities for a short period.

A number of urban areas in the Barron River delta such as Caravonica, Lake Placid, Holloways Beach, Machans Beach, Redlynch and Yorkeys Knob, together with the roads networks that link them to the city centre are particularly susceptible to inundation. Since 1911, 'major' flood levels have been reached at least seven times.

Cairns' Central Business District and its environs, which includes emergency service headquarters, bulk fuel and food supplies, are located on reclaimed swamps, coastal sand ridges and surrounding foothills between the ocean, Trinity Inlet and the steep slopes of the Whitfield Range. This area is drained by the two major water courses of Saltwater Creek and Trinity Inlet. All other minor tributaries have been modified to drain into these two systems.

An extensive network of urban drainage systems exists. During heavy rainfall events combined with a high tide, the storm water surcharge in the drainage system can cause major flooding in the central Cairns area. More than half the total area is flood prone in the 1 in 100 year flood event category.

Recent [mitigation works](#) have been done in the CBD area in an attempt to alleviate this flooding risk.

Tsunami

The Cairns Region has a recent history of a tsunami scare in April 2007. This highlighted Cairns' vulnerability to this type of event. An evacuation strategy prior to this warning would have proved extremely beneficial in minimising public risk and the resulting panic that occurred.

In the unplanned evacuation that resulted from this warning, roads became congested, public panic

was high and people evacuated from 'safe' areas and travelled through 'vulnerable' areas to get home or to schools and day care centres. Cairns was extremely fortunate that tsunami inundation did not occur in this instance.

Cairns Regional Council has since created a Tsunami Evacuation Guide ([available online](#)) illustrating evacuation routes for this type of event, including a map and information on the threat. It is hoped that promoting this information as well as further development of the Evacuation Strategy will mitigate the risk posed to the community from such a warning.

Council plans to develop a specific Tsunami Sub-Plan in the coming months.

Bushfire

According to the Cairns Natural Disaster Risk Assessment Report (2004), Cairns is located in a relatively low risk area for bushfires with respect to injury to people and damage to buildings. However, the hill slopes around Cairns are vulnerable to bushfire and increasing development in these areas adds to this vulnerability.

Rural production, particularly the sugarcane industry, can also pose a fire threat due to trash left on the fields after harvest. There is potential for fires starting on these fields to spread quickly to surrounding residential communities.

Cairns Regional Council has identified mapping for their potential bushfire risk areas and regular mitigation initiatives, such as fuel reduction fires are implemented.

Achievements and plans in relation to the ten essentials areas

A - Make an estimation of the status per essential as follows:

1 - poor/nothing in place, 2 - some progress in place, 3 - in place, well functioning, or N/A

B - Please describe main areas of progress, the achieved results as well as activities and plans to improve the current situation.

Essential 1 – Risk reducing organization and coordination in place

A - 3

- Council has a [Disaster Management Plan](#) which identifies the current Disaster risk for our area. The plan is informed by Disaster Risk Management Studies as well as the Local Disaster Management Group (LDMG) who convene at least 10 times annually. This Plan and its 13 associated operational plans are update on an annual basis, to ensure its currency and any new risks are identified.
- Dedicated [Disaster Management Unit](#) to ensure Council meets its Disaster Management obligations and commitment to the community
- The LDMG is also the main Group responsible for the Local Disaster Management planning, recovery, mitigation and response phases. Agencies which make up this Group are:
 - James Cook University;
 - Emergency Management Queensland;
 - Queensland Police Service;
 - Queensland Fire & Rescue Service;
 - Queensland Ambulance Service;
 - Cairns Base Hospital and Cairns Private Hospital;
 - Department of Transport and Main Roads;
 - State Emergency Services;

