

Disaster Risk Reduction: Building cities resilience to achieve Sustainable Development Goals K-SAFETY EXPO 2017

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Cairns Regional Council

Disaster Preparations, Resilience and Response

The Queensland Emergency Management Framework-

- 4 underlying principles; Leadership, Public safety; Partnership and Performance
- Shared responsibility in Hazard Identification & risk assessment; Hazard Mitigation & Risk Reduction; Preparedness & Planning; Emergency Communications; Response and Relief & Recovery
- Assurance activities include Tier 1 activities (self-assessment); Tier 2 activities (peer review, exercise evaluation) and Tier 3 activities IGEM led review or post event analysis)

 **PLAN**  **PACK**  **LISTEN**

Make an emergency plan

Pack an emergency kit

Stay informed

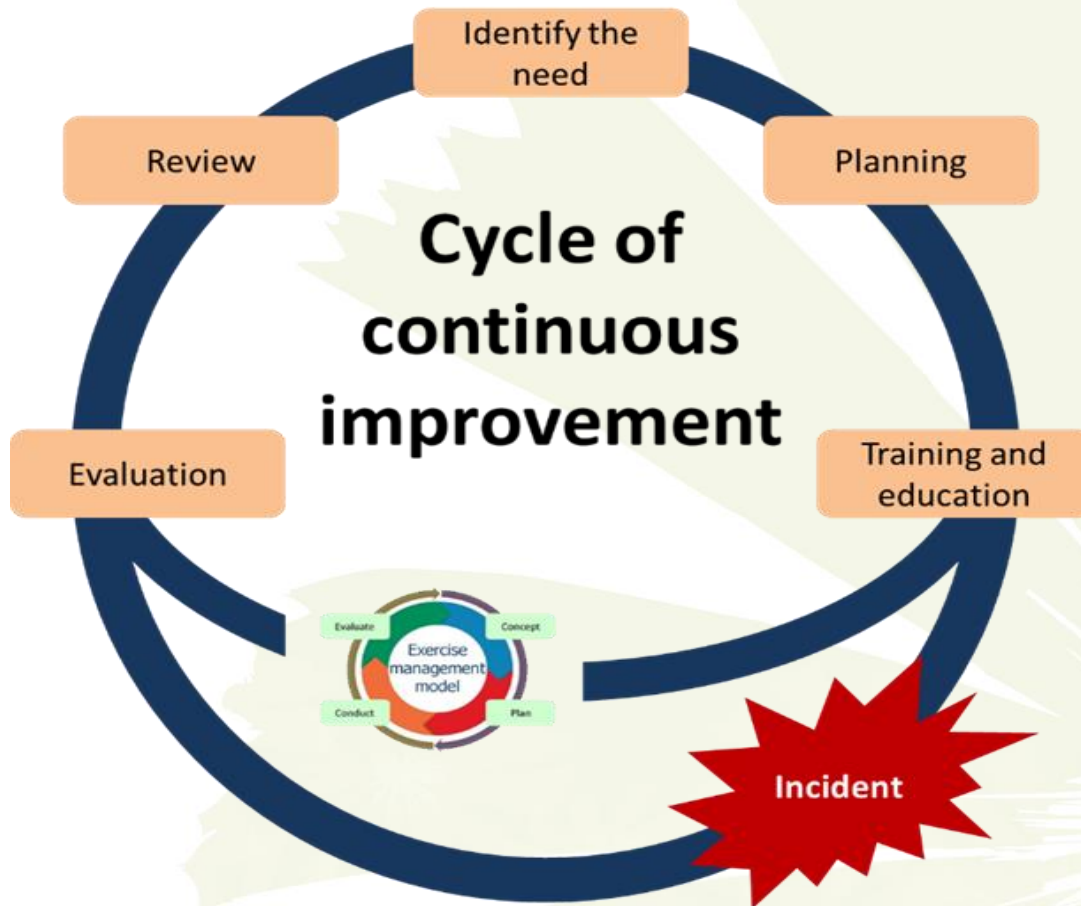
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Disaster Preparations, Resilience and Response