- Ergon Energy;
 - Queensland Health;
 - Cairn Port Authority (Airport and Seaport)
 - Tourism Tropical North Queensland;
 - Australian Red Cross; and
 - Bureau of Meteorology
- LDMG and Council’s Disaster Management Unit work together to produce other planning and policy instruments which benefit Disaster Management e.g.
 - Memorandum of Understanding (MOU) with government and non-governmental organisations on the coordination of evacuation centres;
 - MOU with Regional Councils on joint disaster management activities and coordination (Tablelands, Cassowary Coast, Townsville, Burdekin and Hinchinbrook);
 - MOU with James Cook University Centre for Disaster Studies;
 - Agreement with government and private industry on the provision of evacuation centres;
 - Maintaining evacuation and recovery register of vulnerable residents; and
 - Threat Specific Studies and Strategies (e.g. Storm Tide Study, Evacuation Strategy).
 - A number of LDMG Sub-Committees have also been established to help manage the disaster planning process, such as Evacuation, Community Support, Community Engagement and Communications Sub-Committees.
 - Council is also currently building dedicated Disaster Coordination Centre (to be finished in September 2010), which is purpose built to withstand a Category 5 cyclone and is well outside any storm tide, flooding, tsunami bushfire or landslide vulnerability. This will ensure Council is able to maintain an uninterrupted 24/7 response capability in the event of a disaster. The total cost of the building is in excess of \$ 3 million.
 - Council is committed to maintaining and resourcing a State Emergency Services (SES) volunteer groups for the region
 - Council also maintains and regularly updates a Corporate Risk Register detailing risk to the community and Council as a whole.

Essential 2 – Budget assigned	A - 3
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- Annual Capital budget for Disaster Management. Recent commitments have included:
 - Upgrade Flood Warning Network - \$150,000
 - annual allocation of funds for the upgrade and/or replacement the 16 SES buildings - \$300,000 annually
 - Replacement SES vehicles
 - Drainage and Flood Mitigation 2009/10 budget – \$7.5 million
 - Building a dedicated Disaster Coordination Centre - more than \$3 million
- Annual Operational budget including the operations and staffing of the Disaster Management Unit, Disaster Coordination Centre and other Disaster Management initiatives within the region. Recent commitments have included:
 - Community Education/Awareness Campaign - \$30,000

<ul style="list-style-type: none"> - Cairns Region Storm Tide Study - \$125,000 - Evacuation Strategy – Phase One - \$76,000 - Barron River Delta Flood Model - Evacuation Strategy – Phase Two (Final) - \$115,000 - Implementation of new Guardian software for Disaster Coordination Centre - \$45,000 <ul style="list-style-type: none"> • Annual budget for management and resourcing of the local State Emergency Service. The State Emergency Service in the Cairns Region consists of over 300 dedicated volunteers who train regularly in order to be able to provide assistance to the community in times of disaster. Council is committed to resourcing this essential volunteer emergency service through the provision and maintenance of training facilities, vehicles and equipment to the 11 active groups. • Funding for infrastructure restoration works as a result of a disaster event (Natural Disaster Relief and Recovery Arrangements (NDRRA)) to restore public assets. Funding is allocated from Local, State and Federal governments - current estimate for 2009/10 is \$12 million 	
<p>Essential 3 – Risk assessment prepared</p>	<p>A - 3</p>
<ul style="list-style-type: none"> • Local Disaster Management Plan; • Natural Disaster Risk Management Reports and Studies for the region; • Climate Change Adaptation Action Plan - including recommendations for Disaster Management; • Corporate Risk Register; • Storm Tide Report and mapping; • Evacuation Strategy and mapping; and • Hazard mapping. 	
<p>Essential 4 – Investment in risk reducing infrastructure</p>	<p>A - 2</p>
<p>Major drainage and flooding works. 2009/10 initiatives include:</p> <ul style="list-style-type: none"> - \$3.15 million on CBD south flood mitigation works – a joint project funded by all levels of Government - \$740,000 for Kamerunga Village flood mitigation works. - Lake Placid flood gates and mitigation works - \$500,000 for the O’Leary’s Creek culvert. - \$250,000 for a study into the Moody Creek detention basin. <p>Other infrastructure:</p> <ul style="list-style-type: none"> - \$3 million to construct the dedicated Disaster Coordination Centre - Construction of Fibre Optic link between main Administration building and new Disaster Coordination Centre to ensure business continuity and data recovery. - Up to \$1 million will be spent on further shoreline erosion measures to protect our beaches under Council’s Shoreline Erosion Management Plan. - \$300,000 for upgrades and improvements to SES buildings 	
<p>Essential 5 – Safe schools and health facilities</p>	<p>A - 2</p>
<ul style="list-style-type: none"> • Conduct annual awareness sessions with local schools, who are governed either privately or by State Government. • Liaising with the School Curriculum Manager for the Region regarding including disaster 	

management in school curriculum.

- Disaster management and preparedness information package sent to all schools in our region.
- Cairns Base Hospital and Cairns Private Hospital are members of the Local Disaster Management Group (LDMG).

Essential 6 – Risk-compliant building regulation and land use applied

A -3

Land Use Management Initiatives

CairnsPlan (Council's current planning instrument for our region) contains Overlay Codes for the Cairns Area which regulate assessable development where the site is subject to possible landslip, bushfire or flooding and is referenced in:

- 3.5.1 Hillslopes
- 3.5.11 Bushfire Hazard
- 3.5.12 Flood management

Overlay codes have been developed for the above and are:

- 4.6.4 Hillslopes Code
- 4.6.7 Bushfire Hazard Code
- 4.6.8 Flood Management Code

The new *FNQ Regional Plan* has particular reference to disaster management, including considerations for local government planning.

Building Codes and Building Use Regulations

In Cairns Regional Council the following codes and regulations apply:

- Building Code Australia
- Building Act 1975
- Building Standards Regulation 1993
- Building Regulations 1991
- Building Fire Safety Regulation
- Body Corporate and Community Management Act
- Building Units and Group Titles Act
- Building and Other Legislation Amendment Act
- Building Services Authority Act
- CairnsPlan
- Douglas Shire Planning Scheme
- Integrated Planning Act 1997
- Local Government Act 1993
- Queensland Development Code
- State Planning Policy 1/03 guideline: mitigating the adverse impacts of flood, bushfire and landslide
- State Coastal Management Plan-Mitigating the Effects of Storm Tide Inundation

Legislation

In addition to the Disaster Management Act 2003 the following Acts are relevant to Cairns Region Disaster Management;

- Agricultural Chemicals Distribution Control Act 1966
- Ambulance Service Act 1991
- Chemical Usage (Agricultural and Veterinary) Control Act 1988
- Coastal Protection and Management Act 1955
- Dangerous Goods Safety Management Act 2001
- Disaster Management Act 2003
- Environmental Protection Act 1994
- Exotic Diseases in Animals Act 1981
- Explosives Act 1999
- Fire and Rescue Services Act 1990
- Public Health Act 2005
- Integrated Planning Act 1997
- Land Act 1994
- Liquid Fuel Supply Act 1984
- Local Government Act 1993
- Marine Parks Act 1982
- Native Title (Queensland) Act 1992
- Nature Conservation Act 1992
- Petroleum Act 1923
- Public Safety Preservation Act 1986
- Terrorism (Commonwealth Powers) Act 2002
- Water Act 2000
- Workplace Health and Safety (Miscellaneous) Regulation 1995

Essential 7 – Education programmes and training in place

A - 3

On an annual basis, the Disaster Management Unit (in consultation with the Local Disaster Management Group and Corporate Communication Branch) deliver a cyclone season public awareness campaign. In 2009-10 this process was formalised in a Community Education Strategy developed by the Local Disaster Management Group's Community Education Sub-Committee.

A summary of Community Education activities for the 2009/10 Cyclone Season are as follows:

- Dedicated *Plan, Pack, Listen* campaign used across all materials:
 - *Plan* – make a household emergency plan
 - *Pack* – pack an emergency kit
 - *Listen* – stay informed
- 'Preparing for Cyclones' brochure - print 15,000 and distribute;
- Sponsor and provide copy for the 'Cairns Post Cyclone Survival Guide' inserted in Local newspaper 'The Cairns Post' (111,000 distribution);
- Distribution of 3000 additional copies of the Cyclone Survival Guide;
- Social Networking on [Facebook](#) & [Twitter](#);
- Sunbus advertising on 3 buses for the duration of the season;
- Dedicated 'disaster' web address available via council's website – www.cairns.qld.gov.au/disaster ;
- Sponsorship of the www.cairns.com.au/cyclone website with links to the Council website;
- Advertisements in several local publications
- Regular cyclone tips in local newspaper's Council Corner;
- Cyclone preparedness displays at Council libraries and colouring-in competition;
- Media updates (TV, print and radio);

- Community and school presentations (includes mail out to all schools in region);
- Information provided to Council displays for community events (Cairns Show, Carnival on Collins, Baby Expo etc);
- Annual Disaster Coordination Centre Training
- Online multi-lingual cyclone information guides (Arabic, Chinese, Hmong, Italian, Japanese and Thai);
- Online Tsunami Guide; and
- Update and promote the Evacuation and Recovery Register.

- An important outcome of the final phase of Council's *Evacuation Strategy* is to develop and implement a community engagement campaign. This will be the focus of the Community Education Sub-Committee over the coming months. Some of the intended outcomes of the education strategy are:
 - Improved community resilience and willingness of people to take responsibility for their own safety and respond to disaster events
 - Improved reaction time during an evacuation
 - Reduction in the reliance of government during disaster situations, and
 - Identification of vulnerable areas, population at risk, routes and community expectations.