Queensland Disaster Management Arrangements



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CORPORATE CITY GOVERNANCE – ESSENTIALS 1 - 3

- Dedicated Local Disaster Coordination Centre
- Implementation of DCC Incident Management Team
- Concept of Operations
- Facilitation of LDMG shared responsibility ethos – utilities, NGO, NFP and private institutions to compliment and enhance whole of Government approach
- Creation of dedicated Disaster Resilience Officer within Council
- “Be Ready Cairns!” Disaster Resilience 5 year Action Plan
- Integration of agency information management systems

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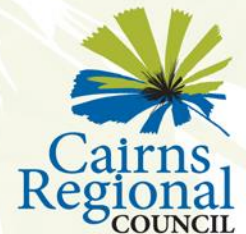
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CORPORATE CITY GOVERNANCE – ESSENTIALS 1 - 3

- Comprehensive disaster management planning
- Features the consistent identification and passage of Residual Risk between levels of the QDMA to directly inform planning and resource allocation and promotes active communication, cooperation and coordination.
- Effective, locally led, integrated disaster coordination services including recovery
- North Queensland Joint Council Disaster Management Network – 20 local governments sharing training, resourcing, resilience initiatives and ideas

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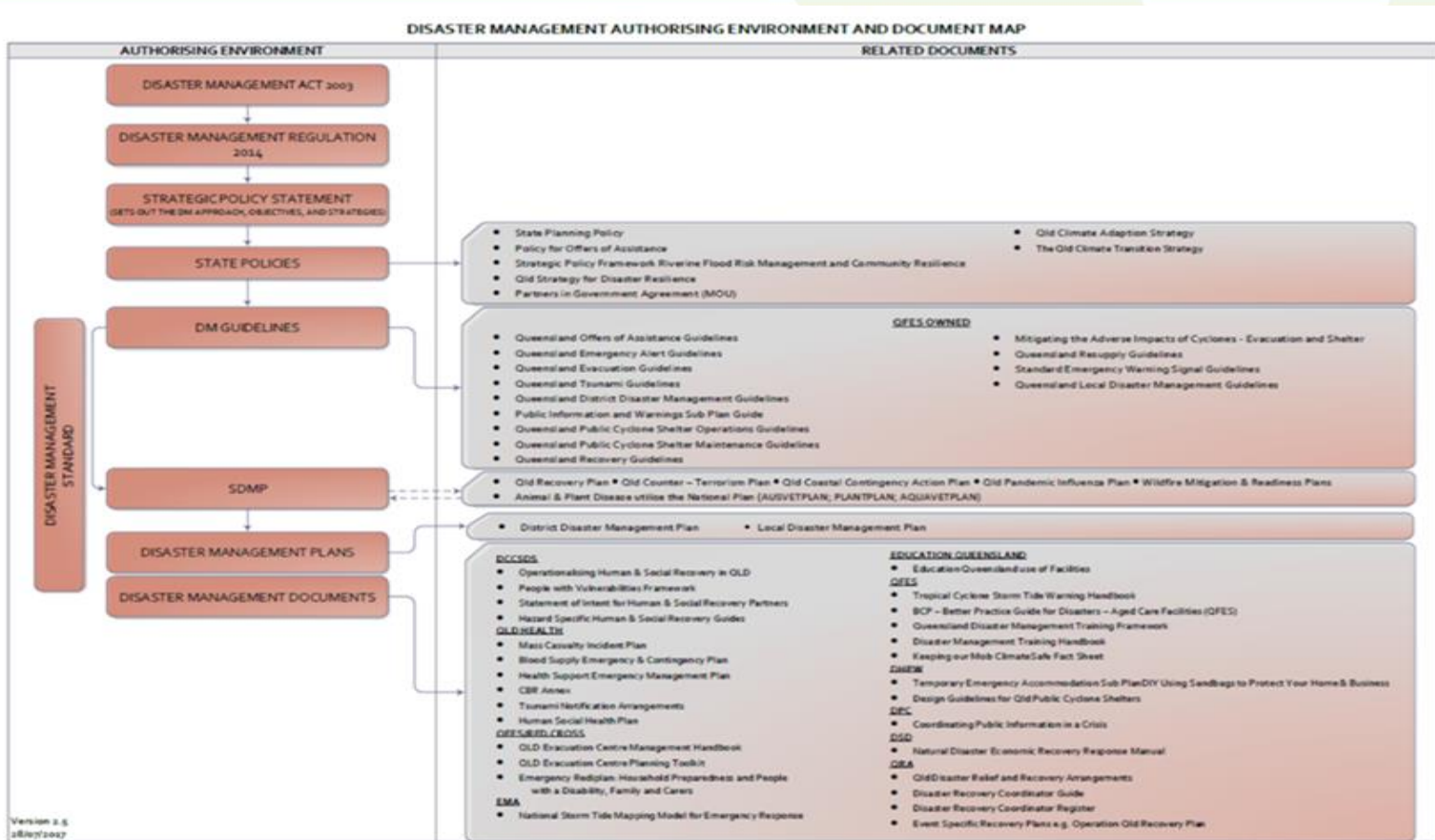
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CORPORATE /CITY GOVERNANCE – ESSENTIALS 1 - 3