Another review of the Community Education Strategy will be undertaken prior to the 2010-11 cyclone season.

Essential 8 – Ecosystems and natural buffers protected

A - 2

According to Council's *Climate Change Adaptation Plan 2009* (CCAP), Far North Queensland is one of the six key 'hot spots' in Australia where the impacts of climate change are likely to be significant, with potentially large losses to built environment from flooding, sea-level rise and storm surges associated with tropical Cyclones.

In addition, one of the projected risks of climate change for the Cairns area is an increased exposure to catastrophic events, such as cyclone flooding and droughts and also compound the effects of existing threats (FNQ Regional Plan 2009-2031).

Studies detailed in the CCAP have also shown there will be a marked increase in the severe category 3.-5 cyclones, and an increase of 60% and 140% of the intensity of the most extreme cyclones for 2030 and 2070 respectively .

A qualitative risk assessment was undertaken as part of CCAP for the Cairns Region, which identified the extreme risks for both 2030 and 2070 to be associated with four main factors:

1. increasing storm surges;
2. more intense tropical cyclones;
3. sea level rise; and
4. more intense rainfall.

The CCAP also details the recommendations listed below as critical responses for Natural Disaster Planning and Response. Most of the items are either complete or in the process of being completed:

- Enhancing Cairns Regional Council's natural disaster coordination capacities, including establishing a

new flood immune disaster coordination centre;

- Updating storm surge maps to take account of projected changes in storm surge heights resulting from higher sea levels and more intense tropical cyclones;
- Preparing business continuity plans for essential Cairns Regional Council services;
- Ensuring flood immune evacuation routes are available;
- Enhancing community and business operator awareness of the risks associated with natural hazards and measures they can put in place to reduced their individual vulnerability and build their resilience;
- Enhancing Cairns Regional Council's capacity to respond to potentially potential more frequent and more extreme natural hazards; and
- Engaging agencies that have an interest in natural disaster planning and response including the Queensland Department of Community Safety, the Bureau of Meteorology and other emergency planning and response organisations.

The Evacuation Strategy is also aimed at enhancing community well being and safety, as well improving the community's long-term resilience to natural disasters.

Essential 9 – Early warning systems installed

A - 3

The *National Emergency Warning System* has now been implemented for all levels of Government to access across the Country. This system will allow Emergency Alerts to be sent by emergency services to all landline telephones and mobiles in a 'defined' geographical location.

It will be used in short notice disaster events such as bushfire and tsunami threats. It is not an opt in service and will go to all phone/mobile with a billing address in the 'defined' location.

Further information on this multi-government initiative can be found [online](#).

Essential 10 – Needs-based (survivors) reconstruction

A - 2

- Council has a Community Support Sub-Committee, which provides input to the Community Support Operational Plan and the recovery planning for the local Government area. This Group focuses on the 'immediate' recovery period to an event and comprises of the following agencies:
 - Australian Red Cross
 - State Emergency Services
 - Cairns Regional Council
 - Department of Communities
 - Homelessness Hub
 - Salvation Army
 - St Vincent de Pauls Society
 - Centacare
 - Surf Lifesaving Qld
 - FNQ Volunteers

- RSPCA - Royal Society for the Prevention of Cruelty to Animals

The immediate recovery response can include emergency food provision, resupply, provision of emergency accommodation and counselling.

- Council is also a key member of the District Community Recovery Committee, a State Government-led group with membership across a range of local, state and federal government and non-government agencies. It plans for, and coordinates, the delivery of more 'longer term' community recovery services to people affected by disasters. Recovery planning and coordination in the Cairns district is underpinned by the principles of:
 - Understanding the community context
 - Recognising the complex and dynamic nature of emergencies and communities
 - Using community-led approaches
 - Ensuring a planned, coordinated and adaptive approach
 - Employing effective communication with affected communities and stakeholders
 - Acknowledging, supporting and building on community, individual and organisational capacity
- All three levels of Government (Local, State and Federal) also provide funding under the Natural Disaster Relief and Recovery Arrangements (NDRAA) to repair damage caused by a disaster event - such as; physical infrastructure (roads, rail, bridges etc), and personal hardship payments. The NDRRA arrangements are aimed at assisting the community to recover from a disaster event. The Guidelines can be found [online](#).