Version 2.0
28/07/2027

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CORPORATE /CITY GOVERNANCE – ESSENTIALS 1 - 3

- Local Government investment in its own risk management strategy, BCP, critical infrastructure interdependencies, operational plan for response and recovery.
- Local government investment in technical studies/ modelling and resilience capacity building programmes
- State grant programmes for DRR mitigation projects
- Natural Disaster Relief and Recovery Arrangements – joint financial assistance from Australian Government/State Govt. to alleviate the financial burden on states and territories as well as urgent financial assistance to disaster affected communities

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INTEGRATED PLANNING – ESSENTIALS 4 - 8

Urban planning schemes – development & land use zones;
cyclone building codes

Critical infrastructure risk analysis – hardening of facilities

Sustainable building design and development

Comprehensive approach;



Figure 1.1 The 'comprehensive approach' to disaster management

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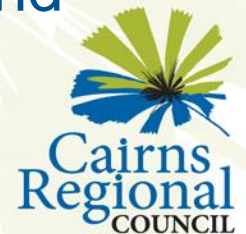


INTEGRATED PLANNING – ESSENTIALS 4 - 8

- Five year strategy based on public participation (IAP2), education for sustainability (EFS) and community based social marketing principles.
- Consistent with state and national resilience strategies.
- Focus on working with identified communities in a targeted, prioritised way.
- Aim is developing community-based resilience in a wider context of strong, connected communities – not just about disasters.
- Consistent with related council plans and strategies.
- Strong emphasis on partnerships, understanding and having relationships with our communities



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INTEGRATED PLANNING – ESSENTIALS 4 - 8

- **Community Engagement Strategy**
- Dedicated **'Plan, Pack, Listen'** campaign
- Social networking.
- Dedicated 'disaster' web pages.
- Advertising, information, promotion.
- Focus on vulnerability via various factors including ethnicity, disability.
- In-community group education sessions.
- Commitment to UNISDR Making Cities Resilient Campaign.
- Evacuation strategy and associated engagement.



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Community Engagement Examples



How to prepare and respond to a cyclone - Japanese

サイクロン 備えと対処法

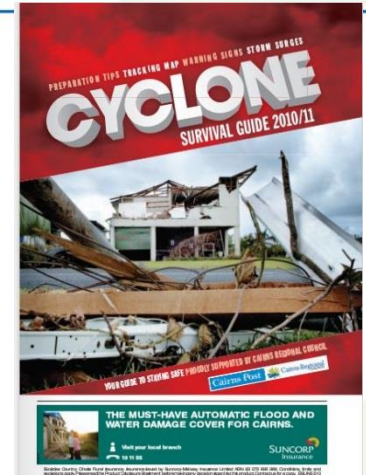
サイクロンの時期: 毎年11月から4月まで

非常時避難セットを準備しましょう

非常時避難セットのチェックリスト:

- 乾電池使用のラジオ (予備の乾電池)
- 懐中電灯 (予備の乾電池)
- ろろろ防水マッチ
- 救急箱と備品
- キャンプ用コンロと燃料
- 料理用鍋
- 飲料水 (10リットル)
- 洗面用具と衛生用品
- 着替えと丈夫な靴
- 毎時食品 3-4 日分
- ベット用敷物
- テントと布団や毛布 (厚めのもの)
- 現金
- 重要書類
- 丈夫なビニール袋
- 緊急時の連絡先

CAIRNS CITY COUNCIL

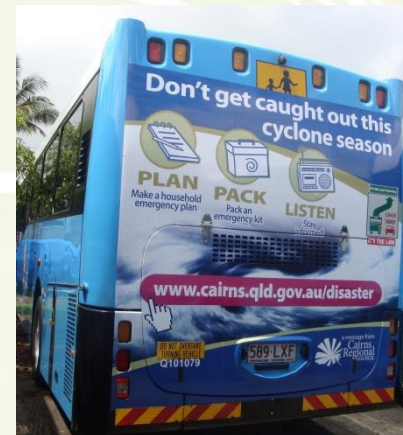
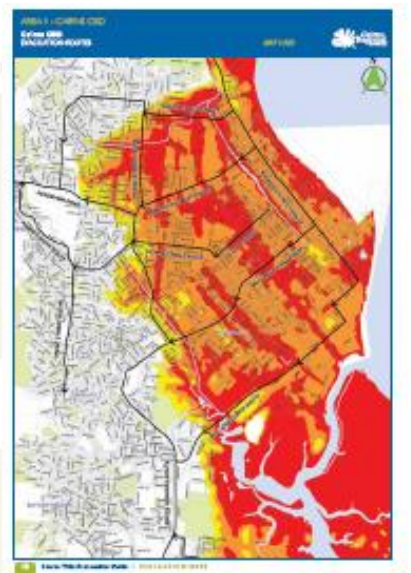


Don't get caught out this cyclone season

- PLAN**
Make a household emergency plan
- PACK**
Pack an emergency kit
- LISTEN**
Stay informed

www.cairns.qld.gov.au/disaster

CAIRNS REGIONAL COUNCIL



Evacuation Strategy – preparation, implementation



- Aims to increase the resilience of communities, families, groups and individuals as well as reduce demand on government services through greater self-reliance.
- Communities that are aware of the risks and take precautions are better able to deal with and recover from a disaster event.

- Determine evacuation zones and routes, road capacity.
- Define timeframes to initiate evacuation.
- Produce public and operational maps (printed, on-line)
- Recommendations for mitigation works

Community engagement initiatives:

- Wide public education and information.
- Individually identify residents at risk.

UNISDR scorecard application

- For the first time individual LDMG members and other stakeholders were asked a standardised set of questions about resilience - had to consider responses individually, then examine efficacy as a whole.
- Proved much more challenging than the usual process of providing feedback on the LDMP or operational plans. In the stocktake process, everyone began at the same level. Participants agreed to openly discuss responses and decide on an appropriate resilience score for all criteria by consensus.
- Detail had never been presented in this kind of forum before, requiring LDMG members to identify their own agency's resilience strengths and weaknesses.
- “Truthing” workshop to check on final scores.
- Combined with Torrens Institute Scorecard which provides an easily usable tool to measure actual and potential community resilience for all hazards

Combining UNISDR & Torrens Scorecards

Torrens (Social focus)

- Community mapping workshops
- Survey within communities identified as most vulnerable – adapted questions for Cairns region.
- Community engagement activities within those communities.
- Comparison of collated information with assumptions and experience

UNISDR (Governance focus)

- Undertaken via Cairns LDMG.
- Self-assessments by LDMG members, partners, contributing organisations
- Workshops
- Aggregated scores
- Comparison of results with Torrens scorecard results

INTEGRATED PLANNING – ESSENTIALS 4 - 8

Annual Mitigation Works and Projects

- Dedicated Local Disaster Coordination Centre – \$4m.
- Cairns CBD Flood Mitigation Project - \$26m.
- Additional Flood Mitigation Projects - \$12.0m – Moody Creek Detention Basin, flood studies, drainage and bridge works.
- Community education and engagement via Cairns Drain Stencil programme – water quality and drain management.



RESPONSE PLANNING – ESSENTIALS 9 - 10

- LDMP (all-Hazard action plans) and Hazard Specific plans
- Pre and Post event shelter arrangements including Public Storm Tide Cyclone Shelters
- Cairns Disaster Dashboard; Real-time information gateway hosted on dedicated domain and website providing situational awareness through interactive map overlays of available shelters, evacuation routes, road closures/hazards, Council flood cameras, TMR traffic cameras, BOM weather alerts and emergency news, Council media and social media feeds, power outages, telecommunication status
- Cairns Alert uses text messages (SMS) and email to send out information about local disasters, severe weather and emergency events

RESPONSE PLANNING – ESSENTIALS 9 - 10

- Immediate/Short term and Medium/Long term Recovery Plans including transition provisions
- Recovery Sub-Committee – 5 pillars of recovery
- Community Support Sub-Committee addresses immediate relief and welfare needs
- Resilience Strategy
- Test/review/exercise plans
- Support for State Emergency Services to augment local disaster operational capacity

Resilience Strategy Action Plan Outcomes

As a result of the development of a resilience Action Plan following application of the UNISDR scorecard the following outcomes were identified and being delivered this severe weather season;

- Development of a tidal surge predictive impact tool for the Cairns Hospital site and associated essential infrastructure (airport, water and sewerage systems etc) to assist in critical decision making
- Implement dedicated domain on-line resource – Developed a Dashboard as an interface to Guardian and Emergency information enabling public to view interactive map overlays and access real time emergency information
- Implement mass notification early warning system –
- Developed Cairns Alert SMS and email to PaR (all hazards)

Customer interface

The screenshot displays the Cairns Regional Council website's 'Cairns Alert' page. At the top, there is a navigation menu with categories: ABOUT CAIRNS, ABOUT COUNCIL, BUILDING, PLANNING & BUSINESS, WATER, WASTE & ROADS, COMMUNITY & ENVIRONMENT, FACILITIES, SPORT & LEISURE, WHAT'S ON, and ONLINE SERVICES & FORMS. A search bar is located below the menu, and a 'Select Language' dropdown is in the top right corner. The main content area is titled 'Cairns Alert' and includes a breadcrumb trail: HOME > NATURAL DISASTERS > CONTACTS > CAIRNS ALERT. Below the title, there are social media icons and a paragraph explaining that Cairns Alerts uses SMS and email for local disasters and emergency events. A link to 'Read the FAQs' is provided. Two buttons, 'Register' and 'Login', are prominently displayed. The date 'Last updated: 03 November 2017' is shown at the bottom of the main content. On the right side, a 'NATURAL DISASTERS' sidebar contains a list of disaster types, each with an expandable/collapsible icon: Cyclones (+), Storm surge (+), Flooding (+), Earthquake, Wild fire, Tsunami, Landslide, ((Storm tide evacuation maps)), Plan (+), Pack (+), Listen, Contacts (-), Disaster Management Unit, ((Cairns Alert)) (-), ((Cairns Alert FAQs)), Tools (+), Accessible information (+), Living With Water, ((Win a household emergency kit)), and Be ready, Cairns.

Sample Cairns Alert Message



Flash Flood Advice

This is a Flash Flood Advice from the Cairns Local Disaster Management Group. The areas in Kanimbla, Manunda and to the south within Moody Creek catchment are likely to experience rapidly rising water levels and inundation over the next hours, posing immediate danger to residents.

Potential for large flood wave exceeding 0.3m high due to possible failure of Moody Creek Detention Basin.

Warn neighbours. Move to higher ground **NOW**.

Listen to local radio, or visit www.cairns.qld.gov.au/community-environment/natural-disasters.

For emergency help contact:

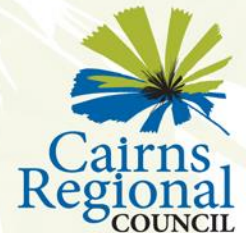
Police/fire/ambulance - 000 or 112 from mobiles

SES - 132 500

Ergon - 131 670

Main Roads - 131 940

Disaster Coordination Centre (only during an emergency) - 40443377



Thanks



Questions?